

1. Introduction

Baseline air quality, noise level, water quality and ecology monitoring was conducted in accordance with the Environmental Monitoring and Audit (EM&A) Manual (Construction Phase) for the Lamma Power Station Extension Project.

1.1 Purpose of the Report

The purpose of this report is to establish baseline levels for air quality, noise and water quality. These levels will be used as the basis for assessing environmental impact and compliance monitoring during construction of the Project. This report presents the methodologies and results of the air quality, noise and water quality measurements as well as marine ecology survey.

1.2 Background

The Environmental Impact Assessment (EIA) Report for the Project, which was prepared in response to EIA Study Brief No. ESB-001/1998 issued to Hongkong Electric Company Limited (HEC) by the Environmental Protection Department (EPD), was completed in February 1999. The EIA Report was submitted to the Director of Environmental Protection (DEP) in accordance with the requirements of the Environmental Impact Assessment Ordinance (EIAO) and was approved by DEP on 5 May 1999.

The Project involves the construction of a gas-fired power station employing combined cycled gas turbine technology, forming an extension to the existing Lamma Power Station. The following outlines the key elements of the Project including the construction activities associated with the transmission system and submarine gas pipeline.

- dredging and reclamation to form approximately 22 hectares of usable area (Figure 1.1);
- construction of six 300MW gas-fired combined cycle units;
- construction of a gas receiving station;
- construction of a new transmission system linking the Lamma Extension to load centres on Hong Kong Island (Figure 1.2);

The laying of a gas pipeline for the supply of natural gas to the new power station (Figure 1.3)

According to the EM&A Manual, no baseline water quality monitoring is required for the construction activities of a gas pipeline.

1.3 Structure of the Baseline Monitoring Report

The structure of the report is as follows:

Section 1: Introduction - detailing the purpose and structure of the report.

Section 2: Air Quality - presenting the results of baseline air quality monitoring.

Section 3: Noise - presenting the results of baseline noise monitoring.

Section 4: Water Quality - presenting the results of baseline water quality monitoring prepared by a water-quality monitoring consultant.

Section 5: Marine Ecological Survey - presenting the results of baseline marine ecological monitoring prepared by an ecological survey consultant.

Section 6: Conclusion

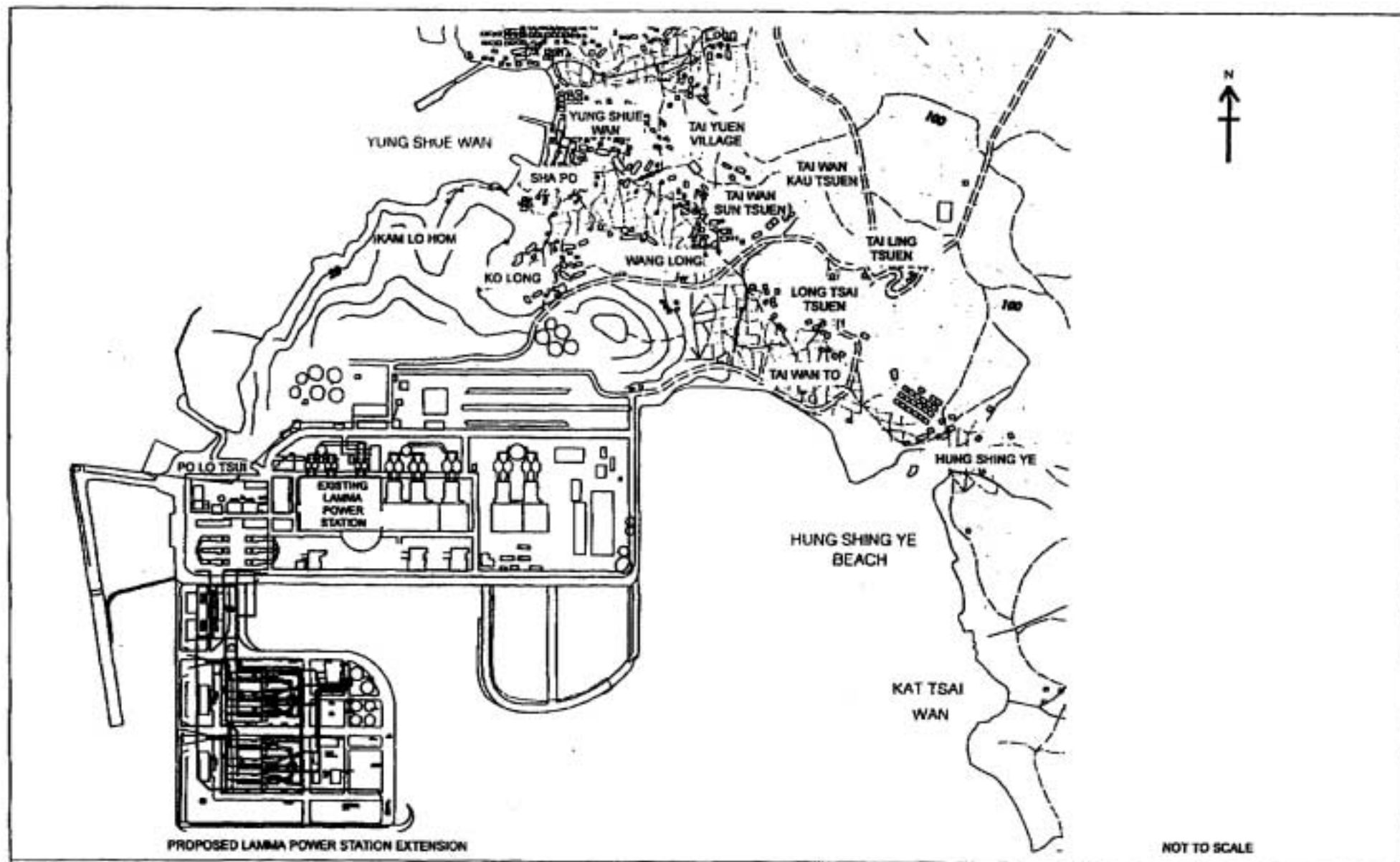


Figure 1.1 Construction Site of Lamma Power Station Extension

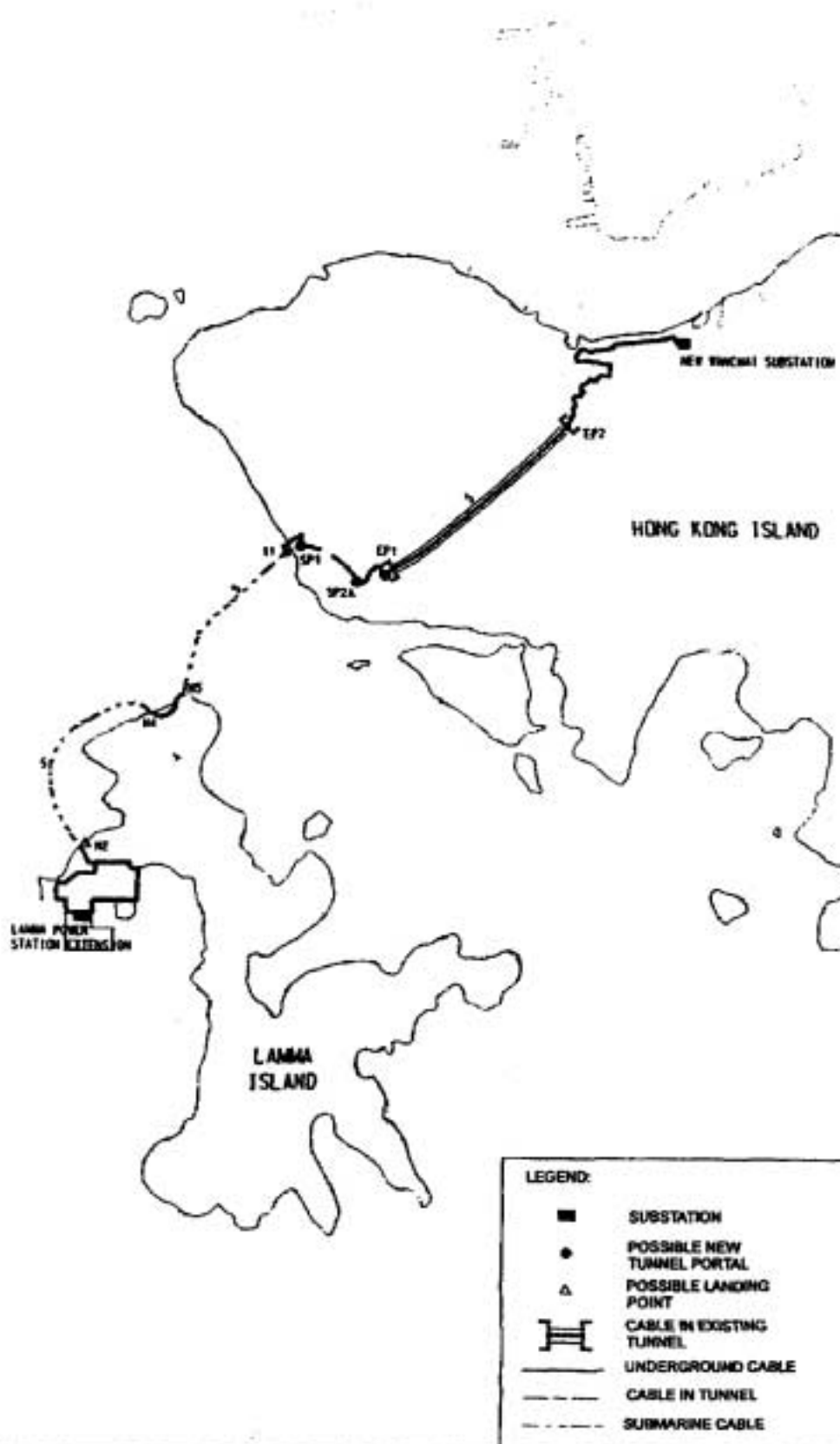


Figure 1.2 Construction of a New Transmission System Linking the Lamma Power Station Extension to Hong Kong Island

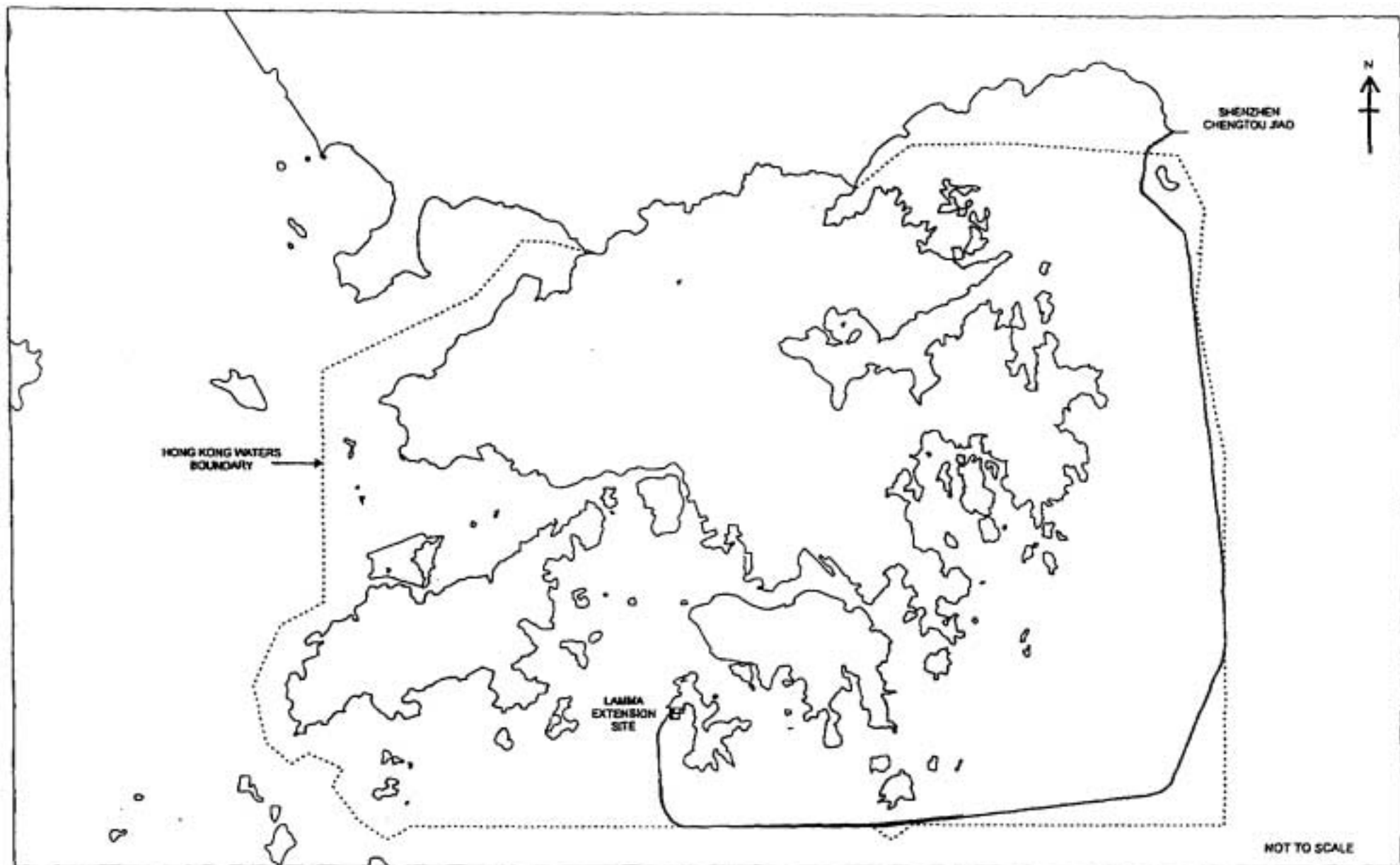


Figure 1.3 Laying of a Gas Pipeline for the Supply of Natural Gas to the Lamma Power Station Extension