1. INTRODUCTION

1.1 Background

- 1.1.1 Territory Development Department (TDD) commissioned a feasibility study for housing development in the Whitehead and Lee On area in Ma On Shan (the Study). The Study Area is about 60 hectares covering the Whitehead peninsula, the proposed Ma On Shan (MOS) Rail Wu Kai Sha Station and the private land in between Whitehead and Wu Kai Sha Station. The Study is to establish a preferred development option for the Study Area. The proposed development (i.e. the Preferred Development Option) will provide private housing development to accommodate a total number of about 6,800 flats for about 17,000 resident and about 11 ha of recreational facilities such as water recreation centre, visitor/heritage/ecological centres, themed dining and botanical garden. The proposed development will involve site formation works and construction of infrastructure including building substructures, roads, drains, sewers and utilities, and landscape areas (the Project).
- 1.1.2 The Project is a Designated Project under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO) [Cap 499] and requires an Environmental Impact Assessment (EIA) report to be approved under the EIAO. Pursuant to section 5(7)(a) of the EIAO, the Director of Environmental Protection (the Director) has issued an EIA Study Brief (ref. no. ESB-029/1999) to the Applicant to carry out an EIA study (Annex A).
- The purpose of this EIA study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the proposed Designated Project and related activities taking place concurrently. This information will contribute to decisions by the Director 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 the proposed mitigation measures are implemented.

1.2 The Study Area

1.2.1 The Study Area is located at Whitehead and Lee On in Ma On Shan, Sha Tin. The location plan of the Study Area is shown on Figure 1.1.

1.3 Scope of Study

1.3.1 In accordance with the Agreement and the EIA Study Brief, a series of reports and papers are required to be produced including an EIA Report.

1.4 Objective of the EIA

- 1.4.1 The objectives of the EIA study are as follows:
 - (i) to describe the proposed project and associated works together with the requirements for carrying out proposed developments arising from the Study;
 - (ii) to identify and describe the elements of the community and environment likely to be affected by the proposed developments covered by the Study and/or likely to cause adverse impacts to the proposed developments arising from the Study, including both the natural and man-made environment;
 - (iii) to identify and quantify emission sources and determine the significance of impacts on sensitive receivers and potential affected uses;
 - (iv) to identify and quantify any potential losses or damage to flora, fauna and natural habitats;
 - (v) to identify and negative impacts on sites of cultural heritage and to propose measures to mitigate these impacts;
 - (vi) to identify and quantify any potential landscape and visual impacts and to propose measures to mitigate impacts;
 - (vii) to identify the negative impacts and propose the provision of infrastructure or mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the developments arising from the Study;
 - (viii) to identify, predict and evaluate the residual (i.e. after practicable mitigation) environmental impacts and cumulative effects expected to raise during the construction and operation phases of the project in relation to the sensitive receivers and potential affected uses;
 - (ix) to identify, assesses and specify methods, measures and standards, to be included in the detailed design, construction and operation of the project which are necessary to mitigate these environmental impacts and cumulative effects to acceptable levels;

- (x) to investigate the extent of side-effects of proposed mitigation measures that may lead to other forms of impacts;
- (xi) to identify constraints associated with the mitigation measures recommended in the study;
- (xii) to identify, within the Study Area, any individual projects that fall under Schedule 2 of the EIAO, to ascertain whether the findings of this EIA study have adequately addressed the environmental impacts of those projects, and where necessary, to identify the outstanding issues that need to be assessed in project specific detailed EIA study; and
- (xiii) to design and specify the environmental monitoring and audit requirements necessary to ensure the implementation and the effectiveness of the environmental protection and pollution control measures adopted.

1.5 Structure of the EIA Report

- 1.5.1 This EIA report presents the results from the assessment and evaluation of the environmental impacts that may arise during the construction and operation of the proposed development. Following impact prediction, the requirement for environmental remedial measures to address any unacceptable environmental impacts are presented. This report also highlights where Environmental Monitoring and Audit (EM&A) programmes are considered to be necessary during construction and operation. Specific requirements for EM&A are presented in a stand alone EM&A Manual.
- 1.5.2 The content of the report is as follows:

Chapter 1: Introduction

Chapter 2: Project Description

Chapter 3: Noise

Chapter 4: Air Quality

Chapter 5: Water Quality

Chapter 6: Ecology

Chapter 7: Cultural Heritage

Chapter 8: Landscape and Visual

Chapter 9: Summary and Conclusion and Implementation Schedule

1.6 Development Option Assessed

- 1.6.1 The Preferred Development Option has been prepared in the following context:
 - The Sha Tin Planning Area 108 Layout Plan was revised and adopted by the Permanent Secretary for Housing, Planning and Lands (Planning and Lands) in September 2002. While the maximum plot ratio for the Wu Kai Sha Station development was 5.0, the height restriction for the Wu Kai Sha Station development was revised to 183mPD.
 - According to latest development proposal by KCRC, the prospective developer, circulated for Governmental departmental comment on 3 April 2002, the proposed development at the Wu Kai Sha Station development would have a plot ratio of 5 and would comprise 7 towers of 40 to 48 storeys (maximum height 183 mPD). This proposal is adopted in the Preferred Development Option.
- 1.6.2 The Preferred Development Option is identical to the preliminary Preferred Development Option except that the plot ratio for the Wu Kai Sha Station development is lowered from the preliminary figure of 6.5 to 5.0 and the number of residential blocks has been reduced from 8 to 7 with a maximum building height of 183 mPD. The details are given in Chapter 2. The EIA was carried out on the preliminary Preferred Development Option which is the more critical scenario. The recommended mitigation measures proposed in this EIA also apply to the Preferred Development Option which would generate less environmental impact.