# 1 Introduction

## 1.1 Background

Kong Nga Po (KNP) in the North District is a rural area with very limited existing developments. There are villages lying at the far north and east. The major vehicular access to the Development Area is by a sub-standard rural track namely KNP Road leading from Man Kam To Road. The Development Area can also be accessed from the east through KNP Road and Ping Che Road.

The "Land Use Planning for the Closed Area" completed in 2010 concluded with a series of suggestions, including further review the development potential of land released from the Closed Area including Kong Nga Po. To follow up on the suggestions, Civil Engineering and Development Department (CEDD) has earlier explored the feasibility of low-density residential development at Kong Nga Po. However, after considering the relevant planning, environmental and overall development factors, it was preliminarily concluded that the option of providing police training facilities at Kong Nga Po would be more desirable compared to the option of low-density residential development.

The project profile for the project "Police Facilities in Kong Nga Po" was submitted to the Environmental Protection Department (EPD) on 23 July 2014 under Section 5(1)(a) of the Environmental Impact Assessment Ordinance (EIAO). On 2 September 2014, EPD issued an Environmental Impact Assessment (EIA) Study Brief for the Project (ESB-276/2014).

On 08 December 2014, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by CEDD under Agreement No. CE31/2014 (CE) to carry out an engineering feasibility study including an environmental impact assessment with a view to confirm the feasibility and environmental acceptability of co-locating police facilities in KNP.

This document is the EIA report for the Project.

## 1.2 Designated Projects under the EIA Ordinance

As stated in the project profile and the EIA Study Brief, the Project consists of the following Designated Projects (DPs) under Part I, Schedule 2 of the EIAO:

i. A helipad within 300 m of existing or planned residential development (Item B.2, Part I, Schedule 2); and

ii. An open firing range (Item O.5, Part I, Schedule 2).

## 1.3 Purpose of the EIA Study

In accordance with Clause 1.5 of the EIA Study Brief, the purpose of the EIA Study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project and related activities that take place concurrently. This information will contribute to decisions by the Director on:

i. The acceptability of any adverse environmental consequences that are likely to arise as a result of the Project;

ii. the conditions and requirements for the design, construction and operation of the Project to mitigate against adverse environmental consequences; and

iii. the acceptability of residual impacts after the proposed mitigation measures is implemented.

## 1.4 Objectives of the EIA Study

In accordance with Clause 2.1 of the EIA Study Brief, the objectives of the EIA are:

i. to describe the Project and associated works together with the requirements and environmental benefits for carrying out the Project;

ii. to identify and describe elements of community and environment likely to be affected by the Project and/or likely to cause adverse impacts to the Project, including natural and man-made environment and the associated environmental constraints;

iii. to identify and quantify emission sources (including air quality, noise, water quality, waste, etc. as appropriate) and determine the significance of impacts on sensitive receivers and potential affected uses;

iv. to identify and quantify any potential ecological impacts arising from the construction and operation of the Project and to propose measures to mitigate these impacts;

v. to identify any potential landscape and visual impacts and to propose measures to mitigate these impacts;

vi. to identify and quantify the potential risks due to the potential land contamination in the Project site and to propose measures to mitigate these impacts;

vii. to propose the provision of infrastructure or mitigation measures to minimize pollution, environmental disturbance and nuisance during construction and operation of Project;

viii. to investigate the feasibility, practicability, effectiveness and implications of the proposed mitigation measures;

ix. to identify, predict and evaluate the residual environmental impacts (i.e. after practicable mitigation) and the cumulative effects expected to arise during the construction and operation phases of the Project in relation to the sensitive receivers and potential affected uses;

x. to identify, assess 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 residual environmental impacts and cumulative effects and reduce them to acceptable levels;

xi. to investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures and to identify constraints associated with the mitigation measures recommended in the EIA study, as well as the provision of any necessary modification;

xii. to design and specify environmental monitoring and audit requirements for the effective implementation of the recommended environmental protection and pollution control measures; and

xiii. to identify any additional studies necessary to implement the mitigation measures or monitoring and proposals recommended in the EIA report.

## 1.5 Scope of the EIA Study

This EIA report addresses all key potential environmental issues associated with the construction and operation phases of the Project, which are as specified under Clause 3.2 of the EIA Study Brief:

i. the potential air quality impact on sensitive receivers from the construction and operation of the Project and associated works, the potential air quality impact on the Project from the air pollutant emission sources (such as vehicular and helicopter emissions) and the potential odour impacts and nuisances from the firing ranges; etc with a view to assessing and recommending sound engineered mitigation proposal(s) to avoid or minimize such impacts and nuisances to the maximum extent practicable;

ii. the potential noise impact on sensitive receivers caused by the Project and associated works, including the impact from construction equipment during construction, and operational noise impacts from road traffic, helicopters take-off, approach and associated ground operation, firing ranges, driving training track; and any other fixed noise sources;

iii. potential hazard to life impact given that part of the Project site is within the consultation zone of the Sheung Shui Water Treatment Works (SSWTW); and in case of any helicopter refuelling facilities on site;

iv. potential impacts to water quality or ecological habitat(s) due to the discharge of stormwater, surface runoff, treated effluent and other effluents generated from the facilities during the construction and operation phases, taking into account the cumulative impact from the construction and operation of existing, committed and planned projects in the vicinity of the Project;

v. potential sewerage and sewage treatment implications to cope with discharges from population and any development from the Project, taking into account the capacity requirements for the existing, committed and planned developments within the same sewage catchment;

vi. potential waste management issues and impacts during construction and operation of the Project;

vii. potential aquatic and terrestrial ecological impacts arising from the construction and operational phases, including loss of habitats, removal of vegetation, the impact and disturbance to animals and plants. The assessment shall identify and evaluate all direct, indirect and cumulative impacts resulting from the Project during the construction and the operational phases. Any adverse impacts shall be fully addressed and mitigated;

viii. potential landscape and visual impacts during the construction and operation of the Project on the nearby sensitive receivers, including but not limited to the nearby village houses and proposed residential development in Hung Lung Hang; and

ix. potential cumulative impacts of the Project, through interaction or in combination with other existing, committed and planned projects in the vicinity of the Project including but not limited to the proposed Organic Waste Treatment Facilities Phase 2, proposed Man Kam To Development Corridor and the Columbarium, Crematorium and related facilities at Sandy Ridge Cemetery and that those impacts may have a bearing on the environmental acceptability of the Project.

## 1.6 Structure of the EIA Report

This EIA report has been structured as follows:

*Chapter 1 – Introduction* presents the background, purpose and scope of the Project.

*Chapter 2 – Project Description* presents a description of the Project including concurrent projects.

*Chapter 3 – Air Quality Impact* presents the approach, findings and recommendations from the air quality impact assessment.

*Chapter 4 – Noise Impact* presents the approach, findings and recommendations from the noise impact assessment.

*Chapter 5 – Water Quality Impact* presents the approach, findings and recommendations from the water quality impact assessment.

*Chapter 6 – Sewerage and Sewage Treatment Implications* presents the approach, findings and recommendations from the sewerage and sewage assessment.

*Chapter 7 - Waste Management Implications* presents the approach, findings and recommendations from the waste assessment.

*Chapter 8 – Land Contamination* presents the approach, findings and recommendations from the land contamination assessment.

*Chapter 9 – Ecological Impact (Terrestrial and Aquatic)* presents the approach, findings and recommendations from the ecology impact assessment.

*Chapter 10 – Landscape and Visual Impacts* presents the approach, findings and recommendations from the landscape and visual impact assessment.

*Chapter 11 – Impact of Hazard to Life* presents the approach, findings and recommendations from the hazard to life impact assessment.

*Chapter 12 – Conclusions* summaries the findings and recommendations from the EIA.

*Chapter 13 – Environmental Monitoring and Audit* summaries the environmental monitoring and audit requirements specified in Chapters 3 to 11.

*Chapter 14 – Implementation Programme* summaries the schedule for implementation of mitigation measures specified in Chapters 3 to 11.