

Consultancy Agreement No. CE 38/98
South East Kowloon Development
Kai Tak Airport - Early Development Package Phase 1
Design and Construction

Project Profile Specifying Environmental Issues

1. **Description of the Project**

1.1. Project title

469CL
South East Kowloon Development
Kai Tak Airport - Early Development Package Phase 1
Design and Construction

1.2 Purpose and Nature of the Project

The Project comprises the design and construction of the infrastructure at the Kai Tak Airport (KTA) North Apron Area to serve the housing and associated developments therein.

1.3 Name of Project Proponent

Kowloon Development Office, TDD.

1.4 Location and Scale of Project and History of Site

It is located at the Kai Tak Airport North Apron Area with a site area of about 140 hectares. The site has a long history of being used as the main international flight centre of Hong Kong.

The cost of the Project is estimated to be \$2,400M at December 1997 prices.

A drawing of No. KZ 003 showing the layout of Project Works is attached herewith for information.

1.5 Types of designated projects involved

According to Schedule 2 of the EIA Ordinance, the following table shows the types of designated projects covered by this Project Profile:-

Classification*	Type	Qualifications as designated project	Location
A.1	New Roads	P1 - primary distributor D1 - district distributor D2 - district distributor D3 - district distributor L1 - local access L2 - local access L13- local access	refer to layout plan No. KZ 003 attached
F.3	Sewage Pumping Station	Estimated design capacity is about 85,000m ³ /day Station boundary is about 100m from planned residential area	

* According to Part 1 of Schedule 2 of EIA Ordinance.

1.6 Contact Person

2. Programme of Implementation

2.1 In accordance with the current public housing development programme, HD plans to commence housing construction in the KTA area in 1999 with a target population intake starting in early 2003. 15 housing sites are under planning of which 14 Nos. are in the HOUSCOM Control list and would be occupied by 2005.

2.2 In order to meet this urgent housing development programme, it is intended to engage consultants to implement the Project according to the following tentative programme:-

Task No.	Task Name	Start Date	End Date	Duration (month)
1	Consultancy Agreement awarded	Oct 98	Oct 98	1m
2	Review Phase	Nov 98	Jan 99	3m
3	Design Phase	Feb 99	Jan 00	12m
4	Tender Phase	Feb 00	Apr 00	3m
5	Construction Phase	May 00	Apr 04	48m
6	Completion Phase	May 04	Apr 05	12m
			Total	79m

3. Major Elements of the surrounding Environment

- 3.1 The development area consists of the existing airport northern apron area. The regional setting is dense urban development, dominated by the existing poor quality residential and industrial areas of San Po Kong, Kowloon City and Ma Tau Kok. Prince Edward Road to the north of the site is also a major transport corridor for the trunk roads from the Eastern Harbour Crossing and Kowloon. There are no natural habitats of note in the KTA area.
- 3.2 In the past, environmental conditions in the area were generally poor because of noise from the airport, industrial sources and the existing transport links. Air quality is generally adversely affected by traffic and major industries. The existing Environmental conditions should improve upon the completion of the Project.
- 3.3 The sensitive receivers in the area include existing residential developments at the airport perimeter (including government Temporary Housing Accommodation areas), G/IC uses such as the San Po Kong Magistracy and schools, and planned residential development.

4. Possible Environmental Impacts

4.1 Noise

Noise-sensitive residential, CDA, and educational uses will be located on the KTA site. New roads will be present on and leading to the new reclamation under other development projects.

Potentially large noise impacts may arise from:

- construction activities
- new road
- new sewage pumping station, rising main & utilities.

All impacts are likely to be localised and mitigation measures are available.

4.2 Air Quality

Air quality in KTA area is expected to improve considerably following relocation of the airport. Reduced emissions from industrial sources in and near KTA area will also contribute to improved air quality.

The principal air quality impacts in the KTA area are likely to be as follows:

- dust generation during construction
- traffic emissions from main distributor roads, car parks and other development which may generate substantial traffic movements; traffic emissions from outside KTA area
- industrial emissions from sources north and east of the KTA area and impact on planned development

All impacts will be localised and existing planning guidance may be sufficient to ensure that residual impacts are acceptable.

4.3 Water Quality

Kai Tak Nullah passes through the KTA area and the introduction of pollutants from the surrounding area into the nullah may create downstream effects in Kowloon Bay, although the situation should be an improvement over the present situation. Most probable pollutants will be soil and waste materials from construction activities and cement washings from re-construction of the nullah. Mitigation measures to prevent ingress of wastes into the nullah should be effective in minimising impacts and therefore water impacts are likely to be minimal.

Decontamination of ground under airport will be carried out by project 494CL/A of title "SEKD at Kai Tak Airport - Decontamination and Site Preparation" prior to the start of this Project. The residual impacts of surface water runoff should be minimal.

There is no need for interim sewage treatment. The development area will be served by a sewerage network collecting sewage flows and discharging into To Kwa Wan Treatment Works for preliminary treatment. Capacity of the

Treatment Works is adequate for the population from the development and no upgrading of the To Kwa Wan Treatment Works is necessary to accommodate the flow.

4.4 Solid Waste

Various kinds of wastes will be generated during construction phase, including:-

- very large quantity of construction waste
- chemical waste
- domestic waste

Different types of waste have to be separated and handled properly in order to minimise the impacts.

During the operation phase, municipal solid waste includes mainly domestic, commercial/industrial solid waste. Initially, a temporary extension of Kowloon Bay Transfer Station would need to be carried out to handle these additional wastes arising from 2003. Eventually, a new refuse transfer station should be constructed to adequately deal with them.

4.5 Land Contamination

After the implementation of project 494CL/A of title “SEKD at Kai Tak Airport - Decontamination and Site Preparation”, there should not be any significant residual impacts due to land contamination.

4.6 Risk

Owing to the PHI consultation zone designated around the existing Ma Tau Kok (MTK) gasworks, this site will present an environmental constraint to the Project. Upon the relocation of the MTK Gasworks, the residual impacts would not be significant.

4.7 Ecological Impacts

The existing land area is highly urbanised, supporting a dense population and industrial activities. Much of the KTA area was reclaimed. There is little vegetation present, comprising amenity planting or grassed areas. The quality of both fresh and marine water bodies is poor as a result of sewage and industrial pollution at present. The habitats that will be lost are of little ecological value.

4.8 Visual & Landscape Impacts

The KTA was a restricted area reserved solely for airport and airport related operations. Upon redevelopment, KTA will be “merged” with the established adjacent urban areas and become part of a large development area. The visual envelope of the redeveloped KTA will be confined to prominent peaks and ridgelines on both sides of the harbour.

The existing landscape is not of high value and the area supporting vegetation is minimal. The vegetation is typically planted species frequently found in the urban environment.

4.9 Salvaging Cultural Heritage

Cultural heritage assessment will be carried out to address the possible need of salvaging precious stone blocks from the Kowloon Walled City before the development of the KTA site. Requirements as stipulated in Annex 19 of the EIAO TM will be taken into consideration. Measures would then be recommended to eliminate the possible threats of destruction of those sites of cultural heritage if salvaging is necessary.

5. Previously produced EIA Reports

- 5.1 In the course of Feasibility Study for South East Kowloon Development (SEKDFS), various EIA reports have been produced. Among these, the Study B EIA report has comprehensively presented the findings and recommendations with respect to the EIA study for Kai Tak Airport Early Development Packages.
- 5.2 This Study B EIA report is currently under review. The essential details of this report will be incorporated into the Final EIA Report for the Whole Study of SEKDFS. It is intended to submit the Final EIA Report to ACE for endorsement as soon as it is available probably in August 1998 and to place the Report on EIAO Register at the appropriate time.
- 5.3 All of the potential environmental problems due to the implementation of this Project have been covered by this EIA Study of Study B under SEKDFS except the cultural heritage assessment.
- 5.4 With regard to the project 494CL/A of title “SEKD at Kai Tak Airport-Decontamination and Site Preparation”, the relevant EIA Report was submitted to EPD for approval on 2 May 1998. The Report is currently under public inspection.

6. Proposed Mitigation Measures and Residual Impacts

6.1 Noise

Construction Stage

The noise level of construction activities could be controlled by regulating the issue of construction noise permits. The EIA report for Study B of SEKDFS gives an indication of the approximate duration of the various construction activities, together with an estimate of the associated peak Leq Level. Should the predicted noise levels exceed the statutory guidelines, the Noise Control Authority might prohibit the activities at specific period of time.

Operation Stage

Based on the recommendations of the EIA report for Study B of SEKDFS, a combination of low friction road surfaces, full or partial enclosures, and roadside barriers along roads would be adopted to reduce noise levels at sensitive receptors. These direct mitigation measures could render a compliance rate of 92% of the HKPSG traffic noise standards for the whole planning areas. Indirect mitigation might be required for the residual impacts at certain localised areas.

In respect of the sewage pumping station, noise generation would be unlikely to lead to disturbance at the noise sensitive receptors upon the implementation of mitigation measures.

6.2 Air Quality

During the construction of the Project, with necessary and sufficient dust suppression measures, significant dust impacts are not expected.

The EIA report for Study B of SEKDFS predicts that exceedance of AQO for traffic pollutants (NO₂ & RSP) would exist in close proximity to major road and junction while no exceedance of the AQOs for NO₂ at the average podium level of 15m height. As podia and/or setbacks are planned for the future sensitive receivers, air quality impacts would be reduce to acceptable levels.

6.3 Water Quality

By implementing adequate construction site drainage according to good practices outlined in ProPECC PN 1/94 “Construction Site Drainage”, the surface runoff and erosion could be controlled satisfactorily during construction stage of the Project.

The EIA report for Study B of SEKDFS indicated that the water quality in Kowloon Bay due to diversion of Kai Tak Nullah would not be significantly deteriorated as compared with the current situation.

6.4 Solid Waste

During the construction stage, wastes should be re-used or recycled on site as far as possible. If off-site disposal is required, different types of waste have to be separated and removed properly so as to minimise the impacts.

Municipal solid wastes produced in operation stage would be handled by appropriate refuse transfer station without adverse impacts.

6.5 Land Contamination

No residual impacts exist after the implementation of 494CL “SEKD at KTA - Decontamination and Site Preparation”.

6.6 Risk

Further detailed risk assessment needs to be undertaken if the existing Ma Tau Kok Gasworks is retained.

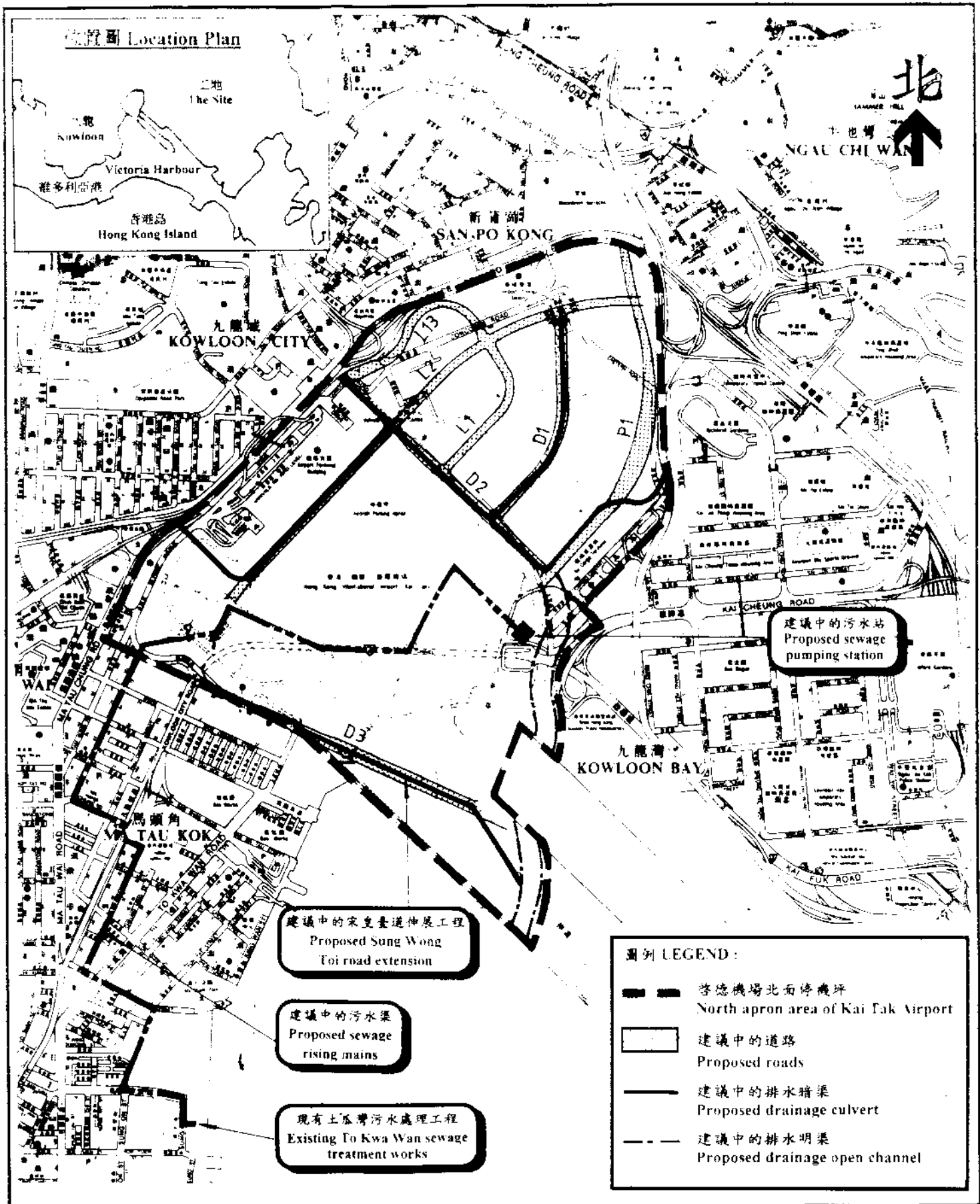
6.7 Ecological Impacts


According to EIA Study of Study B, the Project is found to be either beneficial or of minimal adversity ecologically and no mitigation measures are considered necessary.

6.8 Visual & Landscape Impacts

The re-development at KTA features a large central park of approximately 10 hectares which provides relief from both existing and proposed high density development areas. Other open spaces and amenity strips would also be incorporated to reduce the adverse visual impacts.

Both hard and soft landscape treatment would be carried out to improve the overall quality of landscaping.



圖則名稱 drawing title 在啟德機場原址的九龍東南發展計劃 早期發展工程 第一期 工程規劃圖 South East Kowloon Development at Kai Tak Airport - Early Development Package - Phase 1 Layout of Project Works	繪圖 drawn	簽署 initial	日期 date	項目編號 item no.	辦事處 office 九龍發展處 KOWLOON DEVELOPMENT OFFICE  拓展署 TERRITORY DEVELOPMENT DEPARTMENT
	校對 checked	簽署 initial	日期 date	比例 scale	
	核實 approved	簽署 initial	日期 date	圖則編號 drawing no.	
	C F Ng	[Signature]	22-07-98	469CL	
	P C Leung	[Signature]	22-07-98	1 : 15000	
	P C Mok	[Signature]	22-07-98	KZ 003	