



The Hong Kong Special Administrative Region Government
Civil Engineering and Development Department
New Territories North and West Development Office

**Cycle Track between Tsuen Wan and Tuen Mun – Stage 1
(Section from Tsuen Wan West to Ting Kau)**

Project Profile

January 2011

Contents

| | Page | |
|-----|---|----|
| 1 | Basic Information | 1 |
| 1.1 | Project Title | 1 |
| 1.2 | Purpose and Nature of the Project | 1 |
| 1.3 | Name of Project Proponent | 1 |
| 1.4 | Location and Scale of Project and History of Site | 1 |
| 1.5 | Number and Types of Designated Projects to be Covered by the Project Profile | 2 |
| 1.6 | Name and Telephone Number of Contact Person | 2 |
| 2 | Outline of Planning and Implementation Programme | 3 |
| 2.1 | Planning & Implementation Programme | 3 |
| 2.2 | Interactions with Other Projects | 3 |
| 3 | Possible Impacts on the Environment | 4 |
| 3.1 | Construction Phase | 4 |
| 3.2 | Operational Phase | 5 |
| 4 | Major Elements of the Surrounding Environment | 7 |
| 4.1 | Air Quality | 7 |
| 4.2 | Noise | 7 |
| 4.3 | Water Quality | 8 |
| 4.4 | Hazard to Life | 9 |
| 4.5 | Ecology | 9 |
| 4.6 | Cultural Heritage | 9 |
| 4.7 | Landscape and Visual | 9 |
| 5 | Environmental Protection Measures to be Incorporated in the Design and any Further Environmental Implications | 10 |
| 5.1 | Construction Phase | 10 |
| 5.2 | Operational Phase | 13 |
| 6 | Use of Previously Approved EIA Reports | 15 |

Figures

Figure 1

Figure 2

Figure 3

Proposed Stage 1 Cycle Track Alignment

Locations of Representative Air/Noise Sensitive Receivers

Locations of Water Sensitive Receivers

1 Basic Information

1.1 Project Title

The project is entitled “Cycle Track between Tsuen Wan and Tuen Mun – Stage 1 (Section from Tsuen Wan West to Ting Kau)” which forms part of the PWP Item No. 7268RS of title “Cycle Track between Tsuen Wan and Tuen Mun”.

1.2 Purpose and Nature of the Project

The purpose of this project is to design and construct a new two-way cycle track with a standard width of 4 metres as far as technically practicable and accompanied with footpath between Tsuen Wan and Tuen Mun with the provision of supporting and recreation facilities. The cycle track is intended primarily for recreational use and is thus considered as a recreational development.

1.3 Name of Project Proponent

The project proponent is Civil Engineering and Development Department, The Government of Hong Kong Special Administration Region.

1.4 Location and Scale of Project and History of Site

The proposed cycle track is aligned mainly along the coastline or Castle Peak Road, from the entry/exit hub at Tsuen Wan West to Sam Shing Hui in Tuen Mun via Yau Kom Tau, Ting Kau, Sham Tseng, Tsing Lung Tau, Tai Lam Chung and So Kwun Wat, passing through both rural and residential areas. The proposed cycle track will be further extended to the resting station below Tsing Tsuen Road / Bridge in Tsuen Wan and Tuen Hing Road in Tuen Mun. The construction work of the proposed cycle track will be divided into advance works and two stages: Advance Works – section between Tsing Tsuen Bridge and Tsuen Wan West Sports Centre; Stage 1 work – section between Tsuen Wan West Sports Centre and Ting Kau; and Stage 2 work – section between Ting Kau and Tuen Mun. This project profile focuses on Stage 1 work.

The proposed track of Stage 1 work will lie at a low elevation along the southern toe of Tai Mo Shan Mountain range and falls within coastal hill slopes or reclaimed land, passing through a number of residential complexes, villages and beaches. The proposed alignment of the track mainly follows the coastline or Castle Peak Road between Tsuen Wan West and Ting Kau. The elevation across the site generally ranges from approximately 25mPD to mean sea level.

The proposed track of Stage 1 work will be approximately 4.5km long by 4m wide, together with a 2m footpath alongside. Planters of 0.6m wide will be provided alongside on elevated section of the proposed cycle track. The maximum longitudinal gradient will be limited to 4%. The proposed cycle track will be in the form of two-way tracks. The track alignment is shown in **Figure 1**.

This section of the proposed cycle track will start at Hoi On Road outside the Tsuen Wan West Sports Centre and run along coastline to the proposed resting station near Sham Tseng Sewage Treatment Works. The first part of this section between Tsuen Wan West Sports Centre and Yau Kom Tau Pier will be at-grade section while the remaining part extending to Approach Beach will be mainly on viaducts. This section will route along residential features and Government, Institution and Community (GIC) facilities, such as The Bay Bridge, Keymount Lodge and Approach Beach.

At Ting Kau, the cycle track alignment will route along the Castle Peak Road near Ting Kau Beach and Lido Beach. Key features involved in this section include Ting Kau Village, Ting Kau Bridge, Lido Beach, Casam Beach, Hoi Mei Wan Beach, Airport Core Programme Exhibition Centre and Gemini Beaches. The track along Castle Peak Road near Ting Kau

Village will be at-grade and elevated roads on retaining walls while the section connecting to Gemini Beaches will be viaducts.

Apart from the above track section, resting stations will also be proposed. Two resting stations along the cycling route will be proposed for the purpose of providing open spaces, look-out points and cycle parking facilities wherever practicable.

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

The project will involve the following elements which are considered to be within the categories of Items A.8 and C.12 under Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO).

- Part of the proposed cycle track more than 100m in length between abutments;
- Dredging operation due to construction of pre-bored H-piles less than 500m from the nearest boundary of existing bathing beaches

Therefore, this project is considered as a Designated Project.

1.6 Name and Telephone Number of Contact Person

Department:

Civil Engineering and Development Department
New Territories North and West Development Office
Project Division (1)

Contact Person:

| | | |
|-------------------|---------------------------|-----------|
| Mr. LAM Shu Kai | Senior Engineer/7 (NTN&W) | 2158 5623 |
| Ms. TSUI Wing Har | Engineer /21 (NTN&W) | 2158 5639 |

2 Outline of Planning and Implementation Programme

2.1 Planning & Implementation Programme

The project will start with the road gazette and is scheduled to commence in the mid 2013. Stage 1 construction works is tentatively scheduled to commence in 2015 and to be completed in 2019. The tentative programme for Stage 1 cycle track construction is proposed in **Table 2.1**.

Table 2.1: Tentative implementation programme of Stage 1 work

| Stages | Stage 1 |
|-----------------------------|----------|
| Road Gazette | mid 2013 |
| Works Commencement | mid 2015 |
| Commissioning and Operation | mid 2019 |

2.2 Interactions with Other Projects

Potential interfacing projects in the vicinity of the Project area during the construction period have been identified and summarized in **Table 2.2**.

Table 2.2 List of concurrent projects

| Project | Project Proponent | Construction Period | |
|---|-------------------|---------------------|----------|
| | | Start | Complete |
| Agreement No. CE 22/2005 – Reconstruction and Improvement of Tuen Mun Road | HyD | 10/2008 | end/2014 |
| PWP Item No. 7743TH - Tsuen Wan Bypass, widening of Tsuen Wan Road between Tsuen Tsing Interchange and Kwai Tsing Interchange and associated junction improvement works | CEDD | end/2011 | end/2015 |

3 Possible Impacts on the Environment

3.1 Construction Phase

Air Quality

During construction phase, construction dust impact will be arisen from construction activities, including site clearance, excavation and backfilling activities, material handling, transportation, piling works, retaining wall construction, wind erosion of unpaved area and stockpile, slope cutting, etc.

Noise

The main construction noise impact will be due to the operation of Powered Mechanical Equipment (PME) during various construction activities, such as site clearance, excavation, slope works and piling works for viaducts.

Water Quality

Water quality during construction phase will be due to construction site runoff, sewage effluent due to workforce on site, drainage/ water supply system/ water work installation and sediment release due to pier construction in coastal water.

- Construction site runoff comprises of runoff and erosion from site surfaces, drainage channels, earth working areas and stockpiles. Wash water from dust suppression sprays and wheel washing facilities and fuel, oil, solvents and lubricants from maintenance of construction machinery and equipment also contribute to the pollutant levels of the construction runoff.
- Sewage effluents will arise from the sanitary facilities provided for the on-site construction workforce.
- The potential water quality impact associated with drainage and water mains diversion or upgrading will be from the run-off and erosion from site surfaces and earth working areas. The accidental disconnection of various drainage systems will also result in the release of small amount of wastewater.
- Small amount of sediment will be released at the pier locations in coastal water. The key water quality concerns will be the disturbance of the marine bottom sediment from piling works, causing an increase in suspended solid levels.

Waste Management

Waste will potentially be generated from the construction activities, such as excavation, demolition and construction of viaduct and associated structures. Typical waste types associated with these activities comprise of construction & demolition (C&D) materials, C&D wastes, chemical waste, sewage and general refuse.

- Demolished and excavated materials will be the main components of C&D materials, including soil, sediment, fill and asphalt, of which the major source is likely from site formation works, cutting and filling slopes, piling works and demolition works.
- C&D waste will be generated throughout the construction works from general site clearance works, tree felling, piling works and earthworks for construction of various structures.
- Chemical wastes will be in the form of solid wastes such as oil/air filters and in the form of liquid wastes such as waste oils/grease and consumed solvents.
- Sewage will arise from sanitary facilities used by the construction workforce at the site office. Overnight sewage from chemical toilets will also be generated.

- General wastes which will be produced on a daily basis during the construction of the cycle track, include materials like waste paper, plastic packaging as well as refuse like sewage.

Hazard to Life

An existing potentially hazardous site - Yau Kom Tau water treatment works (YKT WTW) is identified in the vicinity of the project alignment.

It is anticipated that the number of construction workers in each work front within the consultation zone is comparative small. Hence, the hazard to life risk on the construction workers will be insignificant.

Ecology

The primary land uses in the area within 500m of the proposed development are developed land (largely roads, village, development areas and open storage), plantation (primarily roadside), the open sea and hillside shrubland.

Close to the alignment, there are recognized sites of conservation importance, including the Tai Lam Country Park which is dominated by grass land, shrubland and plantation.

During the construction phase, potential impacts are likely to be in the form of habitat loss, tree felling, change in water quality due to site run-off and disturbance.

Cultural Heritage

Archaeological, historical and cultural items in the vicinity of the proposed project site comprise of buildings, structures, monuments, sites of historical significance and architectural or archaeological merit.

Impact due to construction on the built heritage is not anticipated as none of historic buildings are expected to be encroached or disturbed by the proposed cycle track route and associated facilities.

Land Contamination

The present potential contaminated landuses in the vicinity of the project area have been used for container storage or storage area with paved ground. Therefore, the impact during the construction is expected to be insignificant.

Landscape and Visual

A number of existing trees will be affected by the proposed alignment. Other earthworks and construction activities will be confined within areas adjacent to the nearby structures, and therefore the landscape and visual impacts will be transient.

3.2 Operational Phase

Air Quality

There will be no air emission source during the operational phase. Cycling in the metropolitan areas as well as in the topographically-confined areas will have considerable advantages to the environment.

Noise

As there will be no significant noise emission generated from cycling activities during operational phase, it is anticipated that noise impact will be minimal.

Water Quality

During the operational phase, runoff from the cycle track including the at-graded section, hubs and resting places, viaduct sections and retaining structure sections will be conveyed into designated drainage systems. Therefore, the impact on water quality is not anticipated.

Waste Management

During the operational phase, waste will contain mainly food waste and packaging waste generated by the users of cycle track facilities. As there will be licensed waste collector to collect rubbish along the cycle track, no adverse waste impact is anticipated.

Hazard to Life

An existing potentially hazardous site - Yau Kom Tau water treatment works (YKT WTW) is identified in the vicinity of the project alignment. The cyclists only trespass the consultation zone of Potentially Hazardous Installation. Due to the transient nature of the cyclists in the cycle track, it is anticipated that the hazard to life risk on the cyclists will be acceptable.

Ecology

No direct operational phase impacts are anticipated. As the human activities along the cycle track increase, there may, however, be indirect impacts by way of increased disturbance to wildlife. The main concern of such activities will be at the resting stations.

Cultural Heritage

No impact on cultural heritage resources during the operational phase is anticipated.

Land Contamination

Since the cycle track will be a paved facility and the track will not directly encroach into the potentially contaminated landuse, the land contamination issue is likely to be limited.

Landscape and Visual

Potential impacts of the cycle track will need to be considered in respect of the visual envelope including views from local residences, roads, beaches, lookout-points, seaside such as private boats, ferries and Lantau Island etc. A majority portion of the proposed cycle track will generally follow the level of existing carriageway such as Castle Peak Road or existing ground. It will reduce the apparent visual impacts on the users at the domestic premises located at higher ground level.

4 Major Elements of the Surrounding Environment

4.1 Air Quality

The representative Air Sensitive Receivers (ASRs) will consist of various types of sensitive uses including educational institutions, place of public worship, hotels, active recreational facilities, domestic premises and scattered rural village houses. **Figure 2** and **Table 4.1** present the location of key representative ASRs that are close to the work site of the Project.

Table 4.1: Locations of representative air sensitive receivers

| ASR ID | Sensitive Receivers | Nature of Use |
|--------|--|---------------|
| ASR13 | Hoi On Road Playground | PR |
| ASR14 | Hong Kong Baptist Convention Primary School | E |
| ASR15 | Tsuen Wan West Sports Centre | AR |
| ASR16 | Bayview Garden | R |
| ASR17 | One Kowloon Peak | R |
| ASR18 | Greenview Terrace | R |
| ASR19 | Long Beach Gardens | R |
| ASR20 | The Bay Bridge | R |
| ASR21 | Golden Villa (Castle Peak Road- Sham Tseng No.6) | R |
| ASR22 | Golden Villa (Swimming Pool) (Castle Peak Road- Sham Tseng No.6) | AR |
| ASR23 | Sunny Villa | R |
| ASR24 | Keymount Lodge | R |
| ASR25 | Nga Lai Yuen | R |
| ASR26 | Lan Kwa Villa | R |
| ASR27 | Royal Dragon Villa | R |
| ASR28 | La Casetta | R |
| ASR29 | Suk Yuen | R |
| ASR30 | Flying Dragon Terrace | R |
| ASR31 | Ting Kau Village | R |
| ASR32 | Royal View Hotel | H |
| ASR33 | Edinburgh Villa | R |
| ASR34 | Riviera Apartment | R |
| ASR35 | Villamar | R |
| ASR36 | Vista Del Mar | R |
| ASR37 | Domestic Premise at Castle Peak Road - Ting Kau No.400 | R |
| ASR38 | Airport Core Programme Exhibition Centre | O |
| ASR39 | Golden Villa (Castle Peak Road- Ting Kau No.200) | R |
| ASR40 | Pink Villa | R |
| ASR41 | Sham Tseng East Village | R |
| ASR42 | Approach Beach | AR/PR |
| ASR43 | Ting Kau Beach | AR/PR |
| ASR44 | Lido Beach | AR/PR |
| ASR45 | Casam Beach | AR/PR |
| ASR46 | Hoi Mei Wan Beach | AR/PR |
| ASR47 | Gemini Beaches | AR/PR |

Note: R – residential; E – educational; AR – active recreational; PR – passive recreational; H – hotel; I – industrial; O – office

4.2 Noise

The Noise Sensitive Receivers (NSRs) include domestic premises, educational institutions, places of worship, hotels and homes for aged. The representative NSRs along the first row

of the project alignment are listed in the table below. **Figure 2** and **Table 4.2** present the location of representative NSRs in the vicinity.

Table 4.2: Locations of representative noise sensitive receivers

| NSR ID | Sensitive Receivers | Nature of Use |
|--------|--|---------------|
| NSR14 | Hong Kong Baptist Convention Primary School | E |
| NSR16 | Bayview Garden | R |
| NSR17 | One Kowloon Peak | R |
| NSR18 | Greenview Terrace | R |
| NSR19 | Long Beach Gardens | R |
| NSR20 | The Bay Bridge | R |
| NSR21 | Golden Villa | R |
| NSR23 | Sunny Villa | R |
| NSR24 | Keymount Lodge | R |
| NSR25 | Nga Lai Yuen | R |
| NSR26 | Lan Kwa Villa | R |
| NSR27 | Royal Dragon Villa | R |
| NSR28 | La Casetta | R |
| NSR29 | Suk Yuen | R |
| NSR30 | Flying Dragon Terrace | R |
| NSR31 | Ting Kau Village | R |
| NSR32 | Royal View Hotel | H |
| NSR33 | Edinburgh Villa | R |
| NSR34 | Riviera Apartment | R |
| NSR35 | Villamar | R |
| NSR36 | Vista Del Mar | R |
| NSR37 | Domestic Premise at Castle Peak Road - Ting Kau No.400 | R |
| NSR39 | Golden Villa | R |
| NSR40 | Pink Villa | R |
| NSR41 | Sham Tseng East Village | R |

Note: R – residential; E – educational; H – hotel

4.3 Water Quality

Water Sensitive Receivers (WSRs) include existing country park, water gathering grounds, fish culture zones, beaches / secondary contact recreation subzone (water control zone), water abstraction for cooling, flushing and industrial purposes and typhoon shelters. The representative WSRs are listed in **Table 4.3**. **Figure 3** presents the locations of representative WSRs.

Table 4.3: Locations of representative water sensitive receivers

| WSR ID | Sensitive Receivers | Nature of Use |
|--------|--|---------------|
| B1 | Approach Beach | B |
| B2 | Ting Kau Beach | B |
| B3 | Lido Beach | B |
| B4 | Casam Beach | B |
| B5 | Hoi Mei Wan Beach | B |
| B6 | Gemini Beaches | B |
| B7 | Anglers' Beach | B |
| B8 | Ma Wan Tung Wan Beach | B |
| FCZ1 | Ma Wan Fish Culture Zone | FCZ |
| IN1 | WSD Flushing Water Intake at Tsuen Wan | IN |

| WSR ID | Sensitive Receivers | Nature of Use |
|--------|---------------------------------|---------------|
| TS1 | Rambler Channel Typhoon Shelter | TS |

Note: B – Gazetted Beach; FCZ – fish culture zone; IN- seawater abstraction point; TS – typhoon shelter

4.4 Hazard to Life

A section of the proposed cycle track of around 2 km is within the 1km consultation zone of the YKT WTW. The closest distance to the YKT WTW is around 320m.

4.5 Ecology

An ecological survey was conducted between November 2008 and May 2009 which covered both dry and wet seasons. A total of 10 habitats have been identified along the project alignment. These include sea, coastal vegetation, sandy shore, channelized stream / natural stream, grassland, grassland / shrubland mosaic, shrubland, woodland, plantation and developed area.

No species of conservation interest have been identified within the footprint of the cycle track or its associated facilities. As such, it is anticipated that direct impacts to species of conservation interest will be very low.

4.6 Cultural Heritage

No declared monument but a graded built heritage is identified within the vicinity of project site. **Table 4.4** summarizes the details of the graded built heritage.

Table 4.4: Graded built heritage

| Item No. | Name | Address | Existing Grading | Year of Construction / Restoration |
|----------|--|---|------------------|------------------------------------|
| 729 | Airport Core Programme Exhibition Centre | Homi Villa, Castle Peak Road, Tsuen Wan, N.T. | Grade III | Probably Built around 1930s |

Additionally, an archaeological site - Ting Kau Kiln has been identified in the vicinity of the proposed alignment.

4.7 Landscape and Visual

Visually Sensitive Receivers (VSRs) in the Project include residential, industrial, commercial, traffic, leisure, institutional, etc. The representative VSRs are summarized in **Table 4.5**.

Table 4.5: Locations of representative visual sensitive receivers

| NO. | VSRs |
|-----|---|
| 1 | Residents of Belvedere Garden, users of Tsuen Wan West Sports Centre and users of Hong Kong Baptist Convention Primary School |
| 2 | Residents of Belvedere Garden, residents of Greenview Terrance and road users of Castle Peak Road - Ting Kau |
| 3 | Residents of Long Beach Garden and The Bay Bridge |
| 4 | Residents of Golden Villa, Sunny Villa and road users of Castle Peak Road - Ting Kau |
| 5 | Road users of Castle Peak Road - Ting Kau |
| 6 | Residents of various small residential areas, e.g. Anton Villa, Rose Villa, Royal Dragon Villa and so on. |
| 7 | Road users of Castle Peak Road Ting Kau |
| 8 | Population of Sham Tseng Sewage Treatment Works |

5 Environmental Protection Measures to be Incorporated in the Design and any Further Environmental Implications

5.1 Construction Phase

Air Quality

To minimize construction dust impact, good site practice and dust monitoring and audit programme will be implemented. Relevant standard mitigation measures for dust control stipulated in the Air Pollution Control (Construction Dust) Regulation will be followed and incorporated to reduce potential fugitive dust impacts from construction works. In the process of material handling, any material which has the potential to create dust will be treated with water or sprayed with a wetting agent where practicable. Other key control measures will include the followings:

- The working area for excavation or site clearance including uprooting of vegetation and temporary or permanent structures will be sprayed with water immediately before, during and after the operations so as to maintain the entire surface wet;
- Every vehicle shall be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site. However, all spraying of materials and surfaces will avoid excessive water usage;
- The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point will be paved with e.g. concrete, bituminous materials or hardcore or similar materials;
- Hoarding of not less than 2.4m high from ground level will be installed along the site boundary, where appropriate, during construction phase;
- Any excavated dusty materials or stockpile of dusty materials will not extend beyond site boundaries and will be covered entirely by impervious sheeting, placed in an area sheltered on the top and the 3 sides, or sprayed with water so as to maintain the entire surface wet, and recovered or backfilled or reinstated within 24 hours of the excavation or unloading; and
- All malodorous excavated material will be placed as far as possible from any ASRs and the stockpiled materials shall be covered entirely by plastic tarpaulin sheets or removed from site as soon as possible.

Noise

During construction phase, mitigation measures across all work sites will include the followings:

- Good site practices to limit noise emissions at the source;
- Use of quiet plant and working methods;
- Use of site hoarding as noise barrier to screen noise at ground level of NSRs;
- Use of shrouds / temporary noise barriers to screen noise from relatively static PMEs;
- Scheduling of construction works outside school examination periods in critical area; and
- Alternative use of plant items within one worksite, wherever practicable.

Water Quality

To minimize the impacts from construction runoff, the following key mitigation measures stipulated in the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94) will be implemented:

- At the start of site establishment, perimeter cut-off drains to direct off-site water around the site will be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities.
- The dikes or embankments for flood protection will be implemented.
- The silt removal facilities will be implemented, of which design will be based on the Appendix A1 of ProPECC PN 1/94.
- All exposed earth areas will be compacted and vegetated after earthworks have been completed where practicable.
- The overall slope of the site will be kept to a minimum and all traffic areas and access roads protected by coarse stone ballast.
- Measures will be taken to minimise the ingress of site drainage into excavations.
- All open stockpiles of construction materials will be covered with tarpaulin or similar fabric during rainstorms.
- Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed.
- Particular attention will be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes.
- All vehicles and plant will be cleaned before leaving a construction site.
- Oil interceptors will be provided in the drainage system downstream of any oil/fuel pollution sources.
- Construction solid waste, debris and rubbish on site will be collected, handled and disposed of properly to avoid water quality impacts.
- All fuel tanks and chemical storage areas will be provided with locks and sited on sealed areas.

To reduce the impacts from sewage effluent due to workforce on site, the following key mitigation measures will be implemented:

- Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce.

To reduce the impacts from sediment release in coastal water caused by piling works, the following key mitigation measures will be implemented:

- Standing type silt curtains will be installed from the water surface to the seabed level around the points of piling to control the dispersion of SS.
- All barges will be fitted with tight bottom seals to prevent leakage of materials during transport.
- The decent speed of grabs will be controlled to minimize the seabed impact.
- Drainage discharge of site runoff will be directed away from the more sensitive bathing beaches.

- Dredged/excavated contaminated sediment will be managed in accordance with ETWB TCW No. 34/2002.

Waste Management

To reduce the impacts from C&D materials, the following key mitigation measures will be implemented:

- The Fill Division, CEDD will be notified the estimated spoil volumes to be generated, and the Public Fill Committee will be liaised and agreed for the disposal of any surplus inert C&D materials.
- Wherever practicable, C&D materials will be segregated from other wastes.
- The surplus C&D material, mainly surcharge material resulting from reclamation works, will be reused within the site as much as possible.
- Temporary stockpiles will be maintained and excavated fill material will be reused for backfilling and reinstatement.
- On-site sorting will be carried out and the use of recycled aggregates will be promoted where appropriate.
- Broken concrete will be reused for recycling purpose, where possible.
- A system will be implemented to ensure that the disposal of C&D materials are properly documented and verified.
- Disposal of the C&D materials onto any sensitive locations will be avoided.

To reduce the impacts from C&D wastes, the following key mitigation measures will be implemented:

- Standard formwork, pre-fabrication, or more durable formwork or plastic will be used as far as practicable. Wooden hoardings will not be used and metal hoarding will be used to enhance the possibility of recycling.
- The C&D materials will be recycled as much as possible on-site. Public fill and C&D waste will be segregated and stored in different containers or skips.

To reduce the impacts from chemical wastes, the following general mitigation measures will be implemented during the handling process of chemical wastes:

- Plant/ equipment maintenance schedule will be designed to optimise maintenance effectiveness and to minimise the generation of chemical waste.
- Chemical waste will be properly stored and transported off-site for treatment by a licensed collector.
- Where possible, chemical waste (e.g. waste lube oil) will be recycled by licensed treatment facilities.

To reduce the impacts from sewage, the following key mitigation measures will be implemented:

- Adequate numbers of portable toilets will be provided for the workers.
- The portable toilets will be maintained in a reasonable state, which will not deter the workers from utilizing these portable toilets; and
- Overnight sewerage will be collected by licensed collectors regularly.

To reduce the impacts from general refuse, the following key mitigation measures will be implemented:

- All recyclable materials (separated from the general waste) will be stored on-site in appropriate containers with cover prior to collection by a local recycler for subsequent reuse and recycling.
- Residual and non-recyclable general waste will be stored in appropriate containers to avoid odour.
- Regular collection will be arranged by an approved waste collector in purpose-built vehicles.

Hazard to Life

As the number of construction workers working in each work front within the consultation zone is comparative small, it is anticipated that the hazard to life risk on construction workers will be insignificant. Nevertheless, emergency procedures will be formulated as good site practices.

Ecology

Mitigation measures to be implemented are summarized as follows:

- The principle of avoidance, minimization and compensation against habitat loss from the construction will be followed.
- Good work practices will be undertaken to minimize the risk of indirect impacts from water pollution.
- Ecological enhancement through appropriate planting, provision of bird nest boxes and bat boxes and provision of green roof on any potential structures along the cycle track will be investigated.

Cultural Heritage

Mitigation measures to be implemented to reduce/ minimize impacts to cultural heritage resources are summarized as follows:

- Encroachment to the existing cultural heritage resourced during construction will be avoided.
- Good work practices will be undertaken to minimize the risks of impacts on cultural heritage.

Land Contamination

Should land contamination be identified during the construction, the contamination assessment plan, contamination report and remediation action plan will be formulated.

Landscape and Visual

Compensatory planting will be adopted when tree felling occurs. Transplant of trees will be considered, if necessary. Efforts will be exercised to preserve the existing trees on site. It is recommended to incorporate the visual amenity measures into the design of the Cycle Track in order to reduce the potential visual impacts.

5.2 Operational Phase

Air Quality

Screening structures or barriers are recommended wherever necessary in order to reduce the impacts on the users of the cycle track facilities by the vehicular emissions from the nearby major roads.

Noise

As no noise impact is anticipated during the operational phase, no specific mitigation measures are required.

Water Quality

With the installation of the drainage system and sewerage system, no additional mitigation measures are required during operational phase.

Waste Management

Adequate waste collection facilities to accommodate the rubbish from cycle track users will be provided during the operational phase. Separate collection bins will be provided for plastic drinks bottles and drinks cans, which will facilitate recycling of these waste streams. There will be no adverse waste impacts anticipated. Hence, mitigation measures are not required.

Hazard to Life

The cyclists only trespass the consultation zone of Potentially Hazardous Installation, it is anticipated that the hazard to life risk on the cyclists will be insignificant. Nevertheless, mitigation measures such as the construction of protective bunds will be investigated to further minimize the risk, if necessary.

Ecology

No ecological impact is anticipated during the operational phase. Hence no specific mitigation measures are required.

Cultural Heritage

No impact is anticipated during the operational phase. Hence, no specific mitigation measures are required.

Land Contamination

It is anticipated that no mitigation measures are required since there are no land contamination impacts during the operational phase.

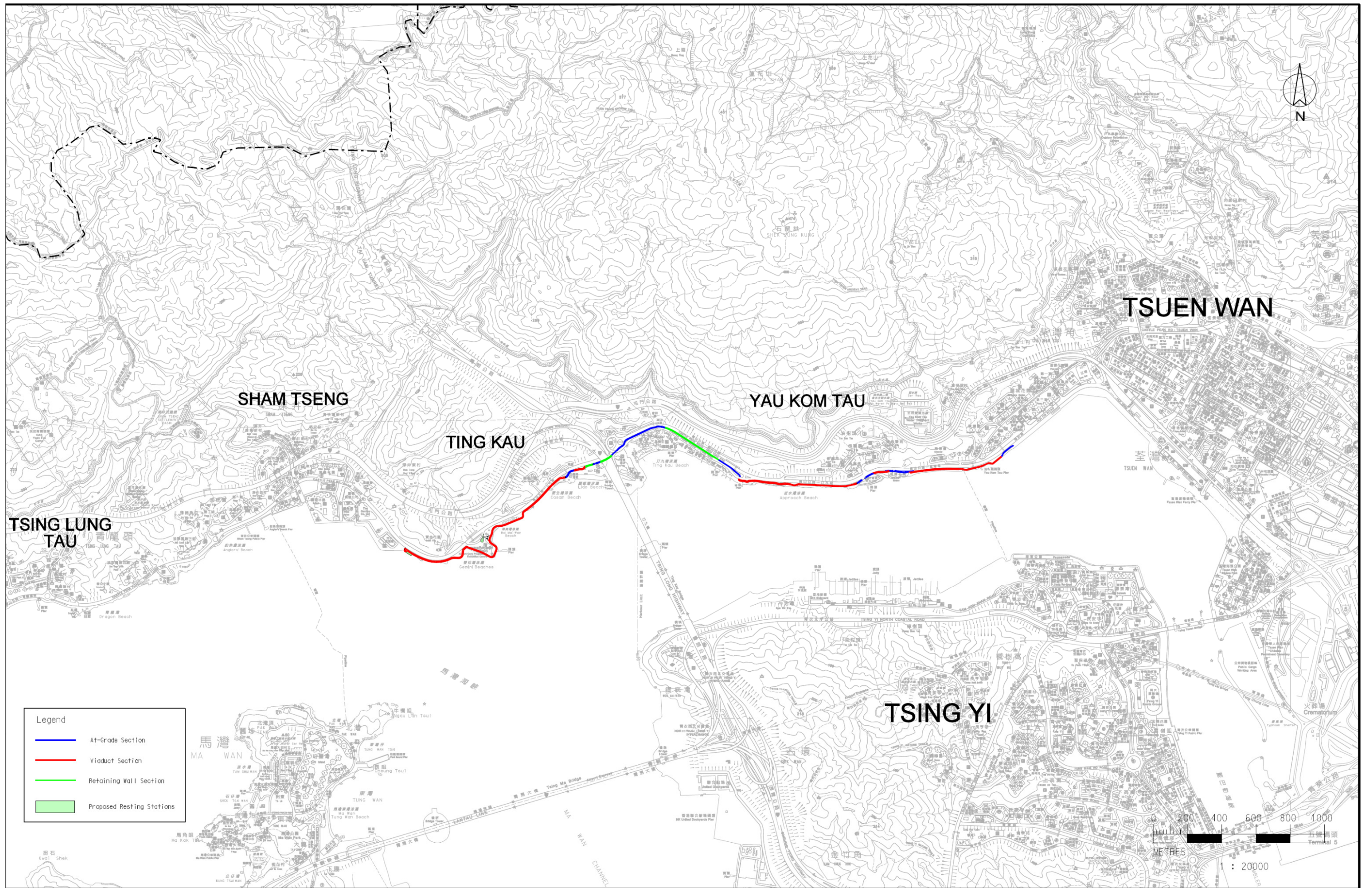
Landscape and Visual

Landscaping planting will be included to improve the landscape features. Visual amenity measures will be incorporated into the design of the cycle track in order to reduce the potential visual impacts.

6 Use of Previously Approved EIA Reports

No previously approved EIA report has been referred to in the preparation of the Project Profile.

Figures

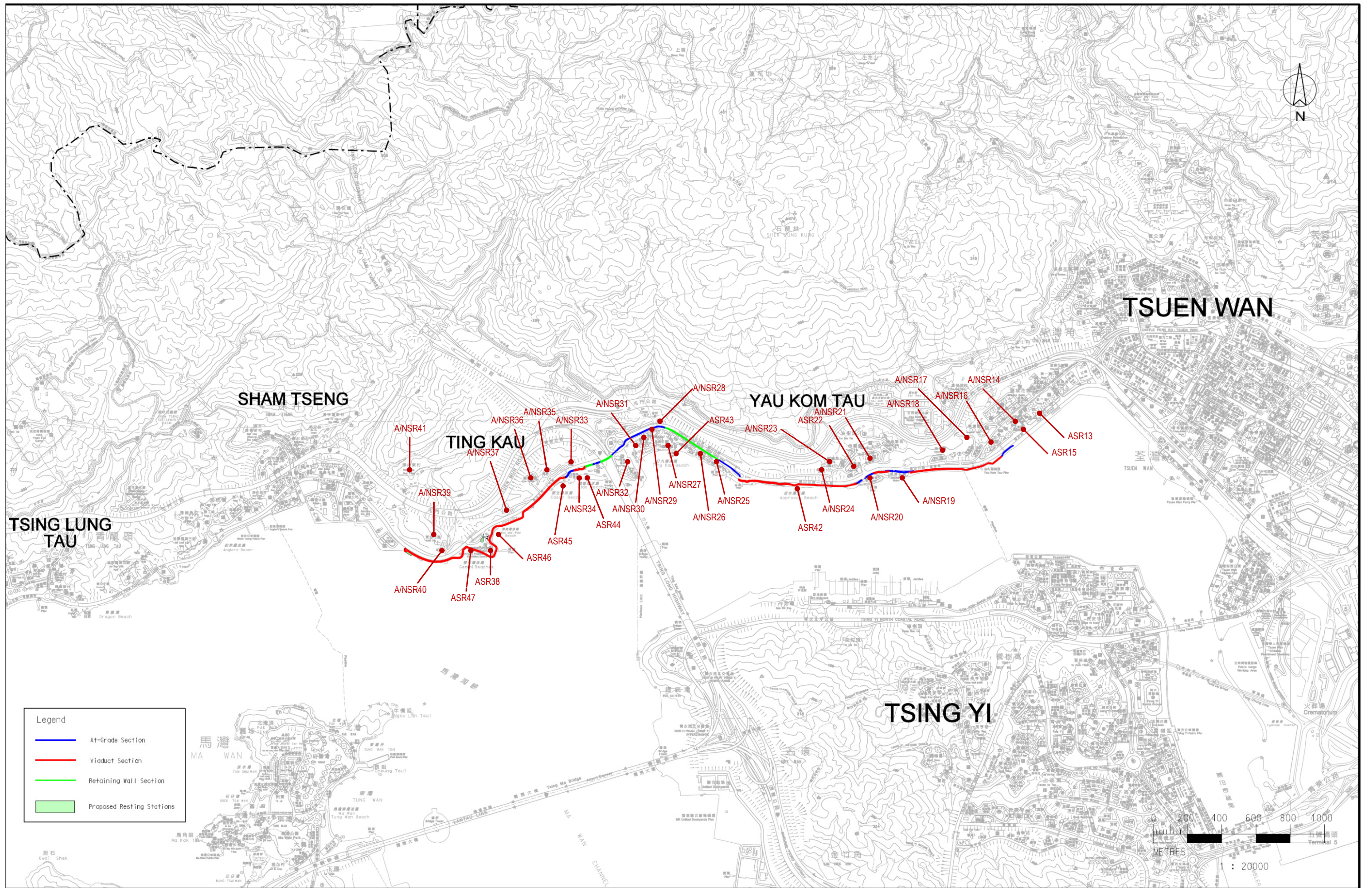


| Legend | |
|--------|---------------------------|
| | At-Grade Section |
| | Viaduct Section |
| | Retaining Wall Section |
| | Proposed Resting Stations |

| Rev. | Description | Date |
|------|-----------------|-------|
| - | PROJECT PROFILE | 06/10 |
| | | |

| | | | |
|---------|---------------|----------|-------|
| Drawn | OYK | Date | 06/10 |
| Checked | TL | Approved | EC |
| Scale | 1:20000 ON A3 | | |

| | |
|-------------|-----------------|
| Drawing No. | Figure 1 |
| Rev. | - |



| Legend | |
|--|---------------------------|
| — | At-Grade Section |
| — | Viaduct Section |
| — | Retaining Wall Section |
| | Proposed Resting Stations |

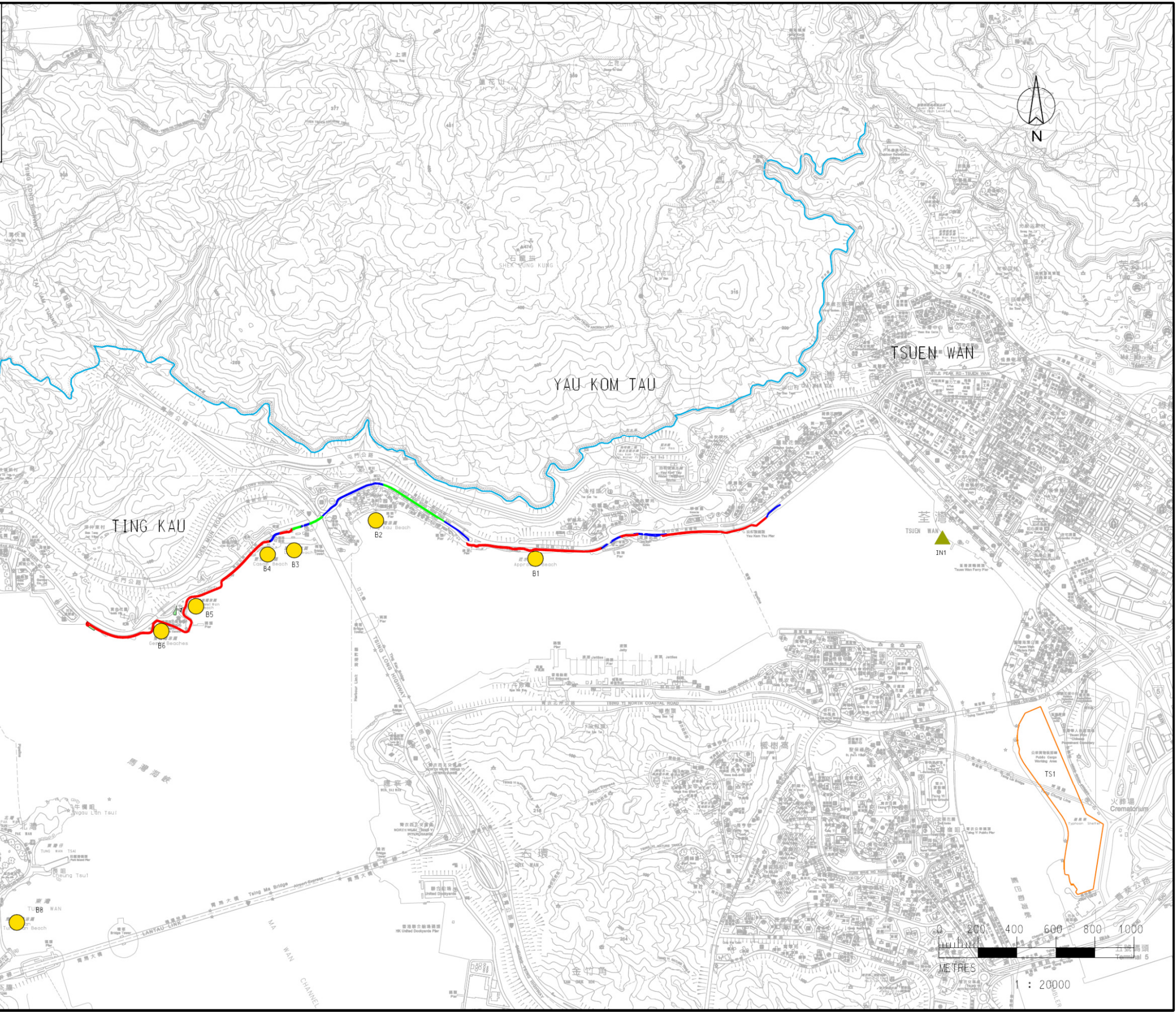
| | |
|-----------------|-------------|
| PROJECT PROFILE | 06/10 |
| Rev | Description |

| | | | |
|---------|--------------|----------|-------|
| Drawn | EC | Date | 06/10 |
| Checked | KL | Approved | SC |
| Scale | 1:20000 @ A3 | | |

| | |
|-------------|-----------------|
| Drawing No. | Figure 2 |
| Rev. | |

LEGEND:

| | |
|--------------------------|--|
| ● GAZETTED BEACH | ■ FISH CULTURE ZONE |
| B1 APPROACH BEACH | FCZ1 MA WAN FISH CULTURE ZONE |
| B2 TING KAU BEACH | ▲ SEAWATER ABSTRACTION POINT |
| B3 LIDO BEACH | IN1 WSD FLUSHING WATER INTAKE AT TSUEN WAN |
| B4 CASAM BEACH | □ TYPHOON SHELTER |
| B5 HOI MEI WAN BEACH | TS1 RAMBLER CHANNEL TYPHOON SHELTER |
| B6 GEMINI BEACHES | — WATER GATHERING GROUND |
| B7 ANGLERS' BEACH | |
| B8 MA WAN TUNG WAN BEACH | |



LEGEND:

| |
|-----------------------------|
| — AT-GRADE SECTION |
| — VIADUCT SECTION |
| — RETAINING WALL SECTION |
| — PROPOSED RESTING STATIONS |