10 LANDSCAPE AND VISUAL IMPACTS

10.1 Introduction

Background

10.1.1 The following section is a Landscape and Visual Impact Assessment (LVIA) for the TKO-LT Tunnel project in accordance with Annex 10 and 18 of the Technical Memorandum on Environmental Impact Assessment Process, EIAO Guidance Note No. 8/2010 and the project EIA Study Brief No. ESB-195/2008.

EIA Study Brief

10.1.2 The TKO-LT Tunnel project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO). An EIA Study Brief No. ESB-195/2008 was issued by the Director of Environmental Protection on 26th August 2008 to CEDD for an EIA Study of the TKO-LT Tunnel. A separate but related EIA Study Brief No. ESB-196/2008 was issued at the same time for the CBL and the LVIA aspects of both EIAs are to be closely coordinated at the TKO interface.

Content of this Section

- 10.1.3 The contents of the following sub-sections of this section are described below:
 - Section 10.1 provides an introduction, describes the EIA Study Brief and provides a description of the content of the LVIA forming Section 10 of the EIA.
 - Section 10.2 describes the environmental legislation, standards and criteria upon which the LVIA is based;
 - Section 10.3 provides the assessment methodology for the LVIA;
 - Section 10.4 provides the scope and content of the study, outlines the limit of study area and provides the project description, review of planning and development control framework, tentative programme and identifies the concurrent projects;
 - Section 10.5 provides the baseline study which outlines the physical Landscape Resources and Landscape Character Areas and their sensitivity, tree survey data, the visual envelope, the Visually Sensitive Receivers and their sensitivity and magnitude of impact;
 - Section 10.6 provides the landscape impact assessment with a description of the sources of potential landscape impacts, the predicted magnitude of impact and the resulting significance of impact on each Landscape Resource and Landscape Character Area;
 - Section 10.7 provides the visual impact assessment with a description of the sources of potential visual impacts, the predicted magnitude of impact and the resulting significance of impact on each Visually Sensitive Receiver;
 - Section 10.8 describes the mitigation measures, the environmental monitoring and audit requirements, the photomontages and the rationale for selecting the photomontage viewpoints;

- Section 10.9 provides the evaluation of residual and the cumulative landscape and visual impacts;
- Section 10.10 provides a summary and conclusions, outlines the compatibility of TKO-LT Tunnel with planning intent and summarises the residual landscape and visual impacts; and
- Section 10.11 provides the overall conclusion in accordance with the criteria and guidelines for evaluating and assessing impacts as stated in Annex 10 and 18 of the TM of the EIAO.

10.2 Environmental Legislation, Standards and Criteria

Relevant Standards

- 10.2.1 The methodology for undertaking the landscape and visual impact assessment is in accordance with Annex 10 and 18 of the Technical Memorandum on Environment Impact Assessment Process, EIAO Guidance Note No. 8/2010 and the EIA Study Brief No. ESB-195/2008. The following legislation, standards and guidelines are applicable to the evaluation of landscape and visual impacts associated with the construction and operation of the proposed TKO-LT Tunnel:
 - Animals and Plants (Protection of Endangered Species) Ordinance (Cap. 187);
 - Country Parks Ordinance (Cap. 208);
 - Environmental Impact Assessment Ordinance (Cap. 499, section 16) and the Technical Memorandum on EIA Process (EIAO-TM), particularly Annexes 10, 11, 18, 20 and 21;
 - Environmental Impact Assessment Ordinance Guidance Note (EIAO GN) 8/2010;
 - ETWB TC No. 34/2003 Community Involvement in Greening Works;
 - ETWB TC No. 29/2004 Registration of Old & Valuable Trees and Guidelines for their Preservation;
 - ETWB TC No. 2/2004 Maintenance of Vegetation and Hard Landscape Features;
 - ETWB TC No. 11/2004 Cyber Manual for Greening;
 - ETWB TC No. 5/2005 Protection of Natural Streams/Rivers from Adverse Impacts Arising from Construction Works;
 - ETWB TC No. 10/2005 Planting on Footbridges and Flyovers;
 - ETWB TC No. 3/2006 Tree Preservation;
 - Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation the Forestry Regulations;
 - GEO 1/2011 Technical Guidelines on Landscape Treatment for Slopes;
 - GEO Publication (1999) Use of Vegetation as Surface Protection on Slopes;
 - Hong Kong Planning Standards and Guidelines (HK PSG);
 - Land Administration Office Guidance Note (LAO GN) No. 7/2007 Tree Preservation and Tree Removal Application for Building Development in Private Projects;
 - Landscape Value Mapping Study of Hong Kong;
 - Approved Tseung Kwan O Outline Zoning Plan No. S/TKO/20, Approved Cha Kwo Ling, Yau Tong, Lei Yue Mun Outline Zoning Plan No. S/K15/19 and current

Outline Zoning Plan for Kai Tak No. S/K22/4; and current Kwun Tong South OZP No. S/K14S/17;

- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- SILTech Publication (1991) Tree Planting and Maintenance in Hong Kong (Standing Interdepartmental Landscape Technical Group);
- Town Planning Ordinance (Cap. 131);
- DEVB TC(W) no. 3/2012 Site coverage of Greenery for Government; Building Projects;
- DEVB publication (April 2012) Guidelines on Greening of Noise Enclosure;
- WBTC No. 7/2002 Tree Planting in Public Works;
- WBTC No. 36/2004 Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS).

AECOM 10-4 March 2013

10.3 Assessment Methodology

Assessment of Landscape Impacts

- 10.3.1 Landscape and visual impacts have been assessed separately for the Construction and Operational Phases, following the methodology set out in EIAO GN 8/2010.
- 10.3.2 The assessment of landscape impacts has adopted the following procedures:
- Identification of the baseline physical and cultural Landscape Resources (LRs) and Landscape Character Areas (LCAs) found within the assessment area:. This is achieved by site visits and desk-top study of topographical maps, information databases and photographs.
- Assessment of the degree of sensitivity of the LRs and LCAs: This is influenced by a number of factors including whether the resource/character is common or rare, whether it is considered to be of local, regional, national or global importance, whether there are any statutory or regulatory limitations/ requirements relating to the resource, the quality of the resource/character, the maturity of the resource, and the ability of the resource/character to accommodate change. The sensitivity of each landscape feature and character area is classified as follows:

High LR or LCA of particularly distinctive character or high importance,

sensitive to relatively small changes

Medium LR or LCA of moderately valued landscape characteristics reasonably

tolerant to change

Low LR or LCA, the nature of which is largely tolerant to change

- Identification of potential sources of landscape impacts: These are the various elements of the construction works and operational procedures that will generate landscape impacts. Landscape impacts may be beneficial/adverse, direct/indirect, short/long-tem, reversible/irreversible and cumulative. Impacts in this report are adverse unless specifically stated as positive.
- *Identification of the magnitude of landscape impacts:* The magnitude of the impact depends on a number of factors including the physical extent of the impact, the landscape and visual context of the impact, the compatibility of the Project with the surrounding landscape; and the time-scale of the impact i.e. whether it is temporary (short, medium or long term), permanent but potentially reversible, or permanent and irreversible. Landscape impacts have been quantified wherever possible. The magnitude of landscape impacts is classified as follows:

Large The LR or LCA would suffer major change

Intermediate The LR or LCA would suffer moderate change

Small The LR or LCA would suffer slight or barely perceptible change

Negligible The LR or LCA would suffer no discernible change

10.3.3 *Identification of potential landscape mitigation measures*: These may take the form of adopting alternative designs or revisions to the basic engineering and architectural design to prevent and/or minimise adverse impacts; remedial measures such as colour and textural treatment of building features; and compensatory measures such as the implementation of landscape design measures (eg. tree planting, creation of new open space, etc.) to compensate for unavoidable adverse impacts and to attempt to generate potentially positive

long term impacts. The proposed mitigation measures for the project and the agencies responsible for the funding, implementation, management and maintenance of the mitigation measures are identified in **Table 10.8.1.** and **Table 10.8.2.**

10.3.4 Prediction of the significance of landscape impacts before and after the implementation of the mitigation measures: By synthesising the magnitude of the various impacts and the sensitivity of the various landscape resources it is possible to categorise impacts in a logical, well-reasoned and consistent fashion. Table 10.3.1 shows the rationale for dividing the degree of significance into four thresholds, namely Insubstantial, Slight, Moderate, and Substantial, depending on the combination of a negligible-small-intermediate-large magnitude of change and a low-medium-high degree of sensitivity of landscape resource/character. The significant thresholds are defined as follows:

Substantial	Adverse/beneficial impact where the proposal would cause significant deterioration or improvement in existing landscape quality
Moderate	Adverse/beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing landscape quality
Slight	Adverse/beneficial impact where the proposal would cause a barely perceptible deterioration or improvement in existing landscape quality
Insubstantial	No discernible change in the existing landscape quality

10.3.5 *Prediction of Acceptability of Impacts:* An overall assessment of the significance of the impacts according to the five criteria set out in Annex 10 of the EIAO-TM is summarized in **Table 10.3.1** below:

Table 10.3.1 Evaluation of Significance of Landscape and Visual Impacts

Magnitude	Large	Moderate	Moderate/	Substantial
of Impact			Substantial	
(Change)	Intermediate	Slight/	Moderate	Moderate/
		Moderate		Substantial
	Small	Slight	Slight/	Moderate
			Moderate	
	Negligible	Insubstantial	Insubstantial	Insubstantial
		Low	Medium	High
		Sensitivity to change (of Landscape Resource,		
		Landscape Character Area or VSR)		

10.3.6 **Conclusion:** from an analysis of the significance thresholds derived for landscape (and visual) impacts, an overall conclusion in terms of impact significance for the project is determined in accordance with the five evaluation criteria set out in Annex 10 of the EIAO-TM:

Beneficial	The project impact is beneficial if it will complement the
	landscape and visual character of its setting, will follow the relevant planning objectives and will improve overall visual amenity.
Acceptable	The project impact is acceptable if the assessment indicates that there will be no significant effects on the landscape, no significant visual effects caused by the appearance of the project, or no interference with key views.
Acceptable	The project impact is acceptable with mitigation measures if
with	there will be some adverse effects, but these can be eliminated,

Mitigation reduced or offset to a large extent by specific measures. **Measures**

Unacceptable The project impact is unacceptable if the adverse effects are

considered too excessive and are unable to be practically

mitigated.

Undetermined The project impact is undetermined if significant adverse effects

are likely, but the extent to which they may occur or may be mitigated cannot be determined from the study. Further detailed

study will be required of the specific effects in question.

Assessment of Visual Impacts

10.3.7 The assessment of visual impacts has adopted the following procedures:

- Identification of the Zone of Visual Influence (ZVI) during the Construction and Operational Phases of the Project: This is achieved by site visit and desk-top study of topographic maps and photographs, and preparation of cross-sections to determine visibility of the Project from various locations. The ZVI is the view shed from which the project can be seen and is defined by natural landform and man-made building structures.
- Identification of the Visually Sensitive Receivers (VSRs) within the ZVI during the Construction and Operational Phases: These are the people who would reside within, work within, play within, or travel through, the ZVI.
- Assessment of the degree of sensitivity to change of the VSRs: This is influenced by the type of VSRs, which is classified according to whether the person is at home, at work, at play, or travelling. Those who view the impact from their homes are considered to be highly sensitive as the attractiveness or otherwise of the outlook from their home will have a substantial effect on their perception of the quality and acceptability of their home environment and their general quality of life. Those who view the impact from their workplace are considered to be of low sensitivity as the attractiveness or otherwise of the outlook will have a less important, although still material, effect on their perception of their quality of life. The degree to which this applies may vary depending on whether the workplace is industrial, retail or commercial. Those who view the impact whilst taking part in an outdoor leisure activity may display varying sensitivity depending on the type of leisure activity. Those who view the impact whilst travelling on a public thoroughfare will also display varying sensitivity depending on the speed of travel. The degree to which this applies is also influenced by the value and quality of existing views; the availability and amenity of alternative views; the duration or frequency of view, the degree of visibility and the numbers of receivers. The sensitivity of each VSR is classified as follows:

High The VSR is highly sensitive to any change in their viewing

experience

Medium The VSR is moderately sensitive to any change in their viewing

experience

Low The VSR is only slightly sensitive to any change in their viewing

experience

• Assessment of the potential magnitude of visual impacts: This includes consideration of the compatibility with the visual character of the surrounding landscape under the Construction and Operation Phase; the duration of the impact; scale of the development in the view; the reversibility of the impact; the distance of the source of impact from the viewer; and the change / blockage to the character of existing views. (Note: for the purposes of this assessment, those VSRs within a VSR group with the greater or worst case magnitude of change are selected for assessment. For example, the VSRs on the upper floors of a tower block may experience a greater

magnitude of change than those on the lower floors which may have their views obstructed by existing ground level features. In this case therefore, the magnitude of impact for the VSRs on the upper floors is assessed as it is the greater, rather than the VSRs on the lower floors).

• The magnitude of visual impacts are classified as follows:

Large The VSRs would suffer a major change in their viewing

experience

Intermediate The VSRs would suffer a moderate change in their viewing

experience

Small The VSRs would suffer a small change in their viewing

experience

Negligible The VSRs would suffer no discernible change in the character of

their viewing experience

10.3.8 *Identification of potential sources of visual impacts*: These are the various elements of the construction works and operational procedures that would generate visual impacts.

10.3.9 *Identification of potential visual mitigation measures:* These may take the form of adopting alternative designs or revisions to the basic engineering and architectural design to prevent and/or minimise adverse impacts; remedial measures such as colour and textural treatment of building features; and compensatory measures such as the implementation of landscape design measures (e.g. tree planting, creation of new open space etc) to compensate for unavoidable adverse impacts and to attempt to generate potentially positive long term impacts. The agencies responsible for the funding, implementation, management and maintenance of the mitigation measures are identified and their approval-in-principle is being sought. **Tables 10.8.1 and 10.8.2** identify these mitigation measures during the Construction and Operation Phases respectively.

10.3.10 Prediction of the significance of visual impacts before and after the implementation of the mitigation measures: By synthesising the magnitude of the various visual impacts, the sensitivity of the VSRs and the numbers of VSRs that are affected, it is possible to categorise the degree of significance of the impacts in a logical, well-reasoned and consistent fashion. Table 10.3.1 shows the rationale for dividing the degree of significance into four thresholds, namely, Insubstantial, Slight, Moderate and Substantial, depending on the combination of a negligible-small-intermediate-large magnitude of change and a low-medium-high degree of sensitivity of VSRs. Photomontages showing views of the Project from key VSRs at day 1 without mitigation, and at day 1 and year 10 with mitigation are provided. The significance of the visual impacts is categorised as follows:

Substantial Adverse/beneficial impact where the proposal would cause significant

deterioration or improvement in existing landscape visual character

Moderate Adverse/beneficial impact where the proposal would cause a noticeable

deterioration or improvement in existing landscape visual character

Slight Adverse/positive impact where the proposal would cause a barely

perceptible deterioration or improvement in existing landscape visual

character

Insubstantial No discernible change in the existing landscape visual character

10.4 Scope and Content of the Study

Limits of the Study Area

- 10.4.1 The study area for the landscape impact assessment is an area 500 meters from the work limit of the project and is indicated on **Figure No. 10.4.1.**
- 10.4.2 The area for the visual impact assessment is defined by the limits of the visual envelope (or ZVI) which forms the view shed for the visibility of the project. The ZVI is indicated on **Figure No. 10.4.1.**

Project Description

- 10.4.3 At present, the existing TKO Tunnel is the main connection between TKO and the urban areas of Kowloon and Hong Kong. According to traffic impact assessments, the existing tunnel will experience serious congestion if an alternative external road link is not provided to meet the population growth and the continuing commercial and industrial development in the TKO area. To cope with the anticipated transport need, the TKO-LT Tunnel and Cross Bay Link (CBL) are proposed to meet the long-term traffic demand between TKO and the external areas.
- 10.4.4 TKO-LT Tunnel, together with the proposed Trunk Road T2 (T2) in the Kai Tak Development (KTD) and Central Kowloon Route (CKR), will form Route 6 in the strategic trunk road network. Route 6 will provide an east-west highway link between Kowloon and TKO. Upon completion, this trunk road will also provide the necessary relief to the existing heavily trafficked road network in the central and eastern Kowloon areas, and reduce the related environmental impacts on these areas.
- 10.4.5 TKO-LT Tunnel comprises a dual two-lane highway approximately 4.2 km long, about 2.6 km of which is in the form of tunnel. At either end of the tunnel are portal facilities and road interchanges linking into existing and future road systems.
- 10.4.6 The project elements of relevance to the landscape and visual impact assessment on the TKO side include the following:
 - TKO interface with the CBL and the TKO Interchange comprising dual two-lane highway linking to tunnel and slip roads to Road P2;
 - The TKO tunnel portal with weight bridge and roadside kiosk with lay-by (the tunnel portal has major slope works);
 - Temporary haul road and barging point for removal of excavated slope and tunnel debris at the base of the tunnel portal;
 - Reclamation for the slip roads landing point;
 - Slip roads landing and transition into a depressed roadway beneath a landscape deck in front of Ocean Shores;
 - Road works along Road P2 including a landscape deck in front of Ocean Shores;
 - Feature footbridge connections at the junction of Road P2 and D4 (Po Yap Road).

- The preferred engineering alignment has been selected and endorsed by the Project Steering Group following a process of option development and review. A review of the Conforming Scheme of TKO-LT Tunnel and development of alternative alignments has been conducted. The conforming scheme and the 3 major alternative tunnel alignments of the TKO Section are shown in **Figure 10.1**. After evaluation of the pros and cons including the respective landscape and visual aspects, of the conforming scheme and the alternative alignments and taking into account the comments received from the public engagement of the project, Alternative Alignment 3 (straight tunnel without toll plaza) has been endorsed by the Project Steering Group (PSG) as the Recommended Scheme for TKO-LT Tunnel.
- 10.4.8 The project elements of relevance to the landscape and visual impact assessment on the Lam Tin side include the following:
 - The Lam Tin Tunnel Portal and associated ventilation building in the north east and western walls of the Ex-Cha Kwo Ling Kaolin Mine Site;
 - The Lam Tin Interchange comprising the main highway and slip roads in the Ex-Cha Kwo Ling Kaolin Mine Site; full noise enclosure for the main highway and partial noise enclosures for the slip roads;
 - Associated buildings for the TKO-LT Tunnel including an Administration Building, a
 vehicle garage, a pumping station and maintenance facilities including a workshop,
 training ground, vehicle recovery base and petrol station;
 - Associated facilities for Trunk Road T2;
 - Road improvements at the junction of Cha Kwo Ling Road and Yau Tong Road;
 - Road improvements along Cha Kwo Ling Road including the proposed Cha Kwo Ling Roundabout;
 - Reprovisioning of the slip road from Lei Yue Mun Road onto the west bound carriageway of the EHC and the addition of Link Road EHC2;
 - Temporary waterfront barging point and elevated conveyor for removal of excavated tunnel and site formation debris.

Review of Planning and Development Control Framework

- 10.4.9 A review has been undertaken of the current planning goals and objectives, statutory landuse and landscape planning designations for the assessment area.
- 10.4.10 The relevant OZP for the project works within TKO is the Tseung Kwan O Outline Zoning Plan No. S/TKO/20, an extract of which is shown in **Figure No. 10.4.2.** The land uses under this Plan directly affected by the Project Site footprint are zoned as Open Space (O), Open Space 1 (O(1)), Other Specified Uses (OU), Government/ Institution/ Community 1 G/IC(1), G/IC(4), Commercial/ Residential (C/R) and Green Belt (GB) and areas designated as "Road" and are summarised in **Table 10.4.1.**

A=COM 10-10 March 2013

Table 10.4.1

Tseung Kwan O Outline Zoning Plan No. S/TKO/20

Zones Land Uses affected by the Project

Land Use Zoning	Area Affected	Sources of Impact/ Design Intent	Future Outlook
C/R	East of junction of Po Yap Road and Po Shun Road	Road, footbridge and footpath works	Road, footbridge and footpath adjacent to mixed commercial residential development
О	Open Space zoned for future Tiu Keng Leng Park	Depressed Road P2	Landscaped Deck
O(1)	Open Space to west of junction of Po Yap Road and Po Shun Road	Road, footpath, footbridge and cycleway	Road, footpath, footbridge and cycleway adjacent to Sports Centre & Library
OU	Tseung Kwan O/Junk Bay sea area	TKO interchange plus connection to Road P2	TKO interchange plus connection to Road P2
G/IC(1)	Reclamation area zoned as Civic Node	Road, footpath, footbridge and cycleway	Road, footpath and cycleway adjacent to planned cultural complex, Government Offices and parking
G/IC(4)	Reclamation area zoned as Civic Node	Road, footpath, footbridge and cycleway	Road, footpath and cycleway adjacent to planned clinic, police station, fire station cum ambulance depot & RCP
GB	Slopes and coastal strip of Tiu Keng Leng	Tunnel Portal	Tunnel Portal
Road P2	Po Yap Road to TKO Interchange	Construction of Road P2 and footbridge crossings	Road P2 integrated into adjacent Open Space, GIC and Residential developments with signature Civic Node at junction of Po Yap Road

10.4.11 TKO is a third generation New Town with a unique waterfront and valley setting. A 2005 Study formulated an urban design framework to concentrate new development in the Town Centre South and Tiu Keng Leng areas on newly reclaimed land in the south and west and Pak Shing Kok in the north east. The planning vision is to create "a new and distinctive waterfront district that capitalizes on the dramatic visual and physical relationship of the surrounding country parks and Junk Bay" with the primary objective of providing "a high

quality vibrant leisure and recreational area for the enjoyment of the TKO residents and visitors".

- 10.4.12 The OZP recognises the future CBL and TKO-LT Tunnel development and has indicated the corridor indicatively on plan (a 'cross-bay bridge road' was indicated on the first Outline Zoning Plan for Tseung Kwan O in 1992. For details of the planning history refer to Section 2.7.7 2.7.27 of the EIA Report). The TKO Interchange and Road P2 will affect an area zoned as OU and O in the south east corner of the TKO extension. Tiu Keng Leng Park is a planned open space over the depressed Road P2 in front of Ocean Shores and the park will extend onto the reclamation formed for the Road P2 landing. The TKO interchange will occupy an area of coast and Junk Bay zoned as OU and indicated on the OZP as allocated for "Toll Plaza, Ventilation Building and Associated Facilities". Road P2 extends north to the junction of Po Yap Road where a new Civic Node will be developed with surrounding Open Space, G/IC and Residential development.
- 10.4.13 Following a series of public consultation/engagement activities from April 2009 to April 2012 (see **Table 2.5** of the EIA Report), the comments and recommendations from the public on the Project including alignment selection, form of construction, land intake, environmental impact, traffic impact and engineering issues, as well as preservation of local culture and heritage, land-use planning and social impact were collected and considered for formulation of the recommended scheme. It is considered that the TKO-LT Tunnel is compatible with the current planning context in TKO and the transitional nature of the area requires that the visual impact analysis should take account of significant planned visually sensitive land-uses and receivers.
- 10.4.14 The relevant OZPs for the project works within the Kowloon side of the project are the Cha Kwo Ling, Yau Tong and Lei Yue Mun Outline Zoning Plan No S/K15/19, Kwun Tong South OZP No. S/K14S/17 and the Kai Tak OZP S/K22/4, extracts of which are shown in **Figure No. 10.4.3**. The land uses under these Plans affected by the Project Site footprint are zoned as G/IC, O, OU and GB and are summarised in **Table 10.4.2**.

Table 10.4.2

Cha Kwo Ling, Yau Tong and Lei Yue Mun Outline Zoning Plan No S/K15/19 Zoned Land Uses affected by the Project

Land Use Zoning	Area Affected	Sources of Impact/ Design Intent	Future Outlook
G/IC	Cha Kwo Ling Road and FEHD Vehicle Depot within old quarry	Road improvements and Lam Tin Interchange	Public road and Lam Tin Interchange comprising elevated slip roads within quarry footprint
R(A)4	West of former Cha Kwo Ling Kaolin Mine Site	Cha Kwo Ling Road improvements	High density residential with GIC facilities and Open Space provision
R(A)5	East of former Cha Kwo Ling Kaolin Mine Site & EHC	Road improvements	
0	Abandoned Kaolin	Lam Tin Interchange	Public road and Lam Tin

Cha Kwo Ling, Yau Tong and Lei Yue Mun Outline Zoning Plan No S/K15/19 Zoned Land Uses affected by the Project

Land Use Zoning	Area Affected	Sources of Impact/ Design Intent	Future Outlook
	Mine Site east of Cha Kwo Ling (reserved for District Open Space)		Interchange comprising elevated slip roads within quarry footprint
OU	Cross Harbour Tunnel Toll Plaza	Integration of Lam Tin Interchange with EHC and Cha Kwo Ling Road	Additional slip road connections
GB	Green belt surrounding ex Cha Kwo Ling Kaolin Mine Site and Sai Tso Wan Recreation Ground	Slope works and slip roads of Lam Tin Interchange	Slope works and slip roads of Lam Tin Interchange

- 10.4.15 The planning intent of the Lam Tin area is to redevelop Yau Tong to the east with new residential and commercial development, particularly within the Yau Tong Bay CDA. The Cha Kwo Ling village area facing the waterfront and the area behind is zoned as R(A)4 residential development and G/IC and the waterfront will be upgraded to provide public access and link into the Kai Tak Development to the north. The TKO-LT Tunnel therefore is compatible with the future development vision for the area in that it will enhance transport connections for the growing urban population in the adjacent development areas.
- 10.4.16 The project works footprint will fall primarily within the G/IC zoned land, and the existing FEHD Vehicle Depot and Seized Goods Compound, LCSD Nursery Site and the proposed LCSD Sports Complex/Indoor Recreation Centre cum District Open Space would be affected. Areas zoned as Open Space to the south and north east may be affected. Works related to public utilities are permitted within areas zoned as Open Space. The area of Open Space and Green Belt to the north of the quarry area would also be only temporarily impacted and the long term intent of providing a District Open Space would not be affected.

Hong Kong Island Side (north-eastern part)

10.4.17 A desk-top study has been undertaken of the current planning context of the waterfront portion along the northeast part of Hong Kong Island. With reference to the draft Chai Wan Outline Zoning Plan No. S/H20/20, it is noted that the current waterfront of Chai Wan and Siu Sai Wan are currently occupied by private residential developments, namely Heng Fa Chuen, Island Resort, Tai Koo Shing, Tung To Court, Tung Yuk Court and Aldrich Bay at Shau Kei Wan, Lei King Wan Grand Promenade and Les Saisons, all of which represent potential VSR groups for the TKO-LT Tunnel. There is no known planned new development or redevelopment along the waterfront portion within the study area that would result in any new VSR groups.

Tentative Programme

10.4.18 The TKO-LT Tunnel is to be implemented in parallel with the CBL. The works is tentatively scheduled to commence in February 2016 and be completed by November 2020. The project is anticipated to be commissioned in 2021.

Concurrent Projects

10.4.19 Concurrent projects have been identified below and are indicated on **Figure No. 10.4.4**.

TKO Side

- Cross Bay Link (CBL);
- TKO Town Centre South Development in Areas 65 and 66;
- Cycle tracks and promenade developments around TKO Bay in Area 68;
- TKO Area 86 Development;
- Hong Kong Offshore Wind Farm in South Eastern Waters;
- Residential Developments in Area 85;
- G/IC developments in Area 78;
- Planned recreational facilities at TKO Stage I Landfill, Area 77

Kowloon Side

- Trunk Road T2
- Kai Tak Development
- Yau Tong Bay CDA development
- Residential Development at ex-Cha Kwo Ling Kaolin Mine Site R(A) 4 zone

Description of Concurrent Projects - TKO Side

- 10.4.20 *Cross Bay Link (CBL)*: the CBL is a designated project under the EIAO Ordinance and the EIA Study Brief No.ESB-195/2008 was issued by the Director of Environmental Protection on 26th August 2008 to CEDD for an EIA study. The CBL is a dual two-lane elevated carriageway of approximately 1.8km long, primarily on viaduct, running east-west across Junk Bay and connecting TKO–LT Tunnel to the Area 86 developments and Wan Po Road in south eastern TKO. There is a direct interface with the TKO-LT Tunnel in the west and the two projects will be implemented in parallel. The landscape and visual impacts of the CBL are assessed under a separate but related report under Agreement No. CE 43/2008 (HY).
- 10.4.21 **TKO Town Centre South Development in Areas 65 and 66:** this area is currently under construction. The area will be primarily residential and will generate VSRs in large

- numbers. It is anticipated phases of the development will be in operation between 2017 and 2018.
- 10.4.22 **TKO Area 86 Comprehensive Development:** the first phases of residential development have already been constructed at Area 86 and additional residential and educational developments are planned above the MTRCL depot. All these developments will generate potential VSRs and the TKO-LT Tunnel landing point, slip roads and tunnel portal will all be potentially visible. The comprehensive development is due for completion on or before 2019.
- 10.4.23 *Cycle Tracks and Promenade Developments around TKO Bay in Area 68:* a promenade and cycle tracks are proposed as part of the TKO Comprehensive Development. These will provide prime viewpoints for walkers and cyclists across Junk Bay from the edge of the reclamation (Area 68) across a proposed southern footbridge over Eastern Channel and around the edge of Area 77 which is a planned recreational facility proposed to be completed by Year 10 of the TKO-LT Tunnel. A footpath connecting Area 68 with the Junk Bay Chinese Permanent Cemetery will interface directly with the TKO-LT Tunnel at the tunnel portal area and at the landscaped deck in front of Ocean Shores. Walkers on this footpath will have direct views of the TKO tunnel portal and the TKO interchange and associated reclamation area. The Cycle Tracks and Promenade Developments are anticipated to be in operation on or before 2018.
- 10.4.24 *Hong Kong Offshore Windfarm in Southeastern Waters:* with reference to the Project Profile and EIA Study Brief (ESB 146/2006) the project is to construct and operate a wind farm in the south eastern waters of Hong Kong. There is a proposed transmission cable landing point south of Ocean Shores which will connect cables from the offshore turbines to the CLP electricity grid. As the proposed works are minor and will consist of only a small underground cable connection pit these works are not considered further in this LVIA assessment.
- 10.4.25 **Residential Areas in Area 85:** two sites comprising 4ha are zoned for Group (E) Residential development. The planning intent is to phase out existing industrial uses in the area and develop it into a residential extension of the Area 86 CDA. Building heights up to 130m will be permitted. The construction of this residential development will likely be completed in 2013.
- 10.4.26 *G/IC developments in Area 78:* Sites at Pak Shing Kok have been reserved for a Fire Services Training School cum Driving Training School, a private hospital and other as yet undetermined G/IC uses. The site is largely screened by a large ridge to the west and building heights have been controlled so as not to exceed this. The G/IC developments are proposed to begin operation in 2017.
- 10.4.27 *Planned Recreational Facilities at TKO Stage 1 Landfill Area 77:* the total area of this site is 65.85ha and has been reserved for active and/or passive recreation and tourism/ecotourism developments for the use of the general public and is anticipated to be completed by Year 10 of the TKO-LT Tunnel.
 - Description of Concurrent Projects Kowloon Side
- 10.4.28 *Trunk Road T2 (T2):* T2 is a dual two-lane trunk road of about 3.6km long, 2.6km of which will be in tunnel. T2 will connect the CKR with the TKO-LT Tunnel and together they will form Route 6 in the strategic trunk road network. T2 and TKO-LT Tunnel will interface at the Lam Tin Interchange near Cha Kwo Ling Village and Laguna City.

A=COM 10-15 March 2013

- 10.4.29 *Kai Tak Development:* the development of the former airport site at Kai Tak affects an area of approximately 460ha and includes proposals for a variety of housing types, a tourism node, a Cruise Terminal, a multi-purpose stadium and a Metropolitan Park. The area is intended to house a population of some 260,000. Whilst the development is related to the Route 6 works there will be no direct interface with the TKO-LT Tunnel. VSRs in the new Kai Tak developments will not be aware of the Lam Tin Interchange due to the screening landform north of Cha Kwo Ling Village.
- 10.4.30 *Yau Tong Bay CDA Development:* the CDA zone in Yau Tong Bay is proposed to be comprehensively redeveloped for residential, commercial and community uses. A planning application has been submitted by a developer for waterfront housing with public promenade and open space. Should this be approved, the construction would be concurrent with the TKO-LT Tunnel. The development will create new residential VSRs along Cha Kwo Ling Road but screen out existing VSRs to the south east.
- 10.4.31 *The Ex- Cha Kwo Ling Kaolin Mine Site:* the site is proposed to be developed for residential use, G/IC facilities and public open space. A planning study is being conducted but no planning application has been submitted for the proposed development to date. If a planning application is submitted and approved, it is likely that the development would be completed during the construction of the TKO-LT Tunnel between 2016 and 2019. The new development would create additional VSRs overlooking the Lam Tin Interchange.

10.5 Baseline Study

Physical Landscape Resources and Landscape Character Areas

- 10.5.1 The study area on the TKO side lies within the existing urban area of Po Yap Road and on the flat reclaimed land of the TKO extension in the north, on the western hill slopes of the Tiu Keng Leng hills to the south west and the seawater body of Junk Bay to the south east. Landscape resources include amenity tree planting in the urban areas, amenity tree planting on roadsides and modified slopes, self -seeded vegetation on the reclamation, grassland/shrubland vegetation on the coastal hill slopes, ponds and streams, the natural rocky and sandy shoreline and the open water expanse of west Junk Bay.
- 10.5.2 The baseline Landscape Resources for TKO that will be affected during the Construction and Operation Phases and their sensitivity are described below in **Table 10.5.1**. An overall view of Baseline Landscape Resources TKO and Lam Tin is illustrated on **Figure 10.5.1.1**. The locations of the TKO Baseline Landscape Resources are illustrated at a larger scale on **Figures 10.5.1.1a 1b**. Photographic Views illustrating the Landscape Resources are provided on **Figure 10.5.1.2**.

Table 10.5.1 – Tseung Kwan O Landscape Resources and their Sensitivity

ID No.	TKO Landscape Resource	Sensitivity
TKO-LR1	Junk Bay (Tseung Kwan O) Sea Waterbody The sea waterbody comprises part of Junk Bay and is a valuable landscape resource contributing to the unique waterfront setting of TKO. The approximate area within the study boundary is 114 ha. The sensitivity is assessed as High given the	High
	channel's physical characteristics and the statutory presumption against reclamation.	
TKO-LR2	Natural Rocky Shore along Chiu Keng Wan Coastline This rocky shore forms part of the last stretch of natural coastline in Junk Bay (apart from Fat Tong Chau on the eastern side) and measures approximately 1102m. The sensitivity of the natural coastline is High due to its relative rarity within the	High
	locality (due to the high proportion of reclamation coast within Junk Bay), its distinctive character and low tolerance of change (it cannot be replaced).	
TKO-LR3A	Amenity/ Roadside Planting/ Vegetation on modified slopes at Chiu Keng Wan Shan The vegetation on the natural hillsides of Chiu Keng Wan Shan consists of planting on	Medium

ID No.	TKO Landscape Resource	Sensitivity
	engineered slopes. In general, the vegetation is dominated by exotic tree species typically planted throughout Hong Kong including Acacia confusa, Acacia auriculiformis, Eucalyptus spp., Casuarina equisetifolia and with occasional native tree species such as Celtis sinensis, Macaranga tanarius and Schefflera heptaphylla. Representative shrubs recorded include Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica and grasses recorded include Hedyotis acutangula and Neyraudia reynaudiana. No plant species of conservation interest were recorded within these areas.	
	The sensitivity of the vegetation is assessed as Medium as it is generally semi-mature secondary woodland or roadside planting and a relatively common local resource that can easily be reinstated and is therefore reasonably tolerant of change.	
TKO- LR3B	Vegetation on modified slopes at Tiu Keng Leng	Medium
	The vegetation on the natural hillsides of Tiu Keng Leng and Mau Wu Shan consists of planting on engineered slopes. In general, the vegetation is dominated by exotic tree species typically planted throughout Hong Kong including Acacia confusa, Acacia auriculiformis, Eucalyptus spp., Casuarina equisetifolia and with occasional native tree species such as Celtis sinensis, Macaranga tanarius and Schefflera heptaphylla. Representative shrubs recorded include Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica and grasses recorded include Hedyotis acutangula and Neyraudia reynaudiana. No plant species of conservation interest were recorded within these areas.	
	The sensitivity of the vegetation is assessed as Medium as it is generally semi-mature secondary woodland or roadside planting and a relatively common local resource that can easily be reinstated and is therefore reasonably tolerant of change.	
TKO- LR3C	Amenity/ Roadside Planting on modified slopes at Junk Bay Chinese Permanent Cemetery	Medium

ID No.	TKO Landscape Resource	Sensitivity
	The amenity planting/ vegetation on the natural hillsides southeast of Chiu Keng Wan Shan and at Junk Bay Chinese Permanent Cemetery consists of planting on engineered slopes. In general, the composition is dominated by exotic tree species typically planted throughout Hong Kong including Acacia confusa, Acacia auricuioformis, Eucalyptus spp., Casuarina equisetifolia and with occasional native tree species such as Celtis sinensis, Macaranga tanarius and Schefflera heptaphylla. No plant species of conservation interest were recorded within these areas.	
	The sensitivity of the vegetation is assessed as Medium as it is generally semi-mature secondary woodland or roadside planting and a relatively common local resource that can easily be reinstated and is therefore reasonably tolerant of change.	
TKO- LR3D	Amenity /Roadside Planting on modified slopes along Road D4 (Po Yap Road and	Medium
	Chui Ling Road) and P2 (Po Shun Road) The Amenity / Roadside planting on modified slopes and at grade along Po Yap Road and the northern edge of the TKO reclamation consists of common roadside tree species including Bauhinia blakeana and Hibiscus tiliaceus. Representative shrubs recorded include Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica and grasses recorded include Hedyotis acutangla and Neyraudia reynaudiana.	
	The sensitivity of the vegetation is assessed as Medium as it is generally semi-mature roadside planting and a relatively common local resource that can easily be reinstated and is therefore reasonably tolerant of change.	
TKO-LR4	Mixed Woodland Vegetation on hillside areas at Chiu Keng Wan Shan	Medium
	The mixed woodland habitat covers an area of 2.8ha south of the residential blocks of Ocean Shores. This resource is dominated by common and widespread native pioneer tree species (Macaranga tanarius, Mallotus paniculatus, Sapium discolour, Ficus hispida	

ID No.	TKO Landscape Resource	Sensitivity
	and Schefflera heptaphylla). Other common species include trees (Celtis sinensis and Araucaria heterophylla), various fruit tree	
	species, climbers (<i>Dalbergia benthamii</i>) and shrubs (<i>Manihot esculenta</i> and <i>Phyllanthus cochinchinensis</i>). No rare flora or species of conservation interest were recorded during recent surveys.	
	The sensitivity of the Cemetery tree planting is Medium as it comprises common species that can easily be reinstated and is therefore	
TKO-LR5A	reasonably able to accommodate change. Grassland/Shrubland Mosaic at Chiu	Medium
	Keng Wan Shan	
	Grassland/Shrubland Mosaic covers an approximate area of 63ha. This resource covers most of Chiu Keng Wan Shan and the back-shore slope along the coast of Chiu Keng Wan. Representative vegetation recorded includes young pioneer trees (Macaranga tanarius, Litsea glutinosa and Bridelia tomentosa), shrubs (Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica) and grasses (Hedyotis acutangula and Neyraudia reynaudiana).	
	This resource is assessed as having Medium sensitivity given its common species composition and secondary nature, and the large expanses of similar vegetation stretching to the north and east. It could be reinstated if impacted and is therefore reasonable able to accommodate change.	
TKO-LR5B	Grassland/ shrubland mosaic at Tiu Keng Leng	Medium
	Grassland/ shrubland mosaic covers an approximate area of 29ha. This resource covers the upper slopes of Tiu Keng Leng. Representative vegetation recorded within grassland/ shrubland mosaic habitat includes young pioneer trees (Macaranga tanarius, Litsea glutinosa and Bridelia tomentose), shrubs (Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica) and grasses (Hedyotis acutangula and Neyraudia reynaudiana).	
	This resource is assessed as having Medium sensitivity given its common species	

ID No.	TKO Landscape Resource	Sensitivity
	composition and secondary nature. It could	•
	be reinstated if impacted and is therefore	
	reasonable able to accommodate change.	
TKO-LR6A	Ponds at Junk Bay Chinese Permanent	Medium
	Cemetery and Chiu Keng Wan Shan	
	Several concrete water retention ponds were	
	recorded within the TKO Chinese Permanent	
	Cemetery. These ponds serve as a flood prevention measure to store the surface	
	runoff from the Cemetery. They are	
	surrounded by plantation habitat. They have	
	a total area of approximately 0.24ha.	
	a total area of approximately 0.24na.	
	Given their artificial character this resource	
	is assessed as having a Medium sensitivity.	
TKO-LR6B	Streams at Junk Bay Chinese Permanent	High
1110 21102	Cemetery and Chiu Keng Wan Shan	8
	Three natural streams (identified on plan as	
	Streams 2, 3 and 4) with a total length of	
	approximately 750m run down the western	
	coast of Chiu Keng Wan. These rocky	
	streams are intermittent in nature depending	
	on season and discharge into Junk Bay.	
	Given their natural character, that they are	
	few in number within the study area and the	
	fact that they cannot be easily recreated,	
	these resources are assessed as having a High	
TKO-LR7	sensitivity.	II: ab
IKO-LK/	Village Trees within Chiu Keng Wan Shan	High
	This resource is located at the slope below	
	the TKO Chinese Permanent Cemetery and	
	covers an area of 2ha. It comprises scattered	
	orchard planting within village housing	
	areas. The species include <i>Dimocarpus</i>	
	longan, Antirhea chinensis and Schefflera	
	heptaphylla.	
	This resource is assessed as having a High	
	sensitivity as the trees contribute to local	
	amenity (although none are rare, endangered	
	species or registered OVTs and they could be	
	reinstated should they be impacted).	
TKO-LR8	Sandy Shore along Chiu Keng Wan Shan	High
	Coastline	
	On the market control of the transfer of the t	
	On the western coast of Junk Bay, natural	
	sandy shore occurs in 3 small bays within the	
	study area and these have a combined length	

ID No.	TKO Landscape Resource	Sensitivity
	of approximately 437 m.	
	The sensitivity of the natural sandy shore is	
	High due to its relative rarity within the	
	locality (due to the high proportion of reclamation coast within Junk Bay), its	
	distinctive character and low tolerance of	
	change (it cannot be easily replaced).	
TKO-LR9	Self-seeded Vegetation on TKO	Low
	Reclamation	
	This includes self-seeded trees, shrubs and	
	grasses on the new reclamation area forming	
	the southern extension of TKO. Most are	
	common native species and are in poor	
	condition having received no formal	
	maintenance. Dominant tree species include	
	Acacia spp., Albizia spp., Bauhinia blakeana, Cassia siamea, Eucalyptus spp., Hibiscus	
	tiliaceus, Leucaena leucocephala. The	
	reclamation occupies an area of	
	approximately 9.7ha of which the vegetation	
	only covers limited areas which are subject to	
	change due to on-going building works.	
	The sensitivity of this vegetation is	
	considered as Low as it is predominantly	
	incidental, of common species and of low	
	quality.	

10.5.3 The baseline Landscape Character Areas for TKO that will be affected during the Construction and Operation Phases and their sensitivity are described below in **Table 10.5.2**. The locations of the Baseline Landscape Character Areas for TKO are illustrated on **Figure No. 10.5.2.1**. Photographic Views illustrating the Landscape Character Areas are provided on **Figure No 10.5.2.2**.

Table 10.5.2 – Tseung Kwan O Landscape Character Areas and their Sensitivity

ID No.	TKO Landscape Character Area	Sensitivity
ID No. TKO-LCA1	TKO Landscape Character Area Junk Bay Inshore Water Landscape This includes the open water of Junk Bay and its interface with the natural and reclaimed coastline. Junk Bay provides a dramatic contrast to the surrounding ridges and hills and creates the unique waterside setting for TKO. The western portion is delimited by natural coastline and the northern edge by reclamation which offers the potential for an enhanced waterfront environment and access. Junk Bay is not only of value to TKO but also to viewers from the south on Hong Kong Island, seaborne viewers and	Sensitivity High
	viewers on elevated ground to the west, north and east.	

ID No.	TKO Landscape Character Area	Sensitivity
	Given the role this LCA plays in setting the bay side	
	context of TKO, and the fact that its characteristic is	
TVOLCAS	flat and open, the sensitivity is assessed as High.	Madiana
TKO-LCA2	Junk Bay Chinese Permanent Cemetery Landscape	Medium
	This is a highly distinctive landscape character area comprising a concrete terraced hillside housing graves and shrines and a central columbarium. There are some groups of mature trees around the columbarium and small trees and shrubs along the terraces but overall the cemetery has a stark, hard aspect contrasting dramatically with the natural vegetation of the adjacent hills. Cemetery landscape is common on the urban fringe throughout Hong Kong.	
	As the cemetery landscape is a common resource, of no particular visual or landscape quality and has a high tolerance to change, the sensitivity is assessed as Medium.	
TKO-LCA3	Chiu Keng Wan Coastal Upland and Hillside Landscape	High
	This landscape area covers the steep natural terrain on the western side of Junk Bay. It is designated Green Belt and forms a buffer to the urban area of TKO to the north. The area is largely undeveloped with a road and footpaths forming the only manmade elements. It is mostly covered in secondary woodland comprising trees, shrubs and grasses. This semi-natural landscape acts as a foil to the hard man-made forms of the residential high-rise to the north and the cemetery terraces to the south.	
	Given that this character area is a remnant of the original Junk Bay landscape, that there is a statutory presumption against development and it provides a green backdrop to the dense built up area of TKO, it is assessed as having a High sensitivity.	
TKO-LCA4	Mixed Modern Comprehensive Urban	Medium
	This character area consists of the existing urban area of TKO which comprises a mix of relatively recent Government, commercial, community and residential developments and transport corridors. The scale of the developments is large with multi-storey developments and the population density is high. This landscape character area is assessed as having a	
	Medium sensitivity as it is a common urban character type throughout Hong Kong and has no particular distinctive qualities. Given its context next to the TKO	

ID No.	TKO Landscape Character Area	Sensitivity
	reclamation to the south which is in a continuing state	v
	of transition it has a reasonable tolerance to change.	
TKO-LCA5	Reclamation/Ongoing Major Development Landscape at proposed Tseung Kwan O Town Centre south The reclamation is a transitional landscape which is	Low
	currently largely an area of earthworks, hoardings and fences, groups of self-seeded vegetation and mechanical plant. There is a temporary golf driving range in the eastern portion. The infrastructure for the new TKO Town Centre South Development is currently being installed.	
	Given the transitional nature of this character area and the planning intention to develop it into a new town extension, this area is assessed as having a Low sensitivity.	
TKO-LCA6	Urban Residential Landscape	Medium
	This area is characterised by high rise residential developments with podiums served by commercial and institutional facilities and road connections. The margins of the area are well defined by transport corridors and podium edges. The built form is typical of Hong Kong housing estates and has no particular landscape character value.	
	The sensitivity of this character area is assessed as Medium given its proximity to the ongoing TKO Town Centre South Development to the east.	
TKO-LCA7	Mau Wu Shan Upland and Hillside Landscape	Medium
	This landscape area covers the southern slopes of the hills behind TKO. It is designated Green Belt and forms a buffer to the urban area of TKO to the south. The area consists of a combination of artificial slopes at the lower level and natural landform above. The artificial slopes are sparsely vegetated but the natural slopes have dense woodland coverage.	
	Given that this character has already been impacted by slope works and is of semi-natural quality, it has a Medium sensitivity.	

10.5.4 The study area within the Lam Tin side of the project area is flanked by Victoria Harbour and the Lei Yue Mun Channel to the west and the Black Hill (Ng Kwai Shan) ridgeline to the east. The Cha Kwo Ling ridge is the site of old granite and kaolin quarry workings and supports areas of mature woodland and sparse scrub. The northern part of the workings now incorporates Sai Tso Wan Recreational Ground. The main quarry site is currently utilised for vehicular storage. Cha Kwo Ling Village lies to the west of the ridge facing the waterfront and comprises old, low-rise development including the historic Tin Hau Temple.

The Eastern Harbour Crossing Tunnel approaches and toll plaza cut through the centre of the study area and has associated peripheral tree planting. The urban area to the east contains new residential, educational and park facilities incorporating amenity planting. The Yau Tong Bay waterfront is currently derelict and is scheduled for comprehensive redevelopment. The Lei Yue Mun Channel is the narrowest point of Victoria Harbour and is a busy sea lane used by shipping, ferries, fishing boats and pleasure craft. The open channel also affords panoramic views of the Hong Kong Island skyline. Landscape Resources include amenity trees along roadsides and modified slopes, mixed woodland, ponds and natural watercourses, amenity grassland, natural grass and shrub areas and the Lei Yue Mun Channel sea waterbody.

10.5.5 The baseline Landscape Resources at Lam Tin that will be affected during the Construction and Operation Phases and their sensitivity are described below in **Table 10.5.3.** An overall view of Baseline Landscape Resources - TKO and Lam Tin is illustrated on **Figure 10.5.1.1.** The locations of the Baseline Landscape Resources at Lam Tin are illustrated on **Figure No.s 10.5.3.1a- 1b.** Photographic Views illustrating the Landscape Resources at Lam Tin are provided on **Figure 10.5.3.2.**

Table 10.5.3 – Lam Tin Landscape Resources and their Sensitivity

ID No.	Lam Tin Landscape Resources	Sensitivity (Low,
ITID1	Loi Vuo Mun Channal Soa Watarhady	Medium, High)
LT-LR1	The Lei Yue Mun Channel is the narrowest point of Hong Kong Harbour and is a busy sea lane for ocean going ships, fishing boats, pleasure craft and sampans. There is a presumption against reclamation of the harbour under the Protection of the Harbour Ordinance. This is particularly pertinent at Lei Yue Mun given the narrowness of the channel. The channel marks the gateway to Hong Kong Harbour and has played a significant role in the cultural history of the city. The area within the study boundary is approximately 68 ha. The sensitivity is assessed as High given the water body's physical characteristics, cultural history value	High
LT-LR2	and the statutory presumption against reclamation. Trees within Yau Tong Bay Industrial Waterfront	Medium
	There are approximately 125 no. existing trees in the derelict industrial waterfront strip of Yau Tong Bay (Kwun Tong Tsai Wan). These are mostly common self-seeded species that have established on vacant and derelict sites and are generally of low value. Dominant tree species include Albizia lebbek, Acacia spp., Macaranga tanarius, Hibiscus tiliaceus, Leucaena leucocephala. The sensitivity is assessed as Medium given the poor quality of the trees and their general low amenity value	

ID No.	Lam Tin Landscape Resources	Sensitivity (Low,
	and that there could be usual and	Medium, High)
LT- LR3	and that they could be replaced. Mixed Woodland Vegetation on Hillside Areas	Medium
LI-LKS	Witxed Woodiand Vegetation on Hinside Areas	Medium
	There is approximately 10 ha of hillside vegetation comprising trees, shrubs, grass and climbers on the natural slopes to the north east fringe of the Lam Tin urban area. It comprises secondary woodland and dominant tree species include <i>Acacia spp., Casuarina equisetifolia, Celtis sinensis, Ficus spp., Leucaena leucocephala</i> and <i>Macaranga tanarius</i> . Part of this area is designated Greenbelt, G/IC uses and Residential (Group A). The vegetation provides a valuable green buffer and backdrop to this dense urban area and begins the transition to the natural uplands of the Black Hill (Ng Kwai Shan) ridge.	
	This resource is assessed as having Medium sensitivity given its common species composition, secondary nature, urban fringe context and the large expanses of similar vegetation stretching to the north and east.	
LT- LR4	Pond at Cha Kwo Ling	Medium
	A seasonal pond is located in the abandoned quarry site north east of Cha Kwo Ling Tsuen. The pond covers approximately 0.16ha and accommodates a variety of low, water loving vegetation. Due to its transitory nature and low ecological value, this resource is assessed as having a Medium sensitivity.	
LT- LR5	Natural Watercourse	High
	A branching natural stream flows down the vegetated slopes between Ping Tin and Kwong Tin Estates. It is an uncommon resource in an urban area and provides a wildlife habitat. The stream lies within an area zoned for G/IC and Residential land uses. The length of the watercourse is approximately 600m.	
	Given its natural character and relative rarity within this urban area, the stream is assessed as having High sensitivity.	
LT- LR6	Grass Sports Pitch within Sai Tso Wan Recreation Ground	Low
	The sports pitch provides a valuable recreational resource within a dense urban area and occupies an area of approximately 1.53 ha.	
	As this resource comprises turf of common commercially available grass species which is easily	

ID No.	Lam Tin Landscape Resources	Sensitivity (Low, Medium, High)
	reinstated, the sensitivity for this recreational resource is assessed as Low.	
LT- LR7	Village Trees within Cha Kwo Ling Residential Area A number of mature trees lie within the low rise Cha	High
	Kwo Ling Village. Dominant tree species include Acacia spp., Eucalyptus spp., Ficus spp., Litsea glutinosa, Mallotus paniculatus, Sterculia lanceolata. The existing trees and shrubs occupy an approximate area of 1ha.	
	This resource is assessed as having a High sensitivity as the trees are mature and contribute to local amenity.	
LT-LR8A	Amenity/Roadside Planting/Vegetation on Modified Slopes at Sai Tso Wan	High
	Within the assessment area there is a network of amenity planting along roads and on modified slopes which support a wide variety of flora. There are significant quantities of semi mature and mature tree species situated in these areas including on quarry and other modified slopes, in recreational facilities, temporary and permanent depots. This vegetation comprises common ornamental tree, shrub and climber species and native pioneer tree species including: Acacia spp., Bauhinia spp. Bischofia jananica, Bombax ceiba, Casuarina equisetifolia, Celtis sinensis, Cinnamomum camphora, Eucalyptus spp., Ficus spp., Hibiscus tiliaceus, Leucaena leucocephala, Litsea glutinosa, Macaranga tanarius, Melia azadarach, Schefflera heptaphylla, Sterculia lanceolata, Syzygium jambos. The sensitivity of this resource is assessed as High due the maturity of the vegetation and the greening and	
	amenity value it provides throughout the assessment area.	
LT-LR8B	Amenity/Roadside Planting/Vegetation on Modified Slopes at Former Quarry	High
	This resource is similar in composition to LT/LR8A but occupies a distinct and significant location (in terms of the project footprint) on the rock walls and surrounding slopes of the former quarry site. The area of vegetation is approximately 5.08ha.	
	The sensitivity of this resource is assessed as High due the mature nature of the vegetation and the greening value it provides for the quarry.	

ID No.	Lam Tin Landscape Resources	Sensitivity (Low, Medium, High)
LT-LR9A	Grassland/Shrubland Mosaic on Ng Kwai Shan	Medium Medium
	Grassland/shrubland mosaic areas are located at Ng Kwai Shan on undulating or sloping terrain. Vegetation recorded includes pioneer tree species such as Macaranga tanarius, Litsea glutinosa and Bridelia tomentosa, shrubs such as Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica, ferns Dicranopteris pedata, grasses Hedyotis acutangula and Neyraudia reynaudiana and herbs Bidens alba and Ageratum conyzoides.	
	This resource is assessed as having Medium sensitivity given its common species composition.	
LT-LR9B	Grassland/Shrubland Mosaic at Cha Kwo Ling	Medium
	Grassland/shrubland mosaic areas are located at Cha Kwo Ling on undulating or sloping terrain. Vegetation recorded within grassland/shrubland mosaic includes pioneer tree species such as Macaranga tanarius, Litsea glutinosa and Bridelia tomentosa, shrubs Rhodomyrtus tomentosa, Lantana camara and Rhaphiolepis indica, ferns Dicranopteris pedata, grasses Hedyotis acutangula and Neyraudia reynaudiana and herbs Bidens alba and Ageratum conyzoides.	
	This resource is assessed as having Medium sensitivity given its common species composition.	

10.5.6 The baseline Landscape Character Areas at Lam Tin that will be affected during the Construction and Operation Phases and their sensitivity are described below in **Table 10.5.4**. The locations of the Baseline Landscape Character Areas at Lam Tin are illustrated on **Figure No. 10.5.4.1**. Photographic Views illustrating the Landscape Character Areas at Lam Tin are provided on **Figure 10.5.4.2**.

Table 10.5.4 – Lam Tin Landscape Character Areas and their Sensitivity

ID No.	Lam Tin Landscape Character Areas	Sensitivity
		(Low, Medium,
		High)
LT-LCA1	Lei Yue Mun Channel Inshore Water Landscape	High
	The Lei Yue Mun Channel is the narrowest point of	
	Hong Kong Harbour and is a busy sea lane for ocean	
	going ships, fishing boats, pleasure craft and sampans.	
	The proximity of the shorelines either side of the	
	channel at this point provide a unique sense of	
	enclosure and intimacy in the harbour. The channel	

ID No.	Lam Tin Landscape Character Areas	Sensitivity (Low, Medium,
		High)
	marks the gateway to Hong Kong Harbour and has played a significant role in the rich history of the development of the harbour city.	
	The sensitivity is assessed as High given the channel's physical characteristics, unique local sense of scale, the cultural history and the statutory presumption against reclamation.	
LT-LCA2	Yau Tong Bay Coastal Industrial Urban Landscape	Low
	This is a waterfront strip of derelict and downgraded industrial uses. It is now predominantly zoned as a CDA with the intention of redevelopment into residential and commercial waterfront to revitalise the area. The waterfront extension in front of Cha Kwo Ling Village is zoned as Open Space, G/IC and Other Uses and the planning vision is to connect the upgraded waterfront with that of the Kai Tak redevelopment to the north. The existing visual character is poor and there are no landscape features of intrinsic value apart from some existing trees. It is the waterfront context that imparts the character to this zone.	
	The sensitivity of this landscape character area is assessed as Low given the current derelict condition and the planning intent to redevelop it.	
LT-LCA3	Lam Tin Upland and Hillside Landscape	Medium
	The green vegetated slopes within and behind Yau Tong provide an organic backdrop which acts as a visual foil to the dense urban development. It also marks the urban fringe transition to the undeveloped natural upland landscapes above and is generally zoned for Residential and G/IC uses although part of its area is zoned as Greenbelt.	
	The sensitivity of this character area is assessed as Medium as it lies within the urban fringe zone and is juxtaposed with dense urban development and is reasonably tolerant to change.	
LT- LCA4	Miscellaneous Urban Fringe Landscape	Medium
	This distinctive character area comprises Cha Kwo Ling Village and lies between Cha Kwo Ling Road and the waterfront strip to the south west and the elevated ridge of land of the former quarry site to the north east. The village comprises an organic patchwork of low rise dwellings with sporadic tree planting.	

ID No.	Lam Tin Landscape Character Areas	Sensitivity
		(Low, Medium, High)
	This area is assessed as being of Medium sensitivity due to its organic nature and it location adjacent to the transitional waterfront area (LCA2) to the southwest, and it is reasonably tolerant to change.	211gn)
LT-LCA5	Urban Recreational Landscape	Medium
	This character area is focused around the Sai Tso Wan Recreation Ground and Sin Fat Road Tennis Courts immediately north of the quarry site. The recreational facilities lie within a broad swathe of mature woodland which screens adjacent LCAs and provides a strong sense of enclosure for the facilities.	
	This area is reasonably tolerant to change due to the dense woodland screen which could be reinstated and is therefore assessed as having a Medium sensitivity.	
LT-LCA6	Urban Transport Corridor	Low
	A broad, linear zone stretching from the Cha Kwo Ling Road and The Eastern Harbour Crossing in the south west to Lei Yue Mun Road in the north west is characterised by carriageways, slip roads, toll plazas, traffic islands, foot bridges and overpasses, roadside slopes and retaining structures. Due to the low visual quality of this area and as it is	
	largely tolerant to change the sensitivity is assessed as Low.	
LT-LCA7	Lam Tin Residential Urban Landscape	Medium
	This character area forms the main urban landscape of the study area and comprises modern high rise residential developments and associated pockets of associated facilities such as commercial and educational establishments, punctuated in places with amenity planting. The urban character is unremarkable and similar to most of Hong Kong's urban residential character.	
	As the landscape quality of this area is unremarkable and as it is reasonably tolerant to change the sensitivity is assessed as Medium.	
LT-LCA8	Former Quarry Landscape – Abandoned	Low
	This landscape character area comprises the north west portion of the abandoned Ex-Cha Kwo Ling Quarry Site. It consists of uneven ground with modified slopes and rock-cut platforms. Some slopes and areas of ground are bare and devoid of vegetation cover. Most of the area supports a patchy mosaic of trees, shrubs	

ID No.	Lam Tin Landscape Character Areas	Sensitivity (Low, Medium, High)
	and grass which are self-seeded and in various stages of maturity. The area is abandoned except for a level platform on the northern side with associated access road which is currently utilised as a storage facility. This landscape character area is assessed as having Low sensitivity due to its abandoned state and incidental vegetation coverage and is considered to be tolerant to change.	•
LT-LCA9	This southern portion of the Ex-Cha Kwo Ling Quarry Site is defined by steep rock cut walls with benches which enclose a flat central portion which has been actively used as an FEHD storage facility (Cha Kwo Ling Vehicle Depot) and formerly a nursery area. The surrounding slopes and rock-cut benches are covered with a combination of self-seeded and planted tree, shrub and climber vegetation which reinforces the sense of enclosure of the area and provides a degree of visual amenity. Whilst this landscape character area has a large number of existing mature trees, a significant proportion (approximately 40%) of the area is access road or hardstanding and the land uses that it supports are transient in nature. Overall, the sensitivity is therefore assessed as Medium as it is reasonably able to tolerate change.	Medium

Tree Survey Data

- 10.5.7 A detailed tree survey has been undertaken within the anticipated footprint of the engineering alignment and works areas. The survey was undertaken in accordance with ETWB-TC No.3/2006 and includes Tree Survey Plans recording all trees with a stem diameter over 95mm DBH (diameter at breast height or 1.3m above ground level). The Tree Preservation Report has been circulated to relevant government departments.
- 10.5.8 On the TKO side of the tunnel the tree survey was undertaken for 2 distinct areas. For "Area A" of the tree survey, including roads P2 and D4 on the edge of the existing TKO urban area and some of the recent reclamation to the south a total of 327 no. existing trees comprising 19 no. species were surveyed. No rare or endangered species and no "Old and Valuable Trees" (OVTs) as defined under ETWB TC(W) 29/2004 or listed in the LCSD OVT Register were identified within the survey area. There were also no potential OVTs or "Important Trees" (ITs) as defined by ETWB TC(W) 3/2006. The dominant species surveyed were *Acacia confusa*, *Bauhinia blakeana*, *Hibiscus tiliaceus*, *Cassia siamea* and *Eucalyptus camaldulensis* and together these comprise over 72% of the trees. *Acacia confusa*, *Cassia siamea* and *Eucalyptus camuldensis* are exotic species whereas *Bauhinia blakeana* and *Hibiscus tiliaceus* are native to Hong Kong. All the trees are in roadside environments and have been planted relatively recently (within approximately the last 5 to 10 years). As the trees are predominantly common species and are not yet mature, their

Amenity Value is rated Medium to Low. Existing trees impacted along Po Yap Road will be compensated at a ratio of 1:1 by number and girth (provisionally 26 no. heavy standard compensatory trees will be planted along roadsides). All 30 of the trees proposed to be transplanted will be transplanted to permanent sites within the project site.

- 10.5.9 Tree survey "Area B" is on the TKO side of the tunnel and includes the tunnel portal area. A total of 191 no. existing live trees comprising 13 no. species were surveyed. No rare or endangered species and no "Old and Valuable Trees" (OVTs) and no potential OVTs or "Important Trees" (ITs) were identified. The dominant species surveyed were *Acacia auriculiformis, Acacia confusa, Acacia mangium, Acronychia pedunculata, Sapium discolor and Schefflera heptaphylla* and together these 6 species comprise 93% of the trees. All the species are exotic except for *Acronychia pedunculata and Sapium discolor* which are native to Hong Kong suggesting that this area is secondary woodland that was planted rather than natural indigenous vegetation cover. Approximately 50 trees on slopes surrounding the TKO tunnel portal will be impacted. Tree planting or woodland mix planting is not feasible on the new tunnel portal slopes but they will be 'greened' with shrub and climber planting to reduce the visual impact. The trees removed within Area B will be compensated at a ratio of 1:1 by number and girth along the reclaimed Road P2 within the project site.
- 10.5.10 Tree survey "Area C" on the Lam Tin side of the tunnel, includes the Link Road EHC2 and the realignment of the slip road from Lei Yue Mun Road onto the westbound carriageway of the EHC. A total of 132 no. trees comprising 22 no. species were individually surveyed. No rare or endangered species and no "Old and Valuable Trees" (OVTs) and no potential OVTs or "Important Trees" (ITs) were identified. The dominant species surveyed were *Acacia auriculiformis, Acacia confusa, Bauhinia blakeana, Caryota mitis, Ficus benjamina,* and *Melaleuca quinquenervia* and together these comprise over 67% of the trees. All the species are exotic except for *Bauhinia blakeana* which is native to Hong Kong. The trees include roadside/street tree planting and trees planted within and around the former Cha Kwo Ling Kaolin Mine Site. Existing trees impacted along Link Road EH2 and along the slip road from Lei Yue Mun Road to the westbound carriageway of the EHC will be compensated at a ratio of 1:1 by number and girth (provisionally 23 no. heavy standard compensatory trees will be planted along roadsides).
- 10.5.11 On the Lam Tin side of the tunnel, tree survey "Area D" includes the area of the Lam Tin tunnel portal and associated ventilation building on the north east and western walls of the Ex-Cha Kwo Ling Kaolin Mine Site; the proposed Lam Tin Interchange comprising the main highway and slip roads in the Ex-Cha Kwo Ling Kaolin Mine Site, associated buildings of the TKO-LTT including administration block, a vehicle garage, a Pumping Station and maintenance facilities including a workshop, training ground, vehicle garage, a vehicle recovery base and petrol station; road improvements along Cha Kwo Ling Road and at the junction of Yau Tong Road and at the Roundabout. A total of 3,152 trees were surveyed individually or under the group survey method comprising 61 different species. No rare or endangered species and no "Old and Valuable Trees" (OVTs) and no potential OVTs or "Important Trees" (ITs) were identified. The dominant species surveyed were Acacia confusa, Casuarina equisetifolia, Eucalyptus exserta, Ficus hispida, Leucaena leucocephala, Macaranga tanarius and Mallotus paniculatus and together these comprise over 80% of the trees. Acacia confusa, Casuarina equisetifolia, Eucalyptus exserta, Ficus hispida and Leucaena leucocephala are exotic species whereas Macaranga tanarius and Mallotus paniculatus are native to Hong Kong. The trees surveyed under the group survey lie on slopes and uneven ground on the former Cha Kwo Ling Kaolin mine site and were either planted following cessation of mine workings or have self-seeded since that date. Existing trees impacted within the ex-Cha Kwo Ling Quarry Site will be compensated a ratio of 1:1 by number and girth. Provisionally approximately 700 no. heavy standard

- compensatory trees will be planted in and around the Lam Tin Interchange. In addition, some slopes will be planted with woodland whip mix planting that will ultimately develop into woodland.
- Drawings extracted from Tree Preservation Report include the Tree Survey Plans (**Drawing No.s URB/MCA75/TA000-003, 101-103, 201, 203-212 and 301)** and the Preliminary Compensatory Planting Plans (**Drawing No.s URB/MCA75/CP-101, 201, 203, 301, 403-408)** of the tree survey Areas A to D are attached in **Appendix 10.1**.

Visual Envelope

- 10.5.13 The visual envelope of the project is illustrated on **Figure No. 10.4.1**. The two geographically separate areas of the project at TKO and Lam Tin generate two distinct visual envelopes or ZVIs. The ZVIs overlap in their southern portions. VSRs for the two areas are identified and tabulated separately for clarity.
- 10.5.14 The ZVI for the TKO side of the project is bounded by Shau Kei Wan, Lei Yue Mun and the ridgeline of the hills enclosing Junk Bay to the west, the urban area of TKO to the north, the ridgeline of Clearwater Bay Country Park to the east, the Tathong Channel to the south west and the ridgeline of the hills of Hong Kong Island in the Tai Tam Country Park in the south west. The ZVI adopts a cut-off at the Tathong Channel as the only potential VSRs beyond this would be on Sung Kong and Waglan Island from which visual impacts would be negligible due to their distant location.
- 10.5.15 The ZVI for the Lam Tin side of the project is bounded by the ridgelines of Hong Kong Island to the south and south west, the wooded ridge behind Cha Kwo Ling Village, the quarry walls and the proposed residential developments at the Ex-Cha Kwo Ling Kaolin Mine Site to the west and north and the urban area of Yau Tong to the east and south east.

Visually Sensitive Receivers (VSRs)

- 10.5.16 Key Visually Sensitive Receivers (VSRs) have been identified for the Construction and Operation phases. For ease of reference, each VSR is given an identity number, which is used in the text tables and Drawings in this assessment. The VSRs for TKO and Lam Tin are tabulated separately. They are listed and assessed below, for their sensitivity to change in view as a result of the Project in **Tables 10.6.5** and **10.5.7**. They are listed and assessed below for the magnitude of change in view in **Tables 10.5.6** and **10.5.8**.
- 10.5.17 VSRs for TKO during the Construction Phase are mapped on **Figure No.s 10.5.5.1** to **10.5.5.3**, namely Baseline VSRs during Construction TKO (Sheets 1 to 3) and VSRs for TKO during the Operation Phase are mapped on **Figure No.s 10.5.5.4** to **10.5.5.6** namely Baseline VSRs during Operation TKO (Sheets 1 to 3) Baseline VSR Photographs with views to or from the VSRs at TKO are shown on **Figure No.s 10.5.5.7** to **10.5.5.19** (Sheets 1 to 13).
- 10.5.18 VSRs for Lam Tin during the Construction Phase are mapped on **Figure No.s 10.5.6.1** and **10.5.6.2**, namely Baseline VSRs during Construction Lam Tin (Sheets 1 to 2) and VSRs for Lam Tin during the Operation Phase are mapped on **Figure No.s 10.5.6.3** and **10.5.6.4**, namely Baseline VSRs during Operation Lam Tin (Sheets 1 to 2). Baseline VSR Photographs with views to or from the VSRs at Lam Tin are shown on **Figure No.s 10.5.6.5** to **10.5.6.15**. (Sheets 1 to 12).
- 10.5.19 Certain VSRs which lie outside the ZVI have also been included in the assessment, particularly for the Lam Tin side of the project. These VSRs due to their location and

proximity have the potential for views to the project, but it is confirmed by site inspection that the project would not be visible from them. To demonstrate that these VSRs have been considered and not mistakenly omitted, they are also included in the assessment.

10.5.20 For the avoidance of doubt, VSRs in the planned developments which, based on latest programme information, will be completed before the completion of the TKO-LT Tunnel have been considered as existing VSRs in this assessment. They are identified in the tables and text with an asterisk (*) to distinguish them from VSRs which are currently in existence.

Table 10.5.5 Tseung Kwan O Visually Sensitive Receivers and their Sensitivity

VSR ID No.	Key VSR	Viewers of	Quality Availability of of	Visibility	Duration of View (Long,	Frequency of View (Frequent,	Sensitivity to Change (Low, Medium, High)		
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
Existing VS	Rs in TKO		1			1	1	1	
TKO- CDA1A	Existing Residents and Workers in TKO Area 86 Comprehensive Development Area/ LOHAS Park	Many	Good	Yes (Fair)	Glimpse	Long	Frequent	Medium	Medium
TKO- CDA1B*	Residents in planned new Residential Development at CDA in Area 86/LOHAS Park *	Many	Good	Yes (Good)	Full	Long	Frequent	High	High
TKO- GIC1	Workers in TKO Sewage Treatment Works, Area 85	Few	Poor	Yes (Fair)	Nil	N/A	N/A	Low	Low
TKO- GIC2	Staff and students at TKO Methodist Primary School & Evangelical College	Medium	Fair	Yes (Fair)	Partial	Short	Frequent	Low	Low
TKO- GIC4	Staff and students at Hong Kong Design Institute Campus	Medium	Good	Yes (Fair)	Partial	Short	Frequent	Low	Low
TKO- GIC5	Workers at Hong Kong Movie City	Medium	Fair	Yes (Fair)	Partial	Short	Frequent	Low	Low

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View (Frequent, Occasional, Rare)	Sensitivity to Change (Low, Medium, High)	
								Construction	Operation
TKO- GIC6	Staff and students at Heung To Secondary School and GT College	Medium	Poor	No	Nil	N/A	N/A	Low	Low
TKO- GIC7	Staff and students at Caritas Bianchi College of Careers	Medium	Poor	No	Nil	N/A	N/A	Low	Low
TKO- GIC8	Workers at Logistics Centre and Preliminary Treatment Works and Cargo Handling Basin	Medium	Good	Yes (Good)	Full	Short	Occasional	Low	Low
TKO- GIC9*	Workers in planned GIC Development at TKO Area 67	Medium	Fair	Yes (Fair)	Partial	Medium	Occasional	Low	Low
TKO- GIC10*	Patients and staff at planned private hospital and students and staff at planned Fire Services Training School cum Driving Training School in Area 78	Medium	Fair	Yes (Fair)	Partial	Medium	Occasional	Low	Low
TKO- OU1A	Workers at TKO Industrial Estate	Medium	Good	Yes (Good)	Full	Short	Occasional	Low	Low
TKO-OU2	Visitors of Junk Bay Chinese Permanent Cemetery	Medium	Good	Yes (Good)	Partial	Short	Rare	Low	Low

VSR ID No.	Key VSR	No. of Viewers	Quality of	Availability of	Degree of Visibility	Duration of View (Long,	Frequency of View (Frequent,		to Change lium, High)
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
TKO-01	Users of Heng Fa Chuen Playground	Medium	Good	Yes (Good)	Full	Medium	Occasional	High	High
TKO-02	Users of Siu Sai Wan Promenade	Medium	Good	Yes (Good)	Full	Medium	Occasional	High	High
TKO-03*	Users of planned Open Space at TKO Area 68	Many	Good	Yes (Good)	Full	Medium	Occasional	High	High
TKO-R1	Residents of Heng Fa Chuen	Many	Good	Yes (Good)	Full	Long	Frequent	High	High
TKO-R2	Residents of Bauhinia Garden	Many	Fair	Yes (Fair)	Partial	Long	Frequent	Medium	Medium
TKO-R3	Residents of Ocean Shores (Phases I to III)	Many	Good	Yes (Fair)	Full	Long	Frequent	High	High
TKO-R4	Residents of Metro Town	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO-R5	Residents of Park Central	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO-R6	Residents of the Grandiose and TKO Plaza	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO-R7	Residents of Oscar by the Sea	Many	Fair	Yes (Fair)	Partial	Medium	Frequent	Medium	Medium
TKO-R8	Residents & users of Island Resort residential area and promenade	Many	Good	Yes (Good)	Full	Long	Frequent	High	High

VSR ID No.	Key VSR	No. of Viewers	Quality of	Availability of	Degree of Visibility	Duration of View (Long,	Frequency of View (Frequent,	Sensitivity to Change (Low, Medium, High)	
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
TKO-R9	Residents in Choi Ming Court	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO-R10	Residents in Chai Wan high rise estates	Many	Good	Yes (Fair)	Full	Long	Frequent	High	High
TKO-R11	Residents in Kin Ming Estate	Many	Poor	Yes (Poor)	Nil	N/A	N/A	Medium	Medium
TKO-R12	Residents in Shin Ming Estate	Many	Poor	Yes (Poor)	Nil	N/A	N/A	Medium	Medium
TKO-R13	Residents at MTRC TKO Station Residential Development	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO- R14a*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)2	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium
TKO- R14b*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)3	Many	Fair	Yes (Poor)	Partial	Long	Frequent	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers	Quality of	Availability of	Degree of Visibility	Duration of View (Long,	Frequency of View (Frequent,		to Change lium, High)
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
TKO- R14c*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)4 Areas (a) & (b)	Many	Fair	Yes (Fair)	Partial	Long	Frequent	Medium	Medium
TKO- R14d*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)5	Many	Good	Yes (Fair)	Partial	Long	Frequent	High	High
TKO- R14e*	Residents in planned Residential Development on TKO Town Centre South reclamation R(A)6 Area (a), (b) & (c) East	Many	Good	Yes (Good)	Partial	Long	Frequent	High	High
TKO- R14f*	Residents in planned Residential Development on TKO Town Centre South reclamation R (A)6 Area (a), (b) & (c) West	Many	Good	Yes (Good)	Full	Long	Frequent	High	High

VSR ID No.	Key VSR	No. of Viewers	Quality of	Availability of	Degree of Visibility	Duration of View (Long,	Frequency of View (Frequent,		to Change ium, High)
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
TKO- R15*	Residents in upper floors of planned Residential Group (E) Development in Area 85	Many	Poor	Yes (Fair)	Partial	Long	Frequent	Medium	Medium
TKO- REC1	Hikers along High Junk Peak (Tiu Yue Yung) Country Trail in Clear Water Bay Country Park	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium
TKO- REC2	Hikers along the Wilson Trail to Devil's Peak and Chiu Keng Wan Shan	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
TKO- REC3A	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium
TKO- REC3B	Visitors of H.K. Museum of Coastal Defence	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium
TKO- REC4	Hikers along Pottinger Trail and Pottinger Peak	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium
TKO- REC5	Hikers at Mount Collinson	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium
TKO- REC6	Hikers at Mount Parker	Medium	Good	Yes (Good)	Full	Short	Rare	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers	Quality of	Availability of	Degree of Visibility	Duration of View (Long,	Frequency of View (Frequent,		to Change lium, High)
		(Many, Medium, Few)	Existing View (Good, Fair, Poor)	Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	(Full, Partial, Glimpse)	Medium, Short)	Occasional, Rare)	Construction	Operation
TKO-T1	Seaborne Leisure Travellers in Junk Bay	Medium	Fair	Yes (Good)	Full	Short	Occasional	Medium	Medium
тко-т2	Seaborne Leisure Travellers along Lei Yue Mun and Tathong Channel	Many	Fair	Yes (Good)	Full	Short	Occasional	Medium	Medium
тко-тз	Travellers along Wan Po Road	Many	Fair	Yes (Fair)	Partial/ Glimpse	Short	Occasional	Low	Low
тко-т4	Travellers at TKO MTR Station and along Po Yap Road and Chui Ling Road	Many	Poor	Yes (Poor)	Partial/ Glimpse	Short	Occasional	Low	Low
тко-т5	Pedestrians on footpath link from Ocean Shores to Junk Bay Chinese Permanent Cemetery	Medium	Good	Yes (Good)	Full	Short	Occasional	Medium	Medium
TKO-T7	Travellers on new Southern Footbridge crossing Eastern Channel	Medium	Good	Yes (Good)	Full	Short	Occasional	Medium	Medium
Planned fut	ure VSRs in TKO	1	1	1		1		1	
TKO- OU1B	Workers in planned TKO Industrial Estate Extension	Medium	Good	Yes (Good)	Full	Short	Occasional	N/A	Low

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good,	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View (Frequent, Occasional, Rare)	•	to Change ium, High) Operation
				Fair, Poor)					
TKO- REC7	Users of planned recreational facilities at TKO Stage I Landfill, Area 77	Many	Good	Yes (Good)	Full	Medium	Occasional	N/A	Medium

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

Table 10.5.6 Tseung Kwan O Visually Sensitive Receivers and their Magnitude of Change

VSR ID No.	Key VSR	Blockage Minimum Distance GI		(Good/ (Large/		Duration of Impacts (Long/ Medium/ Short)		Reversibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
		Partial/Gli mpse)	(m)	Medium/ Small)	Poor)	Construction	Operation	(Yes/No)	Construction	Operation
Existing VS	SRs in TKO									
TKO-	Residents and	Partial	1500m	Large	Fair	Medium	Long	No	Small	Small
CDA1A	Workers in TKO Area 86 Comprehensive Development Area/ LOHAS Park									
TKO-	Residents in planned new	Partial	1000m	Large	Fair	Medium	Long	No	Large	Large
CDA1B*	Residential Development at									
	CDA in Area 86/LOHAS									
	Park									
TKO-	Workers in TKO Sewage	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
GIC1	Treatment Works, Area 85			-	_		-			
TKO-	Staff and students at TKO	Partial	750m	Large	Fair	Medium	Long	No	Small	Small
GIC2	Methodist Primary School & Evangelical College									
TKO-	Staff and students at Hong	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate
GIC4	Kong Design Institute Campus									
TKO-	Workers at Hong Kong	Partial	1750m	Large	Fair	Medium	Long	No	Intermediate	Small
GIC5	Movie City									
TKO-	Staff and students at Heung	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
GIC6	To Secondary School and GT College									
TKO- GIC7	Staff and students at Caritas Bianchi College of Careers	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible

VSR ID No.	Key VSR	Potential Blockage Minimum of View Viewing (Full/ Distance		g ment (Large/	Compatibility (Good/Fair/Paor)	Duration of Imp		Reversibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
		Partial/Gli mpse)	(m)	Medium/ Small)	Poor)	Construction	Operation	(Yes/No)	Construction	Operation
TKO- GIC8	Workers at Logistics Centre and Preliminary Treatment Works and Cargo Handling Basin	Partial	3000m	Small	Good	Medium	Long	No	Small	Small
TKO- GIC9*	Future workers in planned GIC Development at TKO Area 67	Partial	50m	Large	Fair	Medium	Long	No	Large	Intermediate
TKO- GIC10*	Patients and staff at planned private hospital and students and staff at planned Fire Services Training School cum Driving Training School in Area 78	Partial	2000m	Medium	Fair	Medium	Long	No	Small	Small
TKO- OU1A	Workers at TKO Industrial Estate	Partial	1500m	Large	Fair	Medium	Long	No	Large	Large
TKO- OU2	Visitors of Junk Bay Chinese Permanent Cemetery	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate
TKO-O1	Users of Heng Fa Chuen Playground	Partial	2700m	Small	Good	Medium	Long	No	Small	Small
TKO-O2	Users of Siu Sai Wan Promenade	Partial	3200m	Small	Good	Medium	Long	No	Small	Small
TKO-O3*	Users of planned Open Space at TKO Area 68	Partial	500m	Large	Fair	Medium	Long	No	Large	Large
TKO-R1	Residents of Heng Fa Chuen	Partial	2500m	Small	Good	Medium	Long	No	Small	Small
TKO-R2	Residents of Bauhinia Garden	Partial	350m	Large	Fair	Medium	Long	No	Small	Small
TKO-R3	Residents of Ocean Shores (Phases I to III)	Partial	50m	Large	Fair	Medium	Long	No	Large	Large
TKO-R4	Residents of Metro Town	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate
TKO-R5	Residents of Park Central	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate

VSR ID No.	Key VSR	Potential Blockage of View (Full/	Minimum Viewing Distance	Scale of Develop- ment (Large/ Medium/	Compatibility (Good/Fair/Poor)	Duration of Im		Reversibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
		Partial/Gli mpse)	(m)	Medium/ Small)	Poor)	Construction	Operation	(Yes/No)	Construction	Operation
TKO-R6	Residents of the Grandiose and TKO Plaza	Partial	350m	Large	Fair	Medium	Long	No	Small	Small
TKO-R7	Residents of Oscar by the Sea	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
TKO-R8	Residents & users of Island Resort residential area and promenade	Partial	3300m	Small	Good	Medium	Long	No	Small	Small
TKO-R9	Residents in Choi Ming Court	Partial	50m	Large	Fair	Medium	Long	No	Small	Small
TKO-R10	Residents in Chai Wan high rise estates	Partial	3500m	Small	Good	Medium	Long	No	Small	Small
TKO-R11	Residents in Kin Ming Estate	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
TKO-R12	Residents in Shin Ming Estate	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
TKO-R13	Residents at MTRC TKO Station Residential Development	Partial	100m	Large	Fair	Medium	Long	No	Small	Small
TKO- R14a*	Residents in planned Residential Development on TKO Town Centre South reclam-ation OZP Zone R(A)2	Partial	50m	Large	Fair	Medium	Long	No	Small	Small
TKO- R14b*	Residents in planned Residential Development on TKO Town Centre South reclam-ation OZP Zone R(A)3	Partial	50m	Large	Fair	Medium	Long	No	Small	Small

VSR ID No.		Potential Blockage of View (Full/	Minimum Viewing Distance	Scale of Develop- ment (Large/ Medium/	Compatibility (Good/Fair/Poor)	Duration of Imp (Long/ Medium		Revers- ibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
		Partial/Gli mpse)	(m)	Medium/ Small)	Poor)	Construction	Operation	(Yes/No)	Construction	Operation
TKO- R14c*	Residents in planned Residential Development on TKO Town Centre South reclam-ation OZP Zone R(A)4 Areas (a) & (b)	Partial	500m	Large	Fair	Medium	Long	No	Small	Small
TKO- R14d*	Residents in planned Residential Development on TKO Town Centre South reclam-ation OZP Zone R(A)5	Partial	200m	Large	Fair	Medium	Long	No	Large	Large
TKO- R14e*	Residents in planned Residential Development on TKO Town Centre South reclam-ation R(A)6 Area (a), (b) & (c) East	Partial	550m	Large	Fair	Medium	Long	No	Large	Large
TKO- R14f*	Residents in planned Residential Development on TKO Town Centre South reclamation R(A)6 Area (a), (b) & (c) West	Partial	100m	Large	Fair	Medium	Long	No	Large	Large
TKO-R15	Residents in upper floors of planned Residential Group (E) development in Area 85 *	Partial	1750m	Large	Fair	Medium	Long	No	Small	Small
TKO- REC1	Hikers along High Junk Peak (Tiu Yue Yung) Country Trail in Clear Water Bay Country Park	Partial	3500m	Small	Fair	Medium	Long	No	Small	Small
TKO- REC2	Hikers along the Wilson Trail to Devil's Peak and Chiu Keng Wan Shan	Partial	1000m	Medium	Fair	Medium	Long	No	Intermediate	Intermediate

VSR ID No.	Key VSR	Potential Blockage Minimum of View Viewing (Full/ Distance		ment (Large/	(Good/ Fair/	Duration of Imp		Reversibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
		Partial/Gli mpse)	(m)	Medium/ Small)	Poor)	Construction	Operation	(Yes/No)	Construction	Operation
TKO- REC3A	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Partial	2750m	Small	Good	Medium	Long	No	Small	Small
TKO- REC3B	Visitors of H.K. Museum of Coastal Defence	Partial	2750m	Small	Good	Medium	Long	No	Small	Small
TKO- REC4	Hikers along Pottinger Trail and Pottinger Peak	Partial	4500m	Small	Good	Medium	Long	No	Negligible	Negligible
TKO- REC5	Hikers at Mount Collinson	Partial	5500m	Small	Good	Medium	Long	No	Negligible	Negligible
TKO- REC6	Hikers at Mount Parker	Partial	5000m	Small	Good	Medium	Long	No	Negligible	Negligible
TKO-T1	Seaborne Leisure Travellers in Junk Bay	Partial	10m	Large	Good	Medium	Long	No	Large	Large
ТКО-Т2	Seaborne Leisure Travellers along Lei Yue Mun and Tathong Channel	Partial	1500m	Medium	Good	Medium	Long	No	Intermediate	Intermediate
тко-тз	Travellers along Wan Po Road	Partial	1500m	Large	Fair	Medium	Long	No	Small	Small
ТКО-Т4	Travellers at TKO MTR Station and along Po Yap Road and Chui Ling Road	Partial	10m	Large	Fair	Medium	Long	No	Large	Intermediate
TKO-T5	Pedestrians on footpath link from Ocean Shores to Junk Bay Chinese Permanent Cemetery	Partial	0m	Large	Poor	Medium	Long	No	Large	Large
ТКО-Т7	Travellers on new Southern Footbridge crossing Eastern Channel	Partial	750 m	Large	Fair	Medium	Long	No	Large	Large
	ture VSRs in TKO		-		1					-
TKO- OU1B	Workers in planned TKO Industrial Estate Extension	Partial	1500m	Large	Fair	N/A	Long	No	N/A	Large

VSR ID No.	Key VSR	Blockage Minimum of View Viewing (Full/ Distance	Scale of Develop- ment (Large/	Compatibility (Good/	Duration of Impacts (Long/ Medium/ Short)		Revers- ibility of Change	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)		
		Partial/Gli mpse)	(m)	Medium/ Small)	Fair/ Poor)	Construction	Operation	(Yes/No)	Construction	Operation
TKO- REC7	Users of planned recreational facilities at TKO Stage I Landfill, Area 77	Partial	750m	Large	Fair	N/A	Long	No	N/A	Large

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

Sensitivity and Magnitude of Change for VSRs in TKO

Existing VSRs in TKO

- 10.5.21 Existing Residents and workers in TKO Area 86 Comprehensive Development Area/LOHAS Park (TKO-CDA1A): Residents are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of their home environment and quality of life. These particular residents are many in number and will experience good quality glimpse views between the new tower blocks of TKO-CDA1B. Alternative views are available. Their views will also be frequent and of long duration. Overall the assessment of sensitivity for this VSR is therefore Medium during the Construction and Operation Phases due largely to the visual obstruction by TKO-CDA1B.
- 10.5.22 The potential blockage of the view by the development will be partial and the distance of view 1500m. The scale of development is large and irreversible. The compatibility with the visual context is fair given the existing TKO reclamation and planned intent for new town extension and Area 77 Landfill. The duration of impacts is long and the development is irreversible. The magnitude of visual impact for this VSR is assessed as Small during the Construction and Operation Phases due largely to the visual obstruction by **TKO-CDA1B**.
- 10.5.23 Residents in planned new Residential Development at CDA in Area 86/LOHAS Park (TKO-CDA1B*): These residents will be many in number, enjoy good quality existing views with full visibility across Junk Bay. Alternative views are available. Their views are also frequent and of long duration. Overall the assessment of sensitivity for this VSR is therefore High during the Construction and Operation Phases.
- 10.5.24 The potential blockage of the view by the development will be partial and the distance of view is 1000m. The scale of development is large and irreversible. The compatibility with the visual context is fair given the existing TKO reclamation and planned intent for new town extension and Area 77 Landfill. Due to the unobstructed views to the development site, long duration of impacts and the permanence of the development, overall the magnitude of visual impact for this VSR is assessed as Large during the Construction and Operation Phases.
- 10.5.25 Workers in TKO Sewage Treatment Works, Area 85 (**TKO-GIC1**): Workers are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. These workers are few in number and the quality of their existing view west is poor and alternative views are available to the east. Views of the development site are obstructed by LOHAS Park (TKO-CDA1A and TKO-CDA1B). Overall the sensitivity of this VSR is therefore Low during the Construction and Operation Phases.
- 10.5.26 As this VSR will be obstructed by LOHAS Park (**TKO-CDA1A** and **TKO-CDA1B**), the visibility will be nil and the magnitude of visual impact for this VSR is therefore Negligible during the Construction and Operation Phases.
- 10.5.27 Staff and students at TKO Methodist Primary School & Evangelical College (**TKO-GIC2**): College/school Staff and students are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. These particular staff and students are medium in number and the quality of their existing view is fair and alternative views are available. They will experience partial, frequent views of short duration. The degree of visibility will be partial during the construction and operation as planned residential developments (**TKO-**

- **R14a, 14d, 14e & 14f)** will be built in front, screening the project site. Overall, the sensitivity of this VSR is therefore assessed as Low during the Construction and Operation Phases.
- 10.5.28 The potential blockage of the view by the development will be partial and VSRs will view the project from a distance of 750m. The compatibility of the large scale permanent development with the visual context is fair given the transitional nature of the TKO reclamation and planned intent for new town extension. Due to the long duration of impacts and partial obstruction, the overall magnitude of impact for this VSR is assessed as Small during the Construction Phase and the Operation Phase.
- 10.5.29 Staff and students at Hong Kong Design Institute Campus (**TKO-GIC4**): Staff and students are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. The number of staff and students is medium in number and the quality of their existing view is good with visibility of parts of the project site and alternative views available. They will experience frequent views of short duration. Overall, the sensitivity of this VSR is therefore Low during the Construction and Operation Phases.
- 10.5.30 The potential blockage of the view by the development will be partial and VSRs will have views of parts of the project site from a close distance (50m). The compatibility of the development with the existing visual context will be fair given the transitional nature of the TKO Reclamation and planned intent for new town extension. The Visual impacts will be long term and irreversible. Overall the magnitude of impacts for this VSR will be Intermediate during the Construction and Operation Phases.
- 10.5.31 Workers at Hong Kong Movie City (**TKO-GIC5**): Workers are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. These workers are medium in number and the quality of their existing view is fair with partial visibility due to obstruction by the Area 77 Landfill. Alternative views are available. They will experience frequent views of short duration. Overall, the sensitivity of this VSR is therefore assessed as Low during the Construction and Operation Phases.
- 10.5.32 The potential blockage of the view by the development will be partial and VSRs will have distant views of the project development. The compatibility of the development with the existing visual context is fair given the nature of Area 77 and TKO-CDA1A and TKO-CDA1B. Overall the magnitude of impact for this VSR will be Intermediate during the Construction Phase and will be reduced to Small during the Operation Phase when the planned recreational facilities at TKO Stage I Landfill, Area 77 (TKO-REC7) have been developed and the VSR's views are further obstructed.
- 10.5.33 Staff and students at Heung To Secondary School and GT College (**TKO-GIC6**) and Caritas Bianchi College of Careers (**TKO-GIC7**): These VSRs are medium in number and the quality of their existing view is poor with no alternative views available. The degree of visibility is nil due to the surrounding existing development and topography and the overall sensitivity of these VSRs is therefore assessed as Low during the Construction and Operation Phases.
- 10.5.34 As the degree of visibility will be nil, the magnitude of impacts for this VSR is Negligible during the Construction and Operation Phases.
- 10.5.35 Workers at Logistics Centre and Preliminary Treatment Works and Cargo Handling Basin (**TKO-GIC8**): These workers are medium in number and the quality of their existing view

- is good with full visibility and alternative views available. Their frequency of view is occasional and of short duration. Overall the sensitivity of this VSR is assessed as Low during the Construction and Operation Phases.
- 10.5.36 The potential blockage of the view by the development will be partial and the viewing distance will be great (3km). The compatibility of the development with the existing visual context will be good given the existing backdrop of the TKO urban area and planned intent for new town extension. Although the duration of impact will be long, the VSR distance will result in a Small magnitude of impact during the Construction and Operation Phases.
- 10.5.37 Workers in planned GIC Development at TKO Area 67 (**TKO-GIC9***): The numbers of VSRs will be medium and the quality of their view will be fair. Alternative views will be available. The degree of visibility will be partial due to the surrounding planned residential development (**TKO-R14f**). The frequency of view will be occasional and the duration of view will be medium. Overall the sensitivity to change for this VSR will be Low.
- 10.5.38 The potential blockage of the view by the development will be partial and these VSRs will have close views of parts of the project site. The scale of development will be perceived as large due to its proximity. The compatibility of the development will be perceived as fair given the context of the TKO reclamation and planned intent for new town extension. The magnitude of impact for this VSR will be Large during the Construction Phase given its proximity, and will be reduced to Intermediate during the Operational Phase when the completed road infrastructure is viewed in the context of the surrounding reclamation development.
- 10.5.39 Patients and staff at planned private hospital and students and staff at planned Fire Services Training School cum Driving Training School in Area 78 (**TKO-GIC10***): The numbers of VSRs will be medium and the quality of their view will be fair. Alternative views will be available. The degree of visibility will be partial due to the screening provided by the landform to the west of the GIC site. The frequency of view will be occasional and of medium duration. Overall the sensitivity to change for this VSR will be Low during the Construction and Operation Phases.
- 10.5.40 The potential blockage of the view by the development will be partial from a distance of 2km and the scale of development will be perceived as medium due to the distance of view. The compatibility of the development will be fair given the context of the TKO reclamation town extension and Area 77 landfill, and the Junk Bay Chinese Permanent Cemetery backdrop. The magnitude of impact for this VSR will be Small during the Construction and Operational Phases.
- 10.5.41 Workers at TKO Industrial Estate (**TKO-OU1A**): These workers are medium in number, enjoy good quality existing and alternative views with full visibility of the proposed development site. Their views however are only occasional and of short duration. Overall the assessment of sensitivity for this VSR is Low during the Construction and Operation Phases.
- 10.5.42 The potential blockage of the view by the development will be partial and the viewing distance will be 1.5km. The compatibility of the development with the visual context will be fair given the backdrop of TKO and the Junk Bay Permanent Chinese Cemetery. Due to the long duration of impacts and the large scale of development, the overall magnitude of impact for this VSR is Large during the Construction and Operation Phases.
- 10.5.43 Visitors of Junk Bay Chinese Permanent Cemetery (**TKO-OU2**): Visitors in a cemetery are generally considered to be moderately sensitive to changes in their views as the quality of

the view affects the perception of their visit. This VSR is medium in number and enjoys good quality existing views with partial visibility of the proposed project site. Alternative views are available. However, as the frequency of their views is rare and of short duration and as views is only partial, the overall assessment of sensitivity for this VSR is Low during the Construction and Operation Phases.

- 10.5.44 The potential blockage of the view by the development will be partial and the viewing distance will be potentially as little as worst 50m but generally much greater than this. The compatibility of the proposed development with the existing visual context is fair given the backdrop of TKO, landfill, CDA and industrial uses on the north and east sides of Junk Bay. As the visibility of the development will only be partial, the overall magnitude of impacts for this VSR is assessed as Intermediate during the Construction and Operation Phases.
- 10.5.45 Users of Heng Fa Chuen Playground (**TKO-O1**) and Users of Siu Sai Wan Promenade (**TKO-O2**): Users of recreational facilities are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of the leisure environment and quality of experience. These VSRs are medium in number, enjoy good quality existing views with full visibility. Alternative views are available. Their views are occasional and of medium duration. Overall the assessment of sensitivity for these VSRs is therefore High during the Construction and Operation Phases.
- 10.5.46 The potential blockage of the view by the development will be partial and the viewing distance will be 2.7 and 3.2km respectively. The compatibility of the proposed development with the visual context is good given the built-up urban backdrop of TKO and planned intent for new town extension. Although the project will be fully visible, it is considered that it will be perceived as small in scale when viewed from this distance. Overall the magnitude of impacts will therefore be Small during the Construction and Operation Phases.
- 10.5.47 Users of planned Open Space at TKO Area 68 (**TKO-O3***): This planned VSR will be many in number, enjoy good quality existing views with full visibility of the proposed reclamation and interchange. Alternative views will be available. Their views will be occasional and of medium duration. Overall the assessment of sensitivity for this VSR is High during the Construction and Operation Phases.
- 10.5.48 The potential blockage of the view by the development will be partial and the viewing distance will be 500m. The compatibility of the proposed development with the visual context will be fair as VSRs will view the development against the backdrop of the Junk Bay Chinese Permanent Cemetery and the associated slopeworks of the new connecting footpath and the green hillside landscape above. The scale of the project will perceived as large. Impacts will be irreversible and of long duration. Overall the magnitude of impacts will therefore be Large during the Construction and Operation Phases.
- 10.5.49 Residents of Heng Fa Chuen (**TKO-R1**), Residents of Chai Wan high rise estates (**TKO-R10**) and Residents and users of Island Resort residential area and promenade (**TKO-R8**): Residents are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of their home environment and quality of life. These particular VSRs are many in number, enjoy good quality existing views across the Thatong Channel and Junk Bay with partial visibility of the projects site. Alternative views are available. Their views are also frequent and of long duration. Overall the assessment of sensitivity for this VSR is therefore High during the Construction and Operation Phases.

- 10.5.50 The potential blockage of the view by the development will be partial and from considerable distance (2.5 3.5km) making the perception of the scale of the development small. The compatibility of the development with the existing visual context is good given the backdrop of JBCPC, TKO and planned intent for new town extension, Area 77 Landfill site and TKO Industrial Estate. The duration of impact will be long and irreversible. Overall the magnitude of impact for TKO-R1, TKO-R8 and TKO-R10 is therefore Small during the Construction and Operation Phases.
- 10.5.51 Residents of Bauhinia Garden (**TKO-R2**) and Residents of The Grandiose and TKO Plaza (**TKO-R6**): Residents are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of their home environment and quality of life. These particular residents are many in number, will experience fair quality existing views with partial visibility of the project site due to the construction of planned residential development to the south and west (**TKO-14a to 14f**). Alternative views are available. Their views are frequent and of long duration. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.52 The potential blockage of the view by the development will be partial and from a distance of 350m to the roadworks element of the project making the perception of the scale of the development large. The compatibility of the development with the existing visual context is fair given the transitional nature of the TKO reclamation and planned intent for new town extension. The duration of impacts will be long. Overall the magnitude of impact for both VSRs is assessed as Small during the Construction Phase and the Operation Phase.
- 10.5.53 Residents of Ocean Shores (Phases I to III) (**TKO-R3**): These residents are many in number and experience good quality existing views. Alternative views are available. The views are frequent and of long duration. Overall the assessment of sensitivity of the residents on the upper floors is therefore High during the Construction and Operation Phases (however, some residents on lower floors may experience lower visual impacts due to blockage of views by existing podium planting and associated recreational features).
- 10.5.54 The potential blockage of the view towards Junk Bay by the development will be partial and from a distance of 50m making the perception of the scale of the development large. The compatibility of the development with the existing visual context is fair given the transitional nature of the TKO reclamation and planned intent for new town extension, Area 77 Landfill, CDA1 and the TKO Industrial Estate. Overall, the magnitude of impacts is assessed as Large during the Construction and Operation Phases.
- 10.5.55 Residents of Metro Town (**TKO-R4**) and Residents of Park Central (**TKO-R5**): These particular residents are many in number, will experience fair quality existing views with partial visibility of the project site due to the construction of planned residential development to the east and south. Alternative views are available. Their views are frequent and of long duration. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.56 The potential blockage of the view by the development will be partial and from a distance of 50m to the roadworks element of the project making the perception of the scale of the development large. The compatibility of the development with the existing visual context is fair given the current transitional nature and planned intent of the TKO reclamation. The duration of impacts will be long. Overall the magnitude of impact for both VSRs is assessed as Intermediate during the Construction Phase and the Operation Phase.
- 10.5.57 Residents of Oscar by the Sea (**TKO-R7**): These residents are many in number, will experience partial visibility of the project site due to the construction of planned residential

- development to the south and west however views will be frequent and of medium duration. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.58 As the view towards to the development will be largely blocked by the planned Residential Development on TKO Town Centre South Reclamation, the magnitude of impacts for this VSR will be Negligible during the Construction and Operation Phases.
- 10.5.59 Residents of Choi Ming Court (**TKO-R9**): Residents at this VSR are many in number, experience fair, partial views of the project site due to planned development to the south and west. Alternative views are available. Views will be frequent and of long duration. Overall the sensitivity of this VSR is assessed as Medium during the Construction and Operation Phases.
- 10.5.60 The potential blockage of the view by the development will be partial and from a distance of 50m making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given the transitional nature of the TKO reclamation and planned intent for new town extension between the VSR and the proposed development. The duration of impacts will be long and the visual impacts will be irreversible. The magnitude of change for this VSR is assessed as Small during the Construction Phase and Operation Phase due to the completed planned developments on the TKO reclamation which will obstruct the views.
- 10.5.61 Residents in Kin Ming Estate (**TKO-R11**) and Shin Ming Estate (**TKO-R12**): These residents are many in number and experience poor quality existing views due to the density of surrounding development. The degree of visibility of the project site will be nil. The assessment of sensitivity is Medium during the Construction and Operation Phases.
- 10.5.62 The potential blockage of the view by the development will be nil and the overall magnitude of impact will be Negligible during the Construction and Operation Phases.
- 10.5.63 Residents at MTRC TKO Station Residential Development (**TKO-R13**): Residents are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of their home environment and quality of life. These particular residents are many in number, will experience fair quality existing views with partial visibility of the project site due to the completion of planned construction to the south and west. Alternative views are available. Their views are frequent and of long duration. Overall the assessment of sensitivity for these VSRs is assessed as Medium during the Construction and Operation Phases.
- 10.5.64 The potential blockage of the view by the development will be partial and from a distance of 100m to the roadworks element of the project making the perception of the scale of the development large. The compatibility of the development with the existing visual context is fair given the transitional nature of the TKO reclamation and planned intent for new town extension. The duration of impacts will be long. Overall the magnitude of impact for VSR **TKO-R13** is assessed as Small during the Construction Phase and Operation Phases.
- 10.5.65 Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zones R(A)2, R(A)3 and R(A)4 Areas (a) & (b) (TKO-R14a* to TKO-R14c* respectively): The future residents of these developments on the TKO reclamation will be many in number and the quality of their view of the project will be fair due to screening by other adjacent projects. Alternative views will be available. Views will be frequent and of long duration. Overall the sensitivity of these VSRs will be Medium.

- 10.5.66 The potential blockage of the view by the development will be partial and from a distance of 50 to 500m making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given its integrated nature with the TKO new town extension on the reclamation. The duration of impacts will be long and the visual impacts will be irreversible. The magnitude of impact is assessed as Small during the Construction Phase and Operation Phases due to the surrounding completed planned developments on the TKO reclamation which will obstruct the views of the project site.
- 10.5.67 Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zones R(A)5, R(A)6 Area (a), (b) & (c) East and R(A)6 Area (a), (b) & (c) West (TKO-R14d* to TKO-R14f* respectively): The future residents of these planned developments on the TKO reclamation will be many in number and the quality of their view will be good with open views to the south across Junk Bay. Alternative views will be available. Views will be frequent and of long duration. Overall the sensitivity of these VSRs during the Construction Phase and Operation Phases will be High.
- 10.5.68 The potential blockage of the view by the development will be partial and from a distance of 100 to 550m making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given its integrated nature with the TKO new town extension on the reclamation. The duration of impacts will be long and the visual impacts will be irreversible. The magnitude of impact is assessed as Large during the Construction Phase and Operation Phases.
- 10.5.69 Residents in upper floors of planned Residential Group (E) Development in Area 85 (**TKO-R15***): the VSRs will be many in number and will experience poor views of the project site of a partial nature due to the visual obstruction of LOHAS Park tower blocks (**TKO-CDA1A & CDA1B**). Alternative views will be available, particularly to the east. Views will be frequent and of long duration. Overall the sensitivity to change of views to the development will be Medium.
- 10.5.70 The potential blockage of the view by the development will be partial and from a distance of 1750m making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given the proximity of other large scale developments such as LOHAS Park to the west, the Area 77 landfill to the north and TKO Industrial Estate to the south. Overall the magnitude of impact will be Small during the Construction and Operational Phases due to the high level of visual obstruction towards the site as a result of the LOHAS Park residential developments.
- 10.5.71 Hikers on High Junk Peak (Tiu Yue Yung) Country Trail in Clear Water Bay Country Park (TKO-REC1): Visitors of recreational facilities and hikers are generally considered to be moderately sensitive to changes in their views as the quality of the view affects the perception of their leisure environment and quality of experience. These particular VSRs are medium in number and enjoy good quality existing views with full visibility of the project site. Alternative views are available. Views are of short duration and infrequent. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.72 The potential blockage of the view by the development will be partial and from a distance of 3.5km making the perception of the scale of the development small. The compatibility of the development with the existing visual context will be fair given the proximity of other large scale developments such as the Junk Bay Chinese Permanent Cemetery and new connecting footpath and the TKO reclamation/town centre extension. The duration of the

- impacts will be long and irreversible. Overall the magnitude of impact will be Small during the Construction and Operational Phases.
- 10.5.73 Hikers along the Wilson Trail to Devil's Peak and Chiu Keng Wan Shan (**TKO-REC2**): These particular VSRs medium in number, enjoy good quality existing views with partial visibility of the project site due to intervening landform and development. Alternative views are available. Views are of short duration and rare. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.74 The potential blockage of the view by the development will be partial and from a distance of 1km making the perception of the scale of the development medium. The compatibility of the development with the existing visual context will be fair given the proximity of other large scale developments such as the Junk Bay Chinese Permanent Cemetery and new connecting footpath and the TKO reclamation/town centre extension, Area 77 Landfill, CDA1 and 2, and the TKO Industrial Estate. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Intermediate during the Construction and Operational Phases.
- 10.5.75 Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park (**TKO-REC3A**) and Visitors of H.K. Museum of Coastal Defence (**TKO-REC3B**): These particular VSRs are medium in number, enjoy good quality existing views with full visibility of the project site. Alternative views are available. However, their views are of short duration and rare. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.76 The potential blockage of the view by the development will be partial and from a distance of 2750m. making the perception of the scale of the development small. The compatibility of the development with the existing visual context will be good given the backdrop of the TKO urban area and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Small during the Construction and Operational Phases.
- 10.5.77 Hikers along Pottinger Trail and Pottinger Peak (**TKO-REC4**), Hikers at Mount Collinson (**TKO-REC5**) and Hikers at Mount Parker (**TKO-REC6**): These particular VSRs are medium in number, enjoy good quality existing views with full visibility of the project site. Alternative views are available. However, their views are of short duration and rare. Overall the assessment of sensitivity for these VSRs is therefore Medium during the Construction and Operation Phases.
- 10.5.78 The potential blockage of view by the development will be partial and from a distance of 4.5km to 5.5km making the perception of the scale of the development small. The compatibility of the development with the existing visual context will be good given the backdrop of the TKO urban area and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Negligible during the Construction and Operational Phases, primarily due to the distance of view.
- 10.5.79 Seaborne Leisure Travellers in Junk Bay (**TKO-T1**): Seaborne leisure travellers are generally considered to be moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has some bearing on their perceived quality of experience. These seaborne leisure travelers are medium in number and the quality of their existing view is fair as it includes both a waterfront of unremarkable urban development, and reclamation with limited areas of natural coastline and a more attractive natural hill skyline behind. Alternative views are available. Their frequency of view is of short duration

- and occasional. Overall the sensitivity of these VSRs is therefore assessed as Medium during the Construction and Operation Phases.
- 10.5.80 The potential blockage of the view by the development will be partial and from a distance as little as 10m making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be good given the backdrop of the TKO urban area and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Large during the Construction and Operational Phases.
- 10.5.81 Seaborne Leisure Travellers along Lei Yue Mun and Tathong Channel (**TKO-T2**): These seaborne leisure travellers are many in number and the quality of their existing view is fair as it includes both a waterfront of unremarkable urban development, and reclamation with limited areas of natural coastline and a more attractive natural hill skyline behind. Alternative views are available. Their frequency of view is of short duration and occasional. Overall the sensitivity of these VSRs is therefore assessed as Medium during the Construction and Operation Phases.
- 10.5.82 The potential blockage of the view by the development will be partial and from a distance of approximately 1.5km making the perception of the scale of the development medium. The compatibility of the development with the existing visual context will be good given the backdrop of the TKO urban area and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Intermediate during the Construction and Operational Phases.
- 10.5.83 Travellers along Wan Po Road (**TKO-T3**): these travellers are many in number and experience fair quality partial/glimpse views towards the project site. Alternative views are available. The frequency of view is occasional and of short duration. The overall sensitivity of these VSRs is assessed as Low.
- 10.5.84 The potential blockage of the view by the development will be partial and from a distance of approximately 1.5km making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given the backdrop of the TKO urban area and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Small during the Construction and Operational Phases.
- 10.5.85 Travellers at TKO MTR Station and along Po Yap Road and Chui Ling Road (**TKO-T4**): these travellers are many in number and experience poor quality partial/glimpse views towards the project site due to the planned developments on the TKO reclamation. Alternative views are available. The frequency of view is occasional and of short duration. The overall sensitivity of these VSRs is assessed as Low.
- 10.5.86 The potential blockage of the view by the development will be partial and from a close distance (approximately 10m) making the perception of the scale of the development large. The compatibility of the development with the existing visual context will be fair given the existing road layout and surrounding urban context of TKO and planned intent for new town extension. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Large during the Construction Phase and Intermediate during the Operational Phase.
- 10.5.87 Pedestrians on footpath link from Ocean Shores to Junk Bay Chinese Permanent Cemetery (**TKO-T5**): the number of viewers is medium and they will experience occasional, short,

- full views of the project site. Alternative views are available. The quality of the existing view is good across Junk Bay. Overall the sensitivity of this VSR will be Medium.
- 10.5.88 The potential blockage of the view by the development will be partial and from a close distance (the path crosses above the elevated road in front of the tunnel portal) making the perception of the scale of the development large. The compatibility of the development with the existing visual context when viewed from the path will be poor given the existing clear views across Junk Bay to the east and the natural hillside of the tunnel portal. The duration of the impacts will be long and irreversible. Overall the magnitude of impact will be Large during the Construction and Operational Phases.
- 10.5.89 Travellers on new Southern Footbridge crossing Eastern Channel (**TKO-T7**): these VSRs will be medium in number and will experience good quality views across Junk Bay towards the project site. Alternative views will be available. Views will be occasional, full and of short duration. Overall sensitivity to change will be Medium given that these VSRs are likely to be using bridge and footpath recreationally.
- 10.5.90 The potential blockage of the view by the development will be partial and the distance of view will be 750m. The scale of development is large and the change is irreversible. The compatibility with the visual context is fair given the nature of the TKO reclamation and planned TKO town centre south extension and the Junk Bay Chinese Permanent Cemetery. Due to the unobstructed views to the development site, long duration of impacts and the permanence of the development, overall the magnitude of visual impact for this VSR is assessed as Large during the Construction and Operation Phases.

Planned future VSRs in Tseung Kwan O

- 10.5.91 For the purposes of this assessment, it is assumed that the future planned developments will be constructed after the completion of the TKO-LT Tunnel. Assessment of sensitivity and magnitude of impact during the Construction Phase is therefore not applicable.
- 10.5.92 Workers in planned TKO Industrial Estate Extension (**TKO-OU1B**): These workers will be medium in number, enjoy good quality existing and alternative views with full visibility of the proposed development site. Their views however will only be occasional and of short duration. Overall the assessment of sensitivity for this VSR is Low during the Operation Phase.
- 10.5.93 The potential blockage of the view by the development will be partial and the viewing distance will be 1.5km. The compatibility of the development with the visual context will be fair given the backdrop of TKO and planned intent for new town extension and the Junk Bay Permanent Chinese Cemetery. Due to the long duration of impacts and the large scale of development, the overall magnitude of impact on this planned VSR will be Large during the Operation Phase.
- 10.5.94 Users of planned recreational facilities at TKO Stage I Landfill, Area 77 (**TKO-REC7**): These users will be many in number, enjoy good quality views with full visibility across Junk Bay. Alternative views will be available. Their views will also be occasional and of medium duration. Overall the assessment of sensitivity for this VSR is therefore Medium during the Operation Phase.
- 10.5.95 The potential blockage of the view by the development will be partial and the distance of view will be 750m. The scale of development is large and the change irreversible. The compatibility with the visual context is fair given the nature of the TKO reclamation and TKO town centre south extension and the Junk Bay Permanent Chinese Cemetery. Due to

the unobstructed views to the development site, long duration of impacts and the permanence of the development, overall the magnitude of visual impact for this VSR is assessed as Large during the Operation Phase.

Table 10.5.7 Lam Tin Visually Sensitive Receivers and their Sensitivity

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium,	
								Construction	Operation
Existing VSR	s in Lam Tin		T		1				_
LT-C1	Workers at Yau Tong Industrial Area	Many	Fair	Yes (Poor)	Partial	Short	Occasional	Low	Low
LT-C2	Office workers in Taikoo Place and One Island East	Many	Good	Yes (Fair)	Partial	Medium	Frequent	Low	Low
LT-GIC1	Staff and pupils of schools east of EHC	Many	Poor	Yes (Poor)	Partial	Medium	Frequent	Low	Low
LT-GIC2	Staff and pupils of Schools and Government facilities at Rehab Path	Many	Poor	Yes (Poor)	Nil	N/A	N/A	Low	Low
LT-R3	Residents of Ping Tin Estate and Hong Ngar Court	Many	Good	Yes (Poor)	Full	Long	Frequent	High	High
LT-R4A	Residents of Yau Lai Estate	Many	Good	Yes (Fair)	Full	Long	Frequent	High	High
LT-R4B	Residents of Yau Tong Estate and Yau	Many	Poor	Yes (Fair)	Partial	Long	Frequent	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium	
	Mei Court								
LT- R5	Residents in Yau Tong - The Canaryside and The Spectacle	Many	Good	Yes (Fair)	Partial	Long	Frequent	High	High
LT- R6A	Residents at Sai Wan Ho (Lei King Wan, Grande Promenade, Les Saisons)	Many	Good	Yes (Good)	Partial	Long	Frequent	Medium	Medium
LT-R6B	Residents of Shau Kei Wan (Tung To Court, Tung Yuk Court, Aldrich Bay)	Many	Good	Yes (Good)	Partial	Long	Frequent	Medium	Medium
LT- R7	Residents at Sai Wan Ho (Hing Tung Estate, Tung Hei Court, Tung Lam Court)	Many	Fair	Yes (Fair)	Partial	Long	Frequent	Medium	Medium
LT-R8	Residents at Tai Koo Shing	Many	Good	Yes (Good)	Partial	Long	Frequent	Medium	Medium
LT-R9A	Residents at Cha Kwo Ling Village	Many	Fair	Yes (Good)	NIL	N/A	N/A	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium	
LT-R9B*	Residents at Cha Kwo Ling housing developments west of interchange	Many	Good	Yes (Good)	Full	Long	Frequent	High	High
LT-R10	Residents at Fan Wah Street	Many	Fair	Yes (Good)	NIL	N/A	N/A	Medium	Medium
LT-R11	Residents at Kwong Tin Estate and Hong Pak Court	Many	Good	Yes (Fair)	Full	Long	Frequent	High	High
LT-R12	Residents at Laguna City	Many	Good	Yes (Fair)	NIL	N/A	N/A	Medium	Medium
LT-R13	Residents at Sceneway Garden	Many	Good	Yes (Fair)	NIL	N/A	N/A	Medium	Medium
LT-CDA1*	Residents of Yau Tong Bay CDA development	Many	Good	Yes (Good)	Full	Long	Frequent	High	High
LT-REC1A	Hikers along Wilson Trail near Black Hill	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT-REC1B	Hikers along Wilson Trail at Devil's Peak	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT-REC2	Hikers along	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium,	
	Pottinger Trail and Pottinger Peak								
LT- REC3	Hikers at Mount Collinson	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT-REC4	Hikers at Mount Parker	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT-REC5	Hikers at Mount Butler	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT-REC6	Hikers at Braemar Hill Lookout	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT- REC7A	Visitors of Lei Yue Mun Fort (H.K. Museum of Coastal Defence)	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT- REC7B	Visitors of Lei Yue Mun Observation Post (H.K. Museum of Coastal Defence)	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium
LT- REC8	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Medium	Good	Yes (Good)	Partial	Short	Rare	Medium	Medium

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium	
LT-REC9	Users of Sai Tso Wan Recreation Ground and Tennis Courts	Medium	Poor	No	NIL	N/A	N/A	Low	Low
LT-01	Users of Yau Tong Road Playground	Many	Fair	Yes (Fair)	Partial	Medium	Occasional	Medium	Medium
LT-O2	Users of Quarry Bay Park	Many	Good	Yes (Good)	Partial	Medium	Occasional	Medium	Medium
LT-03	Visitors to Aldrich Bay Promenade	Many	Good	Yes (Good)	Partial	Medium	Occasional	Medium	Medium
LT-O4	Visitors of Sai Wan Ho Harbour Park	Many	Good	Yes (Good)	Partial	Medium	Occasional	Medium	Medium
LT-O5*	Users of public open space on promenade	Many	Good	Yes (Good)	Partial	Medium	Occasional	Medium	Medium
LT-O6*	Users of planned open space north west of Lam Tin Interchange	Many	Good	Yes (Fair)	Partial	Medium	Occasional	Medium	Medium
LT-T1	Seaborne Leisure Travellers along Lei Yue Mun Channel	Many	Good	Yes (Good)	Partial/ Glimpse	Short	Occasional	Low	Low

VSR ID No.	Key VSR	No. of Viewers (Many, Medium, Few)	Quality of Existing View (Good, Fair, Poor)	Availability of Alternative Views (Yes, No) If Yes, Amenity Value of Alternative View (Good, Fair, Poor)	Degree of Visibility (Full, Partial, Glimpse)	Duration of View (Long, Medium, Short)	Frequency of View ((Very Frequent, Frequent, Occasional, Rare)	Sensitivity to C (Low, Medium,	
LT-T2	Travellers along Island Eastern Corridor	Many	Good	Yes (Good)	Partial/ Glimpse	Short	Occasional	Low	Low
LT-T3	Travellers on Eastern Harbour Crossing approaches	Many	Poor	No	Partial/ Glimpse	Short	Occasional	Low	Low

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

Table 10.5.8 Lam Tin Visually Sensitive Receivers and their Magnitude of Impact

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	Duration of Impacts (Long/ Medium/ Short)		Reversibility of Change (Yes/No)	Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
						Construction	Operation		Construction	Operation
Existing VSRs			1 37/4			1 27/4				X 1 11 11 1
LT-C1	Workers at Yau Tong Industrial Area	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
LT-C2	Office workers in Taikoo Place and One Island East	Partial	2000m	Small	Fair	Medium	Long	No	Small	Small
LT-GIC1	Staff and pupils of schools east of EHC	Partial	100m	Large	Fair	Medium	Long	No	Large	Large
LT-GIC2	Staff and pupils of Schools and Government facilities at Rehab Path	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible
LT-R3	Residents of Ping Tin Estate and Hong Ngar Court	Partial	300m	Large	Fair	Medium	Long	No	Large	Large
LT-R4A	Residents of Yau Lai Estate	Partial	80m	Large	Fair	Medium	Long	No	Large	Large
LT-R4B	Residents of Yau Tong	Partial	700m	Medium	Fair	Medium	Long	No	Small	Small

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	Duration of Impacts (Long/ Medium/ Short)				Magnitude of Impacts (Large/Intermediate/Small/ /Negligible)	
	Estate and Yau Mei Court										
LT- R5	Residents in Yau Tong - The Canaryside and The Spectacle	Partial	800m	Medium	Fair	Medium	Long	No	Small	Small	
LT- R6A	Residents at Sai Wan Ho (Lei King Wan, Grand Promenade, Les Saisons)	Partial	1500m	Small	Good	Medium	Long	No	Small	Small	
LT-R6B	Residents of Shau Kei Wan (Tung To Court, Tung Yuk Court, Aldrich Bay)	Partial	1600m	Small	Good	Medium	Long	No	Small	Small	
LT- R7	Residents at Sai Wan Ho (Hing Tung Estate, Tung Hei Court, Tung Lam Court)	Partial	2000m	Small	Good	Medium	Long	No	Small	Small	
LT -R8	Residents at Tai Koo Shing	Partial	1500m	Small	Good	Medium	Long	No	Small	Small	

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	Duration of Impacts (Long/ Medium/ Short)		of Change (Yes/No)		ium/ Short) of Change (Large/Intermediate/Smal		mediate/Small/ ligible)
LT -R9A	Residents at Cha Kwo Ling Village	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible		
LT-R9B*	Residents at Cha Kwo Ling housing develop- ments west of inter-change	Partial	50m	Large	Fair	Medium	Long	No	Large	Large		
LT - R10	Residents at Fan Wah Street	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible		
LT-R11	Residents at Kwong Tin Estate and Hong Pak Court	Partial	400m	Large	Fair	Medium	Long	No	Large	Large		
LT-R12	Residents at Laguna City	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible		
LT-R13	Residents at Sceneway Garden	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible		
LT-CDA1 *	Residents of Yau Tong Bay CDA development	Partial	200m	Large	Fair	Long	Long	No	Large	Large		
LT-REC1A	Hikers along Wilson Trail near Black Hill	Partial	750m	Medium	Fair	Medium	Long	No	Small	Small		

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	Duration of Impacts (Long/ Medium/ Short)		Long/ Medium/ Short) of Change (Yes/No)		e of Impacts mediate/Small/ igible)
LT-REC1B	Hikers along Wilson Trail at Devil's Peak	Partial	1250m	Medium	Fair	Medium	Long	No	Small	Small
LT-REC2	Hikers along Pottinger Trail and Pottinger Peak	Partial	5000m	Small	Good	Medium	Long	No	Negligible	Negligible
LT- REC3	Hikers at Mount Collinson	Partial	5200m	Small	Good	Medium	Long	No	Negligible	Negligible
LT-REC4	Hikers at Mount Parker	Partial	3500m	Small	Good	Medium	Long	No	Negligible	Negligible
LT-REC5	Hikers at Mount Butler	Partial	4000m	Small	Good	Medium	Long	No	Negligible	Negligible
LT-REC6	Hikers at Braemar Hill Lookout	Partial	2700m	Small	Good	Medium	Long	No	Small	Small
LT-REC7A	Visitors of Lei Yue Mun Fort (H.K. Museum of Coastal Defence)	Partial	2000m	Small	Good	Medium	Long	No	Small	Small
LT- REC7B	Visitors of Lei Yue Mun Observation Post (H.K. Museum of Coastal Defence)	Partial	2000m	Small	Good	Medium	Long	No	Small	Small

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	Duration of Impacts (Long/ Medium/ Short)		nir/ (Long/ Medium/ Short) of Change (Large/Intermediate/S		ium/ Short) of Change (Yes/No)		nediate/Small/
LT- REC8	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Partial	2400m	Small	Good	Medium	Long	No	Small	Small		
LT-REC9	Users of Sai Tso Wan Recreation Ground and Tennis Courts	Nil	N/A	N/A	N/A	N/A	N/A	N/A	Negligible	Negligible		
LT-O1	Users of Yau Tong Road Playground	Partial	100m	Large	Fair	Medium	Long	No	Intermediate	Intermediate		
LT-O2	Users of Quarry Bay Park	Partial	1500m	Small	Good	Medium	Long	No	Small	Small		
LT-O3	Visitors to Aldrich Bay Promenade	Partial	1700m	Small	Good	Medium	Long	No	Small	Small		
LT-O4	Visitors of Sai Wan Ho Harbour Park	Partial	1500m	Small	Good	Medium	Long	No	Small	Small		
LT-O5*	Users of public open space on promenade	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate		
LT-O6*	Users of planned open space north west of Lam Tin Inter- change	Partial	50m	Large	Fair	Medium	Long	No	Intermediate	Intermediate		

VSR ID No.	Key VSR	Potential Blockage of View (Full/ Partial Glimpse)	Minimum Viewing Distance (m)	Scale of Development (Large/ Medium/Small)	Compatibility (Good/Fair/ /Poor)	(Long/ Medium/ Short) of Change (Large/Inter		(Large/Intern	of Impacts nediate/Small/ igible)	
LT-T1	Seaborne Leisure Travellers along Lei Yue Mun Channel	Partial	100m	Large	Good	Medium	Long	No	Intermediate	Intermediate
LT-T2	Travellers along Island Eastern Corridor	Partial	1400m	Medium	Good	Medium	Long	No	Small	Small
LT-T3	Travellers on Eastern Harbour Crossing approaches	Partial	10m	Large	Good	Medium	Long	No	Intermediate	Intermediate

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

Sensitivity and Magnitude of Change for VSRs in Lam Tin

Existing VSRs in Lam Tin

- 10.5.96 Workers in Yau Tong Industrial Area (LT-C1): Workers are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. This VSR is many in number and the quality of their existing view is fair with visibility largely blocked by the proposed CDA development to the northwest (it is anticipated that the CDA will have been constructed by the time the TKO-LT is constructed). Alternative views are available. The overall assessment of sensitivity for this VSR is Low during the Construction and Operation Phases.
- 10.5.97 The degree of visibility of the large permanent development will be nil due to the CDA constructed to the north-west. Consequently, the magnitude of impact for this VSR is assessed as Negligible during the Construction and Operation Phases.
- 10.5.98 Office workers in Taikoo Place and One Island East (LT-C2): VSRS are many in number and the quality of their existing view is good with partial visibility due to intervening buildings and the ridge of land behind Cha Kwo Ling Village. Alternative views are available. Their view is frequent and of medium duration. The overall assessment of sensitivity for this VSR is Low during the Construction and Operation Phases.
- 10.5.99 The potential blockage of the view by the development will be partial and from a distance of 2km making the perception of the scale of the development small. The compatibility of the development with the existing visual context will be fair given the backdrop of the Lam Tin urban area. The visual impacts will be irreversible and of long duration. Overall, the magnitude of impact for this VSR is assessed as Small during the Construction and Operation Phases.
- 10.5.100 Staff and pupils of schools east of EHC (**LT-GIC1**): Staff and students of schools are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. These particular VSRs are many in number and the quality of their existing view is poor although alternative views to the west are available. Their views are frequent and partially obstructed by the EHC advertising hoardings. Due to the partial nature of the views and the nature of the building design which does not afford good views out for staff or pupils, the overall sensitivity of this VSR is assessed as Low during the Construction and Operation Phases.
- 10.5.101 The potential blockage of the view by the development will be partial and from a distance of 100m. Due to this proximity the scale of the development will be perceived as large. The compatibility of the development with the existing visual context will be fair given the existing EHC corridor and associated slip roads and buildings. The visual impacts will be irreversible and of long duration. Overall, the magnitude of impact for this VSR is assessed as Large during the Construction and Operation Phases.
- 10.5.102 Staff and pupils of School and Government facilities at Rehab Path (LT-GIC2): Staff and pupils are generally considered to be only moderately sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of life. This VSR is many in number and has poor existing views. However, due to the screening nature of the topography between the facilities and the development, the

- degree of visibility will be nil as will the duration and frequency of view. The overall sensitivity of this VSR is assessed as Low during the Construction and Operation Phases.
- 10.5.103 As the degree of visibility will be nil, the magnitude of impact for this VSR is therefore assessed as Negligible during the Construction and Operation Phases.
- 10.5.104 Residents of Ping Tin Estate and Hong Ngar Court (**LT-R3**) and Yau Lai Estate (**LT-R4A**): Residents are generally considered to be sensitive to changes in their views as the quality of the view affects their perception of their home environment and quality of life. These VSRs are many in number, enjoy good quality existing views with full visibility. Alternative views are available. Their views are frequent and of long duration. The overall sensitivity for this VSR is therefore assessed as High during the Construction and Operation Phases.
- 10.5.105 The potential blockage of the view by the development will be partial and from a close distance. These VSRs will have close (300m to 80m respectively) full views overlooking the permanent project development. The compatibility of the development with the existing visual context will be fair given the existing EHC corridor and associated infrastructure and the industrial landscape of the Ex Cha Kwo Ling Kaolin Mine Site. The visual impacts will be irreversible and of long duration. The scale of the development will be perceived as large due to the close elevated viewpoints. Overall, the magnitude of impact for these VSRs is assessed as Large during the Construction and Operation Phases.
- 10.5.106 Residents of Yau Tong Estate and Yau Mei Court (**LT-R4B**): These VSRs are many in number and experience poor quality existing views. Views of the project site are partially screened by the towers of the Yau Lai Estate (LT-R4A) and hence the degree of visibility is partial. The overall sensitivity for these VSRs is assessed as Medium during the Construction and Operation Phases.
- 10.5.107 As the degree of visibility will be partial, the magnitude of impact for this VSR is therefore assessed as Small during the Construction and Operation Phases. Residents in Yau Tong The Canaryside and The Spectacle (LT-R5): These VSRs are many in number, enjoy good quality elevated existing views with partial visibility due to intervening buildings including those of LT-CDA1, LT-GIC1 and LT-R4A. Alternative views are available. Their views are frequent and of long duration. The overall sensitivity for these VSRs is assessed as High during the Construction and Operation Phases.
- 10.5.108 The potential blockage of the view by the development will be partial and these VSRs will have a relatively long viewing distance (750 to 800m) with views partially screened by intervening buildings. The compatibility of the development with the existing visual context will be fair given the existing EHC corridor and associated infrastructure and the industrial landscape of the Ex Cha Kwo Ling Kaolin Mine Site. The visual impacts will be irreversible and of long duration. The scale of the development will be perceived as medium in scale due to the distance of viewpoint. Overall, the magnitude of impact for this VSR is assessed as Small during the Construction and Operation Phases.
- 10.5.109 Residents at Cha Kwo Ling Village (LT-R9A) and Residents at Fan Wah Street (LT-R10): These VSRs are many in number and experience fair existing views. These residential developments are low rise and the degree of visibility of the proposed development is nil due to the ridge of forested high ground forming the edge of the former ex-Cha Kwo Ling Kaolin Mine Site which will completely screen the development from view. Alternative views are available. The overall sensitivity for these VSRs is therefore assessed as Medium during the Construction and Operation Phases.

- 10.5.110 In spite of their close distance to the proposed development (100 to 500m), the development will not be visible to these VSRs due to the screening ridge of land to the north of them. The magnitude of impact for this VSR is therefore assessed as Negligible during the Construction and Operation Phases.
- 10.5.111 Residents at Kwong Tin Estate and Hong Pak Court (**LT-R11**): Residents at Kwong Tin Estate and Hong Pak Court are many in number and experience good quality views towards the site. Alternative views are available to these VSRs. The degree of visibility is full and as residents, their duration of the view towards the site is long and frequent. The overall sensitivity to change for these residents is assessed as High during the Construction and Operation Phases.
- 10.5.112 In spite of their close distance to the proposed development (400m), the development will be only partially visible to these VSRs. The scale of the development will be perceived as large due to the proximity of view. The magnitude of impact for this VSR is therefore assessed as Large during the Construction and Operation Phases.
- 10.5.113 Residents at Laguna City (LT-R12) and Residents at Sceneway Garden (LT-R13): Residents at Laguna City and residents at Sceneway Garden are many in number and currently experience views of good quality. Alternative views are available to these VSRs. The degree of visibility is nil due to the intervening elevated ground of the ex-Cha Kwo Ling Quarry Site. The overall sensitivity to change for these residents is considered to be Medium during the Construction and Operation Phases.
- 10.5.114 The development will not be visible to these VSRs and the magnitude of impact for this VSR is therefore assessed as Negligible during the Construction and Operation Phases.
- 10.5.115 Residents at Sai Wan Ho (Lei King Wan, Grand Promenade, Les Saisons) (LT-R6A), Residents of Shau Kei Wan (Tung To Court, Tung Yuk Court and Aldrich Bay) (LT-R6B), Residents of Sai Wan Ho (Hing Tung Estate, Tung Hei Court, Tung Lam Court) (LT-R7) and Residents at Tai Koo Shing (LT-R8): These VSRs are many in number and enjoy good quality existing views across Victoria Harbour (LT-R7 experiences fair views due to its greater distance and degree of obstruction from surrounding buildings). All these VSRs experience only partial visibility of the proposed development site because of surrounding developments on the Hong Kong side and the screening effect of the high ground to the north west of Cha Kwo Ling Village. Alternative views are available. Their views are frequent and of long duration. The overall sensitivity for these VSRs is assessed as Medium during the Construction and Operation Phases.
- 10.5.116 The potential blockage of the view by the development will be partial. These VSRs will have a long viewing distance (1.5 to 2.0km) with views partially screened by intervening buildings and wooded ridge. From this distance the scale of the development will be perceived as small. The compatibility of the proposed development with the existing visual context is good given the backdrop of the Lam Tin urban area to the north. The visual impacts are irreversible and of long duration. The magnitude of impact for this VSR, is assessed as Small during the Construction and Operation Phases.
- 10.5.117 Residents at Cha Kwo Ling housing developments west of interchange (**LT-R9B***): Future residents of the planned housing developments on the Ex-Cha Kwo Ling Kaolin Mine Site west of the Lam Tin Interchange will be many and will have full views over the site due to their elevated location to the north west of the quarry. Views will be frequent and the duration of views will be long. Alternative views will be available. The sensitivity to change for this planned VSR during the Construction and Operation Phases will be High.

AECOM 10-74 March 2013

- 10.5.118 The potential blockage of the view by the development will be partial. VSRs will have a close viewing distance (50m worst case) from where the scale of the development will appear large. The compatibility of the Lam Tin Interchange with the existing visual context will be fair given the existing EHC transport corridor character and the transitional character of the Ex Cha Kwo Ling Kaolin Mine Site. The visual impacts will be irreversible and of long duration. The magnitude of impact during the Construction Phase and Operation Phase will be Large.
- 10.5.119 Residents of Yau Tong Bay CDA development (LT-CDA1*): Residents of the completed Yau Tong Bay CDA will be many and the upper floors will have good, full views of the Lam Tin Interchange. Views will be frequent and the duration of views will be long. Alternative views will be available. The sensitivity to change for the VSR during the Construction and Operation Phases will be High.
- 10.5.120 The potential blockage of the view by the development will be partial. VSRs will have a close viewing distance (200m) from where the scale of the development will appear large. The compatibility of the Lam Tin Interchange with the existing visual context will be fair given the existing EHC transport corridor character. The visual impacts will be irreversible and of long duration. The magnitude of impact during both the Construction and Operation Phases will be Large.
- 10.5.121 Hikers along Wilson Trail near Black Hill (LT-REC1A) and Hikers along Wilson Trail at Devil's Peak (LT-REC1B): Hikers are generally considered to be moderately sensitive to changes in their views as the quality of the view affects their perception of their leisure environment. These particular VSRs are medium in number, enjoy good quality existing views with partial visibility due to intervening tower blocks and development. Alternative views are available. However, the frequency of their views is usually rare and of short duration. The overall sensitivity for these VSRs is therefore assessed as Medium during the Construction and Operation Phases.
- 10.5.122 The potential blockage of the view by the development will be partial. These VSRs will have an intermediate viewing distance (0.75km to 1.25km). From this distance the scale of the development will be perceived as medium. The compatibility of the proposed development with the existing visual context is fair given the existing level of dense urban development in Lam Tin and the existing EHC infrastructure corridor. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR is assessed as Small during the Construction and Operation Phases.
- 10.5.123 Hikers along Pottinger Trail and Pottinger Peak (LT-REC2), Hikers at Mount Collinson (LT-REC3), Hikers at Mount Parker (LT-REC4), Hikers at Mount Butler (LT-REC5): These particular VSRs are medium in number, enjoy good quality existing views with partial visibility due to intervening development on Hong Kong Island and the wooded ridge north of Cha Kwo Ling Village. Alternative views are available. However, the frequency of their views is usually rare and of short duration. The overall sensitivity for these VSRs is assessed as Medium during the Construction and Operation Phases.
- 10.5.124 The potential blockage of the view by the development will be partial. These VSRs will have a long viewing distance (3.5km to 5.0km). From this distance the scale of the development will be perceived as small. The compatibility of the proposed development with the existing visual context is good given the backdrop of the Lam Tin urban area. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR given the distance and partially obstructed view, is assessed as Negligible during the Construction and Operation Phases.

- 10.5.125 Hikers at Braemar Hill Lookout (LT-REC6): These particular VSRs are medium in number, enjoy good quality existing views with partial visibility due to intervening tower blocks and the wooded ridge north of Cha Kwo Ling Village. Alternative views are available. However, the frequency of their views is usually rare and of short duration. The overall sensitivity for these VSRs is therefore assessed as Medium during the Construction and Operation Phases.
- 10.5.126 The potential blockage of the view by the development will be partial. These VSRs will have a closer viewing distance (2.7km) from which the scale of the development will be perceived as small. The compatibility of the proposed development with the existing visual context is good given the backdrop of the Lam Tin urban area. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR given the distance and partially obstructed view, is assessed as Small during the Construction and Operation Phases.
- 10.5.127 Visitors of Lei Yue Mun Fort (H.K. Museum of Coastal Defence) (LT-REC7A), Visitors of Lei Yue Mun Observation Post (H.K. Museum of Coastal Defence) (LT-REC7B), Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park (LT-REC8): Visitors of recreational facilities are generally considered to be moderately sensitive to changes in their views as the quality of the view affects the perception of their leisure environment and quality of experience. These particular VSRs are medium in number, enjoy good quality existing views with partial visibility primarily due to the obstruction of existing buildings on the Lam Tin shoreline and the EHC complex. Alternative views are available. The frequency of their views is rare and of short duration. The overall sensitivity for these VSRs is therefore assessed as Medium during the Construction and Operation Phases.
- 10.5.128 The potential blockage of the view by the development will be partial. These VSRs will have a long viewing distance (2.0km to 2.4km). From this distance the scale of the development will be perceived as small. The compatibility of the proposed development with the existing visual context is good given the backdrop of the Lam Tin urban area. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR given the distance and partially obstructed view, is assessed as Small during the Construction and Operation Phases.
- 10.5.129 Users of Sai Tso Wan Recreation Ground and Tennis Courts (**LT-REC9**): This particular VSR group is medium in number, and only experience existing views of the sports facilities within the bounds of the surrounding tree screens. Alternative views are not available. The degree of visibility of the proposed development site is nil due to the dense peripheral tree screens. The overall sensitivity for these VSRs is therefore assessed as Low during the Construction and Operation Phases.
- 10.5.130 In spite of their close proximity, the development will not be visible to these VSRs due to the dense tree screen surrounding them. The magnitude of impact for this VSR is therefore assessed as Negligible during the Construction and Operation Phases.
- 10.5.131 Users of Yau Tong Road Playground (LT-O1): Visitors of open spaces are generally considered to be moderately sensitive to changes in their views as the quality of the view affects the perception of their leisure environment and quality of experience. LT-O1 VSRs are many in number, enjoy fair quality existing views across to the wooded slopes of the development site although visibility is only partial due to the screening effect of the open space fencing and planting and the EHC advertising hoardings. Alternative views are available. The frequency of their views is occasional and of medium duration. The overall sensitivity for these VSRs is therefore assessed as Medium during the Construction and Operation Phases.

AECOM 10-76 March 2013

- 10.5.132 The potential blockage of the view by the development will be partial. These VSRs will have a short viewing distance (100m). From this distance the scale of the development will be perceived as large. The compatibility of the proposed development with the existing visual context is fair given the existing EHC corridor in the foreground. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR given the partially obstructed views and the separation by existing transport infrastructure, is assessed as Intermediate during the Construction and Operation Phases.
- 10.5.133 Users of Quarry Bay Park (LT-O2), Visitors to Aldrich Bay Promenade (LT-O3), Visitors to Sai Wan Ho Harbour Park (LT-O4): These VSR groups are many in number, enjoy fair to good quality existing views across the harbour although visibility of the development site is only partial due to the screening effect of buildings on the Lam Tin waterfront, the EHC, the ridge behind Cha Kwo Ling Village and waterborne craft on the harbour. Alternative views are available. The frequency of their views is occasional and of medium duration. The overall sensitivity for these VSRs is assessed as Medium during the Construction and Operation Phases.
- 10.5.134 The potential blockage of the view by the development will be partial. These VSRs will have a long viewing distance (1.5 to 1.75 km). From this distance the scale of the development will be perceived as small. The compatibility of the proposed development with the existing visual context is good given the backdrop of the urban area of Lam Tin. The visual impacts will be irreversible and of long duration. The magnitude of impact for this VSR given the partially obstructed views and the distance of view is assessed as Small during the Construction and Operation Phases.
- 10.5.135 Users of public open space on promenade (LT-O5*): Users of the public open space on the promenade will be many and will experience good but partial views of the Lam Tin Interchange due to the screening provided by the ridge along the southern edge of the quarry. Views will be occasional and the duration of views will be medium. Alternative views will be available. The sensitivity to change for this planned VSR during the Construction and Operation Phase will be Medium.
- 10.5.136 The potential blockage of the view by the development will be partial. VSRs will have a close viewing distance (50m) from where the scale of the development will appear large. The compatibility of the Lam Tin Interchange with the existing visual context will be fair given the existing EHC transport corridor character and the transitional character of the Ex Cha Kwo Ling Kaolin Mine Site. The visual impacts will be irreversible and of long duration. The magnitude of impact implicated on the VSR will be Intermediate during both the Construction and Operation Phases.
- 10.5.137 Users of planned open space north west of Lam Tin Interchange (**LT-O6***): Users of the public open space north west of the Lam Tin Interchange on the ex-Cha Kwo Ling Quarry Site will be many and will experience fair, partial views of the project site because much of the interchange will be screened by the quarry walls and lie below the line of site of the open space area. Views will be occasional and the duration of views will be short. Alternative views will be available. The sensitivity to change for the VSR during the Construction Operation Phase will be Medium.
- 10.5.138 The potential blockage of the view by the development will be partial. VSRs will have a close viewing distance (50m) from where the scale of the development will appear large. The compatibility of the Lam Tin Interchange with the existing visual context will be fair given the existing EHC transport corridor character and the transitional character of the Ex Cha Kwo Ling Kaolin Mine Site. The visual impacts will be irreversible and of long

duration. The magnitude of impact during the Construction and Operation Phases will be Intermediate.

- 10.5.139 Seaborne Leisure Travellers along Lei Yue Mun Channel (LT-T1), Travellers along Island Eastern Corridor (LT-T2): Seaborne and road travellers are generally considered to be only slightly sensitive to impacts on their view as the attractiveness or otherwise of their outlook has a relatively low effect on their perceived quality of experience and the view is only fleeting. LT-T1 and LT-T2 are many in number, enjoy good quality existing views across the harbour although visibility of the development site is only partial/glimpse due to the screening effect of buildings on the Lam Tin waterfront, the EHC and the ridge behind Cha Kwo Ling Village and in the case of seaborne travellers, other craft in the foreground. Alternative views are available. The frequency of their views is occasional and of short duration. The overall sensitivity for these VSRs is assessed as Low during the Construction and Operation Phases.
- 10.5.140 The potential blockage of the view by the development will be partial due to the screening elements mentioned above. LT-T1 Seaborne travelers will have a potentially close viewing distance (minimum 100m) from where the scale of the development will appear large whereas the viewing distance for LT-T2 will be greater (1.4km) from where the development will appear medium. The compatibility of the proposed development with the existing visual context is good given the backdrop of the urban area of Lam Tin. The visual impacts will be irreversible and of long duration. The magnitude of impact for LT-T1 will be Intermediate during the Construction and Operation Phases given the transient, partially obstructed views and the potentially close viewing distance. The magnitude of impact for LT-T2 will be Small during the Construction and Operation Phases given the transient, partially obstructed views and its long viewing distance.
- 10.5.141 Travellers on Eastern Harbour Crossing approaches (**LT-T3**): This VSR group are many in number and experience poor quality existing views to the site due to the low elevation of the EHC road corridor. Visibility of the development site is only partial/glimpse due to the screening effect of existing trees and advertising hoardings. Alternative views are not available. The frequency of their views is occasional and of short duration. The overall sensitivity for these VSRs is assessed as Low during the Construction and Operation Phases.
- 10.5.142 The potential blockage of the view by the development will be partial due to the screening elements mentioned above. This VSR will have a close viewing distance (10m) from where the scale of the development will appear large. The compatibility of the proposed development with the existing visual context is good given the existing transport corridor character. The visual impacts will be irreversible and of long duration. The magnitude of impact will be Intermediate during the Construction and Operation Phases given the transient, partial nature of the views.

10.6 Landscape Impact Assessment

Potential Sources of Landscape Impacts

- 10.6.1 The nature and scope of the works have been described in Section 10.4 above. Sources of landscape impacts during the Construction Phase are as follows:
 - TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing;

- TKO tunnel portal construction with coastline impacts and major slope works;
- Road P2 works including landscape deck in front of Ocean Shores, footbridges and cycle tracks;
- Lam Tin tunnel portals and associated ventilation building in Ex Cha Kwo Ling Kaolin Mine Site:
- Lam Tin Interchange with major slope works, slip roads and noise enclosures;
- Associated tunnel buildings at Lam Tin;
- Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road;
- Modification of link road from Lei Yue Mun Road to EHC;
- The installation of associated utilities;
- Temporary site areas, site offices, materials and plant;
- Temporary barging point at Lei Yue Mun Channel waterfront;
- Temporary barging point at Tseung Kwan O;
- Temporary haul roads at both TKO and Lam Tin sites;
- Construction traffic.
- 10.6.2 The nature and scope of the works that will generate landscape impacts during the Operational Phase are as follows:
 - TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing;
 - TKO tunnel portal construction with major slope works;
 - Road P2 works including landscape deck in front of Ocean Shores, footbridges and cycletracks;
 - Lam Tin tunnel portals and associated ventilation building in Ex Cha Kwo Ling Kaolin Mine Site;
 - Lam Tin Interchange with major slope works, slip roads and noise enclosures;
 - Associated tunnel buildings at Lam Tin;
 - Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road and Junction of Lei Yue Mun Road and Yau Tong Road;
 - Modified link road from Lei Yue Mun Road to EHC;
 - North Footbridge and South footbridge at Road P2/D4.

Prediction of Significance of Landscape Impacts

A=COM 10-79 March 2013

10.6.3 The magnitude of the impacts, before implementation of the mitigation measures on the landscape resources and the landscape character areas that would occur in the Construction Phase are tabulated below in **Tables 10.6.1** and **10.6.2**.

Table 10.6.1: Magnitude of Landscape Impacts during the Construction & Operation Phase – Tseung Kwan O

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
TKO-LR1	Junk Bay (Tseung Kwan O) Sea Waterbody	TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing plus temporary barging point	49 no. piers; approx. 3.0ha of the 114ha area affected by reclamation plus 0.19ha affected by temporary barging point	Small
TKO-LR2	Natural Rocky Shore along Chiu Keng Wan Coastline	TKO tunnel portal construction with coastline impacts and major slope works plus temporary barging point access and associated haul road along coastal edge	Approx. 180m of the total 1102m of coastline affected	Small
TKO- LR3A	Amenity / Roadside planting/ Vegetation on modified slopes at Chiu Keng Wan Shan	None	N/A	Negligible
TKO- LR3B	Vegetation on modified slopes at Tiu Keng Leng	None	N/A	Negligible
TKO- LR3C	Amenity / roadside planting on modified slopes at Junk Bay Chinese Permanent Cemetery	None	N/A	Negligible
TKO- LR3D	Amenity / roadside planting on modified slopes along Road D4 (Po Yap Road and Chui Ling Road) and Road P2 (Po Shun Road)	Road P2 works including, footbridges and cycle tracks	Approximately 75 no. trees will be felled or transplanted out of a total of 327 surveyed trees	Intermediate

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
TKO-LR4	Mixed Woodland Vegetation on hillside areas at Chiu Keng Wan Shan	None	N/A	Negligible
TKO- LR5A	Grassland/ shrubland mosaic at Chiu Keng Wan Shan	TKO tunnel portal construction and associated major slope works	Approx. 3 ha of the total 63 ha affected (48 trees are proposed to be felled within this affected area out of 191 surveyed)	Small
TKO- LR5B	Grassland/ None N/A shrubland mosaic at Tiu Keng Leng		Negligible	
TKO- LR6A Ponds at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan		None	N/A	Negligible
TKO- LR6B	Streams at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan	Temporary haul route from temporary barging point	Minor impacts on lower reaches of 1 no. stream where it meets the coast	Small
TKO-LR7	Village Trees within Chiu Keng Wan Shan	None	N/A	Negligible
TKO-LR8	Sandy Shore along Chiu Keng Wan Shan Coastline	None	N/A	Negligible
TKO-LR9	Self-seeded vegetation on TKO Reclamation	None	N/A	Negligible
TKO- LCA1	Junk Bay Inshore Water Landscape	TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing plus temporary barging point	49 no. piers Out of a total of 114 ha. approx. 3.0ha will be lost to permanent reclamation and 0.19 ha affected by temporary barging point. Approximately 5.9 ha will be affected by the permanent 'footprint' of the elevated interchange	Intermediate
TKO- LCA2	Junk Bay Chinese Permanent Cemetery Landscape	None	N/A	Negligible

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
TKO- LCA3	Chiu Keng Wan Coastal Upland and Hillside Landscape	TKO tunnel portal construction with coastline impacts and major slope works; the installation of associated utilities; temporary site areas, site offices, materials and plant; construction traffic.	out of a total area of 63 ha. A total of 48 trees will be felled within this area out of 191 surveyed. out of a total area of 63 ha. A total of 48 trees will be felled within this area out of 191 surveyed.	
TKO- LCA4	Mixed Modern Comprehensive Urban Development Landscape	Road P2 works including footbridges and cycletracks; the installation of associated utilities; temporary site areas, site offices, materials and plant; construction traffic.	Approx. 600m of road affected out of a total area of 48.9ha. Approximately 49 no. trees will be felled or transplanted out of a total of 211 surveyed trees	Small
TKO- LCA5	Reclamation/On- going Major Development Landscape at proposed Tseung Kwan O Town Centre south	Road P2 works including landscape deck in front of Ocean Shores, footbridges and cycletracks; the installation of associated utilities; temporary site areas, site offices, materials and plant; construction traffic.	Out of a total LCA area of 49 ha, 9.7 ha will be impacted by the works. Approximately 26 no. trees will be felled or transplanted out of a total of 116 surveyed trees	Intermediate
TKO- LCA6	Urban Residential Landscape	None	N/A	Negligible
TKO- LCA7	Mau Wu Shan Upland and Hillside Landscape	None	N/A	Negligible

 $\begin{tabular}{ll} Table 10.6.2: Magnitude of Landscape Impacts during the Construction and Operation Phase-Lam Tin \end{tabular}$

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
LT- LR1	Lei Yue Mun Channel Sea Waterbody	Temporary Barging Point at waterfront	Approximately 1,500 sq.m out of a total of 68ha within the assessment boundary.	Negligible
LT- LR2	Trees within Yau Tong Bay Industrial Waterfront Area	Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road	long Cha Kwo ding Road and unction with Yau 61 trees, approximately 14 no. trees will be felled.	
LT- LR3	Mixed Woodland Vegetation on Hillside Areas	None	ne N/A	
LT- LR4	Pond at Cha Kwo Ling	Kwo Ling None N/A		Negligible
LT- LR5	Natural Watercourse	None	N/A	Negligible
LT- LR6	Grass sports pitch within Sai Tso Wan Recreation Ground	None	N/A	Negligible
LT- LR7	Village trees within Cha Kwo Ling residential area	None	N/A	Negligible
LT- LR8A	Amenity Roadside Planting/Vegetation on Modified Slopes at Sai Tso Wan	None	N/A	Negligible
LT- LR8B	Amenity Roadside Planting/Vegetation on Modified Slopes at Former Quarry	Lam Tin tunnel portals and associated ventilation building and tunnel buildings in Ex - Cha Kwo Ling Kaolin Mine Site; Lam Tin Interchange with major slope works, slip roads and noise enclosures.	Out of a total of approximately 2,835 surveyed trees, approximately 960 trees will be impacted.	Large

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
LT- LR9A	Grassland/Shrubland mosaic on Ng Kwai Shan	None	N/A	Negligible
LT- LR9B	Grassland/Shrubland mosaic at Cha Kwo Ling	Lam Tin Interchange with major slope works, slip roads and noise enclosures. Only 12 no. trees will be impacted along the edge of the LR which has a total area of in an area of approximately 6ha		Small
LT- LCA1	Lei Yue Mun Channel Inshore Water Landscape	Temporary barging point at Lei Yue Mun Channel waterfront; Temporary site areas, site offices, materials and plant; Construction traffic.		Negligible
LT- LCA2	Yau Tong Bay Coastal Industrial Urban Landscape	Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road; temporary barging point at Lei Yue Mun Channel waterfront; construction traffic.	Approx. 0.1ha (1,000 sq.m) out of a total area of 19.9ha.	Small
LT- LCA3	Lam Tin Upland and Hillside Landscape	None	N/A	Negligible
LT- LCA4	Miscellaneous Urban Fringe Landscape	None	N/A	Negligible
LT- LCA5	Urban Recreational Landscape	None	N/A	Negligible
LT- LCA6	Urban Transport Corridor	Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road and Junction of Lei Yue Mun Road and Yau Tong Road; Modified link road	Minor reconfiguration of road layout. Approximately 112 trees out of 266 surveyed will be felled.	Small

ID No.	Landscape Resources/ Landscape Character Areas	Source of Impact	Description of Impacts	Magnitude of Impact
		from Lei Yue Mun Road to EHC.		
LT- LCA7	Lam Tin Residential Urban Landscape	Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road and Junction of Lei Yue Mun Road and Yau Tong Road.	Approximately 30ha out of a total area of 90ha will be impacted and approximately 48 streets trees out of a total of 191 surveyed trees will be affected	Small
LT- LCA8	Former Quarry Landscape – Abandoned	Lam Tin Interchange with major slope works, slip roads and noise enclosures.	Approximately 0.6ha will be impacted due to slope works out of a total area of approximately 13.5ha and approx. 50 trees out of 51 trees surveyed will be affected.	Small
LT- LCA9	Former Quarry Landscape – Occupied	Lam Tin tunnel portals and associated ventilation buildings; major slope works, slip roads and noise enclosures; the installation of associated utilities; temporary site areas, site offices, materials and plant; temporary construction traffic; permanent interchange traffic.	Total alteration of existing conditions to form Lam Tin Interchange. Approximately 960 trees will be felled out of 2835 surveyed.	Large

Nature and Magnitude of Landscape Impacts before Mitigation during the Construction and Operation Phases

10.6.4 The potential significance of the landscape impacts during the Construction and Operation Phases before the implementation of mitigation measures are tabulated in **Tables 10.6.3** and **10.6.4** below.

Landscape Impacts at TKO

- Junk Bay (Tseung Kwan O) Sea Water body (**TKO-LR1**) has a High sensitivity as it is a valuable landscape resource contributing to the unique waterfront setting of TKO. The magnitude of impact caused by the construction of the interchange and reclamation is Small given the overall size of Junk Bay (3ha is affected out of an an approximate total area of 114ha). The resulting significance of impact before mitigation is therefore **Moderate**.
- 10.6.6 Natural Rocky Shore along Chiu Keng Wan Coastline (**TKO-LR2**) has a High sensitivity as it is a relatively rare resource within the locality (due to the high proportion of reclamation coast within Junk Bay). The magnitude of impact caused by the construction of the temporary barging point and haul road for access during the Construction Phase is small (approximately 180m of the total 1102m of coastline affected). The resulting significance of impact before mitigation is therefore **Moderate**.
- 10.6.7 Amenity / roadside planting on modified slopes along Road D4 (Po Yap Road and Chui Ling Road) (**TKO-LR3D**) has a Medium sensitivity as it is a common local resource that can easily be reinstated. The magnitude of impact caused by the loss of roadside tree planting along Road D4 and P2 works including construction of footbridges and cycle tracks is Intermediate (approximately 75 no. trees will be felled or transplanted out of a total of 327 surveyed trees). The resulting significance of impact before mitigation is therefore **Moderate**.
- 10.6.8 Grassland/shrubland mosaic at Chiu Keng Wan Shan stretching to the north and east (**TKO-LR5A**) has a Medium sensitivity due to its common species composition and secondary nature. The magnitude of impact caused by the construction of the TKO tunnel portal and associated major slope works is Small (approx. 3 ha of the total 63ha are affected and 48 trees are proposed to be felled within the affected area out of 191 surveyed). The resulting significance of impact before mitigation is therefore **Moderate**.
- 10.6.9 Streams at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan (**TKO-LR6B**) have a High sensitivity as they are rare and few in number within the study area and cannot be easily recreated. The magnitude of impact caused by the temporary haul route from the temporary barging point is Small (there will be minor impacts on the lower reaches of 1 no. stream where it meets the coast). The resulting significance of impact before mitigation is therefore **Moderate**.
- Amenity/ roadside planting/ vegetation on modified slopes at Chiu Keng Wan Shan (TKO-LR3A), Vegetation on modified slopes at Tiu Keng Leng (TKO-LR3B), Amenity/roadside planting on modified slopes at Junk Bay Chinese Permanent Cemetery (TKO-LR3C), Mixed woodland vegetation on hillside areas at Chiu Keng Wan Shan (TKO-LR4), Grassland/shrubland mosaic at Tiu Keng Leng (TKO-LR5B), Ponds at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan (TKO-LR6A) and Village Trees within Chiu Keng Wan Shan (TKO-LR7) have Medium sensitivity as they are common local resources that can easily be reinstated and are reasonably tolerant of change. Natural Sandy Shore along Chiu Keng Wan Shan Coastline (TKO-LR8) has a High sensitivity as it is a rare resource in this locality and cannot be replicated. Self-seeded planting on TKO Reclamation (TKO-LR9) has a Low sensitivity due to its common species composition and incidental nature. The magnitude of impact is Negligible as the construction works cause no impact to these resources. The resulting significance of impact of these resources before mitigation is therefore Insubstantial.
- 10.6.11 Junk Bay Inshore Water Landscape (**TKO-LCA1**) has a High sensitivity as it provides the bayside context of the TKO and has a unique flat and open characteristic which cannot be

easily recreated. The magnitude of impact caused by the TKO Interchange with viaduct piers and land reclamation for slip road landing and temporary barging point is Intermediate (out of a total of 114ha, only approximately 3.0ha will be permanent reclamation and approximately 0.19ha will be affected by the permanent footprint of the elevated interchange). However, the overall impact to the LCA is perceived as greater than the physically impacted area due to the volume of the viaduct structure supported by the piers, hence the evaluation of Intermediate impact). The resulting significance of impact before mitigation is therefore **Substantial**.

- 10.6.12 Chiu Keng Wan Coastal Upland and Hillside Landscape (**TKO-LCA3**) has a High sensitivity as it is a remnant of the original Junk Bay Landscape and provides a green backdrop to the dense built up area of TKO. The magnitude of impact caused by the TKO tunnel portal construction with slope works and minor coastline impacts is Small (approx. 2.8ha will be affected out of a total area of 63 ha and a total of 48 trees impacted within this area of 191 surveyed.) The resulting significance of impact before mitigation is therefore **Moderate.**
- 10.6.13 Mixed Modern Comprehensive Urban Development Landscape (**TKO-LCA4**) has a Medium sensitivity as it is a common local landscape character type with no unique attributes. The magnitude of impact caused by the construction of Road P2 works and associated footbridges and facilities is Small (approximately 600m of road are affected within the total character area of 48.9ha and approximately 49 trees are impacted out of a total of 211 surveyed). The resulting significance of impact of these landscape characters before mitigation is therefore **Moderate.**
- 10.6.14 Reclamation/On- going Major Development Landscape at proposed Tseung Kwan O Town Centre South (**TKO-LCA5**) has a Low sensitivity due to its undeveloped transitional nature and planned designation for development. The magnitude of impact caused by the construction of road works and associated footbridges and cycle tracks on the reclamation is Intermediate (9.7ha will be impacted by the works out of a total area of 49ha and approximately 26 trees will be affected out of a total of 116 surveyed trees). The resulting significance of impact before mitigation is therefore **Moderate.**
- 10.6.15 Junk Bay Chinese Permanent Cemetery Landscape (**TKO-LCA2**), Residential Urban Landscape (**TKO-LCA6**) and Mau Wu Shan Upland and Hillside Landscape (**TKO-LCA7**) have a Medium sensitivity as they are common local landscape character types with no intrinsic or unique value. The magnitude of impact is negligible as the construction works cause no impact to these Landscape Character Areas. The resulting significance of impact of these landscape characters before mitigation is therefore **Insubstantial**.

Landscape Impacts at Lam Tin

- 10.6.16 Amenity Roadside Planting/Vegetation on Modified Slopes at Former Quarry (LT-LR8B) has a High sensitivity due to its mature and the greening value it provides for the quarry. The magnitude of impact caused by the construction of the Lam Tin Interchange within the Ex Cha Kwo Ling Kaolin Mine Site is Large (approximately 960 trees will be impacted out of a total of approximately 2835 surveyed trees). The resulting significance of impact before mitigation is therefore Substantial.
- 10.6.17 Grassland/Shrubland Mosaic at Cha Kwo Ling (**LT-LR9B**) has Medium sensitivity due to its common species composition. The magnitude of impact caused by slope works within the Ex Cha Kwo Ling Kaolin Mine Site is Small (only 12 no. trees will be impacted along the edge of the LR which has a total area of in an area of approximately 6ha). The resulting significance of impact before mitigation is therefore **Slight**.

- 10.6.18 Trees within Yau Tong Bay Industrial Waterfront Area (LT-LR2) have a Medium sensitivity given their poor quality and their general low amenity value. The magnitude of impact caused by road improvements along Cha Kwo Ling Road and junction with Yau Tong Road is Small (approximately 14 no. trees affected out of a an estimated total of 61 trees from the Yau Tong Bay waterfront area). The resulting significance of impact before mitigation is therefore Slight.
- 10.6.19 Lei Yue Mun Channel Sea Waterbody (LT-LR1), Natural Watercourse (LT-LR5), Village Trees within Cha Kwo Ling Residential Area (LT-LR7) and Amenity Roadside planting/Vegetation on modified slopes at Sai Tso Wan (LT-LR8A) all have High sensitivity and a Negligible magnitude of impact. The resulting significance of impact before mitigation is Insubstantial.
- 10.6.20 Mixed Woodland Vegetation on Hillside Areas (LT-LR3), Pond at Cha Kwo Ling (LT-LR4) and Grassland/Shrubland Mosaic on Ng Kwai Shan (LT-LR9A) have a Medium sensitivity due to its common local species and low ecological value. Grass sports pitch within Sai Tso Wan Recreational Ground (LT-LR6) has a Low sensitivity as it is common, commercially available grass species that can be easily reinstated. However, the magnitude of impact of all of these Landscape Resources is Negligible as the construction works cause no impact to these resources. The resulting significance of impact of these Landscape Resources before mitigation is therefore Insubstantial.
- 10.6.21 Former Quarry Landscape Occupied (**LT-LCA9**) has Medium sensitivity as a large portion (approximately 40%) of it is access road or hard standing and it is occupied by temporary land uses which are reasonably able to tolerate change. The magnitude of impact caused by Lam Tin Interchange and Tunnel Portal will be Large due to the total alteration of existing conditions by the construction of the Lam Tin Interchange (approximately 960 trees will be affected out of 2835 surveyed). The resulting significance of impact before mitigation is therefore Substantial.
- 10.6.22 Lam Tin Residential Urban Landscape (LT-LCA7) has a Medium sensitivity as it is a common, unremarkable landscape type and largely tolerant to change. The magnitude of impact caused by the road modification works to the EHC transport corridor is Small (approximately 30ha out of a total area of 90ha will be impacted and approximately 48 streets trees out of a total of 191 surveyed trees will be affected). The resulting significance of impact of this Landscape Character Area before mitigation is therefore Moderate.
- 10.6.23 Former Quarry Landscape Abandoned (**LT-LCA8**) has a Low sensitivity due to its abandoned state and incidental vegetation coverage comprising common species. The magnitude of impact caused by the construction of the Lam Tin Interchange will be Small (approximately 0.6ha will be impacted due to slope works out of a total area of approximately 13.5ha and approx. 50 trees out of 51 trees surveyed will be affected). The resulting significance of impact of this Landscape Character Area before mitigation is therefore **Slight**.
- 10.6.24 Urban Transport Corridor (**LT-LCA6**) has a Low sensitivity due to its generally low visual quality. The magnitude of impact caused by the road modification works to the EHC transport corridor is Small (minor reconfiguration of road layout and impacts to approximately 112 street trees out of a total of 266 surveyed trees). The resulting significance of impact before mitigation is therefore **Slight**.
- 10.6.25 Yau Tong Bay Coastal Industrial Urban Landscape (**LT-LCA2**) has a Low sensitivity given the current derelict condition and the planning intent to redevelop it. The magnitude of impact caused by the construction of access for a temporary barging point and minor

road realignments is Small (approximately 0.1ha will be affected out of a total area of 19.9ha). The resulting significance of impact before mitigation is therefore **Slight**.

10.6.26 Lei Yue Mun Channel Inshore Water Landscape (LT-LCA1) has a high sensitivity due to its unique physical characteristics, historical and cultural context. Lam Tin Upland and Hillside Landscape (LT-LCA3), Miscellaneous Urban Fringe Landscape (LT-LCA4) and Urban Recreational Landscape (LT-LCA5) have a Medium sensitivity as they are largely tolerant to change. The magnitude of impact is Negligible as the construction works cause no impact to these Landscape Character Areas. The resulting significance of impact before mitigation is therefore Insubstantial.

Table 10.6.3: Significance of Landscape Impacts in the Construction and Operation Phases - Tseung Kwan O

ID No.	Landscape Resources / Landscape	Sensitivity (Low, Medium, High)	Magnitude of Impact (Negligible, Small, Intermediate, Large)	Impact Significance Threshold BEFORE Mitigation (Insubstantial,	Recommended Mitigation Measures		Residual Impact Significance Threshold AFTER Mitigation (Insubstantial, Slight, Moderate, Substantial) Construction Operation	
	Character			Slight, Moderate, Substantial)		Construction		
				Í			DAY 1	YEAR 10
TKO- LR1	Junk Bay (Tseung Kwan O) Sea Waterbody	High	Small	Moderate	CM1, 2, 11,12 OM4	Moderate	Slight	Slight
TKO- LR2	Natural Rocky Shore along Chiu Keng Wan Coastline	High	Small	Moderate	CM1	Moderate	Slight	Slight
TKO- LR3A	Amenity /Roadside planting /Vegetation on modified slopes at Chiu Keng Wan Shan	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR3B	Vegetation on modified slopes at Tiu Keng Leng	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR3C	Amenity /Roadside planting on modified slopes at Junk Bay Chinese Permanent Cemetery	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR3D	Amenity /Roadside planting on modified slopes along Road D4 (Po Yap Road and Chui Ling Road) and P2	Medium	Intermediate	Moderate	CM1, 2, 3,4,5 OM1,8	Moderate	Moderate	Slight

ID No.	Landscape Resources / Landscape	Sensitivity (Low, Medium, High)	Magnitude of Impact (Negligible, Small, Intermediate, Large)	Impact Significance Threshold BEFORE Mitigation (Insubstantial,	Recommended Mitigation Measures		Residual Impact Significance Threshold AFTER Mitigation (Insubstantial, Slight, Moderate, Substantial) Construction Operation	
	Character			Slight, Moderate,		Construction		
				Substantial)			DAY 1	YEAR 10
	(Po Shun Road)							
TKO- LR4	Mixed Woodland Vegetation on hillside areas at Chiu Keng Wan Shan	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR5A	Grassland/ shrubland mosaic at Chiu Keng Wan Shan	Medium	Small	Moderate	CM1, 2, 3,7 OM1,3	Moderate	Slight	Slight
TKO- LR5B	Grassland/ shrubland mosaic at Tiu Keng Leng	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR6A	Ponds at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR6B	Streams at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan	High	Small	Moderate	CM1,2,11 OM1, OM3	Moderate	Slight	Insubstantial
TKO- LR7	Village Trees within Chiu Keng Wan Shan	High	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LR8	Sandy Shore along Chiu Keng Wan Shan Coastline	High	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial

ID No.	Landscape Resources / Landscape	Sensitivity (Low, Medium, High)	Magnitude of Impact (Negligible, Small, Intermediate, Large)	Impact Significance Threshold BEFORE Mitigation (Insubstantial,	Recommended Mitigation Measures		Residual Impact Significance Thre Mitigation (Insubstantial, Slight Substantial)	
	Character			Slight, Moderate, Substantial)		Construction		ration NEAD 10
TKO- LR9	Self-seeded vegetation on TKO Reclamation	Low	Negligible	Insubstantial	Not Required	Insubstantial	DAY 1 Insubstantial	YEAR 10 Insubstantial
TKO- LCA1	Junk Bay Inshore Water Landscape	High	Intermediate	Substantial	CM1, 2, 8, 11,12 OM4, 5, 6, 7,8	Substantial	Moderate	Moderate
TKO- LCA2	Junk Bay Chinese Permanent Cemetery Landscape	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LCA3	Chiu Keng Wan Coastal Upland and Hillside Landscape	High	Small	Moderate	CM1,3,4, 7,11 OM1,2,3,4,5,6,7, 8	Moderate	Moderate	Slight
TKO- LCA4	Mixed Modern Comprehensive Urban Development Landscape	Medium	Small	Moderate	CM1,3,4, 7,11 OM1,2,3,4,5,6,7, 8	Moderate	Slight	Insubstantial
TKO- LCA5	Reclamation/Ongoi ng Major Development Landscape at proposed Tseung Kwan O Town Centre south	Low	Intermediate	Moderate	CM1,2,3,4,5,6,7, 9,10,11, 12 OM1,2,3,4,5,6,7, 8	Moderate	Slight	Insubstantial
TKO- LCA6	Urban Residential Landscape	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
TKO- LCA7	Mau Wu Shan Upland and Hillside Landscape	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial

March 2013

Table 10.6.4: Significance of Landscape Impacts in the Construction and Operation Phases - Lam Tin

ID No.	Landscape Resources / Landscape Characters	Sensitivity (Low, Medium,	Magnitude of Impact (Negligible, Small,	Impact Significance Threshold BEFORE Mitigation	Recommended Mitigation Measures		ct Significance Threshold tion (Insubstantial, Slight, stantial)		
		High)	Intermediate,	(Insubstantial,		Construction	Operation		
			Large)	Slight, Moderate, Substantial)			DAY 1	YEAR 10	
LT-LR1	Lei Yue Mun Channel Sea Waterbody	High	Negligible	Insubstantial	CM1,11	Insubstantial	Insubstantial	Insubstantial	
LT- LR2	Trees within Yau Tong Bay Industrial Waterfront Area	Medium	Small	Slight	CM1, 4, 5 OM1	Slight	Slight	Insubstantial	
LT-LR3	Mixed Woodland Vegetation on Hillside Areas	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial	
LT-LR4	Pond at Cha Kwo Ling	Medium	Negligible	Insubstantial	CM1,11	Insubstantial	Insubstantial	Insubstantial	
LT-LR5	Natural Watercourse	High	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial	
LT- LR6	Grass Sports Pitch within Sai Tso Wan Recreation Ground	Low	Negligible	Insubstantial	CM1,4	Insubstantial	Insubstantial	Insubstantial	
LT-LR7	Village Trees Within Cha Kwo Ling Residential Area	High	Negligible	Insubstantial	CM1,4	Insubstantial	Insubstantial	Insubstantial	
LT- LR8A	Amenity/Roadside planting/Vegetation on Modified Slopes at Sai Tso Wan	High	Negligible	Insubstantial	CM1,4	Insubstantial	Insubstantial	Insubstantial	
LT- LR8B	Amenity/Roadside planting/Vegetation on Modified Slopes at Former Quarry	High	Large	Substantial	CM1,3,4, 7, OM1,2,3,7,8	Substantial	Substantial	Moderate	

ID No.	Landscape Resources / Landscape Characters	Sensitivity (Low, Medium,	Magnitude of Impact (Negligible, Small,	Impact Significance Threshold BEFORE Mitigation	Recommended Mitigation Measures	Residual Impac AFTER Mitigat Moderate, Subs	tion (Insubstanti	
		High)	Intermediate, Large)	(Insubstantial, Slight, Moderate, Substantial)		Construction	Operation DAY 1	YEAR 10
LT- LR9A	Grassland/ Shrubland Mosaic on Ng Kwai Shan	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
LT- LR9B	Grassland/ Shrubland Mosaic at Cha Kwo Ling	Medium	Small	Slight	CM1,3,4, 7 OM1,3	Slight	Slight	Insubstantial
LT- LCA1	Lei Yue Mun Channel Inshore Water Landscape	High	Negligible	Insubstantial	CM1, 2, 11 OM 5	Insubstantial	Insubstantial	Insubstantial
LT- LCA2	Yau Tong Bay Coastal Industrial Urban Landscape	Low	Small	Slight	CM1, 2, 4, 5 OM1	Slight	Insubstantial	Insubstantial
LT- LCA3	Lam Tin Upland and Hillside Landscape	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
LT- LCA4	Miscellaneous Urban Fringe Landscape	Medium	Negligible	Insubstantial	CM1, 4 OM1, 2	Insubstantial	Insubstantial	Insubstantial
LT- LCA5	Urban Recreational Landscape	Medium	Negligible	Insubstantial	Not Required	Insubstantial	Insubstantial	Insubstantial
LT- LCA6	Urban Transport Corridor	Low	Small	Slight	CM1, 2, 4, 5, 6, 9 OM1, 2, 3,4,5,6,8	Slight	Insubstantial	Insubstantial
LT- LCA7	Lam Tin Residential Urban Landscape	Medium	Small	Moderate	CM1, 2, 4, 5, 6, 9 OM1, 2, 3,4,5,6,8	Slight	Slight	Insubstantial
LT- LCA8	Former Quarry Landscape – Abandoned	Low	Small	Slight	CM1,3,4, 7,11 OM1,3	Slight	Slight	Insubstantial

ID No.	Landscape Resources / Landscape Characters	Sensitivity (Low, Medium, High)	Magnitude of Impact (Negligible, Small, Intermediate, Large)	Impact Significance Threshold BEFORE Mitigation (Insubstantial, Slight, Moderate,	Recommended Mitigation Measures	AFTER Mitigati	Residual Impact Significance Threshold AFTER Mitigation (Insubstantial, Slight, Moderate, Substantial) Construction Operation DAY 1 YEAR 10	
LT- LCA9	Former Quarry Landscape – Occupied	Medium	Large	Substantial) Substantial	CM1,3,4, 7,8,11 OM1,3,4,5,6,7,8	Substantial	Moderate	Slight

10.7 Visual Impact Assessment

Potential Sources of Visual Impacts

- 10.7.1 The nature and scope of the works have been described in Section 10.4.3 above. Sources of visual impacts during the Construction Phase and are listed below:
 - TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing;
 - TKO tunnel portal construction with major slope works;
 - Temporary haul road and barging point for removal of excavated slope and tunnel debris at the base of the tunnel portal.
 - Road P2 works including landscape deck in front of Ocean Shores, footbridges and cycle tracks;
 - Lam Tin tunnel portals and associated ventilation building in Ex-Cha Kwo Ling Kaolin Mine Site;
 - Lam Tin Interchange with major slope works, slip roads and noise enclosures;
 - Associated tunnel buildings at Lam Tin;
 - Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road;
 - The installation of associated utilities;
 - Temporary site areas, site offices, materials, plant and hoardings;
 - Temporary waterfront barging point and elevated conveyor for removal of excavated tunnel and site formation debris.
 - Sea and land construction traffic including lorries and barges;
 - Night time construction lighting;
 - Temporary road works;
 - Dust and construction debris.
- 10.7.2 Sources of visual impacts during the Operation Phase are as follows:
 - TKO Interchange with viaduct piers in sea waterbody and land reclamation for slip road landing;
 - TKO tunnel portal construction with major slope works;
 - Road P2 works including landscape deck in front of Ocean Shores, footbridges and cycletracks;
 - Lam Tin tunnel portals and associated ventilation building in Ex-Cha Kwo Ling Kaolin Mine Site;

- Lam Tin Interchange with major slope works, slip roads and noise enclosures;
- Associated tunnel buildings at Lam Tin;
- Road improvements along Cha Kwo Ling Road and junction with Yau Tong Road and Junction of Lei Yue Mun Road and Yau Tong Road;
- Increased road traffic;
- Road and architectural lighting

Nature and Magnitude of Visual Impacts before Mitigation during the Construction and Operation Phases

- 10.7.3 The significance of the visual impacts on VSRs before the implementation of mitigation measures during the Construction and Operation Phases are assessed in **Tables 10.7.1** for TKO and **Table 10.7.2** for Lam Tin below. Photomontages illustrating the permanent works before the implementation of mitigation measures are provided in **Figure No.s 10.8.5.1** to **10.8.5.13** and **10.8.7.1** to **10.8.7.9** (Note: Photomontage viewpoints and mitigation measures are described in more detail in Section 8).
- 10.7.4 For the purposes of this assessment, based on the latest available programme information it is assumed that planned developments will largely be constructed before the completion of the TKO-LT Tunnel (the exceptions being **TKO-OU1B** and **TKO-REC7**).

Significance of Visual Impacts before Mitigation during the Construction and Operation Phases - Existing VSRs in Tseung Kwan O

- 10.7.5 Existing Residents and workers in TKO Area 86 Comprehensive Development Area/LOHAS Park (**TKO-CDA1A**) have a Medium sensitivity and will experience a Small magnitude of impact during the Construction and Operation Stage due largely to the visual obstruction of the tower blocks of CDA1B to the west. This will result in **Slight/Moderate** visual impacts during the Construction Phase and Operation Phases before the implementation of mitigation measures.
- 10.7.6 Residents in planned new Residential Development at CDA in Area 86/LOHAS Park (**TKO-CDA1B**) have a High sensitivity and will experience a Large magnitude of impact during the Construction and Operation Stage due to their unobstructed views to the west. This will result in **Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.7 The receptor sensitivity of workers in TKO Sewage Treatment Works, Area 85 (**TKO-GIC1**) is Low and the magnitude of impact is Negligible due to visual obstruction by CDA1A and CDA1B. This VSR group will therefore experience **Insubstantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.8 **TKO-GIC2**: The receptor sensitivity of staff and students at the TKO Methodist Primary School and Evangelical College will be Low and the magnitude of impact will be Small during the Construction and Operation Phases due largely to the planned residential areas which will obstruct views of the project site. This VSR group will therefore experience **Slight** visual impacts during the Construction Phase and Operation Phases before the implementation of mitigation measures.

- 10.7.9 **TKO-GIC4**: The receptor sensitivity for Staff and Students at the Hong Kong Design Institute Campus is Low and the magnitude of impact will be Intermediate during the Construction and Operation Phases as views of much of the proposed development will be obstructed by planned G/IC, Open Space and Residential development to the south. This VSR group will therefore experience **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.10 **TKO-GIC5**: The receptor sensitivity for Workers at Hong Kong Movie City is Low and the magnitude of impact is Intermediate during the Construction Phase when views across the undeveloped TKO reclamation are available and will be Small during the Operation Phase once planned recreational facilities on the Area 77 Landfill are built including tree planting providing a degree of screening to the TKO-LT Tunnel. This VSR group will therefore experience **Slight/Moderate** visual impacts during the Construction Phase and **Slight** visual impacts during the Operation Phase before the implementation of mitigation measures.
- 10.7.11 Heung To Secondary School and GT College (**TKO-GIC6**) and Staff and Students at Caritas Bianchi College of Careers (**TKO-GIC7**): The receptor sensitivity for staff and students is Low and the magnitude of impact is Negligible due to visual obstruction of existing development in TKO to the east and natural topography to the south. These VSR groups will therefore experience **Insubstantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.12 Workers at Logistic Centre and Preliminary Treatment Works and Cargo Handling Basin (**TKO-GIC8**): The receptor sensitivity for these workers is Low and the magnitude of impact is Small. This VSR group will therefore experience **Slight** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.13 Workers in the planned GIC development in TKO Area 67 (**TKO-GIC9***): Receptor sensitivity for the workers will be Low and the magnitude of impact will be Large during construction due to the proximity of the roadworks, and they will be Intermediate during the Operation Phase with the absence of temporary construction impacts. Visual impacts will therefore be **Moderate** during the Operation Phase before the implementation of mitigation measures.
- 10.7.14 Patients and Staff at Planned Private Hospital and Students and Staff at Planned Fire Services Training School cum Driving Training School in Area 78 (**TKO-GIC10**): Receptor sensitivity for patients, staff and students will be Low and the magnitude of impact will be Small for both Construction and Operation Phases, given the distance of view and the screening effect of the topography and the planting on Area 77 Landfill between the VSRs and the TKO-LT Tunnel. Visual impacts will therefore be **Slight** during both the Construction and Operation Phases before the implementation measures.
- 10.7.15 Workers at the TKO Industrial Estate (**TKO-OU1A**): The receptor sensitivity for these VSRs is Low and the magnitude of visual impact will be Large due to the open panoramic views of the TKO interchange and tunnel portal resulting in **Moderate** visual impacts at the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.16 Visitors of Junk Bay Chinese Permanent Cemetery (**TKO-OU2**): The receptor sensitivity for the visitors is Low and the magnitude of visual impact will be Intermediate as the TKO interchange will be partially visible. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.

- 10.7.17 Users of Heng Fa Chuen Playground (**TKO-O1**) and Users of Siu Sai Wan Promenade (**TKO-O2**): The receptor sensitivity for these VSRs is High but the magnitude of visual impact will be Small due to the long viewing distance. This will result in **Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.18 Users of planned Open Space at TKO Area 68 (**TKO-O3***): The receptor sensitivity for these VSRs is High and the magnitude of visual impact will be Large due to the proximity of viewing distance and openness of view. This will result in **Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.19 Residents of Heng Fa Chuen (**TKO-R1**) and Residents and Users of Island Resort Residential Area and Promenade (**TKO-R8**): The receptor sensitivity for these VSRs is High and the magnitude of impact is Small due to the distance of view. This will result in **Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.20 Residents of Bauhinia Garden (**TKO-R2**): The receptor sensitivity for these VSRs is Medium due to the existing partial visibility. The magnitude of visual impact will be Small during the construction and operation due to the obstruction from planned development between the VSRs and the project site. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.21 **TKO-R3:** The receptor sensitivity for Residents at Ocean Shores (Phases I to III) is High and the magnitude of visual impact will be Large due to the elevated viewpoints and proximity to the TKO-LT Tunnel works. Full, panoramic views down onto the TKO interchange and associated roadworks will result in **Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.22 Residents of Metro Park (**TKO-R4**) and Residents of Park Central (**TKO-R5**): The receptor sensitivity for these VSRs is Medium due to the lack of good existing views and the magnitude of impact will be Intermediate during the Construction Phase and Operational Phases due largely to the obstruction from planned new development on the TKO reclamation which will screen much of the visual impacts of the TKO-LT Tunnel. This will result in **Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.23 Residents of the Grandiose and TKO Plaza (**TKO-R6**): The receptor sensitivity for these VSRs is Medium due to the poor quality of existing views towards the project site due to intervening planned development. The magnitude of impact will be Small during the Construction and Operational Phases due to the obstruction by the new intervening development on the TKO reclamation screening the visual impacts of the TKO-LT Tunnel. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.24 Residents of Oscar by the Sea (**TKO-R7**): The receptor sensitivity for these VSRs is Medium due to the poor quality of existing views towards the projects site due to intervening planned development. The magnitude of impact will be Negligible during the Construction Phase and Operational Phases due to the obstruction by the new intervening development on the TKO reclamation screening the visual impacts of the TKO-LT Tunnel. This will result in **Insubstantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.

- 10.7.25 Residents in Choi Ming Court (**TKO-R9**): the receptor sensitivity for these VSRs is Medium due to poor views of the project site and the magnitude of visual impact will be Small due to the partial screening of the TKO-LT Tunnel works by existing and planned new development to the south. The significance of visual impacts will be **Slight/Moderate** during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.26 Residents Chai Wan high-rise estates (**TKO-R10**): The receptor sensitivity for these VSRs is High due to their good existing views but the magnitude of impact is Small due largely to the distance of view. This will result in **Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.27 Residents in Kin Ming Estate (**TKO-R11**), and Residents in Shin Ming Estate (**TKO-R12**): The receptor sensitivity for these VSRs is Medium due to the poor quality of existing views and the magnitude of visual impact will be Negligible during the Construction and Operation Phases due to the screening effects of surrounding existing development and topography. The significance of visual impacts will be **Insubstantial** during the Construction and Operation Phases both before and after the implementation of mitigation measures.
- 10.7.28 Residents in MTRC TKO Station Residential Development (**TKO-R13**): The receptor sensitivity for these VSRs is Medium due to the poor quality of existing views which will be screened by planned new development on the reclamation to the south. The magnitude of impact will be Small. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.29 Residents in Planned Residential Developments in TKO Town Centre South reclamation OZP Zone R(A)2 (TKO-R14a*), OZP Zone R(A)3 (TKO-R14b*) and OZP Zone R(A)4 Areas a & b (TKO-R14c*): Receptor sensitivity for these VSRs is Medium due to the poor quality of existing views and the magnitude of impact will be Small due to the screening effect of planned development to the west and south between the VSRs and the TKO-LT Tunnel development. Visual impacts will therefore be Slight/Moderate during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.30 Residents in Planned Residential Developments on TKO Town Centre South reclamation OZP Zone R(A)5 (TKO-R14d*), OZP Zone R(A)6 Area (a), (b) & (c) East (TKO-R14e*), OZP Zone R(A)6 Area (a), (b) & (c) West (R14f*): Receptor sensitivity for these VSRs is High and the magnitude of impact will be Large given the open, unobstructed views west and south to the TKO interchange and reclamation and the relative proximity. Visual impacts will therefore be **Substantial** during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.31 Residents in upper floors of planned Residential Group E Development in Area 85 (**TKO-R15***): Receptor sensitivity for these VSRs will be Medium due to poor existing views towards project site and the magnitude of impact will be Small given the visual obstruction of LOHAS Park and CDA1B and future recreational facilities on Area 77 Landfill. Visual impacts will therefore be **Slight/Moderate** during both the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.32 Hikers along the High Junk Peak (Tiu Yue Yung) Country Trail in Clearwater Bay Country Park (**TKO-REC1**) and Hikers along the Wilson Trail to Devil's Peak and Chiu Keng Wan Shan (**TKO-REC2**): The receptor sensitivity for these VSRs is Medium and the magnitude of impact will be Small and Intermediate respectively due largely to the distance of view and the fact that the impacts will form only part of a much broader panoramic view

- observed from the ridgelines. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.33 Visitors to Lei Yue Mun Holiday Village, Lei Yue Mun Park (**TKO-REC3A**) and Visitors to the Hong Kong Museum of Coastal Defence (**TKO-REC3B**): The receptor sensitivity for these VSRs is Medium and the magnitude of impact is Small due largely to the distance of view. This will result in **Slight/Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.34 Hikers along Pottinger Trail and Pottinger Peak (**TKO-REC4**), Hikers at Mount Collinson (**TKO-REC5**), and Hikers at Mount Parker (**TKO-REC6**): The receptor sensitivity for these VSRs is Medium but the magnitude of impact is Negligible due to the distance of view. This will result in **Insubstantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.35 Seaborne Leisure Travellers in Junk Bay (**TKO-T1**): The receptor sensitivity for these VSRs is Medium and the magnitude of impact is Large due to the potential proximity of the view. This will result in **Moderate/Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.36 Seaborne Leisure Travellers along Lei Yue Mun and Tathong Channel (**TKO-T2**): The receptor sensitivity for these VSRs is Medium and the magnitude of impact is lintermediate due to the greater distance of view. This will result in **Moderate** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.37 Travellers along Wan Po Road (**TKO-T3**): The receptor sensitivity for these VSRs is Low and the magnitude of impact will be Small as views are largely obscured by the Area 77 landfill, the LOHAS Park CDA development and the TKO Industrial Estate. These VSRs will therefore experience **Slight** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.38 Travellers at TKO MTR Station and along Po Yap Road and Chui Ling Road (**TKO-T4**): The receptor sensitivity for these VSRs is Low and the magnitude of impact will be Large during the Construction Stage due to the proximity of the temporary works and will be reduced to Intermediate during the Operation Phase. This VSR group will therefore experience **Moderate** visual impacts during the Construction Phase and **Slight/Moderate** visual impacts during the Operation Phase before the implementation of mitigation measures.
- 10.7.39 Pedestrians on Footpath Link from Ocean Shores to Junk Bay Chinese Permanent Cemetery (**TKO-T5**): The receptor sensitivity for these VSRs is Medium and the magnitude of impact will be Large with close views of the TKO interchange and the TKO portal. This VSR group will experience **Moderate/Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.40 Travellers on new Southern Footbridge Crossing Eastern Channel (**TKO-T7***): Receptor sensitivity for these VSRs is Medium and the magnitude of impact will be Large given the open unobstructed views south and west to the TKO-LT Tunnel. Visual impacts will therefore be **Moderate/Substantial** during the Operation Phase before the implementation of mitigation measures.

Significance of Visual Impacts before Mitigation during the Construction and Operation Phases - Planned Future VSRs in Tseung Kwan O

- 10.7.41 For the purposes of this assessment, it is assumed that the following future planned developments will be constructed <u>after</u> the completion of the TKO-LT Tunnel. Assessment of significance of impact during the Construction Phase is therefore not applicable and neither is assessment of significance at Day 1 of the Operation Phase.
- 10.7.42 Workers in planned TKO Industrial Estate Extension (**TKO-OUIB**): Receptor sensitivity for these VSRs will be Low and the magnitude of impact will be Large given the open panoramic views towards the TKO-LT Tunnel. Visual impacts will therefore be **Moderate** during the Operation Phase before the implementation of mitigation measures.
- 10.7.43 Users of Planned Recreational Facilities at TKO Stage I Landfill in Area 77 (**TKO-REC7**): Receptor sensitivity for these VSRs will be Medium and the magnitude of impact will be Large given the open unobstructed views south and west to the TKO-LT Tunnel. Visual impacts will therefore be **Moderate/Substantial** during the Operation Phase before the implementation of mitigation measures.

Significance of Visual Impacts before Mitigation during the Construction and Operation Phases - Existing VSRs in Lam Tin

- 10.7.44 Workers in Yau Tong Industrial Area (**LT-C1**): The receptor sensitivity of these VSRs is Low and the magnitude of impact is Negligible due to the screening effect of the planned Yau Tong Bay CDA development to the north west. This VSR group will therefore experience **Insubstantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.45 Workers in Tai Koo Place and One Island East (LT-C2): The receptor sensitivity of these VSRs is Low and the magnitude of impact is Small due to the distance of view and the screening of most the Lam Tin Interchange by the ridge of land behind Cha Kwo Ling Village. This VSR group will therefore experience visual impacts of Slight significance during the Construction and Operational Phases before the implementation of mitigation measures.
- 10.7.46 Staff and Pupils of Schools East of EHC (LT-GIC1): The receptor sensitivity of these VSRs is Low and the magnitude of impact is Large due to the proximity of view and elevated viewpoint. This VSR group will therefore experience visual impacts of Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.47 Staff and pupils of School and Government facilities at Rehab Path (LT-GIC2): The receptor sensitivity for these VSRs is Low and the magnitude of impact is Negligible due to screening by existing topography and woodland. This VSR group will therefore experience Insubstantial visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.48 Residents of Ping Tin Estate and Hong Ngar Court (**LT-R3**), Residents of Yau Lai Estate (**LT-R4A**), Residents of Kwong Tin Estate and Hong Pak Court (**LT-R11**): The receptor sensitivity for these VSRs is High and the magnitude of impact is Large due to the clear elevated, fixed views of the project and proximity. This will result in **Substantial** visual impacts during the Construction and Operation Phases before the implementation of mitigation measures.

- 10.7.49 Residents of Yau Tong Estate and Yau Mei Court (LT-R4B): The receptor sensitivity for these VSRs is Medium due to poor existing views of the project site and the magnitude of impact is Small due to the obstruction of intervening development. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.50 Residents in Yau Tong The Canaryside and the Spectacle (**R5**): The receptor sensitivity for these VSRs is High and the magnitude of impact is Small due to the distance of view of the project and obstruction of intervening planned and existing development. This will result in visual impacts of **Moderate** significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.51 Residents at Sai Wan Ho (Lei King Wan, Grand Promenade, Les Saisons) (LT-R6A), Residents at Shau Kei Wan (Tung To Court, Tung Yuk Court and Aldrich Bay) (LT-R6B), Residents at Sai Wan Ho (Hing Tung Estate, Tung Hei Court, Tung Lam Court) (LT-R7), and Residents at Tai Koo Shing (LT-R8): The receptor sensitivity for these VSRs is Medium and the magnitude of impact is Small due to the distance of view and partial screening of the project site by landform and buildings. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.52 Residents at Cha Kwo Ling Village (LT-R9A), and Residents at Fan Wah Street (LT-R10): Whilst these VSRs are close to the project site, the receptor sensitivity for them is Medium and the magnitude of impact is Negligible primarily due to their lack of views of the project site as it is screened by the high ground behind Cha Kwo Ling Village. This will result in visual impacts of Insubstantial significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.53 Residents at Cha Kwo Ling housing developments west of interchange (LT-R9B):
 Receptor sensitivity for these VSRs will be High and the magnitude of impact will be Large given the proximity, and the panoramic elevated views over the Lam Tin Interchange.
 Visual impacts will therefore be **Substantial** during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.54 Residents at Laguna City (LT-R12) and Residents at Sceneway Garden (LT-R13): Whilst these VSRs are close to the project site, the receptor sensitivity for them is Medium and the magnitude of impact is Negligible due to their lack of views of the project site as it is screened by the high ground between. This will result in visual impacts of Insubstantial significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.55 Residents in Yau Tong Bay CDA development (**LT-CDA1**): Receptor sensitivity for these VSRs will be High and the magnitude of impact will be Large given the proximity and the panoramic elevated views over the Lam Tin Interchange. Visual impacts will therefore be **Substantial** during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.56 Hikers along Wilson Trails near Black Hill (LT-REC1A), and Hikers along Wilson Trail at Devil's Peak (LT-REC1B): The receptor sensitivity of these VSRs is Medium and the magnitude of impact is Small due to partial obstruction of views of the site by high rise building blocks and distance of view. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.

- 10.7.57 Hikers along Pottinger Trail and Pottinger Peak (LT-REC2), Hikers at Mount Collinson (LT-REC3), Hikers at Mount Parker (LT-REC4), and Hikers at Mount Butler (LT-REC5): The receptor sensitivity of these VSRs is Medium and the magnitude of impact is Negligible due to the distance of view and partial obstruction of views of the site by high rise building blocks and high ground behind Cha Kwo Ling Village. This will result in visual impacts of Insubstantial significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.58 Hikers at Braemar Hill Lookout (LT-REC6), Visitors of Lei Yue Mun Fort (Hong Kong Museum of Coastal Defence) (LT-REC7A), Visitors of Lei Yue Mun Observation Post (Hong Kong Museum of Coastal Defence) (LT-REC7B), and Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park (LT-REC8): The receptor sensitivity of, these VSRs is Medium and the magnitude of impact is Small due to the distance of view and partial obstruction of views of the site by high-rise building blocks and high ground behind Cha Kwo Ling Village. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.59 Users of Sai Tso Wan Recreation Ground and Tennis Courts (**LT-REC9**): Whilst these VSRs are close to the project site, the receptor sensitivity for is Low and the magnitude of impact is Negligible due to the screening effect of existing woodland. This will result in visual impacts of **Insubstantial** significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.60 Users of Yau Tong Road Playground (LT-O1): The receptor sensitivity for these VSRs is Medium and the magnitude of impact is Intermediate due to the partial screening effect of existing tree planting and advertising banners along the edges of the EHC. This will result in visual impacts of Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.61 Users of Quarry Bay Park (LT-O2), Visitors to Aldrich Bay Promenade (LT-O3) and Visitors of Sai Wan Ho Harbour Park (LT-O4): The receptor sensitivity for, these VSRs is Medium and the magnitude of impact will be Small due to the distance of view and partial screening effect of existing buildings along the Lam Tin waterfront and the high ground behind Cha Kwo Ling Village. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.62 Users of public open space on promenade (LT-O5*) and Users of planned open space north west of Lam Tin Interchange (LT-O6*): Receptor sensitivity for these VSRs will be Medium and the magnitude of impact will be Intermediate given the screening effect of the quarry landform in reducing potential views across the Lam Tin Interchange. Visual impacts will therefore be **Moderate** during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.63 Seaborne leisure travellers along Lei Yue Mun Channel (LT-T1): The sensitivity for these VSRs is Low and the magnitude of impact will be Intermediate due to the distance of view and partial screening effect of existing buildings along the Lam Tin waterfront and the high ground behind Cha Kwo Ling Village. This will result in visual impacts of Slight/Moderate significance during the Construction and Operation Phases before the implementation of mitigation measures.
- 10.7.64 Travellers along the Island Eastern Corridor (**LT-T2**): The receptor sensitivity is Low and the magnitude of impact will be Small due to the distance of view and partial screening

effect of existing buildings along the Lam Tin waterfront and the high ground behind Cha Kwo Ling Village. This will result in visual impacts of **Slight** significance during the Construction and Operation Phases before the implementation of mitigation measures.

10.7.65 Travellers on EHC approaches (**LT-T3**): The receptor sensitivity is Low and the magnitude of impact will be Intermediate due to the proximity of view and partial screening effect of existing trees, buildings and advertising hoardings along the south western side of the ExCha Kwo Ling Kaolin Mine Site. This will result in visual impacts of **Slight/Moderate** significance during the Construction and Operation Phases before the implementation of mitigation measures.

Significance of Visual Impacts before Mitigation during the Construction and Operation Phases - Planned Future VSRs in Lam Tin

10.7.66 There are no known planned future developments in the Lam Tin area that will be constructed <u>after</u> the completion of the TKO-LT Tunnel.

Table 10.7.1: Significance of Visual Impacts in the Construction and Operation Phases – TKO

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude of Impact (Negligible, Small, Intermediate, Large)		Receptor Sensitivity (Low, Medium, High)		Impact Significance Threshold Before Mitigation (Insubstantial, Slight, Moderate, Substantial)		Recommen ded Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial, Slight, Moderate, Substantial) Constructoperation		
		Construction	Operation	Construction	Operation	Construction	Operation		tion	DAY 1	YEAR 10
Existing VS	SRs in TKO										
TKO- CDA1A	Existing Residents and Workers in TKO Area 86 Comprehensive Development Area / LOHAS Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO- CDA1B*	Residents in planned new Residential Development at CDA in Area 86/LOHAS Park	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Substantial	Moderate/ Substantia	Moderate
TKO- GIC1	Workers in TKO Sewage Treatment Works, Area 85	Negligible	Negligible	Low	Low	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO- GIC2	Staff and students at TKO Methodist Primary School & Evangelical College	Small	Small	Low	Low	Slight	Slight	CM1,2,4,6 ,8,9,10 OM1 to 8	Slight	Slight	Insub- stantial
TKO- GIC4	Staff and students at Hong Kong Design Institute Campus	Intermediate	Intermediate	Low	Low	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO- GIC5	Workers at Hong Kong Movie City	Intermediate	Small	Low	Low	Slight/ Moderate	Slight	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO- GIC6	Staff and students at Heung To Secondary School	Negligible	Negligible	Low	Low	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude of Impact (Negligible, Small, Intermediate, Large)		Receptor Sensitivity (Low, Medium, High)		Impact Significance Threshold Before Mitigation (Insubstantial, Slight, Moderate, Substantial)		Recommen ded Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial, Slight, Moderate, Substantial) Construct Operation		
		Construction	Operation	Construction	Operation	Construction	Operation		tion	DAY 1	YEAR 10
	and GT College										
TKO-	Staff and students	Negligible	Negligible	Low	Low	Insubstantial	Insub-	N/A	Insub-	Insub-	Insub-
GIC7	at Caritas Bianchi						stantial		stantial	stantial	stantial
	College of Careers										
TKO-	Workers at	Small	Small	Low	Low	Slight	Slight	CM1, 2, 4,	Slight	Insub-	Insub-
GIC8	Logistics Centre							6, 7, 8, 9,		stantial	stantial
	and Preliminary							10			
	Treatment Works							OM1, 2,			
	and Cargo							3, 4, 5, 7			
	Handling Basin										
TKO-	Workers in planned	Large	Intermediate	Low	Low	Moderate	Slight/	OM1,2,4	Moderate	Slight/	Slight
GIC9*	GIC Development						Moderate	to 8		Moderate	
	at TKO Area 67										
ТКО-	Patients and staff at	Small	Small	Low	Low	Slight	Slight	CM1, 2, 4,	Slight	Insub-	Insub-
GIC10*	planned private							6, 7, 8, 9,		stantial	stantial
	hospital and							10			
	students and staff							OM1, 2,			
	at planned Fire							3, 4, 5, 7			
	Services Training										
	School cum										
	Driving Training										
	School in Area 78										
TKO-	Workers at TKO	Large	Large	Low	Low	Moderate	Moderate	CM1,2,4,6	Moderate	Slight/	Slight
OU1A	Industrial Estate							,7,8,9,10		Moderate	
								OM1 to 8			
TIVO	X7'.'4	T. 4 1'	T	т.	T .	C11: -1-4/	C1: .1.4/	CM1246	C1: .1.4/	GII . 1.4	G11 - 1-4
TKO-	Visitors of Junk	Intermediate	Intermediate	Low	Low	Slight/	Slight/	CM1,2,4,6	Slight/	Slight	Slight
OU2	Bay Chinese					Moderate	Moderate	,7,8,9,10	Moderate		
	Permanent							OM1,2,4			
	Cemetery							to 8			

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude of Impact (Negligible, Small, Intermediate, Large)		Receptor Sensitivity (Low, Medium, High)		Impact Significance Threshold Before Mitigation (Insubstantial, Slight, Moderate, Substantial)		Recommen ded Mitigation Measures	Residual Impact Significance Threshold After Mitigation (Insubstantial, Slight, Moderate, Substantial) Constructory Operation		
		Construction	Operation	Construction	Operation	Construction	Operation	1,100,501,05	tion	DAY 1	YEAR 10
TKO-O1	Users of Heng Fa Chuen Playground	Small	Small	High	High	Moderate	Moderate	CM1, 2, 4, 6, 7, 8, 9, 10 OM1, 2, 3, 4, 5, 7	Slight/ Moderate	Slight	Slight
TKO-O2	Users of Siu Sai Wan Promenade	Small	Small	High	High	Moderate	Moderate	CM1, 2, 4, 6, 7, 8, 9, 10 OM1, 2, 3, 4, 5, 7	Slight/ Moderate	Slight	Slight
TKO- O3*	Users of planned Open Space at TKO Area 68	Large	Large	High	High	Substantial	Substantial	CM1, 2, 4, 6, 7, 8, 9, 10 OM1, 2, 3, 4, 5, 7	Substantial	Moderate/ Substantia 1	Moderate
TKO-R1	Residents of Heng Fa Chuen	Small	Small	High	High	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight	Slight
TKO-R2	Residents of Bauhinia Garden	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO-R3	Residents of Ocean Shores (Phases I to III)	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Substantial	Moderate/ Substantia	Moderate
TKO-R4	Residents of Metro Town	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight/ Moderate	Slight
TKO-R5	Residents of Park Central	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight/ Moderate	Slight

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact ble, Small, ate, Large)	Receptor Sens Medium		Impact Sig Threshold Befo (Insubstant	ore Mitigation tial, Slight,	Recommen ded Mitigation	After Mitig Mo	ation (Insubst derate, Substa	
		Construction	Operation	Construction	Operation	Moderate, S Construction	Operation	Measures	Construc- tion	DAY 1	YEAR 10
TKO-R6	Residents of the Grandiose and TKO Plaza	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO-R7	Residents of Oscar by the Sea	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Insub- stantial	Insub- stantial	Insub- stantial
TKO-R8	Residents & users of Island Resort residential area and promenade	Small	Small	High	High	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight	Slight
TKO-R9	Residents in Choi Ming Court	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO-R10	Residents in Chai Wan high rise estates	Small	Small	High	High	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight	Slight
TKO-R11	Residents in Kin Ming Estate	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO-R12	Residents in Shin Ming Estate	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO-R13	Residents in MTRC TKO Station Residential Development	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Slight/ Moderate	Slight	Insub- substantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact le, Small, ate, Large)	Receptor Sens Medium		Impact Sig Threshold Befo (Insubstant	ore Mitigation ial, Slight,	Recommen ded Mitigation	After Mitiga Mod	pact Significar ation (Insubsta lerate, Substa	ntial, Slight, ntial)
		Constant discontinue	0	G	0	Moderate, S		Measures	Construc- tion	DAY 1	ration
TKO- R14a*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)2	Small Small	Operation Small	Construction Medium	Operation Medium	Construction Slight/ Moderate	Operation Slight/ Moderate	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Slight/ Moderate	Slight	YEAR 10 Insub- substantial
TKO- R14b*	Residents in planned Future residential Development on TKO Town Centre South reclamation OZP Zone R(A)3	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Slight/ Moderate	Slight	Insub- substantial
TKO- R14c*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)4 Areas (a) & (b)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Slight/ Moderate	Slight	Insub- substantial
TKO- R14d*	Residents in planned Residential Development on TKO Town Centre South reclamation OZP Zone R(A)5	Large	Large	High	High	Substantial	Substantial	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Substantial	Moderate/ Substantia l	Moderate

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact ble, Small, ate, Large)	Receptor Sens Medium		Impact Sig Threshold Befo (Insubstant Moderate, S	ore Mitigation tial, Slight,	Recommen ded Mitigation Measures	After Mitig	pact Significan ation (Insubsta lerate, Substar Ope	intial, Slight,
		Construction	Operation	Construction	Operation	Construction	Operation		tion	DAY 1	YEAR 10
TKO- R14e*	Residents in planned Residential Development on TKO Town Centre South reclamation R(A)6 Area (a), (b) & (c) East	Large	Large	High	High	Substantial	Substantial	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Substantial	Moderate/ Substantia I	Moderate
TKO- R14f*	Residents in planned Residential Development on TKO Town Centre South reclamation R(A)6 Area (a), (b) & (c) West	Large	Large	High	High	Substantial	Substantial	CM1,2,4,5 ,6,7,8,9,10 ,12 OM1,2,3, 4,5,6,7	Substantial	Moderate/ Substantia 1	Moderate
TKO- R15*	Residents in upper floors of planned Residential Group (E) Development in Area 85	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	N/A	Slight/ Moderate	Slight	Insub- stantial
TKO- REC1	Hikers along High Junk Peak (Tiu Yue Yung) Country Trail in Clear Water Bay Country Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
TKO- REC2	Hikers along the Wilson Trail to Devil's Peak and Chiu Keng Wan Shan	Intermediate	Intermediate	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Slight
TKO- REC3A	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Slight

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact ble, Small, ate, Large)	Receptor Sens Medium		Impact Sig Threshold Befo (Insubstant	ore Mitigation tial, Slight,	Recommen ded Mitigation	After Mitiga Mod	ntion (Insubsta lerate, Substa	ntial)
		Construction	Operation	Construction	Operation	Moderate, S Construction	Operation	Measures	Construc- tion	DAY 1	ration YEAR 10
TKO- REC3B	Visitors of H.K. Museum of Coastal Defence	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Slight/ Moderate	Slight	Slight
TKO- REC4	Hikers along Pottinger Trail and Pottinger Peak	Negligible	Negligible	Medium	Medium	Insub- stantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO- REC5	Hikers at Mount Collinson	Negligible	Negligible	Medium	Medium	Insub- stantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO- REC6	Hikers at Mount Parker	Negligible	Negligible	Medium	Medium	Insub- stantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
TKO-T1	Seaborne Leisure Travellers in Junk Bay	Large	Large	Medium	Medium	Moderate/ Substantial	Moderate/ Substantial	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Moderate/ Substantial	Moderate	Slight/ Moderate
TKO-T2	Seaborne Leisure Travellers along Lei Yue Mun and Tathong Channel	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight/ Moderate
ТКО-Т3	Travellers along Wan Po Road	Small	Small	Low	Low	Slight	Slight	CM1,2,4,6 ,7,8,9,10 OM1 to 8	Slight	Insub- stantial	Insub- stantial
TKO-T4	Travellers at TKO MTR Station and along Po Yap Road and Chui Ling Road	Large	Intermediate	Low	Low	Moderate	Slight/ Moderate	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate	Slight/ Moderate	Slight

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact de, Small, ate, Large)	Receptor Sens Medium		Impact Sig Threshold Befo (Insubstant Moderate, S	ore Mitigation ial, Slight,	Recommen ded Mitigation Measures	After Mitig	npact Significar gation (Insubsta derate, Substan Ope	antial, Slight,
		Construction	Operation	Construction	Operation	Construction	Operation		tion	DAY 1	YEAR 10
TKO-T5	Pedestrians on footpath link from Ocean Shores to Junk Bay Chinese Permanent Cemetery	Large	Large	Medium	Medium	Moderate/ Substantial	Moderate/ Substantial	CM1,2,4,6 ,7,8,9,10 OM1,2,4 to 8	Moderate/ Substantial	Moderate	Slight/ Moderate
TKO-T7*	Travellers on new Southern Footbridge crossing Eastern Channel	Large	Large	Medium	Medium	Moderate/ Substantial	Moderate/ Substantial	OM1 to 8	Moderate/ Substantial	Moderate	Slight/ Moderate
TKO- OU1B	Workers in planned TKO Industrial Estate Extension	N/A	Large	N/A	Low	N/A	Moderate	OM1 to 8	N/A	Moderate	Slight/ Moderate
TKO- REC7	Users of planned recreational facilities at TKO Stage I Landfill, Area 77	N/A	Large	N/A	Medium	N/A	Moderate/ Substanti al	OM1 to 8	N/A	Moderate	Slight/ Moderate

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

Table 10.7.2: Significance of Visual Impacts in the Construction and Operation Phases - Lam Tin

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude (Negligib Intermedia	le, Small,	Receptor Sens Medium		Threshold Bei	ignificance fore Mitigation ntial, Slight, Substantial)	Recommended Mitigation Measures	After Mitiga	pact Significand ation (Insubstar erate, Substant	tial, Slight,
		Construction	Operation	Construction	Operation	Construction	Operation	<u>-</u>	Constituction	DAY 1	YEAR 10
Existing	VSRs in Lam Ti										
LT-C1	Workers in Yau Tong Industrial Area	Negligible	Negligible	Low	Low	Insub- stantial	Insub- stantial	N/A	Moderate	Slight/ Moderate	Insub- stantial
LT-C2	Office workers in Taikoo Place and One Island East	Small	Small	Low	Low	Slight	Slight	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight	In- substantial	Insub- stantial
LT – GIC1	Staff and pupils of schools east of EHC	Large	Large	Low	Low	Moderate	Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight
LT – GIC2	Staff and pupils of School and Government facilities at Rehab Path	Negligible	Negligible	Low	Low	Insub- stantial	Insub- stantial	Not Required	Insub- stantial	In- substantial	Insub- stantial
LT- R3	Residents of Ping Tin Estate and Hong Ngar Court	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6,7,8, 9,10 OM1 to 8	Substantial	Moderate/ Substantial	Moderate
LT- R4A	Residents of Yau Lai Estate	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6,7,8, 9,10 OM1 to 8	Substantial	Moderate/ Substantial	Moderate
LT- R4B	Residents of Yau Tong Estate and Yau Mei Court	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact le, Small, ate, Large)	Receptor Sens Medium		Threshold Bef (Insubstan	ignificance fore Mitigation atial, Slight, Substantial)	Recommended Mitigation Measures	After Mitiga	pact Significand ation (Insubstan lerate, Substan Oper	ntial, Slight,
		Construction	Operation	Construction	Operation	Construction	Operation			DAY 1	YEAR 10
LT- R5	Residents in Yau Tong – The Canaryside and The Spectacle	Small	Small	High	High	Moderate	Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight
LT- R6A	Residents at Sai Wan Ho (Lei King Wan, Grand Promenade, Les Saisons)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT- R6B	Residents at Shau Kei Wan (Tung To Court, Tung Yuk Court and Aldrich Bay)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT- R7	Residents at Sai Wan Ho (Hing Tung Estate, Tung Hei Court, Tung Lam Court)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT- R8	Residents at Tai Koo Shing	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT- R9A	Residents at Cha Kwo Ling Village	Negligible	Negligible	Medium	Medium	Insub- stantial	Insub- stantial	N/A	In- substantial	In- substantial	Insub- stantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude (Negligib Intermedia	le, Small,	Receptor Sens Medium,		Threshold Bef (Insubstan	ignificance fore Mitigation atial, Slight, Substantial)	Recommended Mitigation Measures	After Mitiga	pact Significanc ation (Insubstant erate, Substant Oper	tial, Slight, ial)
		Construction	Operation	Construction	Operation	Construction	Operation	1		DAY 1	YEAR 10
LT – R9B*	Residents at Cha Kwo Ling housing developments west of interchange	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6,7,8, 9,10 OM1 to 8	Substantial	Moderate/S ubstantial	Moderate
LT- R10	Residents at Fan Wah Street	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	In- substantial	Insub- stantial
LT- R11	Residents at Kwong Tin Estate and Hong Pak Court	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6,7,8, 9,10 OM1 to 8	Substantial	Moderate/ Substantial	Moderate
LT- R12	Residents at Laguna City	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
LT- R13	Residents at Sceneway Garden	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insubstantial	Insub- stantial	Insub- stantial
LT- CDA1	Residents of Yau Tong Bay CDA development	Large	Large	High	High	Substantial	Substantial	CM1,2,4,6,7,8, 9,10 OM1 to 8	Substantial	Moderate/ Substantial	Moderate
LT - REC1 A	Hikers along Wilson Trail near Black Hill	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	In- substantial
LT - REC1 B	Hikers along Wilson Trail at Devil's Peak	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	In- substantial
LT – REC2	Hikers along Pottinger Trail and Pottinger Peak	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	Magnitude (Negligib Intermedia	le, Small,	Receptor Sens Medium,		Threshold Bef (Insubstan	ignificance fore Mitigation Itial, Slight, Substantial)	Recommended Mitigation Measures	After Mitiga	pact Significand tion (Insubstar erate, Substant Oper	tial, Slight,
		Construction	Operation	Construction	Operation	Construction	Operation			DAY 1	YEAR 10
LT – REC3	Hikers at Mount Collinson	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
LT – REC4	Hikers at Mount Parker	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
LT – REC5	Hikers at Mount Butler	Negligible	Negligible	Medium	Medium	Insubstantial	Insub- stantial	N/A	Insub- stantial	Insub- stantial	Insub- stantial
LT – REC6	Hikers at Braemar Hill Lookout	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT – REC7 A	Visitors of Lei Yue Mun Fort (H.K. Museum of Coastal Defence)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT – REC7 B	Visitors of Lei Yue Mun Observation Post (H.K. Museum of Coastal Defence)	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT – REC8	Visitors of Lei Yue Mun Holiday Village, Lei Yue Mun Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial
LT – REC9	Users of Sai Tso Wan Recreation Ground and Tennis Courts	Negligible	Negligible	Low	Low	In- substantial	In- substantial	N/A	In- substantial	In- substantial	In- substantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact le, Small, ate, Large)	Receptor Sens Medium		Threshold Bef (Insubstan	gnificance fore Mitigation itial, Slight,	Recommended Mitigation Measures	After Mitiga Mod	act Significand tion (Insubstar erate, Substant	ntial, Slight, tial)
		Construction	Operation	Construction	Operation	Construction	Substantial) Operation	-	Construction	DAY 1	ration YEAR 10
LT-O1	Users of Yau Tong Road Playground	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight
LT-O2	Users of Quarry Bay Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	In- substantial
LT-O3	Visitors to Aldrich Bay Promenade	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	In- substantial
LT-O4	Visitors of Sai Wan Ho Harbour Park	Small	Small	Medium	Medium	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	In- substantial
LT – O5*	Users of public open space on promenade	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight
LT - 06*	Users of planned open space north west of Lam Tin Interchange	Intermediate	Intermediate	Medium	Medium	Moderate	Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Moderate	Slight/ Moderate	Slight
LT-T1	Seaborne Leisure Travellers along Lei Yue Mun Channel	Intermediate	Intermediate	Low	Low	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10	Slight/ Moderate	Slight	Insub- stantial
LT - T2	Travellers along Island Eastern Corridor	Small	Small	Low	Low	Slight	Slight	CM1,2,4,6,7,8, 9,10	Slight	Insu- stantial	Insub- stantial

VSR Type & ID.	Key Visually Sensitive Receiver (VSR)	(Negligib	e of Impact le, Small, ate, Large)	Receptor Sens Medium		Threshold Bef (Insubstan	gnificance fore Mitigation itial, Slight,	Recommended Mitigation Measures	After Mitiga	pact Significanc tion (Insubstan erate, Substant	ntial, Slight,
						Moderate, S	Substantial)		Construction	Oper	ation
		Construction	Operation	Construction	Operation	Construction	Operation			DAY 1	YEAR 10
LT - T3	Travellers on Eastern Harbour Crossing approaches	Intermediate	Intermediate	Low	Low	Slight/ Moderate	Slight/ Moderate	CM1,2,4,6,7,8, 9,10 OM1 to 8	Slight/ Moderate	Slight	Insub- stantial

^{*}VSRs in developments planned to be completed before completion of TKO-LT Tunnel

10.8 Mitigation Measures

Mitigation of Landscape and Visual Impacts

10.8.1 The mitigation measures listed in **Tables 10.8.1** and **10.8.2** describe mitigation measures during the Construction and Operation Phases which if implemented may reduce the degree of impact of the landscape and visual impacts identified in earlier sections of this report and potentially enhance the landscape and visual amenity.

Construction Phase Mitigation Measures

10.8.2 Landscape and visual mitigation measures during the Construction Phase are listed and described in **Table 10.8.1** below.

Table 10.8.1: Construction Phase Mitigation Measures

ID No.	Construction Phase Mitigation Measures	Funding & Implementation Agency	Management & Maintenance Agency
CM1	Construction area and contractor's	CEDD (via	CEDD (via
	temporary works areas to be	Contractor)	Contractor)
	minimised to avoid impacts on		
	adjacent landscape.		
CM2	Reduction of construction period to	CEDD (via	CEDD (via
	practical minimum.	Contractor)	Contractor)
CM3	Topsoil, where the soil material	CEDD (via	CEDD (via
	meets acceptable criteria and where	Contractor)	Contractor)
	practical, to be stripped and stored		
	for re-use in the construction of the		
	soft landscape works. The Contract		
	Specification shall include storage		
	and reuse of topsoil as appropriate.		
CM4	Existing trees at boundary of site	CEDD (via	CEDD (via
	and retained trees within site	Contractor)	Contractor)
	boundary to be carefully protected		
	during construction. Detailed Tree		
	Protection Specification shall be		
	provided in the Contract		
	Specification, under which the		
	Contractor shall be required to		
	submit, for approval, a detailed		
	working method statement for the		
	protection of trees prior to		
	undertaking any works adjacent to		
	all retained trees, including trees in		
	contractor's works areas. (Tree		
	protection measures will be detailed		
	at Tree Removal Application		
CM5	stage).	CEDD (via	CEDD (via
CIVIS	Trees unavoidably affected by the works shall be transplanted where	CEDD (via Contractor)	CEDD (via Contractor)
	practicable. Where possible, trees	Contractor)	Contractor)
	should be transplanted direct to		
	permanent locations rather than		
	permanent locations rather than		

ID No.	Construction Phase Mitigation Measures	Funding & Implementation Agency	Management & Maintenance Agency
	temporary holding nurseries. A detailed tree transplanting specification shall be provided in the Contract Specification and sufficient time for preparation shall be allowed in the construction programme.		
CM6	Advance screen planting of fast growing tree and shrub species to noise barriers and hoardings. Trees shall be capable of reaching a height >10m within 10 years.	CEDD (via Contractor)	CEDD (via Contractor)
CM7	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material.	CEDD (via Contractor)	CEDD (via Contractor)
CM8	Control of night-time lighting by hooding all lights and through minimisation of night working periods.	CEDD (via Contractor)	CEDD (via Contractor)
СМ9	Screening of works areas with hoardings with appropriate colours compatible with the surrounding area	CEDD (via Contractor)	CEDD (via Contractor)
CM10	Avoidance of excessive height and bulk of site buildings and structures	CEDD (via Contractor)	CEDD (via Contractor)
CM11	Limitation of run-off into freshwater streams, ponds and sea areas	CEDD (via Contractor)	CEDD (via Contractor)
CM12	Minimise area of reclamation and design the edges sensitively to tie in with adjacent coastline character	CEDD (via Contractor)	CEDD (via Contractor)

Operation Phase Mitigation Measures

10.8.3 Landscape and visual mitigation measures during the Operation Phase are listed and described below in **Table 10.8.2** below.

Table 10.8.2: Operation Phase Mitigation Measures

ID No.	Operation Phase Mitigation Measures	Implementation Agency	Maintenance/ Management Agency
OM1	Compensatory Tree Planting for all felled trees to the satisfaction of relevant Government Departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process.	CEDD (via Contractor)	As per ETWB(W) 2/2004 Along non- expressway public roads – LCSD Within expressway boundary (ie route 6) – HyD
OM2	Screen tree planting along the site boundary featuring trees capable of reaching a height >10m within 10 years. Offsite screen planting by agreement may also be considered should space within the site be insufficient.	CEDD (via Contractor)	As per ETWB(W) 2/2004 Along non- expressway public roads – LCSD Within expressway boundary (ie route 6) – HyD
OM3	Slope greening works on all disturbed, new or reinstated slopes including trees, shrubs, groundcover and climbers. For slopes which are not feasible for planting, sensitive design of hard landscape treatment with appropriate material and color should be provided. The use of unobtrusive colours and tones for all hard elements on slopes (concrete channels, access stairs, railings, catch pits etc) including pigmented concrete and paints.	CEDD (via Contractor)	As per ETWB(W) 2/2004 and DEVB TC (W) 06/2011; Maintenance of Man- made Slopes and Emergency works to Deal with Landslides
OM4	Sensitive design of buildings and structures in terms of scale, form, height and bulk (visual weight)	CEDD (via Contractor)	Building Operator
OM5	Use appropriate (visually unobtrusive and non-reflective) building materials and colours in buildings and structures.	CEDD (via Contractor)	Building Operator
OM6	Streetscape and highway elements including paving, signage, street furniture, lighting etc. sensitively designed in a manner that responds to the local context, and minimises	CEDD (via Contractor)	As per ETWB(W) 2/2004 Features associated with public road safety, paving, in-

ID No.	Operation Phase Mitigation Measures	Implementation Agency	Maintenance/ Management Agency
	potential negative landscape and visual impacts. Lighting units to be directional and minimise unnecessary light spill.		situ planters and street lighting – HyD; Street furniture & amenity lighting - CEDD
OM7	Greening measures on elevated road sections.	CEDD (via Contractor)	As per ETWB(W) 2/2004 - HyD on expressways; LCSD on non- expressways
OM8	Sensitive design of footbridges, noise barriers and enclosures with greening (screen planting/climbers/planters) and chromatic measures.	CEDD (via Contractor)	As per ETWB(W) 2/2004 – hardworks elements CEDD; softworks elements by LCSD
ОМ9	Additional greening measures for streetscape and building associated with infrastructure for further enhancement and optimization of the overall greening effect within the Project Area.	CEDD (via Contractor)	As per ETWB(W) 2/2004 – hardworks elements CEDD; softworks elements by LCSD

10.8.4 The proposed mitigation measures are illustrated on the conceptual landscape plans in **Figure No.s 10.8.1 to 10.8.4.**

Environmental Monitoring and Audit Requirements

Construction Phase

10.8.5 It is recommended that a professionally qualified Resident Site Landscape Architect supervises and monitors the construction phase landscape and visual mitigation measures. This is necessary to ensure the minimisation of the works footprint, to ensure that topsoil is saved, to ensure that those existing trees earmarked for retention on site or transplanting are protected and to monitor advance screen planting works and the effectiveness of temporary screen hoardings. Regular site inspections should be undertaken to closely monitor all these aspects of the work.

Operational Phase

10.8.6 During the operational phase, landscape and visual mitigation measures should be monitored by the Environmental Team and Independent Environmental Checker during the first 10 years to check that the intended mitigation effects are realised. Regular monitoring should be undertaken to ensure that the landscape and visual mitigation measures have been implemented, are effective and are being managed and maintained. The compensatory tree planting required to offset the loss of existing trees should be checked, and the additional planting works for screening, slope stabilisation and amenity purposes. Planting must be

established and sustainable and provide long term landscape and visual mitigation. Hardworks elements that have been provided as part of the new works or as the reinstatement of impacted works should also be monitored and checked that they are being maintained and are achieving their mitigation function.

Photomontages

- 10.8.7 Photomontages have been developed to highlight the key mitigation measures introduced to reduce residual visual impacts of above-ground and sea structures. The locations of the viewpoints at TKO and LT for the photomontages can be seen on **Figures 10.8.5.1** and **10.8.7.1** respectively. Viewpoints were selected to provide representative examples of the "worst case scenario" in terms of visual impacts of the project. The photomontages illustrate the project works for the four scenarios listed below:
- Existing Condition;
- Day 1 without Mitigation Measures;
- Day 1 with Mitigation Measures;
- Year 10 with Mitigation Measures.

Photomontage from VSR TKO-R1 to TKO Interchange (Figure no.s 10.8.5.2 to 10.8.5.3)

10.8.8 This viewpoint from Heng Fa Chuen was selected as representative of views from the highly sensitive residential VSR groups on Hong Kong Island. This is the worst case scenario as it is the closest of the Hong Kong Island VSRs and also has direct views of the TKO Interchange in Junk Bay. The photograph was taken on the waterfront promenade at an elevation of approximately 5m m.p.d. (access to the residential towers to take photographs from a higher viewpoint was not permitted). This viewpoint is also representative of VSR group TKO-O1 and TKO-REC3B.

Photomontage from VSR TKO-R3 to TKO Interchange (Figure no.s 10.8.5.12 to 10.8.5.13)

10.8.9 This viewpoint from Ocean Shores was selected as representative of views from highly sensitive residential VSR groups along the western side of Junk Bay overlooking TKO Interchange and the interface of the TKO tunnel portal with the existing hillsides. The photograph was taken from the roof of Ocean Shores at an elevation of approximately 180m m.p.d. which gives the maximum view and a worst case scenario for residents in the upper floors.

Photomontage from VSR TKO-R5 to TKO Interchange (Figure no.s 10.8.5.4 to 10.8.5.5)

10.8.10 This viewpoint from Park Central was selected as representative of views from highly sensitive residential VSR groups along the southern edge of TKO overlooking the new reclamation extension area with the future road works on the and the TKO interchange in Junk Bay beyond. The photograph was taken from the roof of Park Central at an elevation of approximately 180m m.p.d. which gives the maximum view and a worst case scenario for residents in the upper floors.

Photomontage from VSR TKO-CDA1 to TKO Interchange (Figure no.s 10.8.5.6 to 10.8.5.7)

10.8.11 This viewpoint represents the outlook from the planned waterfront residential blocks in CDA1A (LOHAS Park). It was taken from one of the existing residential blocks on the east side of LOHAS Park at an elevation of approximately 180m m.p.d. The viewpoint has been zoomed in to give a representative view from the planned new waterfront blocks on the west of the site which will represent the worst case scenario. This VSR group is the most sensitive on the eastern side of Junk Bay and has direct panoramic views across the entire TKO side of the project including the TKO interchange, the TKO tunnel portal and the Road P2 reclamation.

Photomontage from VSR TKO-REC1 to TKO Interchange (Figure no.s 10.8.5.8 to 10.8.5.9)

10.8.12 This is a representative viewpoint for another important VSR group (recreational hikers in surrounding Country Parks) and the location on High Junk Peak (Tiu Yue Yung) at 344m m.p.d. is the focal viewpoint from the High Junk Peak Country Trail and as such represents the worst case scenario. Recreational hikers will have direct panoramic views across the entire TKO side of the project including the TKO interchange, the TKO tunnel portal and the Road P2 reclamation.

Photomontage from VSR TKO-REC2 to TKO Interchange (Figure no.s 10.8.5.10 to 10.8.5.11)

10.8.13 This is a representative viewpoint for hikers along the western view shed of TKO and the location on Devil's Peak at 222m m.p.d is the principal viewpoint from the Wilson Trail. It has direct panoramic views to the north and east across Junk Bay which will include part of the TKO interchange.

Photomontage from VSR LT-T1 to Lam Tin Interchange (Figure no.s 10.8.7.2 to 10.8.7.3)

10.8.14 This is a representative viewpoint for seaborne travellers in Lei Yue Mun Channel and also VSRs along the Hong Kong Island Waterfront. The photograph was taken from a ferry (at approximately 3m m.p.d.) and as seaborne travellers approach the project site more closely than VSRs on the Hong Kong waterfront, this is considered the worst case scenario. Viewers have an extensive view of the Lam Tin Interchange and the greening mitigation measures employed on the surrounding quarry slopes.

Photomontage from VSR LT-GIC1 to Lam Tin Interchange (Figure no.s 10.8.7.4 to 10.8.7.5)

10.8.15 This is a representative viewpoint for VSRs in the school east of the EHC and is taken from an elevation of approximately 40m m.p.d. Staff and pupils will have a panoramic view west across the EHC towards the Lam Tin Interchange. Due to its proximity and elevation it represents a worst case scenario for viewers to the east of the interchange.

Photomontage from VSR LT-R5 to Lam Tin Interchange (Figure no.s 10.8.7.6 to 10.8.7.7)

10.8.16 This is a representative viewpoint for highly sensitive VSR groups in high-rise residential developments to the east. The elevation of the viewpoint is approximately 125m m.p.d. Due to the elevated viewpoint, residents will have panoramic views to the west over the Lam Tin

A=COM 10-125 March 2013

Interchange and this therefore represents a worst case scenario. It is likely that this VSR group will increase in future as more residential redevelopment takes place.

Photomontage from VSR LT-R4 to Lam Tin portal area (Figure no.s 10.8.7.8 to 10.8.7.9)

10.8.17 This is a representative viewpoint for highly sensitive VSR groups in high-rise residential developments to the north. The photograph was taken from Yau Lai Estate and the elevation of the viewpoint is approximately 150m m.p.d. Residents will have elevated panoramic views to the south over the Lam Tin Interchange and this therefore represents a worst case scenario.

10.9 Evaluation of Residual Impacts

Prediction of Significance of Landscape and Visual Impacts

10.9.1 The potential significance of the landscape and visual impacts during the construction and operation phases, before and after mitigation, are provided in **Tables 10.6.3**, **10.6.4**, **10.7.1** and **10.7.2**. The assessment has adopted the methodology described in Section 10.3 and assumes that the assessed design is implemented and that the mitigation measures identified in **Tables 10.8.1** and **10.8.2** are implemented and that the full effects of the soft landscape mitigation measures would be realized after 10 years. The residual landscape and visual impacts of the works after the Construction Phase and during the Operational Phase are summarised below. Residual Landscape Impacts at Year 10 at TKO and LT are mapped on **Figure No.s 10.9.1**, **10.9.3** and **10.9.2**, **10.9.4** respectively. Residual Visual Impacts at Year 10 at TKO and LT are mapped on **Figure No.s 10.9.7** and **10.9.8**, **10.9.9** respectively.

Residual Landscape Impacts at TKO

- 10.9.2 For the Junk Bay sea water body (**TKO-LR1**) the Moderate impacts experienced during the Construction Phase after the implementation of mitigation measures due to the loss of sea waterbody area of Junk Bay would reduce to **Slight** at Day 1. This will be due primarily to the effects of reducing the area of reclamation and sensitive design of the elevated road structure and piers. As planting on these elements will not mitigate the loss of sea waterbody area, the residual impact will remain the same at Year 10.
- 10.9.3 For the natural rocky shore along Chiu Keng Wan Coastline (**TKO-LR2**) the Moderate impacts experienced during the Construction Phase after the implementation of mitigation measures due to the loss of approximately 180m of natural coastline would be reduced to **Slight** at Day 1 and Year 10 of the Operational Phase following mitigation. This will be due primarily to the effects of reducing the area of impact. As natural coastline cannot be reinstated, the residual impact remains the same at Year 10.
- 10.9.4 For the amenity / roadside planting on modified slopes along Road D4 and Road P2 (**TKO-LR3D**) the Moderate impacts experienced during the Construction Phase after the implementation of mitigation measures would stay as **Moderate** at Day 1 and reduce to **Slight** at Year 10 of the Operational Phase due to compensatory roadside tree planting which will progressively mature.
- 10.9.5 For the grassland/ shrubland mosaic at Chiu Keng Wan Shan (**TKO-LR5A**) the Moderate impacts experienced during the Construction Phase after the implementation of mitigation measures due to the loss of approximately 3ha of area due to the construction of the tunnel portal slopes would be reduced to **Slight** at Day 1 and remain as **Slight** at Year 10 of the Operational Phase following mitigation. The reason there is no change with time is that the nature of the compensatory planting is different from that of the original resource (climbers and shrubs rather than natural grassland/shrubland mosaic). Whilst the proposed planting will provide greening to the new slopes it will not be a continuous cover as per the existing condition.
- 10.9.6 For streams at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan (**TKO-LR6B**), Moderate impacts during construction will be reduced to **Slight** at Day 1 due to reinstatement of adjacent planting. Impacts will reduce to **Insubstantial** at Year 10 as the natural system within the stream course re-establishes.

- 10.9.7 All the other landscape resources identified at TKO (TKO-LR3A, TKO-LR3B, TKO-LR3C, TKO-LR4, TKO-LR5B, TKO-LR6A, TKO-LR7, TKO-LR8, TKO-LR9) will experience Insubstantial Residual Impacts at Day 1 and Year 10 respectively regardless of mitigation measures.
- 10.9.8 For the Junk Bay Inshore Water Landscape (**TKO-LCA1**) the Substantial impacts experienced after the implementation of mitigation measures during the Construction Phase will be reduced to **Moderate** at Day 1 due to the absence of temporary construction works and plant and due to the positive effects of mitigation measures, particularly the sensitive design of structures and finishes. These impacts stay as **Moderate** at Year 10 because the planting elements on the interchange and viaducts over the water areas will not have a significant effect in further mitigating the impacts.
- 10.9.9 For Chiu Keng Wan Coastal Upland and Hillside Landscape (TKO-LCA3), mixed Modern Comprehensive Urban Development Landscape (TKO-LCA4) and the reclamation/ ongoing Major Development Landscape at proposed Tseung Kwan O Town Centre south Moderate impacts will be experienced after the implementation of (TKO-LCA5), mitigation measures during the Construction Phase. Chiu Keng Wan Coastal Upland and Hillside Landscape (TKO-LCA3) will stay as Moderate at Day 1 as the positive effects of mitigation measures, particularly the mitigation planting on the tunnel portal slopes and the green roof of the tunnel portal building will not have established sufficiently to reduce the significance. As the slope greening measures on the tunnel portal slopes integrate the portal into the surrounding landscape character area, the residual impact will be reduced to **Slight** by Year 10 of the Operational Phase. During the Operation Stage, the mixed Modern Comprehensive Urban Development Landscape (TKO-LCA4) and the reclamation/ ongoing Major Development Landscape at proposed Tseung Kwan O Town Centre south (TKO-LCA5) will experience Slight residual impacts at Day 1 due to the positive effects of mitigation measures and be reduced to Insubstantial at Year 10 by the effects of the maturing planting works.
- 10.9.10 For the remaining Landscape Character Areas (**TKO-LCA2**, **TKO-LCA6**, **TKO-LCA7**), **Insubstantial** impacts will be experienced before the implementation of mitigation measures due to the construction of the TKO Interchange in Junk Bay and it will remain as **Insubstantial** at Day 1 and Year 10 of the Operational Phase regardless of mitigation.

Residual Landscape Impacts at Lam Tin

- 10.9.11 The following residual impacts are based on the cumulative impact of the TKO-LT Tunnel and the concurrent CBL.
- 10.9.12 Amenity/roadside planting/vegetation on modified slopes at Former Quarry (LT-LR8B) will experience the same Substantial impacts after the implementation of mitigation measures during the Construction Phase due to the necessity of felling a minimum number of existing trees. The impact of the loss of large numbers of existing trees within the ex Cha Kwo Ling Kaolin Mine Site will stay as Substantial at Day 1 even with the reinstatement of the planting as it will be immature and not yet provide significant mitigation effect. This will have reduced to Moderate by year 10 of the Operational Phase due to the maturing of the planting. It is to be expected that the residual impact will continue to decline as the planting further matures with age.
- 10.9.13 All other Landscape Resources LT-LR1, LT-LR2, LT-LR3, LT-LR4, LT-LR5, LT-LR6, LT-LR7, LT-LR8A, LT-LR9A and LT-LR9B will experience Insubstantial residual impacts at Year 10 of the Operation Phase.

- 10.9.14 The Former Quarry Landscape (occupied) (LT-LCA9), will experience the same Substantial impacts after the implementation of mitigation measures during the Construction Phase due to the necessity of felling a minimum number of existing trees. However, peripheral tree screens will be maintained to mitigate initial impacts. In addition, the central area of the LCA is open and the works will not have a detrimental effect on this portion. The impact on landscape character within the ex Cha Kwo Ling Kaolin Mine Site will be reduced to Moderate at Day 1 due to extensive compensatory planting and sensitive design of road and associated building elements including noise enclosures. This will have reduced to Slight by year 10 of the Operational Phase due to the maturing of the planting. It is to be expected that the residual impact will continue to decline as the planting further matures with age.
- 10.9.15 All remaining Landscape Character Areas including LT-LCA1, LT-LCA2, LT-LCA3, LT-LCA4, LT-LCA5, LT-LCA6, LT-LCA7 and LT-LCA8 will experience Insubstantial residual impacts at Year 10 of the Operation Phase.

Residual Visual Impacts at Tseung Kwan O

- 10.9.16 The following residual impacts are based on the cumulative impact of the TKO-LT Tunnel and the concurrent CBL.
- 10.9.17 The existing VSRs with the highest residual visual impacts at Year 10 include the Eesidents and workers in TKO Area 86/LOHAS Park (TKO-CDA1B). They will experience residual impacts of Moderate significance at Year 10 after mitigation measures due to the wide unobstructed views towards the site. Residents in Ocean Shores (TKO-R3) will experience residual visual impacts of Moderate significance in Year 10 due to their close proximity and unobstructed outlook over the site. Also, Residents in planned high rise estates along the southern edge of the TKO reclamation (TKO-R14d, TKO-R14e and TKO-R14f) and Rrecreational users of the planned open space at Area 68 (TKO-O3) will experience residual visual impacts of Moderate significance in Year 10 due to their close proximity and unobstructed outlook towards the site.
- 10.9.18 Seaborne leisure travellers in Junk Bay (**TKO-T1**) will experience residual visual impacts of **Slight/Moderate** significance at Year 10 after mitigation measures due to the potentially close low level views of the elevated interchange and reclamation. Pedestrians on the footpath link from Ocean Shores to Junk Bay Chinese Permanent Cemetery (**TKO-T5**) will also experience residual visual impacts of **Slight/Moderate** significance at Year 10 after mitigation measures due to the proximity to the TKO Portal and unobstructed views of the TKO Interchange and Road P2 reclamation.
- 10.9.19 Users of planned recreational facilities at TKO Stage 1 Landfill, Area 77 (**TKO-REC7**) and Users of the footbridge crossing the Eastern Channel (**TKO-T7***) will experience residual impacts of **Slight/Moderate** significance at Year 10 after mitigation measures due to their wide unobstructed views towards the site.
- In the TKO area, Travellers at the TKO MTR Station and along Po Yap Road and Chui Ling Road (TKO-T4), Residents of Metrotown (TKO-R4), Park Central (TKO-R5), Workers in the planned GIC Development at TKO Area 67 (TKO-GIC9), Existing and planned workers at TKO Industrial Estate (TKO-OU1A and OU1B respectively), Visitors to JBPCC (TKO-OU2), hikers on the Wilson Trail (TKO-REC2) will experience residual visual impacts of Slight significance at Year 10 after mitigation measures.
- 10.9.21 On Hong Kong Island, Residents of Heng Fa Chuen (**TKO-R1**) and Users of Heng Fa Chuen Playground (**TKO-O1**), Users of Siu Sai Wan promenade (**TKO-O2**), Residents &

users of Island Resort residential area and promenade (**TKO-R8**), Residents in Chai Wan high rise estates (**TKO-R10**), Visitors of Lei Yue Mun Holiday Village/Lei Yue Mun Park and the H.K. Museum of Coastal Defence (**TKO-REC3A** and **REC3B** respectively), and Seaborne leisure travellers in Lei Yue Mun and Tathong Channel (**TKO-T2**) will experience residual visual impacts of **Slight** significance at Year 10 after mitigation measures.

- 10.9.22 All remaining VSRs will experience residual visual impacts of **Insubstantial** significance at Year 10 after mitigation measures.
- 10.9.23 More detailed descriptions for each of the VSRs identified in the report as providing residual visual impacts is provided below. The residual impacts are based on the cumulative impact of the TKO-LT Tunnel and the concurrent CBL.
- 10.9.24 **TKO-CDA1B**: Following the implementation of mitigation measures residents and workers in the planned development at TKO Area 86 CDA/LOHAS Park will still experience Substantial visual impacts during the Construction Phase as they will have unobstructed views of the project site and the highly visible temporary impacts. During the Operation Phase, the VSR group will experience **Moderate/Substantial** visual impacts at Day 1 due to the absence of the temporary construction impacts and the positive effects of the mitigation measures including design forms, finishes and planting works. At Year 10, the maturing of the mitigation planting will reduce residual visual impacts to **Moderate**.
- 10.9.25 **TKO-O3*:** Following the implementation of mitigation measures users of planned recreational facilities at Open Space at TKO Area 68 will still experience Substantial visual impacts during the Construction Phase due to the proximity and scale of the development and unobstructed views towards it. The visual impacts will be reduced to **Moderate/Substantial** at Day 1 of the Operational Phase due to the absence of temporary construction plant and the positive effects of the mitigation measures including design forms, finishes and planting works. At Year 10 visual impacts will be reduced further to **Moderate** significance due to the maturing mitigation planting, in particular on the TKO tunnel portal and the Road P2 reclamation.
- 10.9.26 **TKO-R3:** after the implementation of mitigation measures residents at Ocean Shores will still experience Substantial visual impacts during the Construction Phase as mitigation measures will not be able to significantly reduce the degree of visual impact caused by temporary construction activity and plant. These visual impacts will be reduced to **Moderate/Substantial** at Day 1 due to the absence of temporary construction impacts and the positive effects of planting and paving of previously exposed surfaces and the use of sensitive design and finishes for structures. By Year 10 the residual visual impact will be reduced to **Moderate** due to the extensive mature planting works on the reclamation area, landscape deck, roadsides and elevated viaducts. The degree of impact will also be lessened by the integration of the project into the new planned context of the TKO Town Centre South extension which includes ground level public open space (TKO-O3).
- 10.9.27 **TKO-R14d***, **TKO-R14e*** and **TKO-R14f***: Following the implementation of mitigation measures residents in planned new developments on the TKO Town Centre South Reclamation will experience Substantial visual impacts during the Construction Phase following mitigation due to their unobstructed views of temporary construction plant and activity within Junk Bay, on the new Road P2 reclamation area and at TKO tunnel portal. These visual impacts will be reduced to **Moderate/Substantial** at Day 1 following completion of the works and removal of temporary construction impacts and the positive effects of mitigation planting and hardworks design and finishes. The residual visual

AECOM 10-130 March 2013

impacts will be further reduced to **Moderate** at Year 10 due to the effect of maturing planting on the elevated interchange viaducts, on the reclamation and tunnel portal.

- 10.9.28 **TKO-T1:** After the implementation of mitigation measures seaborne travellers in Junk Bay will experience Moderate/Substantial visual impacts during the Construction Phase due to on-going construction activity and plant including cranes, scaffolding and barges. These visual impacts will be reduced to **Moderate** at Day 1 due largely to the disappearance of temporary construction works, their replacement by the completed works which will incorporate visual mitigation measures including planting and sensitive design of form, and finishes. The effect of maturing planting on the elevated interchange viaducts, on the reclamation and tunnel portal will progressively integrate the development throughout the Operational Phase resulting in **Slight/Moderate** residual visual impacts at Year 10.
- 10.9.29 **TKO-T5:** Following the implementation of mitigation measures pedestrians on the JBCPC footpath will experience Moderate/Substantial visual impacts during the Construction Phase as the viewing distance will be very close and mitigation measures will have little overall effect in reducing the effects of the temporary construction impacts. During the Operation Phase, the VSR group will experience **Moderate** visual impacts at Day 1 once the completed project is viewed with the positive effects of mitigation measures including greening of the tunnel portal slopes, reclamation area and sensitive design and finishes of highway structures and buildings. The planting works will progressively soften the tunnel portal and reclamation area resulting in **Slight/Moderate** residual visual impacts at Year 10.
- 10.9.30 **TKO-T7:** Following the implementation of mitigation measures pedestrians on the new Southern Footbridge crossing the Eastern Channel will experience visual impacts of Moderate/Substantial significance during construction due to the clear views of the works to the south. This will be reduced to **Moderate** at Day 1 with views of the completed works with the positive effects of mitigation measures including aesthetic design of structures, finishes and planting. Residual visual impacts at Year 10 will be reduced to **Slight/Moderate** due to the effects of maturing mitigation planting.
- 10.9.31 **TKO-GIC9*:** Following the implementation of mitigation measures future workers in the planned G/IC development in TKO Area 67 will experience Moderate visual impacts during the Construction Phase due to the temporary construction impacts. These VSRs will only experience the adjacent road works as views to the south will largely be screened from view by planned residential development to the south. Visual impacts will be reduced to **Slight-Moderate** at Year 1 due to mitigation measures, primarily roadside planting and hard landscape treatments and aesthetic design of footbridges. At Year 10 the effects of mature planting on the roadsides will reduce residual visual impacts to **Slight**.
- 10.9.32 **TKO-OU1A:** After the implementation of mitigation measures workers in TKO Industrial Estate will experience Moderate visual impacts during the Construction Phase due to the temporary construction impacts required to construct the interchange, reclamation and tunnel portal. These will be reduced to **Slight/Moderate** at Day 1 once the temporary impacts have ceased and views of the sensitively designed permanent TKO-LT structures and finishes and associated planting are available. The residual visual impacts will be further reduced to **Slight** at Year 10 due to the maturing planting on tunnel portal and reclamation.
- 10.9.33 **TKO-OU2:** After the implementation of mitigation measures visitors and workers at Junk Bay Chinese Permanent Cemetery will experience Slight/Moderate visual impacts during the Construction Phase. These visual impacts will be reduced to **Slight** at Day 1 once the temporary impacts of construction works including cranes and barges have disappeared.

A=COM 10-131 March 2013

This will be due to the positive effects of mitigation measures including sensitive design of form and finishes of the viaduct structures. Due to the viewpoint, VSRs will not experience the planted portions of the project and thus the visual impacts remain the same (**Slight**) at Year 10.

- 10.9.34 **TKO-O1** and **TKO-O2**: After the implementation of mitigation measures Lo Shue Pai Park and Siu Sai Wan Promenade will experience Slight/Moderate visual impacts during the Construction Phase due the effects of temporary construction plant. These visual impacts will be reduced to **Slight** at Day 1 during the Operation Phase due largely to the disappearance of temporary construction plant and the positive effects of sensitive design of form and finishes of the viaduct structures. Due to the viewpoint, the effect of maturing planting on the elevated interchange viaducts will not have a significant effect in reducing the visual impact further and therefore the degree of visual impact will remain the same (**Slight**) throughout the Operational Phase.
- 10.9.35 **TKO-R1** and **TKO-R8**: After the implementation of mitigation measures residents in Heng Fa Chuen and Island Resort will experience Moderate visual impacts during the Construction. These visual impacts will be reduced to **Slight** at Day 1 due to the absence of the temporary construction impacts and the positive effects of sensitive design of form and finishes of the viaduct structures and planting on reclamation and portal slopes. Due to the viewpoint, the effect of maturing planting on the elevated interchange viaducts will not have a significant effect in reducing the visual impact further and therefore the degree of visual impact will remain the same (**Slight**) throughout the Operational Phase.
- 10.9.36 **TKO-R4 and TKO-R5:** Residents in Metro Town and Park Central will experience Moderate visual impacts during the Construction Phase as much of the project site will be screened from view by planned development to the south. Moderate impacts will be generated by temporary construction works along Po Yap Road. These visual impacts will be reduced to **Slight/ Moderate** at Day 1 following the removal of the temporary construction plant and due to the positive effects of mitigation measures including roadside planting, well designed streetscape and sensitive finishes on structures. Residual impacts will be reduced to **Slight** at Year 10 due to the effect of maturing mitigation planting.
- 10.9.37 **TKO-R10:** After the implementation of mitigation measures residents Chai Wan high-rise estates will experience Moderate visual impacts during the Construction Phase. These visual impacts will be reduced to **Slight** at Day 1 with the removal of temporary construction impacts, views of the completed works and the implementation mitigation measures including sensitive design of form and finishes of the viaduct structures and planting on reclamation and portal slopes. Due to the viewpoint, the effect of maturing planting on the elevated interchange viaducts will not have a significant effect in reducing the visual impact further and therefore the degree of visual impact will remain the same (**Slight**) throughout the Operational Phase.
- 10.9.38 **TKO-REC2:** After the implementation of mitigation measures, hikers along the Wilson Trail will experience Slight/Moderate visual impacts during the Construction Phase due to temporary construction plant and activity. Hiker's views will be 'over' the project works towards the broader expanse of Junk Bay and the hills of Clearwater Bay Peninsula in the east which will reduce the perceived impact. The visual impacts will be reduced to **Slight** at Day 1 with the absence of temporary construction plant and machinery, views of the completed works and the implementation of mitigation measures including planting and sensitive design and finishes to built structures. Due to the angle of view, only the viaduct portion of the project will be visible and the effect of maturing planting will not be seen, resulting in **Slight** visual impacts remaining at Year 10.

- 10.9.39 After the implementation of mitigation measures, visitors to Lei Yue Mun Holiday Village, Lei Yue Mun Park and the Hong Kong Museum of Coastal Defence (**TKO-REC3A**, **TKO-REC3B** respectively) will experience Slight/Moderate visual impacts during the Construction Phase. These impacts will be largely generated by temporary construction plant and activity and the effects are reduced by distance of view. These visual impacts will be reduced to **Slight** at Day 1 following the disappearance of temporary construction works and replacement with views of the completed interchange and reclamation and due to the positive effects of sensitive design of the bridge structure and reclamation and portal. Visual impacts will remain **Slight** ay Year 10 as the effect of maturing mitigation planting will not be visible from their view points.
- 10.9.40 Following the implementation of mitigation measures travellers at the TKO MTR Station and along Po Yap Road and Chui Ling Road (TKO-T4) will experience Moderate visual impacts during the Construction Phase due to temporary construction plant and activity. During the Operation Phase, the VSR group will experience Slight/Moderate visual impacts at Day 1 with the absence of the construction works, views of the completed roads and footbridges and the positive effects of the mitigation measures including sensitive design of form and finish, streetscape design and planting. At Year 10 the residual visual impact will be reduced to Slight due to the maturing roadside planting. The roadworks will also be seen in the context of the completed G/IC, Open Space and Residential developments on the TKO reclamation to the south.

Residual Visual Impacts on Future Planned VSRs in Tseung Kwan O

- 10.9.41 For the purposes of this assessment, it is assumed that the future planned developments will be constructed <u>after</u> the completion of the TKO-LT Tunnel. Assessment of significance of impact during the Construction Phase is therefore not applicable and neither is assessment of significance at Day 1 of the Operation Phase.
- 10.9.42 Workers in planned extension to the TKO Industrial Estate Extension (**TKO-OU1B**) will experience **Slight/Moderate** visual impacts at Year 10 due to the visual mitigation measures including aesthetic design of structures, finishes and maturing planting on tunnel portal and reclamation.
- 10.9.43 Users of planned recreational facilities at TKO Stage I Landfill, Area 77 (**TKO-REC7**) will experience **Slight/Moderate** visual impacts at Year 10 due to the visual mitigation measures and the maturing planting on tunnel portal and reclamation.

Residual Visual Impacts in Lam Tin

- 10.9.44 The existing VSRs with the highest residual visual impacts at Year 10 are residents in surrounding high rise residential estates which have relatively unobstructed elevated views and they will experience residual visual impacts of **Moderate** significance at Year 10. These VSRs include residents at Ping Tin Estate and Hong Ngar Court (**LT-R3**), Yau Lai Estate (**LT-R4A**), Cha Kwo Ling housing developments west of interchange (**LT-R9B***), Kwong Tin Estate and Hong Pak Court (**LT-R11**) and Yau Tong Bay CDA Development (**LT-CDA1**).
- 10.9.45 Receivers who will experience visual impacts of **Slight** significance include staff and pupils of schools east of EHC (**LT-GIC1**), residents of The Canaryside and The Spectacle in Yau Tong (**LT-R5**), users of Yau Tong Road Playground (**LT-O1**), users of the public open space on the Cha Kwo Ling promenade (**LT-O5***) and users of the planned open space north west of the Lam Tin Interchange (**LT-O6***).

- 10.9.46 All remaining VSRs will experience residual visual impacts of **Insubstantial** significance at Year 10 after mitigation measures.
- 10.9.47 The residual visual impacts for all the individual VSRs in Lam Tin are described in more detail below.
- 10.9.48 Following the implementation of mitigation measures residents of the existing Ping Tin Estate and Hong Ngar Court (LT-R3), Yau Lai Estate (LT-R4A) and Kwong Tin Estate and Hong Pak Court (LT-R11) will continue to experience Substantial visual impacts during the Construction Phase due to their unobstructed elevated views across the site. During the Operation Phase, visual impact significance will be reduced to Moderate/Substantial at Day 1 due to the absence of the temporary construction plant and activity and the effects of positive mitigation measures on the completed Lam Tin Interchange including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to Moderate due to the maturing of the planting.
- 10.9.49 Following the implementation of mitigation measures residents in the planned Yau Tong Bay CDA development (LT-CDA1) and The planned housing development at Cha Kwo Ling north west of the Lam Tin Interchange (LT-R9B) will experience Substantial visual impacts during the construction stage due to their close, elevated views into the site of the Lam Tin Interchange. At Day 1, the impact significance will be reduced to Moderate/Substantial as views of construction will be replaced by views of the completed interchange with the positive effects of sensitive visual impacts including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual residual visual impacts will be reduced to Moderate due to the maturing of the planting.
- 10.9.50 Following the implementation of mitigation measures staff and pupils at schools east of EHC (LT-GIC1) will experience Moderate visual impacts due to their relatively low sensitivity and because of the screening effect of existing trees and advertising hoardings along the eastern boundary of the former quarry site. During the Operation Phase, these VSR group will experience Slight/Moderate visual impacts at Day 1 due to the effects of the mitigation measures including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to Slight due to the maturing of the planting, particularly along the eastern edge of the Lam Tin Interchange.
- 10.9.51 Following the implementation of mitigation measures residents in The Canaryside and The Spectacle in Yau Tong (LT-R5) will continue to experience Moderate visual impacts during the Construction Phase due to their elevated views across the site. During the Operation Phase, visual impact significance will be reduced to Slight/Moderate at Day 1 due to the effects of the mitigation measures including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to Slight due to the maturing of the planting, particularly along the eastern edge of the Lam Tin Interchange.
- 10.9.52 Following the implementation of mitigation measures users of Yau Tong Road Playground (LT-O1) will experience only Moderate visual impacts during the Construction Phase due to screening provided by the playground fencing and amenity tree planting and the effectiveness of screen hoardings and retention of existing tree screens along the eastern edge of the Lam Tin Interchange site. During the Operation Phase, visual impact significance will be reduced to Slight/Moderate at Day 1 due to the effects of the mitigation measures including sensitive design of buildings and structures and extensive

AECOM 10-134 March 2013

planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to **Slight** due to the maturing of the planting, particularly along the eastern edge of the Lam Tin Interchange.

- 10.9.53 Following the implementation of mitigation measures users of the planned public open space on the promenade south of Cha Kwo Ling Road (LT-O5*): will experience Moderate visual impacts at Day 1 due to the screening effect of the wooded ridge screening the Lam Tin Interchange to the north. During the Operation Phase, visual impact significance will be reduced to Slight/Moderate at Day 1 due to the effects of the mitigation measures including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to Slight due to the maturing of the planting, particularly along the southern edge of the Lam Tin Interchange.
- 10.9.54 Following the implementation of mitigation measures users of the public open space north west of the ex Cha Kwo Ling Kaolin Mine Site (LT-O6*) will experience Moderate visual impacts at Day 1 as most of the Lam Tin Interchange will be screened by the former quarry walls and associated tree planting. During the Operation Phase, visual impact significance will be reduced to Slight/Moderate at Day 1 due to the effects of the mitigation measures including sensitive design of buildings and structures and extensive planting at grade, on slopes and on buildings and structures. At Year 10 the residual visual impacts will be reduced to Slight due to the maturing of the planting, particularly along the southern edge of the Lam Tin Interchange.

Cumulative Landscape and Visual Impacts

TKO

- 10.9.55 The landscape and visual impacts generated by the TKO-LT Tunnel must be assessed in the context of the associated impacts of the concurrent projects (as described in **Section 10.4.19** above).
- The major projects which are planned to be constructed concurrently with the TKO-LT 10.9.56 Tunnel around TKO include the CBL, TKO Town Centre South Development, Cycle tracks and promenade developments around TKO Bay, TKO Area 86 Development, Residential Developments in Area 85, G/IC developments in Area 78 and the SENT Landfill Extension in Area 137. These developments are largely on reclaimed land or currently vacant sites and landscape impacts will therefore be minimal. Visual impacts will be created by the new building works, however building heights are controlled through planning regulations with the intention of creating a positive overall composition to the new town extensions. The combined effect of these projects will be to transform the existing TKO Town Centre South reclamation and waterfront into a modern new-town. The conversion of large areas of existing reclamation and vacant waterfront will generally enhance the landscape quality of the area. The portion of the TKO-LT Tunnel works affecting the Town Centre South reclamation will be fully integrated into the new townscape. TKO interchange and its associated reclamation will affect the Junk Bay and natural hillside landscape resources and will be highly visible as a new landscape element. If the TKO-LT Tunnel was the only proposed development in TKO, the relative scale of the landscape and visual impacts would be perceived as greater. However, when viewed in the context of the other major concurrent developments, the landscape and visual impacts generated by the TKO-LT Tunnel are perceived as compatible and acceptable when the effect of mitigation are taken into account. The tunnel and interchange will form part of the overall new town extension and the landscape and visual impacts will take place against a backdrop of other major construction works.

- 10.9.57 The cumulative landscape impacts that the TKO-LT Tunnel itself brings to the development context at TKO include the following:
 - Loss of water body area of Junk Bay due to reclamation and enclosure of part of it by the elevated viaducts (**TKO-LR1**). This cannot be replaced but can be mitigated through sensitive design of the reclamation and viaduct piers and structures.
 - Loss of a section of natural rocky shore coastline (approximately 180m TKO-LR2); this cannot be replaced but can be mitigated through appropriate planting reinstatement.
 - Loss of approximately 75 no. amenity roadside trees (**TKO-LR3D**). These can be replaced by compensatory planting.
 - Loss of approximately 3ha of grassland/shrubland mosaic Chiu Keng Wan Shan (**TKO-LR5A**). This cannot be replaced but the slopes that cause the impact will be vegetated with alternative appropriate species which will mitigate the impacts.
 - Minor impacts on a stream at Chiu Keng Wan Shan (TKO-LR6B). The impacts to this stream will be temporary and it will recover its natural state in time following reinstatement works.
- 10.9.58 The cumulative visual impacts that the TKO-LT Tunnel itself brings to the development context at TKO include the following:
 - The TKO Interchange in Junk Bay including piers and viaducts. This will form a highly visible new element and cannot be screened or hidden. Mitigation can only be addressed through sensitive design of form and finishes.
 - The TKO Tunnel Portal building and associated slope works. The portal building is designed to integrate with the existing slopes and be an attractive building appropriate to a contemporary engineering structure. The visual impact of the slopes will be mitigated through time due to extensive planting works.
 - The Road P2 reclamation area which acts as a landing for the interchange slip roads. The visual impact of this element is greatly reduced by its relationship to the existing reclamation coastline. The visual impacts of Road P2 are minimized by decking in front of Ocean Shores. Extensive landscape treatment is proposed for the reclamation area which will enhance the existing outlook (as well as offer practical benefits of increased public open space and improvements to pedestrian and cycling circulation).
 - Junction and road improvements and footbridge construction at Po Yap Road. Whilst these will generate visual impacts, they are modifications to an existing road system and the net increase in visual impact will be minor and can be offset through sensitive design and compensatory planting.
- 10.9.59 Overall, it is considered that the cumulative landscape and visual impacts generated by the TKO-LT Tunnel at TKO are acceptable within the context of the transitional landscape of which it forms a part.

AECOM 10-136 March 2013

Lam Tin

- 10.9.60 The major concurrent projects in the Lam Tin area are the comprehensive development at Yau Tong Bay CDA zone and the planned residential development on the Ex-Cha Kwo Ling Kaolin Mine Site ("R(A)4" zone). A planning application has been submitted for a mixed residential, commercial and community use development along the waterfront of Yau Tong Bay. The landscape impacts would be relatively small as it would be constructed on vacant industrial land. The visual impacts would be significant however with the likely addition of a large number of residential towers. The planning intent is to enhance the existing townscape setting which is currently run-down and derelict. Residential developments have been planned on the Ex-Cha Kwo Ling Kaolin Mine Site to the north west of the Lam Tin Interchange and the waterfront is zoned for public open space and G/IC uses. The area is undergoing rapid change from its existing condition. If the Lam Tin Interchange was the only proposed development in the area, the landscape and visual impacts would appear relatively more significant. However, as it will be constructed within the context of the planned residential development to the west and the CDA development to the east, viewed in the context of the cumulative impacts the relative impacts of the project appear to be less.
- 10.9.61 The cumulative landscape impacts that the TKO-LT Tunnel itself brings to this development context at Lam Tin include the following:
 - Loss of existing vegetation (including approximately 960 existing trees) at amenity/ roadside planting/vegetation on modified slope at Former Quarry (LT-LR8B). Extensive compensatory planting is proposed to offset this loss.
 - Loss of a portion (only 12 no. trees will be impacted along the edge of the LR which has a total area of in an area of approximately 6ha) of grassland/shrubland mosaic at the ex- Cha Kwo Ling Kaolin Mine Site (LT-LR98). This area will be reinstated with appropriate planting species.
 - Loss of roadside trees at Yau Tong Bay Industrial Waterfront Area (LT-LR2) and due to minor road amendments along the EHC corridor. All affected trees will be replaced with compensatory roadside planting.
- 10.9.62 The cumulative visual impacts that the TKO-LT Tunnel itself brings to this development context at Lam Tin include the following:
 - The Lam Tin Interchange with depressed carriageway, elevated slip road connections and associated service buildings. This will transform the character of the former quarry site to elevated VSRs in surrounding high-rise residential towers.
 - The existing site consists of a tree fringed enclosure with an open paved central area used as a temporary storage area. The rock-cut walls of the quarry form a distinctive edge to the northern and western edge of the site. The proposed interchange will result in a more intensive use of the space and visually it will result in a more dynamic scene with a greener outlook overall due to extensive mitigation planting.
 - Visual impacts will also be caused by the road reconfigurations along the EHC corridor and the proposed roundabout to the south on Cha Kwo Ling Road. The existing visual character of this area is already heavily dominated by roads and these modifications will not represent a significant increase in visual impact.

- In addition, there is the opportunity to rationalize and enhance the visual quality of the area, which is currently has a rather neglected atmosphere, through the introduction of consistent roadside treatments.
- 10.9.63 Overall, it is considered that the cumulative landscape and visual impacts generated by the TKO-LT Tunnel at TKO are acceptable within the context of the transitional landscape of which it forms a part. The planning intent for the area sets the development within a zone of G/IC, Residential and CDA lands uses. The principle landscape visual impacts can be mitigated through mitigation measures including extensive compensatory planting and appropriate, sensitive design and finishing of built structures.

10.10 Conclusion

Compatibility of TKO-LT Tunnel with Planning Intent

10.10.1 From a review of the current planning legislation and OZP's the proposed development is compatible with the broad planning goals. Provision has been made on the Approved Tseung Kwan OZP No. S/TKO/20 for the TKO-LT Tunnel (a 'cross bay bridge road' has been indicated on the Tseung Kwan O OZP since 1992) and the area affected on the Lam Tin side is primarily zoned as GIC uses which is compatible with the intended development. Both TKO and Lam Tin are areas in transition with major developments planned concurrently with the proposed tunnel.

Residual Landscape Impacts - TKO

- 10.10.2 For the Junk Bay sea water body (**TKO-LR1**) residual impacts would be **Slight** at Day 1 and **Slight** at Year 10 of the Operational Phase following mitigation. This will be due primarily to the effects of reducing the area of reclamation and sensitive design of the elevated road structure and piers. As planting on these elements will not mitigate the loss of sea waterbody area, the residual impact remains unchanged.
- 10.10.3 For the natural rocky shore along Chiu Keng Wan coastline (**TKO-LR2**) the residual impact will be **Slight** at Day 1 and Year 10 of the Operational Phase following mitigation. This will be due primarily to the effects of reducing the area of impact. As natural coastline cannot be recreated, the residual impact remains the same at Year 10.
- 10.10.4 For the amenity /roadside planting on modified slopes along Road D4 and Road P2 (**TKO-LR3D**) the residual impacts would be **Slight** at Year 10 of the Operational Phase due to compensatory roadside tree planting which will progressively mature and replace what has been impacted. The degree of impact would be expected to progressively decline thereafter with the further growth of the planting.
- 10.10.5 For the grassland/shrubland mosaic at Chiu Keng Wan Shan (**TKO-LR5A**) the residual impact would be **Slight** at Year 10 of the Operational Phase following mitigation. The reason there is no change with time is that the nature of the compensatory planting is different from that of the original resource (climbers and shrubs rather than natural grassland/shrubland mosaic). Whilst the proposed planting will provide greening to the new slopes it will not be a continuous cover as per the existing condition and it will be of a different character so it is not a direct replacement of the existing resource.
- 10.10.6 For streams at Junk Bay Chinese Permanent Cemetery and Chiu Keng Wan Shan (**TKO-LR6B**), the residual impact will be **Slight** at Year 10 due to the maturing of the vegetation and the re-establishment of the natural system within the stream course with time.

- 10.10.7 Residual impacts on all the other landscape resources identified (TKO-LR3A, TKO-LR3B, TKO-LR3C, TKO-LR4, TKO-LR5B, TKO-LR6A, TKO-LR7, TKO-LR8, TKO-LR9) will experience Insubstantial impacts at Day 1 and Year 10 respectively regardless of mitigation measures due to the low level or lack of anticipated impacts.
- 10.10.8 For the Junk Bay Inshore Water Landscape (**TKO-LCA1**) the residual impacts will be **Moderate** at Year 10. The new structures will be highly visible but they can be mitigated by sensitive design of form and finish. Because the planting elements on the interchange and viaducts over the water areas will not have a significant effect, or change significantly with time (there is no tree planting on the viaduct sections) the effects of mitigation are experienced at Day 1 and will not change significantly thereafter.
- 10.10.9 For Chiu Keng Wan Coastal Upland and Hillside Landscape (**TKO-LCA3**) the residual impact at Year 10 of the Operational Phase will be **Slight** due to the slope greening measures on the tunnel portal slopes and the sensitive design of the tunnel portal building with green roof treatment which will help to integrate the portal into the surrounding landscape character area.
- 10.10.10 For the Mixed Modern Comprehensive Urban Development Landscape (**TKO-LCA4**)) and the reclamation/ongoing major development landscape at proposed Tseung Kwan O Town Centre south (**TKO-LCA5**), the residual impact will be **Slight** at Day 1 and Insubstantial at Year 10 due to the maturing of the vegetation and the natural re-establishment of natural system within the stream course with time.
- 10.10.11 For all the other Landscape Character Areas (**TKO-LCA2**, **TKO-LCA6**, **TKO-LCA7**) the **Insubstantial** impacts experienced before the implementation of mitigation measures due to the construction of the TKO Interchange in Junk Bay will remain as Insubstantial at Year 10 of the Operational Phase regardless of mitigation due to the low level of anticipated impacts.

Residual Landscape Impacts - Lam Tin

- 10.10.12 For the amenity/roadside planting within the former quarry site (LT-LR8B) the residual impacts by year 10 of the Operational Phase will be **Moderate** due to the maturing of extensive compensatory planting at grade, on slopes and rock-cut benches. It is to be expected that the residual impact will continue to decline as the planting further matures with age.
- 10.10.13 All other Landscape Resources LT-LR1, LT-LR2, LT-LR3, LT-LR4, LT-LR5, LT-LR6, LT-LR7, LT-LR8A, LT-LR9A and LT-LR9B will experience Insubstantial residual impacts at Year 10 due to the low level or absence of anticipated impacts.
- 10.10.14 For Former quarry site (occupied) Landscape Character Area (LT-LCA9), the residual impacts by year 10 of the Operational Phase will be Slight. This will be due to the combined mitigation effects including sensitive design of depressed road, associated service and tunnel portal buildings, noise enclosures and barriers, green slope treatments and extensive compensatory tree planting. It is to be expected that the residual impact will continue to decline as the planting further matures with age.
- 10.10.15 All other Landscape Character Areas LT-LCA1, LT-LCA2, LT-LCA3, LT-LCA4, LT-LCA5, LT-LCA6, LT-LCA7 and LT-LCA8 will experience Insubstantial residual impacts at Year 10 due to the low level or absence of anticipated impacts.

Residual Visual Impacts – TKO

AECOM 10-139 March 2013

10.10.16 The change in character of the visual resource of Junk Bay caused by the TKO-LT Tunnel development must be assessed within the context of the wider development parameters for the TKO extension. The primary visual impacts of the project at TKO will be the addition of the TKO Interchange in Junk Bay, the tunnel portal in the western hill slopes and the road improvement works with footbridges on the TKO reclamation. Mitigation of the interchange can primarily be achieved by minimisation of the size and scale of development and sensitive design of the visible elements. The primary VSRs will be the surrounding existing and planned residential blocks which will experience elevated views and the users of the planned waterfront and open space facilities. Negative views can be mitigated from the level of Substantial to Moderate by the combined effects of the proposed mitigation measures which include primarily the minimization of the footprint of the works (particularly the area of reclamation and the extent of the tunnel portal slopes), sensitive design of all structures and buildings in terms of scale, form and finishes, decking of Road P2 with the provision of landscape treatments above, extensive planting on slopes, reclamation, landscape deck and roadsides.

10.10.17 The existing VSRs with the highest residual visual impacts at Year 10 are:

- Residents in planned new residential development at CDA Area 86/LOHAS Park (TKO-CDA1B) will experience residual impacts of Moderate significance at Year 10 after mitigation measures due to the wide unobstructed views towards the site.
- Residents in Ocean Shores (Phases I to III) (**TKO-R3**) will experience residual visual impacts of **Moderate** significance in Year 10 due to their close proximity and unobstructed outlook over the site.
- Residents in planned high rise estates along the southern edge of the TKO Town Centre reclamation (TKO-R14d, TKO-R14e and TKO-R14f) and users of the planned open space at Area 68 (TKO-O3) will experience residual visual impacts of Moderate significance in Year 10 due to their close proximity and unobstructed outlook towards the site.
- Seaborne leisure travellers in Junk Bay (TKO-T1) and Seaborne leisure travellers along Lei Yue Mun and Tathong Channel (TKO-T2) will experience residual visual impacts of Slight/Moderate significance at Year 10 after mitigation measures due to the potentially close low level views of the elevated interchange and reclamation. Pedestrians on the JBCPC footpath (TKO-T5) will also experience residual visual impacts of Slight/Moderate significance at Year 10 after mitigation measures due to the proximity to the TKO Portal and unobstructed views of the TKO Interchange and Road P2 reclamation. Users of planned recreational facilities at TKO Stage 1 Landfill, Area 77 (TKO-REC7) and Users of footbridge crossing the Eastern Channel (TKO-T7) and Workers at planned TKO Industrial Estate (TKO-OU1B) will experience residual impacts of Slight/Moderate significance at Year 10 after mitigation measures due to the wide unobstructed views towards the site.
- In the TKO area, Travellers at the TKO MTR Station and Travellers along Po Yap Road and Chui Ling Road (TKO-T4), Residents of Metro Town (TKO-R4) and Park Central (TKO-R5), Workers in planned G/IC Development at TKO Area 67 (TKO-GIC9), Workers at existing TKO Industrial Estate (TKO-OU1A), Visitors to JBCPC (TKO-OU2), Hikers on the Wilson Trail (TKO-REC2) will experience residual visual impacts of Slight significance at Year 10 after mitigation measures.
- On Hong Kong Island, Residents of Heng Fa Chuen (**TKO-R1**) and Users of Heng Fa Chuen Playground (**TKO-O1**) and Users of Siu Sai Wan promenade (**TKO-O2**),

Residents & users of Island Resort residential area and promenade (**TKO-R8**), Residents in Chai Wan high rise estates (**TKO-R10**) and Visitors of Lei Yue Mun Holiday Village/Lei Yue Mun Park and the H.K. Museum of Coastal Defence (**TKO-REC3A and REC3B** respectively) will experience residual visual impacts of **Slight** significance at Year 10 after mitigation measures.

10.10.18 All remaining VSRs will experience residual visual impacts of **Insubstantial** significance at Year 10 after mitigation measures.

Residual Visual Impacts - Lam Tin

- 10.10.19 The primary visual impacts at Lam Tin come from the construction of the Lam Tin Interchange within the Ex-Cha Kwo Ling Kaolin Mine Site. The existing quarry walls provide a high degree of visual containment and the principal VSRs affected are the surrounding existing and planned high rise residential blocks which define the ZVI to the north west, north east and south.
- 10.10.20 The visual quality of the former quarry site is limited due to the fact that it has large expanses of paving used for parking and storage and stark shear walls and steep slopes formed from previous quarrying activity along the western, northern and eastern edges. The proposed mitigation measures for the Lam Tin Interchange include the sensitive design of form and finishes of all structures including at grade and elevated slip roads, service and tunnel portal buildings, noise enclosures and barriers, retaining walls and slopes and extensive tree, shrub and climber planting on all available non-operational at-grade areas, on slopes and rock-cut benches and building roofs. The combined effect of these treatments will be to transform a plain, visually uninteresting area into one with dynamic visual characteristics and increase the overall level and quality of greening of the site compared to the existing condition.
- 10.10.21 The existing VSRs with the highest residual visual impacts at Year 10 are:
 - Residents in surrounding high rise residential estates which have relatively unobstructed elevated views will experience visual impacts of Moderate significance at Year 10. These VSRs include Residents at Ping Tin Estate and Hong Ngar Court (LT-R3), Residents at Yau Lai Estate (LT-R4A), Residents at Cha Kwo Ling housing developments west of interchange (LT-R9B*), Residents at Kwong Tin Estate and Hong Pak Court (LT-R11) and Residents at Yau Tong Bay CDA (LT-CDA1).
- 10.10.22 Receivers who will experience visual impacts of **Slight** significance include Staff and pupils of schools east of EHC (**LT-GIC1**), Residents of The Canaryside and The Spectacle in Yau Tong (**LT-R5**), Users of Yau Tong Road Playground (**LT-O1**), Users of public open space on promenade (LT-O5*) and Users of planned open space north west of Lam Tin Interchange (**LT-O6***).
- 10.10.23 All remaining VSRs will experience residual visual impacts of Insubstantial significance at Year 10 after mitigation measures.

10.11 Overall Conclusion

- 10.11.1 In accordance to the criteria and guidelines for evaluating and assessing impacts as stated in Annex 10 and 18 of the TM- EIAO, overall, it is considered that the residual landscape and visual impacts of the proposed TKO-LT Tunnel are **acceptable with mitigation** during the construction and operation phases.
- 10.11.2 For TKO, the Moderate adverse landscape and visual impacts are considered acceptable given the context of an area which is planned for large-scale development and the fact that the TKO-LT Tunnel will be integrated with the TKO Town Centre South Extensions. Impacts on the Junk Bay Landscape Resource and Character Area are unavoidable but the scale is considered acceptable in relation to the scale of the Bay.
- 10.11.3 For Lam Tin, the Moderate adverse landscape and visual impacts are also considered acceptable given the planning intent for the area which includes major redevelopment of the waterfront and the abandoned ex-Cha Kwo Ling Kaolin Mine Site. The number of VSRs affected is relatively low due to the visual containment of the site. In addition, the existing visual quality of the proposed site for the interchange is relatively low and the proposed development can be integrated into the overall development of the area with impacts reduced to acceptable levels provided the recommended mitigation measures are implemented.