

1 INTRODUCTION

1.1 General

- 1.1.1 In August 2002 BMT Asia Pacific Limited (BMT) was awarded the contract for Agreement No. CE 18/2002: *Environmental Impact Assessment Study for Construction of Helipads at Peng Chau and Lamma Island / Investigation* by the Civil Engineering Office, Civil Engineering & Development Department (CEDD).
- 1.1.2 The Agreement requires the completion of Environmental Impact Assessment (EIA) studies for two proposed helipads: one at Peng Chau and one Yung Shue Wan, Lamma Island.
- 1.1.3 This Report presents the approach to and findings of the EIA study for the proposed *Peng Chau* helipad, and follows the requirements of Environmental Impact Assessment Study Brief No. *ESB-091/2001*.

1.2 Project Background

- 1.2.1 The Project involves the construction and operation of a permanent helipad at Peng Chau, and is 'designated' under Item B.2, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) by virtue of being: "*A helipad within 300m of existing or planned residential development*". Accordingly, an Environmental Permit is required for the Project.
- 1.2.2 The Project has been planned and managed in-house by the Land Works Division of CEDD. Construction works are to be completed by contractors under CEDD's supervision. CEDD will hand over the helipad to the management department (yet to be determined) upon its commissioning.
- 1.2.3 The helipad is solely required for transporting Peng Chau residents to urban areas for medical treatment in emergency situations, and is not for commercial use. The current Peng Chau helipad is located on a soccer pitch near Tai Lung Tsuen and is the only landing site for the island. This site, located at the top of a hill, is still being used by Government Flying Service (GFS) for casualty evacuation ('casevac') operations but is not considered ideal on flight safety grounds, as the site constitutes a confined area – being surrounded by tall lighting posts.
- 1.2.4 Furthermore, the Tai Lung Tsuen landing site is only accessible by climbing long stairs. Vehicle access is impossible, and so the current helipad is very inconvenient for paramedics who presently must carry patients up the stairs by foot. The path to the existing landing site cannot be upgraded without significant reconstruction works, including partial demolition of village property. As such, the anticipated environmental and community impact associated with such upgrade works would be considerable. In view of the present situation, the Home Affairs Department (HAD) had commissioned CEDD to construct a permanent helipad to serve the local community.
- 1.2.5 A full description of the Project is presented in *Section 2* of this Report.

1.3 Purpose and Approach of the EIA Study

- 1.3.1 The purpose of this EIA Study is to provide information on the nature and extent of environmental impacts arising from the Project and other concurrent works. This information will contribute to decisions by the Director of the Environmental Protection Department (EPD) on:
- (i) The overall acceptability of any adverse environmental consequences that are likely to arise as a result of the proposed Project;

- (ii) The conditions and requirements for the detailed design, construction and operation of the proposed Project to mitigate against adverse environmental consequences wherever practicable; and
- (iii) The acceptability of residual impacts after implementation of proposed mitigation measures.

1.3.2 Satisfying the aims of the EIA Study has been managed by achieving a number of more specific objectives as listed in the EIA Study Brief. The objectives of the EIA study are to:

- (i) Describe the proposed Project and associated works together with the requirements for carrying out the proposed Project;
- (ii) Consider alternative design and construction method(s) for the proposed Project and to compare the environmental benefits and disadvantages of each of the method(s) and design in selecting a preferred one;
- (iii) Identify and describe elements of community and environment likely to be affected by the proposed Project and/or likely to cause adverse impacts to the proposed Project, including natural and man-made environment;
- (iv) Identify and quantify emission sources and determine the significance of impacts on sensitive receivers and potential affected uses;
- (v) Identify and quantify potential losses or damage to aquatic organism and natural habitats and to propose measures to mitigate these impacts;
- (vi) Identify and quantify potential losses or damage to flora, fauna and natural habitats and to propose measures to mitigate these impacts;
- (vii) Propose the provision of mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the proposed Project;
- (viii) Identify, predict and evaluate the residual (i.e. after practicable mitigation) environmental impacts and the cumulative effects expected to arise during the construction and operation phases of the proposed Project in relation to the sensitive receivers and potential affected uses;
- (ix) Identify, assess and specify methods, measures and standards, to be included in the detailed design, construction and operation of the proposed Project which are necessary to mitigate these environmental impacts and reducing them to acceptable levels;
- (x) Investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures, and to identify the constraints associated with the mitigation measures recommended in the EIA study as well as the provision of any necessary modification;
- (xi) Design and specify environmental monitoring and audit requirements, if required, to ensure the implementation and the effectiveness of the environmental protection and pollution control measures adopted.

1.4 Structure of this EIA Study Report

1.4.1 The EIA Report is divided into a total of 10 sections. Following this *Section 1*, Introduction, the Report is organised as follows:

- Section 2 – Project Description
- Section 3 – Air Quality Assessment
- Section 4 – Noise Assessment
- Section 5 – Waste Management Assessment
- Section 6 – Water Quality Assessment

- Section 7 – Ecological Assessment
- Section 8 – Fisheries Assessment
- Section 9 – Cultural Heritage Assessment
- Section 10 – Implementation Schedule of Recommended Mitigation Measures
- Section 11 – Summary Conclusion & Recommendations.

1.4.2 The respective assessments for each technical discipline follow the appropriate requirements as set out in the *Technical Memorandum on Environmental Impact Assessment Process (EIA-TM)*.

1.4.3 For each section, all Figures referred to are at the back of the appropriate section for ease of reference, while all Appendices are together at the back of the EIA Report.