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Appendix A



EPD EIA Study Brief No. ESB-016/1998

KOWLOON-CANTON RAILWAY CORPORATION
EAST RAIL EXTENSIONS
HUNG HOM TO TSIM SHA TSUI
ENVIRONMENTAL IMPACT ASSESSMENT
SCHEDULE 1 -THE SERVICES

1. GENERAL

The study brief (section 2.2) details the Environmental Impact Assessment requirements for the Hung Hom to Tsim Sha Tsui. The Environmental Impact Assessment is an essential part of the process to enable an environmental permit to be issued to KCRC authorising commencement of construction of the new rail line.

1.1 General Description

The KCR Extension is formed by extending a pair of tracks from the existing East Rail Station at Hung Hom southwards into an underground East-West alignment to a station located in Middle Road East Tsim Sha Tsui. Interchange with the MTR Tsim Sha Tsui Station located in Nathan Road will be provided from this new East Tsim Sha Tsui Underground Station. A further long term proposal is to further extend the line from East Tsim Sha Tsui to connect to the West Rail Line at West Kowloon.

On leaving Hung Hom Station the alignment enters a box structure and a 300m radius curve as it commences to descend and pass clear of the International Mail Centre between the Hung Hom By-Pass Piers and over the Cross Harbour Tunnel (the alignment can be improved if agreement is given to demolish/relocate the International Mail Centre). It then continues to descend to a level of -8.9MPD as it continues straight along Salisbury Road to opposite Wing On Centre. The alignment then turns to pass beneath the Middle Road Children's Playground into Middle Road. The actual location of the station is beneath Wing On Gardens, Chatham Road and Signal Hill/Middle Road Children's Playground. It is the only location on this alignment where a 300 metre long (12-car) station can fit and even then requires the construction of side platforms on a curve. The crossovers for turning back trains are located immediately beyond the station in Middle Road because the curved track on the approach to the station prevents provision of the crossovers there. The alignment immediately east of the new station crosses Salisbury Road using a 300m radius curve and then continues westwards in a 1000m radius curve as it passes through the station. The alignment then straightens into Middle Road. The overrun and turnback tracks are located under Middle Road and the former Marine Police Headquarters such that this alignment will allow for the future extension to West Kowloon. The extension will pass below Nathan Road and above the MTR Tsuen Wan Line Tunnels.

To ensure that adequate traction power at 25KV 50Hz is available to support the extension of East Rail an additional 25kv feeder station will therefore be required. A site for the additional feeder station has been identified within the Ho Man Tin Livestock unloading sidings located to the north of Hung Hom Station. The new feeder station will be fed from China Light and Power Co. Ltd. 132kv supply.

1.2 Milestone Submittals

Consultant shall submit the required deliverables specified in this Schedule in the form and at the stages of development described below. Drawings, calculations and other required deliverables must comply in scales and formats as directed by the Director. Submittals shall be transmitted to the Director on or before the Milestone Dates specified in Schedule 6.

1.2.1 Milestone 1 - Inception Report

The Consultant shall submit an Inception Report that shall without limitation, serve the following purposes :

- The Consultants understanding and appreciation of the objectives of the study
- Reflect the results of Consultant's comprehensive review of all relevant information provided and available at the Date of Commencement.
- Describe Consultant work plan and approach to the Services.
- Identify items requiring direction or agreement by the Director.
- Quality Assurance Programme
- Organisation and staffing of the study team and the curriculum vitae of the key team members
- Computer modelling software to be used in formulating the environmental models

1.2.2 Milestone 2 - Draft Environmental Impact Assessment Report

The Consultant shall submit the following document under this milestone :

- Draft Environmental Impact Assessment Report which shall without limitation :
 - (i) Provide a preliminary Environmental Impact Assessment resulting from the construction and operation of the Hung Hom to Tsim Sha Tsui.

1.2.3 Milestone 3 - Final Environmental Impact Assessment Report

The Consultant shall submit the requisite documents/presentation materials identified in the brief (Section 2.2) to enable submission to the Environmental Protection Department accordingly.

2. SCOPE OF SERVICES

2.1 General

The Consultant shall develop its work on the basis of the brief produced by Environmental Protection Department described in Section 2.2.

The Consultant shall be required to provide support to the Director in carrying out necessary consultative processes and in obtaining necessary approvals from relevant authorities, Government departments, and other affected public and private entities in respect of the Consultant's proposals, including without limitation:

- Participation in briefings, meetings, presentations, and the like.
- Preparation of exhibits, illustrations, or other explanatory materials suitable for presentation to interested parties and consultative bodies
- Preparation of meeting minutes and responses to comments and queries
- Review of objections received and drafting of responses to such objections.

2.2 Brief Prepared by Environmental Protection Department
Environmental Impact Assessment Ordinance (Cap. 499)
Section 5 (7)

Environmental Impact Assessment Study Brief No. ESB-016/1998

Project Title: KCRC Extension from Hung Hom to Tsim Sha Tsui

Name of Applicant: Kowloon-Canton Railway Corporation, named "the Applicant" thereafter

1. BACKGROUND

- 1.1 An application (No. ESB-016/1998) for an Environmental Impact Assessment (EIA) study brief under section 5(1) of the Environmental Impact Assessment Ordinance (EIAO) was submitted by the captioned Applicant on 15 October 1998 with a project profile (No. PP-025/1998) on the captioned project.
- 1.2 The Applicant proposes to design and construct an approximately 1.5 km new rail track, a new station under the existing Middle Road Children's Playground and a traction substation at Ho Man Tin. Majority of the rail will be operating underground. The project is a Designated Project under section A.2 of the EIAO.
- 1.3 Pursuant to section 5(7)(a) of the EIAO, the Director of Environmental Protection (the Director) issues this EIA study brief to the captioned Applicant to carry out an EIA study.
- 1.4 The purpose of this EIA Study is to provide information on the nature and extent of environmental impacts arising from the construction, operation of the proposed project and all 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, operation, of the proposed project; and
 - (iii) the acceptability of residual impacts after the proposed mitigation measures are implemented.

2. OBJECTIVES OF THE EIA STUDY

- 2.1 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 the proposed project;
 - (ii) to identify and describe the elements of the community and environment likely to be affected by the proposed project, and/or likely to cause adverse impacts upon the proposed project, 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 any potential landscape and visual impacts and to propose measures to mitigate these impacts;
- (v) to propose the provision of infrastructure or mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction, operation of the proposed project;
- (vi) to identify, predict and evaluate the residual (i.e. after practicable mitigation) environmental impacts and cumulative effects expected to arise during the construction, operational phases of the proposed project in relation to the sensitive receivers and potential affected uses;
- (vii) to identify, assess and specify methods, measures and standards, to be included in the detailed design, construction, operation of the proposed project which are necessary to mitigate these impacts and reduce them to acceptable levels;
- (viii) to investigate the extent of side-effects of proposed mitigation measures that may lead to other forms of impacts;
- (ix) to identify constraints associated with the mitigation measures recommended in the study; and
- (x) 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.

3. DETAILED REQUIREMENTS OF THE EIA STUDY

3.1 The purpose of this study brief is to scope the key issues of the EIA study. The Applicant has to demonstrate in the EIA report that the criteria in the relevant sections of the Technical Memorandum on the Environmental Impact Assessment Process of the Environmental Impact Assessment Ordinance (thereafter refer to as the TM), are fully complied with.

The Scope

3.2 The scope of this EIA study covers the proposed project mentioned in section 1.2 above, including :

- (i) construction and operation of an approximately 1.5 km railway track, with ancillary facilities including a new station and a traction substation; and
- (ii) provision of mitigation measures which may be identified and/or recommended in this EIA study.

Study Area

3.3 In general, the boundary of the "study area" for the purpose of this EIA shall be of 500m from either side and along the full stretch of the proposed railway alignment (see Figure 1) and the proposed Ho Man Tin Traction Substation (see Figure 2).

3.4 For noise impact assessment, the study area shall be defined by a distance of 300m from the proposed railway alignment and associated facilities. The study area can be reduced

accordingly if the first layer of the noise sensitive receivers (NSRs), closer than 300m from the road, provide acoustic shielding to those receivers at further distance behind subject to the agreement with the Director.

- 3.5 All sensitive receivers regarding the visual impact assessment shall be assessed within the visual envelope outlining the area of land which there is a view of any part of the proposed road, its structure, or the traffic which will use it.

Technical Requirements

- 3.6 The Applicant shall conduct the EIA study to address all environmental aspects of the activities as describe in the scope as set out above. They are to include the following technical requirements as specific impacts :

3.7 Noise Impact Study

- 3.7.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing noise impact stated in Annexes 5 and 13 of the TM respectively.

(i) Provision of Background Information

The Applicant shall provide all background information relevant to the project, e.g. relevant previous or current studies.

(ii) Identification of Noise Sensitive Receivers

- (a) The Applicant shall select assessment points to present all identified NSRs for carrying out quantitative noise assessment described below. The assessment point shall be agreed with the Director prior to the quantitative noise assessment. A map showing the location and description such as a name of building, use and floors of each and every selected assessment point shall be given.

- (b) - The NSRs shall include all existing NSRs and all planned/committed noise sensitive developments and uses earmarked on the relevant Outline Zoning Plans, Outline Development Plans & Layout Plans.

(iii) Provision of an Emission Inventory of the Noise Sources

The Applicant shall provide an inventory of noise sources for both the construction noise assessment and operational noise assessment. From a knowledge of the likely type, sequence and duration of construction activities required for the project implementation, identify those construction activities likely to cause noise problems to the receivers.

(iv) Construction Noise Assessment

- (a) The Applicant shall carry out assessment of noise from construction activities (excluding percussive piling) of the project during daytime, i.e. 7 a.m. to 7 p.m., on weekdays other than general holidays in accordance with the methodology stipulated in para 5.3 and 5.4 of Annex 13 of the TM. The criteria in Table 1B of Annex 5 of the TM shall be adopted in the assessment.

- (b) To minimise the construction noise impact, alternative construction methods to replace percussive piling shall be proposed as far as practicable.
- (c) If the unmitigated construction noise levels are found exceeding the relevant criteria, the Applicant shall propose practicable direct mitigation measures (including but not limited to movable barriers, enclosures, quieter alternative methods, re-scheduling and restricting hours of operation of noisy task) particularly at the open-cut area(s) and the tunnel portal(s) to minimise the impact. If the mitigated noise levels are still exceeding the relevant criteria, the duration of the noise exceedance shall be given.

(v) Operational Noise Assessment

- (a) The Applicant shall assess the impacts during the operational phase of the proposed railway and the associated facilities, involving worst case scenario, normal, abnormal, transient and emergency operations, with respect to the acceptable levels contained in Table 1A in Annex 5 in the TM. The assessment methodology including the railway/train design noise level shall be agreed with the DEP prior to the commencement of the assessment.
- (b) In assessing the noise level, the Applicant shall allow for a deterioration in rail and rolling stock condition from brand new to an operating level, address the worst case scenario, taking into account any other planned noise source. Noise contours in the maximum $Leq(30 \text{ min})$ and L_{max} during the day and at night shall be presented on plans of suitable scales showing the identified NSRs. Quantitative assessment at the identified NSRs for different alignment of the rail shall be compared against the relevant criteria or limits. The potential noise impact of each proposed alignment on the existing and planned NSRs shall be quantified by estimating the total number of dwellings and/or classrooms that will be exposed to levels above the relevant planning criteria and statutory limits.
- (c) The Applicant shall make recommendations for noise amelioration for an existing or planned NSR which would be subject to predicted cumulative noise level in excess of the relevant planning criteria and statutory limits in the appropriate design year. A manual detailing the schedule of maintaining/capping the wheel/rail noise to suit the design specification shall be provided.
- (d) For fixed noise sources (ventilating systems and fixed plants at stations and depot), the Applicant shall calculate the expected noise using standard acoustic principles. Calculations for the expected noise shall be based on assumed plant inventories and utilisation schedule for the worst case scenario. The Applicant shall calculate the noise levels taking into account of correction of tonality, impulsiveness and intermittency in accordance with the Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites. The Applicant shall present the existing and future noise levels in $Leq(30 \text{ min})$ at the NSRs on tables and plans of suitable scale. Quantitative assessment at the NSRs for proposed fixed noise source(s) shall be carried out and compared against the criteria set out in Table 1A of Annex 5 of the TM. The Applicant shall propose direct technical remedies within the project limits in all situations where the predicted noise level exceeds the criteria in Table 1A of Annex 5 of the TM to

protect affected NSRs.

(vii) Evaluation of Constraints on Planned Noise Sensitive Developments/Land Uses

- (a) In the event that there are planned noise sensitive uses which will still be affected even with all practicable direct technical remedies in place, the Applicant shall propose, evaluate and confirm the practicality of additional measures within the planned noise sensitive uses and shall make recommendations on how these noise sensitive uses will be designed for the information of relevant parties.
- (b) The Applicant shall take into account the agreed environmental requirements/constraints identified by the study to assess the development potential of the concerned sites which shall be made known to the relevant parties.

3.8 **Hazard to Life**

3.8.1 If there is storage of explosives on site, the Applicant shall follow Annexes 4 and 22 of the TM in conducting hazard assessment and include the following in the assessment :

- (a) identification of all hazardous scenarios associated with the transport, storage and use of explosives for blasting operations;
- (b) execution of a Quantitative Risk Assessment expressing population risks in both individual and societal terms;
- (c) comparison of individual and societal risks with the Criteria for Evaluating Hazard to Life stipulated in Annex 4 of the TM; and
- (d) identification and assessment of practicable and cost effective risk mitigation measures.

3.9 **Water Quality Impact**

3.9.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing water pollution as stated in Annexes 6 and 14 of the TM respectively. Specifically, the assessment shall address the following:

- (i) collection and review of background information on existing water system(s) and sensitive receivers which might be affected by the proposed project during construction and operation;
- (ii) characterisation of water quality on the surrounding water systems and sensitive receivers which might be potentially affected by the proposed project both during construction and operation;
- (iii) identification of any construction activities such as filling, excavation and tunneling which might lead to potential water quality impacts on nearby water system(s) and sensitive receivers identified in (i);
- (iv) establishment of pertinent water quality objectives, criteria and standards for water system(s) and all sensitive receivers identified in (i);

- (v) assessment and evaluation of any potential stormwater and construction runoff impacts on the water system(s) and sensitive receivers due to activities identified in (iii) above. Best management practices shall be recommended to reduce the water and sediment quality impacts to within standards, objectives and criteria established in item (iv) above. Cumulative impacts due to other projects, activities or pollution sources within a boundary of 300 m from both sides along the identified water system(s) and sensitive receivers shall be identified and assessed;
- (vi) erosion control plan during construction shall be established as per assessments carried out as described in item (iv) above. This erosion control plan shall incorporate details such as locations, sizes and types of best management practices, which will be used to reduce stormwater pollution arising during construction works. These requirements shall be incorporated in the project contract document and formed part of the permit conditions;
- (vii) assessment and evaluation of any potential water quality impacts on the identified water system(s) and sensitive receivers due to sewerage arising from on-site construction workforce. Any effluent generated will require appropriate treatment and disposal; and
- (viii) identification, assessment and evaluation of any potential impacts arising from tunnel / seepage drainage and track runoff. Appropriate measures shall be recommended to reduce the identified impacts arising during operation.

3.10 Construction Waste Management Impact

3.10.1 The Applicant shall assess the waste management implications arising from the construction of the project in accordance with Annex 7 and 15 of the TM. The assessment of waste management impacts shall cover, but not limited to, the following:

(i) Analysis of Activities and Waste Generation

Identify the quantity, type, quality and timing of the liquid and solid waste arising as a result of the construction, based on the sequence and duration of these activities.

(ii) Proposal for Waste Management

- (a) Prior to considering the disposal options for various types of wastes, opportunities for waste reduction/ reuse/ recycle shall be fully evaluated.
- (b) Apart from taking into account all the opportunities for reducing waste generation, the types and quantities of the wastes required to dispose of as a consequence shall be estimated and the disposal options for each type of waste described in detail. The disposal method recommended for each type of wastes shall take into account the result of the assessment in section (c) below. All solid waste, wastewater and sludge during construction shall be conveyed by suitable means to be disposed properly outside the water gathering grounds.
- (c) the impact caused by handling (including labeling, packaging and storage), collection, and disposal of wastes shall be addressed in detail. This assessment shall cover but not be limited to the following areas:

- potential hazards;
- air and odour emission;
- noise;
- wastewater discharge; and
- public transport.

3.11 Land Contamination Impact

- 3.11.1 The Applicant shall follow the guidelines for evaluating and assessing potential contaminated land issues as stated in Annex 19 sections 3.1 and 3.2 of the TM.
- 3.11.2 The Applicant shall provide a clear and detailed account of the present land use (e.g. description of the activities, chemicals and hazardous substances handled with clear indication of their storage and location by reference to a site map) and the relevant land use history in relation to possible land contamination (e.g. accident records, change of land use etc).
- 3.11.3 During the execution of the EIA study, the Applicant shall submit a contamination assessment plan (CAP) to the DEP for endorsement prior to conducting an actual contamination impact assessment of the land/site. The CAP shall include proposals on sampling and analysis required and shall aim at determining the nature and the extent of the contamination of the land/site.
- 3.11.4 Based on the endorsed CAP, the Applicant shall conduct a land contamination impact assessment. If land contamination is confirmed, a remedial action plan shall be prepared to formulate necessary remedial measures.

3.12 Landscape and Visual Impact

- 3.12.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing landscape and visual impact as stated in Annexes 10 and 18 of the TM respectively. Landscape and visual impact assessment shall cover the following:
- (i) a baseline study to provide a comprehensive and accurate description of the baseline landscape and visual character;
 - (ii) a review of the relevant planning and development control framework;
 - (iii) impact studies to identify the potential landscape and visual impacts and predict their magnitude and potential significance; and
 - (iv) recommendations on mitigation measures and implementation programme.

3.12.2 Assessment of Landscape Impacts

The Applicant shall assess the impact of the proposed project on the landscape aspect during construction and operational phases. The Applicant shall appraise and analyse the existing landscape resource and character of the Study Area. It shall focus particularly on the sensitivity of the landscape framework such as green belt, open space etc and its ability to accommodate change. The Applicant shall identify the degree of compatibility of the proposed project with the existing landscape.

3.12.3 Assessment of Visual Impacts

The Applicant shall assess the visual impacts of the proposed project. The assessment shall include the following:

- (i) identification and plotting of visibility contours and visual envelope of the proposed project. The Study Area visual impact assessment shall be defined by the visual envelope of the proposed project.
- (ii) identification of the key groups of sensitive receivers within the visibility contours with regard to views from both ground level and elevated vantage points;
- (iii) description of the visual compatibility of the project with the surrounding, and its obstruction and interference with key views of the adjacent areas; and
- (iv) the severity of visual impacts in terms of distance, nature and number of sensitive receivers shall be identified. The visual impacts of the project with and without mitigation measures shall be assessed.

3.12.4 Review of Planning and Development Control Framework

The Applicant shall review relevant plans and studies which may contain such information as areas of high landscape value, open space network etc. Such review will give an insight to the future outlook of the area affected and ways the project can be assimilated into the environment. Any conflict with the statutory town plan shall be highlighted and appropriate follow up action shall be recommended.

3.12.5 Proposals for Mitigation Measures

The Applicant shall recommend mitigation measures to minimise the adverse effects identified in 3.12.2 and 3.12.3 above, including the provision of a landscape design. The mitigation measures shall include the preservation of vegetation, transplanting of mature trees, provision of screen planting, revegetation of disturbed land, compensatory planting, re-provisioning of amenity areas and open spaces, design of structures, provision of finishes to structures, colour scheme and texture of materials used and any measures to mitigate the disturbance to the existing landuse. Parties shall be identified for the on-going management and maintenance of the proposed mitigation works to ensure their effectiveness throughout the operational phase of the project. A practical programme and funding proposal for the implementation of the recommended measures shall be presented.

3.12.6 Presentation Materials

Perspective drawings, plans and section/elevation diagrams, photographs of scaled physical models, oblique aerial photographs photo-retouching and computer generated photomontages shall be adopted to illustrate the landscape and visual impacts of the project.

3.13 Heritage Impact Assessment

3.13.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing impacts on cultural heritage as stated in Annexes 10 and 19 of the TM respectively.

3.13.2 The cultural heritage impact assessment shall cover the following:

(i) Baseline Study

A baseline study shall be conducted in accordance with the requirements set out in Annex A.

(ii) Impact Assessment

Cultural heritage impact assessment must be undertaken to identify the impacts of the sites of cultural heritage which will be affected by the proposed development subject to the result of desktop research and field evaluation. The prediction of impacts and an evaluation of their significance must be undertaken by an expert in cultural heritage. During the assessment, both the direct impacts such as loss or damage of important features as well as indirect impacts such as change of water table levels which may affect the preservation of the archaeological and built heritage in situ should be stated. A detailed description and plans should be provided to elaborate to what extent the site of cultural heritage will be affected.

Preservation in totality must be taken as the first priority. Please refer to paragraph 4.3.1(c), item 2 of Annex 10, items 2.6 to 2.9 of Annex 19 and other relevant parts of the TM for the detailed requirements of the impact assessment.

As the proposed alignment would pass under the former Marine Police Headquarters Compound which is a declared monument, a detailed study on impact to the declared monument caused by the construction and operation of the proposed railway, and a geotechnical investigation for the underground historic structures of the compound are required.

(iii) Mitigation Measures

It is always a good practice to recognize the site or monument early in the planning stage and site selection process, and to avoid it, i.e. preserve it in-situ, or leaving a buffer zone around the site. Built heritage, sites and landscapes are to be in favour of preservation unless it can be shown that there is a need for a particular development which is of paramount importance and outweighs the significance of the heritage feature.

If avoidance of the cultural heritage is not possible, amelioration can be achieved by reduction of the potential impacts and the preservation of heritage features, such as physically relocating it. Measures like amendments of the sitting, screening and revision of the detailed design of the development are required to lessen its degree of exposure if it causes visual intrusion to the cultural heritage and affecting its character.

All the assessments should be conducted by an expert in cultural heritage and further evaluated and endorsed by the AMO and the Antiquities Advisory Board.

Besides refer to paragraph 4.3.1(d), items 2.10 to 2.14 of Annex 19 and other relevant parts of the TM, proposals for mitigation measures should be accompanied with a master layout plan together with all detailed treatment, elevations, and landscape plan. A rescue programme, when required, may involve preservation of the historic

building or structure together with the relics inside, and its historic environment through relocation, detailed cartographic and photographic survey or preservation of an archaeological site "by record", i.e. through excavation to extract the maximum data as the very last resort.

The programme for implementation of agreed mitigation measures should be able to be implemented. It is to be clearly stated in the EIA report, as required in Annex 20 of the TM. In particular, item 6.7 of Annex 20 requires to define and list out clearly the proposed mitigation measures to be implemented, by whom, when, where, to what requirements and the various implementation responsibilities. A comprehensive plan and programme for the protection and conservation of the partially preserved Site of Cultural Heritage, if any, during the planning and design stage of the proposed project must be detailed.

4. ENVIRONMENTAL MONITORING AND AUDIT (EM&A) REQUIREMENTS

- 4.1 The Applicant shall identify in the EIA study whether there is any need for EM&A activities during the construction and operational phases of the project and, if affirmative, to define the scope of the EM&A requirements for the project in the EIA study.
- 4.2 Subject to the confirmation of the EIA study findings, the Applicant shall comply with the requirements as stipulated in Annex 21 of the TM.
- 4.3 The Applicant shall prepare a project implementation schedule (in the form of a checklist as shown in Annex B attached) containing all the EIA study recommendations and mitigation measures with reference to the implementation programme.

5. DURATION OF VALIDITY

This EIA study brief is valid for 24 months after the date of issue. If the EIA study does not commence within this period, the Applicant shall apply to the Director for another EIA study brief afresh before commencement of the EIA study.

6. REPORT REQUIREMENTS

- 6.1 In preparing the EIA report, the Applicant shall refer to Annex 11 of the TM for the contents of an EIA report. The Applicant shall also refer to Annex 20 of the TM which stipulates the guidelines for the review of an EIA report.
- 6.2 The Applicant shall supply the Director with the following number of copies of the EIA report and the executive summary :
- (i) 40 copies of the EIA report in English and 40 copies of the executive summary (each bilingual in both English and Chinese) as required under section 6(2) of the EIAO to be supplied at the time of application for approval of the EIA report.
 - (ii) when necessary, addendum to the EIA report and the executive summary submitted in (i) above as required under section 7(1) of the EIAO, to be supplied upon advice by the Director for public inspection.

(iii) 40 copies of the EIA report in English and 40 copies of the executive summary (each bilingual in both English and Chinese) with or without Addendum as required under section 7(5) of the ELAO, to be supplied upon advice by the Director for consultation with the Advisory Council on the Environment.

- 6.3 In addition, to facilitate the public inspection of the EIA Report via the ELAO Internet Website, the applicant shall provide electronic copies of both the EIA Report and the Executive Summary Report prepared in HyperText Markup Language (HTML) (version 4.0 or later) and in DynaDoc Format (version 3.0 or later) [for Chinese documents] and in Portable Document Format (PDF version 3.0 or later) [for English documents], unless otherwise agreed by the Director. For the HTML version, a content page capable of providing hyperlink to each section and sub-section of the EIA Report and the Executive Summary Report shall be included in the beginning of the document, and all graphics in the report shall be in interlaced GIF format.
- 6.4 The electronic copies of the EIA report and the Executive Summary shall be submitted to the Director at the time of application for approval of the EIA Report.
- 6.5 When the EIA Report and the Executive Summary are made available for public inspection under s.7(1) of the EIA Ordinance, the content of the electronic copies of the EIA Report and the Executive Summary must be the same as the hard copies and the Director shall be provided with the most updated electronic copies.

7. OTHER PROCEDURAL REQUIREMENTS

- 7.1 During the EIA study, if there is any change in the name of the Applicant for this EIA study brief, the Applicant mentioned in this study brief must notify the Director immediately.
- 7.2 If there is any key change in the scope of the project mentioned in section 1 of this EIA study brief and in the Project Profile (No. PP-025/1998), the Applicant must seek confirmation from the Director in writing on whether or not the scope of issues covered by this EIA study brief can still cover the key changes, and the additional issues, if any, that the EIA study must also address. If the changes to the project fundamentally alter the key scope of the EIA study brief, the Applicant shall apply to the Director for another EIA study brief afresh.

Environmental Assessment and Noise Division
Environmental Protection Department
November 1998



- LEGEND
- Tunnel
 - - - At Grade
 - █ Station Site
 - ⊠ Vent Shafts

TSIM SHI TSUI EXTENSION ALIGNMENT

FIGURE 1

9810 KCR/TSIM TSUI EXTENSION (01/10/98) 02/98

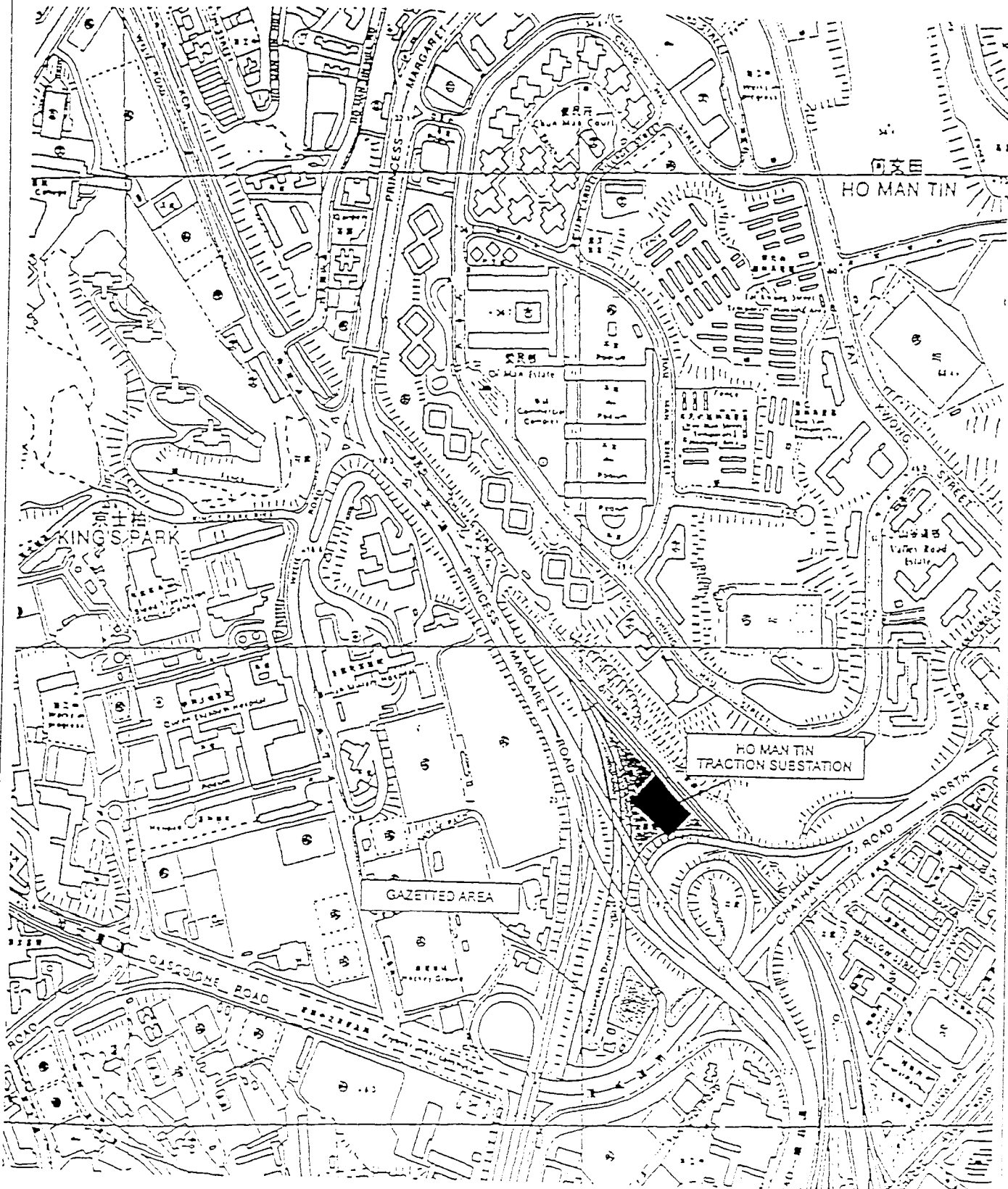


FIGURE 2
HO MAN TIN TRACTION SUBSTATION



Requirements of Baseline Study for Heritage Impact Assessment

A baseline study shall be conducted :

- (a) to compile a comprehensive inventory of archaeological sites, historic buildings and structures within the proposed project area, which include:
- all sites of archaeological interest;
 - all pre-1950 buildings and structures;
 - selected post-1950 buildings and structures of high architectural and historical significance and interest; and
 - landscape features include sites of historical events or providing a significant historical record or a setting for buildings or monuments of architectural or archaeological importance, historic field patterns, tracks and fish ponds and cultural element such as fung shui woodlands and clan grave.
- (b) to identify the direct and indirect impacts on the site of cultural heritage at the planning stage in order to avoid causing any negative effects. The impacts include the direct loss, destruction or disturbance of an element of cultural heritage, impact in its settings causing impinge on its character through inappropriate sitting or design, potential damage to the physical fabric of archaeological remains, historic buildings or historic landscapes through air pollution, change of water-table, vibration, recreation pressure and ecological damage by the development. The impacts listed are merely to illustrate the range of potential impacts and not intended to be exhaustive.
- (c) The following are the known sites of cultural heritage which may be affected by the project:
- Former Marine Police Headquarters Compound, including the historic underground structures, Salisbury Road, Tsim Sha Tsui
 - Signal Tower, Blackhead Point, Tsim Sha Tsui
 - Ex-Terminus Station, Salisbury Road, Tsim Sha Tsui
 - The Peninsula Hotel, Salisbury Road, Tsim Sha Tsui
 - Kowloon Market, 1 Peking Road, Tsim Sha Tsui

The baseline study shall also include a desk-top study and a field survey as follows:

(a) Desk-top Study

Desk-top study should be conducted to analyse, collect and collate extant information, including:

- Search of the list of declared monuments protected by the Antiquities and Monuments Ordinance (Chapter 53).
- Search of the list of deemed monuments through the Antiquities and Monuments Office (AMO) of the Home Affairs Bureau.
- Search of the list of sites of cultural heritage identified by the AMO.

- Search of publications on local historical, architectural, anthropological, archaeological and other cultural studies, such as Journals of the Royal Asiatic Society (Hong Kong Branch), Journals of the Hong Kong Archaeological society, Antiquities and Monuments Office Monograph Series and so forth.
- Search of other unpublished papers, records, archival and historical documents through public libraries, archives, and the tertiary institutions, such as the Hong Kong Collection and libraries of the Department of Architecture of the University of Hong Kong and the Chinese University of Hong Kong, Public Records Office, photographic library of the Information Services Department and so forth.
- Search of any other unpublished archaeological investigation and excavation reports kept by the AMO.
- Search of historical documents in the Public Records Office, the Land Registry, District Lands Office, District Office and the Hong Kong Museum of History and so forth.
- Search of cartographic and pictorial documents. Maps of the recent past searched in the Maps and Aerial Photo Library of the Lands Department.
- Study of existing Geotechnical information (for archaeological desk-top research).
- Discussion with local informants.

(b) Field Survey

- The Potential value of the development site with regard to the cultural heritage could be established easily where the site is well-documented. However, it does not mean that the site is devoid of interest if it lacks information. In these instances, a site visit combined with discussions with appropriate individuals or organizations should be conducted by those with expertise in the area of cultural heritage to clarify the position.
- Historic buildings and structures survey:
 - Field scan of all the historic buildings and structures within the project area.
 - Photographic recording of each historic building or structure including the exterior (the elevations of all faces of the building premises, the roof, close up for the special architectural details) and the interior (special architectural details), if possible, as well as the surroundings of each historic building or structure.
 - Interview with local elders and other informants on the local historical, architectural, anthropological and other cultural information related to the historic buildings and structures.
 - Architectural appraisal of the historic buildings and structures.
- Archaeological survey:

Appropriate methods of field evaluation should be applied to assess the archaeological potential of the project area:

 - Definition of areas of natural land undisturbed in the recent past.
 - Field scan of the natural land undisturbed in the recent past in detail with special attention paid to areas of exposed soil which were

- searched for artifacts.
- Conduct systematic auger survey / shovel testing to establish the horizontal spread of cultural materials deposits.
- Excavation of test pits to establish the vertical sequence of cultural materials. The hand digging of 1 x 1 m or 1.5 x 1.5 m test pits to determine the presence or absence of deeper archaeological deposits and their cultural history.
- If the field evaluation identifies any additional sites of cultural heritage within the study area which are of potential historic or archaeological importance and not recorded by AMO, the office should be reported as soon as possible. The historic and archaeological value of the items will be further assessed by the AMO.

(c) The Report of Baseline Study

- The study report should have concrete evidence to show that the process of the above desk-top and field survey has been satisfactorily completed. This should take the form of a detailed inventory of the sites of cultural heritage supported by full description of their cultural significance. The description should contain detailed geographical, historical, archaeological, architectural, anthropological, ethnographic and other cultural data supplemented with illustrations below and photographic and cartographic records.
- Historic Buildings and Structures
 - A map in 1:1000 scale showing the boundary of each historic building or structure.
 - Photographic records of each historic building or structure.
 - Detailed record of each historic building or structure including its construction year, previous and present uses, architectural characteristics, as well as legends, historic persons and events, and cultural activities associated with the structure.
- Archaeological Sites
 - A map showing the boundary of each archaeological site as supported and delineated by field walking, augering and test-pitting.
 - Drawing of stratigraphic section of test-pits excavated which shows the cultural sequence of a site.
- A full bibliography and the source of information consulted should be provided to assist the evaluation of the quality of the evidence. It is expected that the study and result are up to an internationally accepted academic and professional standard.

END OF STUDY BRIEF

I.D.: ELA02GA98SB.doc

IMPLEMENTATION SCHEDULE

EIA* Ref.	EM&A Log Ref	Environmental Protection Measures*	Location/Duration of measures/ Timing of completion of measures	Implementation Agent	Implementation Stages**				Relevant Legislatio Guidelines	
					Des	C	O	Dec		

* All recommendations and requirements resulted during the course of EIA/EA Process, including ACI; nml/or accepted public comment to the proposed project.
 ** Des=Design, C=Construction, O=Operation, Dec=Decommissioning

2.3 Additional Services Identified by KCRC

- 2.3.1 Undertake an analysis of the potential for groundborne noise and vibration impacts on property adjacent to the alignment and recommend appropriate mitigation measures where necessary.
- 2.3.2 Provide technical advice and support to any Public Consultation Programme associated with the project, including attendance at District Board, Regional Council and concern group meetings.