

**FURTHER DEVELOPMENT OF TSEUNG KWAN O
FEASIBILITY STUDY**

PROJECT PROFILE

March 2004

Territory Development Department

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1 BASIC INFORMATION

1.1 Project Title

Further Development of Tseung Kwan O - Feasibility Study

1.2 Purpose and Nature of Project

Territory Development Department (TDD) are now conducting a review of the overall planning for the further development of Tseung Kwan O (TKO), to take into account recent changes in planning parameters and to ensure a comprehensive planning approach to the development of this area within the context of the South East New Territories (SENT) Development Strategy.

The overall objective of the present study is to formulate a comprehensive plan for the further development of TKO, which will address all the issues arising from the development, and which will integrate the new and existing/planned developments of the new town in a coherent manner. The aim is to improve the overall design of the new town with the vision to build TKO into a new town that can boast of its convenience, vibrancy, distinctive urban design and quality living environment.

1.3 Name of Project Proponent

New Territories East Development Office, Territory Development Department (NTE DevO, TDD)

1.4 Location and Scale of Project and History of Site

TKO is the seventh New Town in Hong Kong. Since the approval in 1982 to develop TKO into a new town, TKO has undergone very rapid development and the New Town now provides home to about 310,000 people. According to the current TKO Outline Zoning Plan (Plan No. S/TKO/14), the planned population of the New Town is about 480,000. The study area for the further development of TKO, covering existing and planned developments, is shown in Figure 1.

The key elements of the TKO further development comprise the Western Coast Road (WCR), the Cross Bay Link (CBL), new development at Town Centre South (TCS) and new development at Pak Shing Kok (PSK). Other existing and planned land uses (eg planned development above MTR station depot, TKO Industrial Estate, industrial uses in Area 137, etc) will not be considered under this study. Area 137 was originally a key element to be studied but taking account of the indefinite programme and commitment of the land uses, the study will not propose any recommendations for changes to the current adopted Layout Plan and approved Outline Zoning Plan (OZP). Area 137 is currently zoned for "Other Specified Use (Deep Waterfront Industry)" on the TKO OZP.

Optimum planning and engineering solutions for each of these elements must be found (eg the alignment and form of structure for the WCR and the CBL, new land use proposals for TCS and PSK, etc) such that these, together with the existing and planned developments in TKO, fit together in a coherent manner and provide for an optimum level of population and development.

Following extensive public consultation and preliminary technical evaluations during the early part of the Study, a Concept Plan has been formulated for the further development of TKO. The plan sets out the suggested land uses for the preferred development, and will form the basis for the future planning of the further development areas of TKO, in particular TCS (as well as part of Tiu Keng Leng (TKL)) and PSK. The CBL is incorporated in this plan as a bridge option,

linking WCR on the western side of Junk Bay with Wan Po Road, to the south of Area 86, on the eastern side of Junk Bay. The planned road deckovers above Road D4 as noise mitigation measure will also be reviewed. Detailed impact assessments, including environmental impact assessment (EIA) in accordance with the requirements of the Environmental Impact Assessment Ordinance (EIAO), will be carried out to determine the environmental acceptability and feasibility of this plan. The Concept Plan is shown in Figure 2.

The tunnel alignment of WCR has been selected as the preferred option and will be subject to detailed EIA under this Project. The WCR runs in tunnel under Devil's Peak, from the TKO side on the western shoreline of Junk Bay to Lam Tin on the Kowloon side, from where it runs on viaduct, at-grade road and in another short length of tunnel to connect with Trunk Road T2 in the South East Kowloon Development (SEKD). On the TKO side, the WCR, including a toll plaza, is on reclamation along the shoreline of Inner Junk Bay. Junk Bay is not within the Victoria Harbour covered by the Protection of the Harbour Ordinance. Therefore, there is no reclamation in Victoria Harbour under this Project. The WCR tunnel alignment and the reclamation extent in Junk Bay are shown in Figure 3.

The WCR scheme incorporates two slip road connections between Road T2 and Cha Kwo Ling Road. The introduction of these slip roads will require slight modification of the access (as proposed under SEKD) leading to the vehicle queuing area of the proposed Dangerous Goods Vehicle Ferry Pier. The EIA for the WCR will cover these two proposed slip roads and will also check whether the modification of the access road will affect the findings/assumptions used in the SEKD Schedule 3 EIA.

1.5 Number and Types of Designated Projects to be covered by the Project Profile

This Project Profile was prepared in accordance with Annex 1 of the Technical Memorandum on the Environmental Impact Assessment Process (EIAO-TM).

The proposed Project is an integrated planning and engineering feasibility study of an urban development project with a study area covering more than 20 ha or involving a total population of more than 100,000. Under the EIAO, this Project is classified as a Schedule 3 Designated Project (DP) under Item 1 of the Schedule 3 "Major Designated Projects requiring Environmental Impact Assessment Reports". A detailed environmental impact assessment for approval by the Director of Environmental Protection (DEP) is required.

The Project also includes various Schedule 2 DPs that, under the EIAO, require Environmental Permits (EPs) to be granted by the DEP before they may be either constructed or operated. The following elements under this Project are anticipated to be classified as Schedule 2 DPs (subject to confirmation of their need and extent) and are covered by this Project Profile:

- CBL, a district distributor road considered as a DP under Schedule 2, Part I, A.1 of the EIAO;
- Road P2 (the southern extension, connecting with WCR, including a grade separated junction with Road D4), being a primary distributor road considered as a DP under Schedule 2, Part I, A.1 of the EIAO; and
- WCR (including tunnel and reclamation), being a trunk road considered as a DP under Schedule 2, Part I, A.1, A.7 and C.1 of the EIAO.

1.6 Name and Telephone Numbers of Contact Person(s)

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Telephone No: 2301 1369

2 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Project Implementation and Timetable

The Study is being undertaken under Consultancy Agreement No. CE 87/2001 (CE) for NTE DevO, TDD. The Study commenced on 26 July 2002. The Study is being undertaken essentially in two phases, namely Phase 1: Alternative Options; and Phase 2: Preferred Option Assessment. The Schedule 3 EIA will be carried out for the preferred development option under Phase 2, over the period April 2004 to August 2004.

Implementation of the project (detailed design, construction and operation) will be subject to the findings of the Study.

3 POSSIBLE IMPACTS ON THE ENVIRONMENT

3.1 General

The major elements of the study include the new planning proposals at TCS, TKL and PSK, and the two proposed major highways WCR and CBL, along with the provision or upgrading of associated key infrastructure.

The following are possible key impacts arising from the potential developments on the environment:

- Construction work will require handling and stockpiling of excavated materials, concreting works and construction traffic movements on unpaved roads. These activities will increase the levels of airborne particulates. Vehicular emissions on new roads including WCR, CBL, Road P2, etc, could cause air quality impact.
- Plant and machinery used as well as non-mechanical construction activities will generate increased noise levels. Major noise sources include civil works and construction (eg general earth works, spoil removal, etc). During the operation phase, traffic noise would be generated from the new roads (WCR, CBL, Road P2, etc).
- Waste arising would comprise excavated material, construction waste, chemical waste and general refuse, with associated dust and odour emissions, noise, potential hazards and water pollution.
- Further reclamation works of the WCR, potentially polluted runoff from the urban areas and seepage of leachate from landfill may result in water quality impacts, particularly to Junk Bay and the Eastern Channel.
- There is a potential landfill gas hazard for TCS and PSK associated with possible migration pathways from the TKO Landfills, and for the WCR from the Sai Tso Wan Landfill.
- Landscape and visual impacts may arise from the new TKO development proposals, in particular the WCR, CBL, and the new development at TCS and PSK.
- Cumulative water quality impacts from the potential landfill leachate of the TKO landfills and Sai Tso Wan landfill will be addressed.
- Water quality impacts arising from the potential sewage bypass/ emergency overflow within the inner Junk Bay as a result of the findings of the EEFS (Environmental and Engineering Feasibility Assessment Studies in Relation to the Way Forward of the Harbour Area Treatment Scheme).

4 POSSIBLE ENVIRONMENTAL IMPACTS DURING CONSTRUCTION

4.1 Air Quality

Three possible air quality impacts during the construction phase of the project are:

- fugitive dust arising from any reclamation, demolition and construction of structures, movement of construction traffic over the site area, and wind erosion of open sites and stockpiling areas;
- cumulative impact of fugitive dust resulting from any adjacent construction works which are planned to be implemented at the same time as the TKO Further Development works;
- odour generation from any reclamation activities and sediment management.

During construction, residential premises, schools, education institutes, offices, shopping centres, temples/churches and active open spaces in the TKO and Yau Tong areas may be impacted. The major residential developments and educational institutions are listed in the later Table 6.1.

4.2 Noise

Noise impacts during the construction phase may result from various phases of construction activities, neighbouring concurrent construction works, the use of powered mechanical equipment and traffic along site access roads. General speaking, most construction noise is attributable to site clearance, geotechnical works including excavation, tunnelling and formation, dredging/reclamation works and transport infrastructure works

During construction, residential developments and education institutes in the TKO and Yau Tong areas, listed in Table 6.1, may be impacted.

4.3 Water Quality

Possible water quality impacts during the construction phase of WCR and CBL include:

- influence of changes in coastline configurations on the hydrodynamic and water quality conditions in Junk Bay and Victoria Harbour;
- temporary elevation in concentrations of suspended solids (SS) and generation of sediment plumes, release of organic and inorganic contaminants and nutrients during dredging and filling;
- increase in SS levels and turbidity arising from construction site runoff and wastewater generated from construction activities;
- release of leachate from the Sai Tso Wan Landfill as groundwater discharge at the construction site of WCR;
- release of leachate from TKO Landfill Stage I and Stage II/III into the Eastern Channel and the marine waters of Inner Junk Bay during construction phase and operation phase.
- change in sediment deposition rate could affect the ecological sensitive receivers in the vicinity to the construction area.

4.4 Waste Management

Wastes generated by the construction works are likely to include site wastes, workforce wastes, chemical wastes, construction and demolition material and dredged sediment. The possible presence of contaminated sediments that may require dredging and disposal will need to be determined.

4.5 Ecology and Fisheries

Shrubland and small areas of woodland are located at Black Hill and Chiu Keng Wan Shan. As this vegetation is located west of TKO and is far away from the proposed development areas, disturbance due to the associated infrastructural works of the development is expected to be minor.

Isolated small colonies of corals are located along the western and eastern coastline of Junk Bay, as identified in earlier ecological studies. However, apart from an area of corals deemed to be of significance close to the Lei Yue Mun gap, the marine ecology in Junk Bay is considered to be of low conservation interest.

As identified in the Port Survey 96/97 published by Agricultural and Fisheries Department in 1998, the Study Area contributes only a small proportion of the total production of all fishing areas in Hong Kong (less than 1% for adult fish and less than 0.3% for fry fish). Therefore, fisheries in the area are regarded as minor.

4.6 Cultural Heritage

Impact upon areas/items of significant cultural heritage is considered minimal as physical encroachment or interference with the cultural heritage areas is generally avoided. For reference, the areas/items of significant cultural heritage within the Study Area include the ruined fort at Mau Wu Shan, the Fat Tau Chau Qing Dynasty Grave Stone, the Junk Island House Ruin, the Junk Island Site of Chinese Custom Station, Yau Yue Wan Kiln, the Grade II Tin Hau Temple in Hang Hau, the quarry face at Lei Yue Mun, the Devil's Peak Fort and associated military installations, Lei Yue Mun Burial Ground and graves in Pak Shing Kok, and Junk Bay which, as the eastern entrance to Victoria Harbour, may contain ancient shipwrecks.

4.7 Landscape and Visual Impacts

The development would consist of WCR, CBL, mixed residential, commercial, and institution and community development in TCS and PSK. The primary sources of impact may arise from the loss of bay waters as a visual resource and obstruction of access to the bay from the existing urban perimeter. Intrusion into views of Clearwater Bay Peninsula may also occur from the PSK development. Direct adverse landscape impacts may occur due to the loss of bay waters and loss of natural vegetation and landscape.

4.8 Landfill Gas Hazard

As part of TCS and PSK fall within the 250 m Consultation Zone of TKO Stage I Landfill, migration of landfill gas from the landfill site would be an issue during construction of the Project.

As part of the Kowloon section of WCR encroaches upon the Consultation Zone of Sai Tso Wan Landfill, landfill gas hazard from Sai Tso Wan Landfill during construction would also be an issue.

5 POSSIBLE ENVIRONMENTAL IMPACTS DURING OPERATION

5.1 Air Quality

Operation phase air quality impact from the use of new roads will primarily be vehicle emissions of nitrogen dioxide (NO₂) and respirable suspended particulates (RSP). There may be impacts from portal and ventilation building emissions from the WCR on nearby air sensitive receivers (ASRs), and mitigation measures may need to be considered. Sufficient buffer zones would be provided to allow adequate dispersion and dilution of vehicle emissions. Cumulative air quality impacts from the landfill sites and the industrial areas to the south-east of TKO (the TKO Industrial Estate, Area 85 and Area 137) and also the odour impact from the Sewage Treatment Works in Area 85 should be taken into account.

5.2 Noise

The key noise impact would be operation phase traffic noise arising from the new roads in TCS and PSK, as well as from the WCR and CBL. High traffic noise may occur at the existing and future noise sensitive receivers (NSRs) along these roads, including residential blocks and schools, which may not meet the traffic noise standard. Impacts should be avoided firstly through appropriate location/alignment and design of the project (in particular major roads such as the WCR, CBL, Road P2, etc). Where this is not possible, mitigation measures would be required.

Fixed plant noise sources (such as ventilation exhaust fans, sewage pumping stations, utilities, etc) will also need to be assessed.

5.3 Water Quality

Water sport recreation within Inner Junk Bay and Eastern Drainage Channel (EDC) would necessitate water quality complying with secondary contact recreation standard. Owing to the pollution loadings draining from upstream catchments, landfill leachate and runoff arising from the New Town, embayment of the Junk Bay area resulting in limited tidal flushing should be minimised. Possible adverse impacts of leachate seepage from TKO Landfill Stage I and Stage II/III to the Eastern Channel and marine waters of Inner Junk Bay should be investigated. The design of the CBL, in particular the bridge piers and any necessary bridge protection measures, should take into account the enhancement if possible of tidal flushing and ensure the suitability of water quality in Inner Junk Bay for water recreation.

The limited extent of reclamation required for the WCR along the north-western shoreline of Junk Bay will not cause any embayment and, whilst the influence of the change in coastline configuration on the hydrodynamic and water quality conditions will need to be assessed, no major impacts are expected. It is also expected that the WCR reclamation within Inner Junk Bay would not have direct impact on flows through Lei Yue Mun and Victoria Harbour.

The operational phase water quality impact on ecological sensitive receivers will also be addressed. This may be due to the diversion of storm outfall and change in hydrodynamic regime affecting the coral communities within the Junk Bay. Possible impacts on the coral sites may include sedimentation and change in salinity.

Water quality impact during the operation phase of the WCR, CBL and other road infrastructure is considered negligible, as the impact would be confined to the road surface runoff.

Key issues relating to sewage impacts will be investigated under the Sewerage Impact Assessment (SIA) of the present study (which will also form part of the EIA). Key issues include the following:

- assessment of the sewerage system in TKO (including the TKO Preliminary Treatment Works) taking into account the projected flows from TKO and part of Port Shelter;
- assessment of impacts of the proposed developments under the Study on the existing and planned TKO sewerage systems and recommendation of appropriate mitigation measures including implementation programme and estimated costs;
- assessment of water quality impacts of possible sewage overflow and or emergency bypass as a result of capacity constraint of HATS Stage 1 Tunnel or emergencies arising from this Project.

Regarding the possible capacity constraint of HATS, the SIA shall make reference to the recommendations and conclusions of the EEFS.

5.4 Waste Management

Wastes generated during the operation phase will be mainly domestic wastes with a small percentage of commercial (from offices and restaurants) and industrial wastes. All the future municipal solid wastes will be collected and directed to the SENT landfill. As such, no adverse environmental impacts are anticipated to arise from the operation of the Project.

5.5 Ecological and Fisheries Impact

As the major pollution sources in Junk Bay in the operation phase would be storm water run-off from the TKO Town Centre South area and surface run-off from WCR and CBL, it is expected that the Project would have only minor impact on the coral site near Lei Yue Mun Point and Fat Tong Chau and negligible impact on local fisheries.

5.6 Cultural Heritage Impact

Cultural heritage impacts during the operation phase of the TKO development and road infrastructure, including WCR and CBL, are not anticipated, although this would be subject to the findings of cultural heritage impact assessment.

5.7 Landscape and Visual Impact

The key landscape and visual impacts during operation would result from the new coastline and from new development proposals, including the roads and bridges. Residual impacts would occur primarily from loss of bay waters due to reclamation and from possible visual obstruction to views from existing residential areas to the bay and to the Clear Water Bay Country Park. Landscape and visual impacts from any operational noise mitigation measures (eg noise barriers) of new roads should also be addressed.

5.8 Landfill Gas Hazard

Parts of TCS and PSK fall within the 250 m Consultation Zone of TKO Stage I Landfill and part of the WCR Kowloon section falls within the Consultation Zone of Sai Tso Wan Landfill. Landfill gas and leachate hazards from these landfill sites may constrain the land use and development of these areas. A landfill gas and leachate hazards will need to be assessed.

6 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

The major existing and planned sensitive receivers and sensitive parts of the natural environment that might be affected by the proposed project are summarised in Table 6.1. The locations of these receivers are shown in Figures 4 to 7.

Table 6.1 Major Existing and Planned Sensitive Receivers

Sensitive Receivers	
<i>Residential developments</i>	Residential developments in Laguna City, existing residential development along Cha Kwo Ling, Kaolin Mine Site Housing Development, Eastern Harbour Crossing Housing Development, Yau Tong Bay Development, Tai Wan San Tsuen, Ocean Shores, TKO Town Centre, Bauhinia Garden, MTRCL Area 86, Oscar By The Sea, La Cite Noble, Hin Ming Court, Tin Ha Wan Village, Wo Tong Kong, Boon Kin Village
<i>Educational institutions</i>	In Tiu Keng Leng, TKO Town Centre, Hang Hau, Area 85 and Area 86, SKH Kei Hau Secondary School
<i>Government / Community facilities</i>	North of TKO Town Centre, WSD salt water intakes including Junk Bay, Yau Tong, Cha Kwo Ling, Hung Hom, Quarry Bay, Sai Wan Ho, Heng Fa Chuen, Siu Sai Wan, North Point and Cape D' Aguilar salt water intake, cooling water intakes including Dairy Farm Ice Plant and Pamela Youde Nethersole Eastern Hospital
<i>Water bodies</i>	Eastern Channel, Junk Bay
<i>Marine water resources (mariculture)</i>	Po Toi O and Tung Lung Chau Fish Culture Zone
<i>Terrestrial ecological sensitive receivers</i>	Habitats including woodland, shrubland-grassland at Black Hill and Chiu Keng Wan Shan
<i>Marine ecological sensitive receivers</i>	An isolated small colony of corals along the outer western coastline of Junk Bay
<i>Places of high visual value</i>	Visual resources such as bay waters, natural vegetation and landscape
<i>Items of cultural heritage</i>	The ruined fort at Mau Wu Shan, the Fat Tau Chau Qing Dynasty Grave Stone, the Junk Island House Ruin, the Junk Island Site of Chinese Custom Station, Yau Yue Wan Kiln, the Grade II Tin Hau Temple in Hang Hau, the quarry face at Lei Yue Mun, the Devil's Peak Fort and associated military installations, Lei Yue Mun Burial Ground and graves in Pak Shing Kok

The major elements of the surrounding environment and existing and planned land uses that might affect the areas of new development proposed under the Project are summarised in Table 6.2.

Table 6.2 Major Land Uses of the Site

Land Uses	
<i>Roads</i>	Vehicle emission along the existing road networks, including Wan Po Road, Chiu Shun Road, Po Yap Road, Po Shun Road
<i>Landfill</i>	Landfill gas migration from the restored TKO Landfill at Area 77, and from landfills in Areas 101 and 105 on the TKO side, existing chimney emissions from flaring of landfill gas.
<i>Industrial</i>	Noise generated from operating plants and exhaust fans at TKO Industrial Estate. Existing chimney emissions from the TKO Industrial Estate and Area 85, and odour emissions from the sewage treatment works in Area 85

7 ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED

7.1 Air Quality Impact

Construction dust is not likely to be an issue, with the implementation of proper dust control and suppression measures as stipulated in the Air Pollution Control (Construction Dust) Regulation.

Operational air quality impacts arising from traffic on the new roads would be minimised through incorporation of set-backs, to provide sufficient separation between the major roads / ventilation buildings and the ASRs.

7.2 Noise Impact

With the application of mitigation in the form of quieter alternative mechanical plant, installation of movable noise barriers, reduction in number of plant and on-time percentage powered mechanical equipment, construction noise criteria would normally be complied with and no adverse residual impacts would be expected during construction phase. Alternative mitigation measures such as quiet construction methods, scheduling / phasing of noisy construction works, and other possible direct mitigation measures for reducing the construction noise impact should also be explored.

Operational traffic noise arising from the new roads in TKO, WCR and CBL would be minimised with the implementation of noise mitigation measures such as provision of setbacks, alternative alignments of roads, appropriate adjustment of site layouts and building design, etc. Other direct mitigation measures as stipulated in Section 6.1 of Annex 13 of the TM on EIA Process would also be investigated (noise barriers would be recommended if necessary) to reduce noise impacts to sensitive receivers.

7.3 Water Quality Impact

Mitigation measures during any necessary dredging and filling operations would include:

- installation of silt curtains during dredging works;
- construction of the seawall in the early stages of the reclamation to effectively confine sediment release during dredging and filling;
- reduction of the dredging rate, use of tightly closed grabs, and control of grab descent speed to minimise disturbance to the seabed and sediment loss during dredging and raising of grabs.

For land-based construction activities, water quality impact would be readily mitigated with the adoption of good site arrangement and management practices. Groundwater discharged from the construction site that may be contaminated with landfill leachate could be collected and recharged into the ground.

7.4 Sediment Management

The requirements and procedures for dredged mud disposal under the Environment, Transport and Works Bureau Technical Circular No. 34/2002 would be followed.

7.5 Waste Management Implications

Standard waste management measures and good site practices in waste handling, disposal and transportation would be implemented.

7.6 Ecological and Fisheries Impact

Compensatory planting of native trees would mitigate woodland loss. To reduce impact on marine environment, closed-grab dredger and silt curtains would be deployed to minimise impacts on benthos, other sessile and mobile organisms. Seawalls with riprap facing may be constructed to provide marine habitats.

No mitigation measures are required for fisheries as the study area is not regarded as an important fishing area in Hong Kong.

7.7 Cultural Heritage Impact

Impacts to sites of cultural heritage or archaeological resources that are affected by the development proposals should be assessed and mitigation measures should be proposed. Subject to the findings of the assessment, these could include either preservation in whole or in part in the proposed development, or rescue under a comprehensive and practical rescue plan. A marine archaeological investigation should also be conducted to assess the marine archaeological impact of the affected seabed.

7.8 Landscape and Visual Impact

Tree felling, tree transplanting, retention of trees in situ and compensatory planting will be carried out in accordance with WBTC No. 24/94. Minimisation of the tree cutting would reduce the potential visual impact and the potential impact on natural topography.

The impacts during the operation phase are unlikely to be a critical issue with implementation of following mitigation measures:

Roadside and Slope Landscaping

- Implementation of roadside planting
- Use of planters on slope terraces with shrub and tree planting
- Use of total vegetated steeper slopes using geotextile systems
- Use of planted bunds or landscaped berms to screen developments from the surrounding areas.

Noise Barrier Design

- Use of transparent panels to reduce visual obstruction
- Use of planting adjacent to the barrier
- Appropriate colour selection of panels and support structures to relate to other streetscape structures or surrounds
- Design of support structures to incorporate a high level of quality and aesthetics.

8 USE OF PREVIOUSLY APPROVED EIA REPORTS

The following approved EIA Reports that cover the environmental impact assessment of different infrastructural developments at various parts of TKO and East Kowloon will be referred to in the present study:

- Fill Bank at Tseung Kwan O Area 137, EIA Report (Register No.: AEIAR-060/2002, approved on 27 June 2002);
- Tseung Kwan O Roads D1, D8 and D10, EIA Report (Register No.: AEIAR-046/2001, approved on 23 November 2001);
- Tseung Kwan O Development - Contract F: Grade Separated Interchange T1/P1/P2, EIA Report (Register No.: AEIAR-017/1999, approved on 20 October 1999);
- Feasibility Study on the Alternative Alignment for the Western Coast Road, Tseung Kwan O, EIA Report (Register No.: AEIAR-016/1999, approved on 20 October 1999);
- Yau Tong Bay Development, Reclamation of Yau Tong Bay, Environmental Impact Assessment Study, Final Report (Register No.: AEIAR-053/2002, approved on 8 April 2002).