

Flyover and Adjoining Footbridge between Yuen Long On Ning Road and Kau Yuk Road

Project Profile

**Flyover and Adjoining Footbridge between
Yuen Long On Ning Road and Kau Yuk Road**

**PROJECT PROFILE
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DRAWING

SK/2183/PP1

SK/2183/PP2

PROJECT PROFILE

1.0 BASIC INFORMATION

1.1 Project Title

Flyover and adjoining Footbridge between Yuen Long On Ning Road and Kau Yuk Road

1.2 Purpose and Nature of Project

The proposed road works are to alleviate traffic congestion in Yuen Long Town as well as to resolve traffic safety problems at the junction of Castle Peak Road / Ma Miu Road / Yuen Long Tai Yuk Road and Castle Peak Road / Kuk Ting Street/Tai Tong Road.

The project is to construct a flyover and a footbridge longitudinally over the nullah between Yuen Long On Ning Road and Kau Yuk Road.

1.3 Name of Project Proponent

Highways Department, HKSAR Government.

1.4 Location and Scale of Project

(a) The location plan and general layout plan of the project is shown on drawing no. **SK/2183/PP1**.

(b) The scope of the project comprises the following:

- provision of a single two lane elevated road of about 330 metres in length longitudinally over the existing nullah
- provision of a 200 metres long footbridge (5 metres wide) adjoining the flyover with access ramps and staircases
- associated landscape, drainage, street lighting, traffic aids and E&M works
- associated noise mitigation measures in the study area along the proposed flyover
- associated drainage mitigation measures along the nullah

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

This project profile covers only the project "Flyover and adjoining Footbridge between Yuen Long On Ning Road and Kau Yuk Road". This project is classified as a Designated Project under Schedule 2, Part 1, A.8 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 449). An environmental permit is required for the project.

1.6 Name and Telephone Numbers of Contact Persons

2.0 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Project Planning and Implementation

The Investigation (including Environmental Impact Assessment, Drainage Impact Assessment and Traffic Impact Assessment Studies) and Preliminary Design will be carried out by consultants.

2.2 Project Timetable

A tentative implementation programme is as follows:

Investigation and Preliminary Design	August 2001	-	December 2002
Detailed Design	January 2003	-	July 2004
Tendering	August 2004	-	November 2004
Construction	December 2004	-	June 2008

2.3 Interaction with Other Projects

This project is anticipated to impact and interface with some other existing and planned government and public sector projects including but not limited to the following:

- Yuen Long Bypass Floodway by Territories Development Department
- Sewer Upgrading Works at Yuen Long Town by Drainage Service Department
- Proposed Public Transport Interchange and residential development near the West Rail Long Ping Station by Kowloon-Canton Railway Corporation

3.0 POSSIBLE IMPACT ON THE ENVIRONMENT

The likely environmental impacts of the proposed works that may arise during both construction and operational phases are described below:

3.1 Gaseous emissions

Vehicle and plant exhaust emissions from the site are not considered to be a significant source of air pollutants in construction phase. However, vehicular traffic will be the main source of gaseous emissions during the operational phase.

3.2 Dust

Air quality impacts have the potential to occur during construction from dust generated due to exposed site areas, stockpiling of materials, movement of vehicles along the road and excavation and handling of construction materials. Particulates will be generated from vehicle emissions during operational phase.

3.3 Noisy operations

Dominant powered equipment and machinery which are expected to generate noise include: breakers (both portable and excavator-mounted),

power units for various types of plant, including air compressors, excavators, ready mixed concrete lorries and poker vibrators; and cranes.

Major noisy activities include breaking road surface, excavation, piling, concreting, road surfacing and handling of earth materials. The traffic noise from the new road may have impact to the sensitive receivers and should be assessed.

3.4 Traffic generation

Construction traffic will add to the overall traffic volume on Yuen Long On Ning Road, Castle Peak Road (Yuen Long Section), Kau Yuk Road and adjoining roads. Temporary traffic management measures may be implemented to minimise disturbance to the road users.

3.5 Disruption of water movement or bottom sediment

Piers and their foundation construction will disturb the flow of the nullah. Drainage mitigation measures may be implemented before the construction. The main concern relating to the activities which might cause the water quality of some public drains to deteriorate is the possible pollution due to silt, oil and floating debris while work is in progress.

3.6 Solid waste

Waste generated will comprise excavated materials, construction and demolition waste and general refuse.

3.7 Unsightly visual appearance

The project will involve the construction of flyover, adjoining footbridge, and noise mitigation measures which may affect the landscape character and create visual impacts. The potential landscape and visual impacts should be addressed with suitable mitigation measures recommended.

3.8 Ecological impacts

There are some flora and fauna at the downstream of Shan Pai River, which could be affected by the works in the nullah upstream. No important habitat could be found within the subject site which is totally urbanised.

4.0 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

Existing and planned sensitive receivers and sensitive parts of the natural environment which might be affected by the proposed project, include mainly the following: (A total of 27 representative sensitive receivers are shown on drawing no. P/2183/PP2)

- (a) Residential developments along Yuen Fat Path, Chung Shing Path, Hi Lee Path and Cheung Shing Path

- Ref. (1) Fung Yue Building,
(2) Yuen Tung Building,

- (3) Wah Shing Mansion,
- (4) Wah Cheung Mansion,
- (5) Healey Building,
- (6) Shun Tak Building,
- (7) Man Yip Building,
- (8) Yen Tsui Garden,
- (9) Tse King House,
- (10) Happy House,
- (11) Siu Fung Building,
- (13) Yuen Long Mansion,
- (14) Kin Shing Building,
- (15) Yuen Fat House,
- (16) Ho Shun Fuk Building,
- (17) Fook On Building,
- (27) Hay Ping House.

(b) Educational institutions, including schools, kindergartens and nurseries

- Ref. (12) Shung Shing School,
 (18) Yuen Long Merchants' Association Secondary School,
 (19) N. T. Heung Yee Kuk Yuen Long District Secondary School,
 (20) Chiu Lut Sau Memorial Secondary School,
 (21) Yuen Long Lutheran Middle School,
 (22) Caritas Chan Chun Ho Prevocational School – Yuen Long,
 (24) Chun Kwong School,
 (25) Yuen Long Chamber of Commercial Primary School No. 2,
 (26) Yuen Long Pui Jing Kindergarten.

(c) Health care facilities, including clinics, and homes for the aged

- Ref. (23) Madam Yung Fung Shee Health Centre.

5.0 ENVIRONMENTAL PROTECTION MEASURES AND ENVIRONMENTAL IMPLICATIONS

5.1 Measures to Minimise Environmental Impact

(a) Air

The following dust control measures to minimise the dust nuisance during the construction phase should be considered:

- vehicle wheel and body washing facilities at site exits
- reduction of vehicular speed and unpaved roads
- regular wetting of the site (using browsers, sprays or vapour mists) to reduce dust
- the earthmoving activities must be carefully and well planned. Such planning shall include the transportation routes as well as protective measures such as the employment of water-spraying and tarpaulin sheets to suppress the dust generated during and after excavation.

Dust is not expected to be an issue during the operational phase.

(b) Noise

To mitigate the construction noise impacts, the following measures should be considered:

- the use of silenced equipment
- the use of mufflers, silencers and acoustic linings for noisy mechanical equipment
- the siting of equipment
- the careful scheduling of work, especially near the educational institution where examination periods shall be taken into consideration
- the use of temporary acoustic barriers
- the proper maintenance of equipment

To reduce traffic noise during the operational phase, the following measures should be considered:

- noise enclosure
- noise barrier
- noise reducing highway surfacing

(c) Water

Measures include the provision of temporary drainage systems in accordance with EPD's guidelines, interceptor manholes to trap oil pollutant; appropriate means to trap debris and sedimentation of silt in the temporary drainage system prior to discharging into the nullah.

(d) Waste

The main source of solid waste during the construction phase will be excavated spoil. Other materials including surplus construction materials, used products and municipal type waste will also be generated. To minimise impacts, the following mitigation measures should be taken into consideration:

- solid materials and waste will be removed from the site and taken to a designated disposal site
- construction vehicles to and from the site will be routed to avoid sensitive receivers where possible

No solid waste in excess of normal roadside litter will be expected during the operational phase.

(e) Landscape and visual

Mitigation measures to minimise the landscape and visual impacts may include but not limited to:

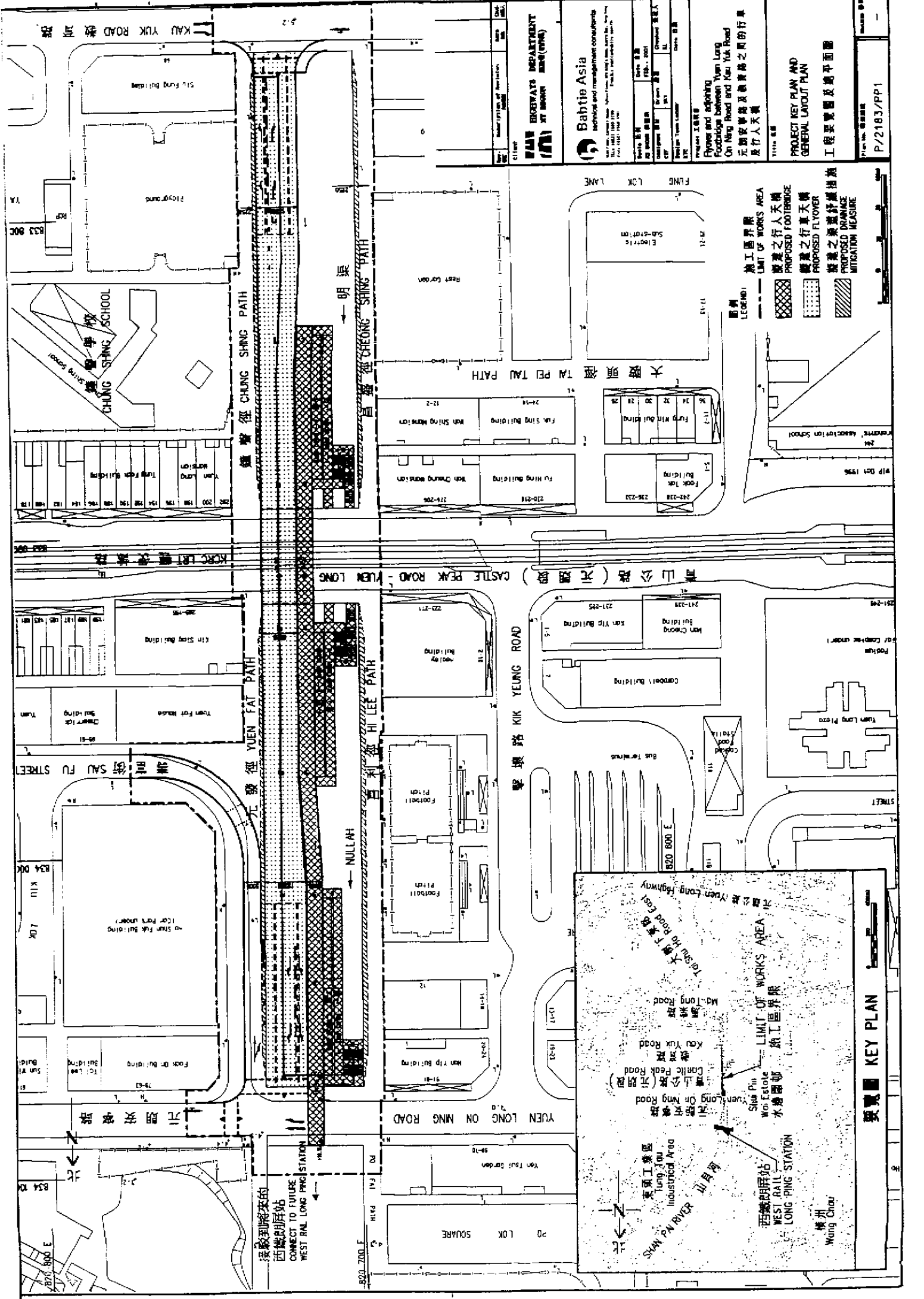
- compensatory planting
- aesthetic design of elevated structures and noise mitigation measures

5.2 Possible Severity, Distribution and Duration of Environmental Effects

All construction impacts are short-term effects. From the findings of the preliminary environmental review, it is revealed that construction noise impacts on noise sensitive receivers should be in compliance with the established standards during daytime in weekdays. Construction dust impacts on sensitive receivers are expected to be in compliance with the established standards. No ecological sensitive areas and important

species were identified in the vicinity of the project. No adverse ecological impact is envisaged.

Operational impacts are long-term effects. It is recommended that further assessment should be carried out to determine the traffic noise impact in details and the requirement of suitable mitigation measures. No adverse operational air quality impact is envisaged. Visual and landscape impacts are expected to be minimal. It is expected that the project would not affect any site of cultural interest.



Client: **NEW BROADWAY DEPARTMENT AT WORK**

Project Name: **NEW BROADWAY DEPARTMENT AT WORK**

Project Location: **On Ning Road and Kau Yuk Road**

Project Description: **元朗新廣道及廣道與新廣道之間的行車及行人天橋**

Project No: **P/2183/PP1**

Babtie Asia
 services and management consultants

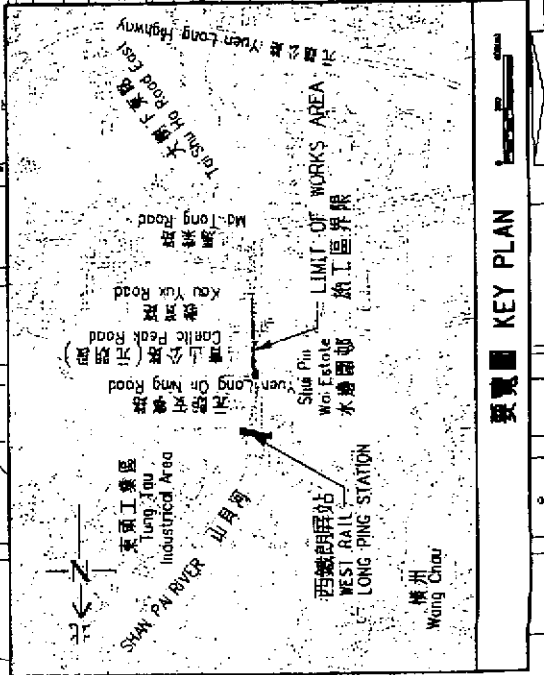
Project Engineer: **陳國強**
 Project Manager: **陳國強**
 Project Supervisor: **陳國強**
 Project Assistant: **陳國強**

Project Description: **元朗新廣道及廣道與新廣道之間的行車及行人天橋**

Project No: **P/2183/PP1**

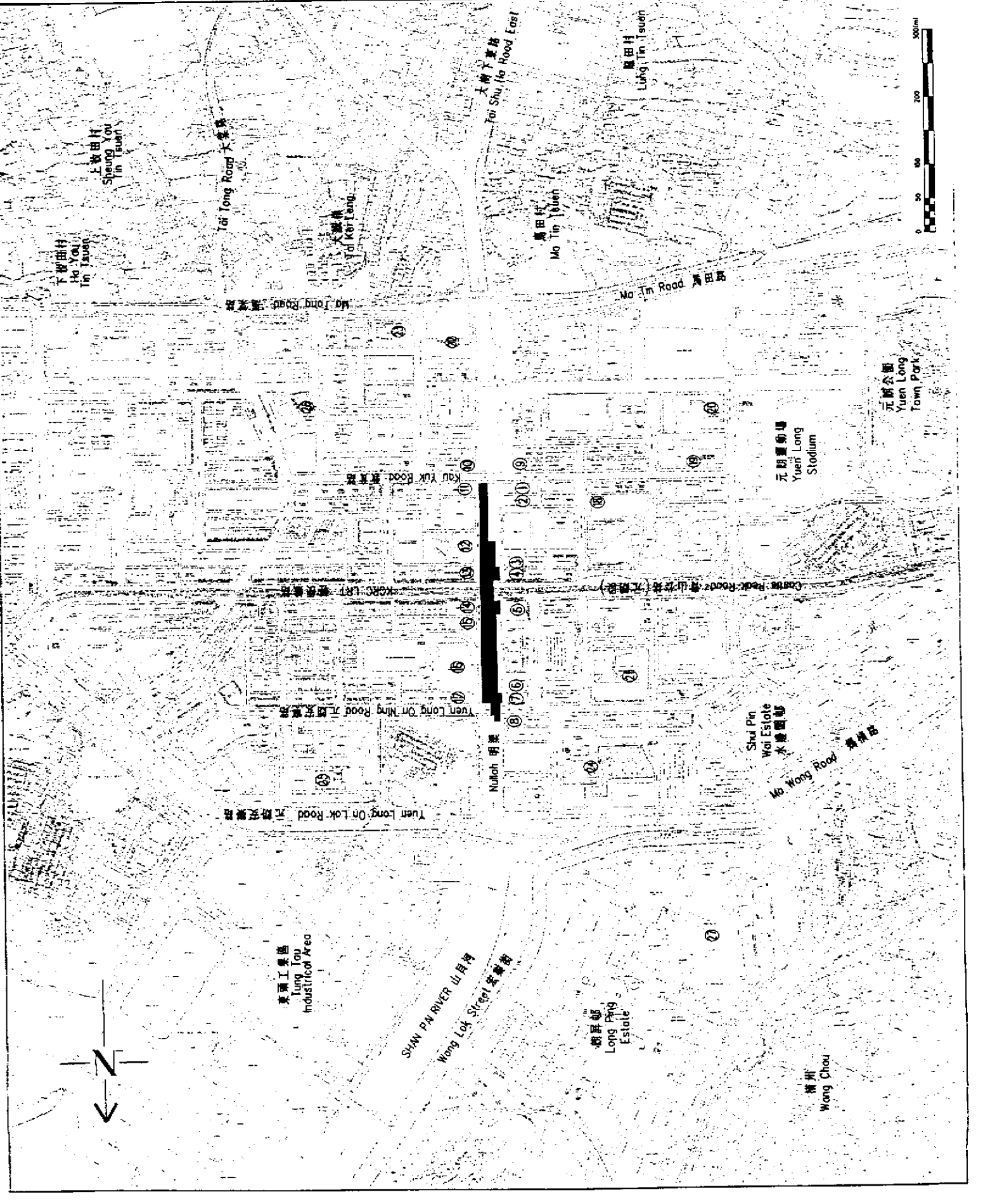
圖例

LIMIT OF WORKS AREA
 擬建之行人天橋
 PROPOSED FOOTBRIDGE
 擬建之行車天橋
 PROPOSED FLYOVER
 擬建之渠溝好運橋措施
 PROPOSED DRAINAGE MITIGATION MEASURE



要覽 KEY PLAN

擬議之行人天橋及行人通道
 PROPOSED FLYOVER AND FOOTBRIDGE
 對空氣/噪音敏感的地方
 AIRBORNE SENSITIVE RECEIVERS



Client	Highways Department 香港路政處
Project	Yuen Long Flyover and Footbridge
Scale	1:1000
Date	1998

Highways Department
 香港路政處

Babtie Asia
 Technical and management consultants
 技術及管理顧問

Project Director	Project Manager
Author	Checker
Drawn	Reviewed
Scale	Date

Proposed Flyover and Footbridge
 Locations of Sensitive Receivers
 擬議之行人天橋及行人通道
 對空氣/噪音敏感的地方