6. Landscape and Visual Impact

6.1 Introduction

This section describes legislation and guidelines that have been reviewed in the Landscape and Visual Impact Assessment (LVIA). The landscape baseline reviews the condition of existing landscape resources (LRs) and landscape character areas (LCAs), planning and development control framework, and the visual amenity and visually sensitive receivers (VSRs).

The assessment has been based on the criteria and guidelines stated in Annexes 10 and 18 of the EIAO-TM and covered in the scope outlined in section 3.4.10 of the EIA Study Brief. The assessment identifies potential landscape and visual impacts that would occur during the construction and operational phases of all above-ground structures proposed under the proposed SIL(E) project [hereinafter referred to as SIL(E)] including the proposed viaduct section, railway bridge, and ventilation shafts / buildings, recommends landscape mitigation measures to alleviate the impacts; and identifies residual effects apparent after mitigation.

6.2 Environmental Legislations, Standards & Guidelines

Legislation, Standards, Guidelines and Criteria relevant to the consideration of landscape and visual impacts in this report include the following:

- Environmental Impact Assessment Ordinance (Cap. 499) and the Technical Memorandum on EIA Process (EIAO-TM), particularly Annexes 3, 10, 11, 18, 20 and 21;
- EIAO Guidance Note 8/2002 on Preparation of Landscape and Visual Impact Assessment under the EIAO;
- Town Planning Ordinance (Cap 131);
- Hong Kong Planning Standards and Guidelines Chapter 4 and Chapter 10;
- Environment, Transport and Works Bureau (ETWB) Technical Circular (Works) (TCW) No. 03/2006 on Tree Preservation;
- ETWB TCW No. 2/2004 on Maintenance of Vegetation and Hard Landscape Features;
- ETWB TCW No. 29/2004 on Registration of Old and Valuable Trees, and Guidelines for their Preservation;
- Works Bureau Technical Circular (WBTC) No. 25/92 - Allocation of Space for Urban Street Trees;
- WBTC No. 7/2002 - Tree Planting in Public Works;
- ETWB No. 36/2004 - Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS);
- ETWB TCW No. 13/2003A - Guidelines and Procedures for Environmental Impact Assessment of Government Projects and Proposals Planning for Provision of Noise Barriers;
- Mass Transit Railway Ordinance (Cap. 556);
- Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislations;
- Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
- EPD Guidelines and References on Design of Noise Barriers;
- GEO Publication No. 1/2000 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls"; and
- Study on Landscape Value Mapping of Hong Kong.

6.3 Assessment Methodology

6.3.1 Landscape Impact

6.3.1.1 General

The preparation of the LVIA is based on the EIAO GN No. 8/2002 “Preparation of Landscape and Visual Impact Assessment under the EIAO” for evaluation of the proposed SIL(E). **Section 2** describes the details of the Project and this LVIA section also provides a summary. The methodology for the LVIA is described in the following sections.

6.3.1.2 Review of Planning and Development Control Framework

A review of the existing planning studies and documents has been undertaken as part of the baseline study to gain an insight into the planned role of the site, its surrounding areas, and its landscape context and to help to determine if the project fits into the wider existing and future landscape context. This review considered Outline Zoning Plan numbers including S/H4/13 Central District , S/H24/6 Central District (Extension), S/H11/15 Mid-levels West, S/H14/10 The Peak Area, S/H15/26 Aberdeen and Ap Lei Chau, S/H10/15 Pok Fu Lam and S/H17/11 Shouson Hill & Repulse Bay. Compatibility of the proposed works to the planned developments either within or adjacent to the Study Area are also considered in terms of landscape and visual impacts.

6.3.1.3 Landscape Baseline Review and Impact Assessment

The assessment of the potential impacts of a proposed scheme on the existing landscape comprises two distinct sections namely the baseline survey and the landscape impact assessment. Landscape Impact Assessment (LIA) Study Area has been undertaken to include all areas within 100 m of the site boundary in accordance with the EIA Study Brief.

A baseline survey of the existing landscape resources and landscape character has been undertaken based on a combination of desktop studies and site surveys. The landscape elements which contribute to the landscape character include:

- Local topography and geology
- Woodland extent and type
- Other vegetation types
- Built form
- Patterns of settlement
- Land use
- Scenic spots
- Details of local materials, styles, streetscapes, etc.
- Prominent watercourses and water bodies; and
- Cultural and religious identity.

The process of landscape characterisation draws on the information gathered in the desktop and site survey and provides an analysis of the way in which the elements including the identified landscape resources (LRs) interact to create the character of the landscape. The Study Area is then divided into broadly homogenous units of similar character, which are called Landscape Character Areas (LCAs).

The sensitivity of the individual LRs and LCAs is rated using low, medium or high depending on the following factors:

- Condition, quality and maturity (maturity in this context refers to the age of the LR or LCA relative to its constituent components therefore a woodland containing mature trees would be considered to have a high level of maturity) of the LRs / LCAs;
- Importance and rarity of special landscape elements (rarity being of either local, regional, national or global importance) ;
- Significance of the LRs / LCAs from a local and regional perspective (therefore the sensitivity of a LR or LCA which is either rare in a local or regional context is greater than one which is common place);
- Ability of the LRs / LCAs to accommodate change; and
- Statutory or regulatory requirements relating to the landscape including its resources.

The next stage of the assessment process is the identification of the assessment of the magnitude of change (rated as nil, small, intermediate or large) arising from the implementation of the project and the principal sources of impact based on the following factors:

- Scale of the works and the associated supporting facilities
- Compatibility of the project with the surrounding landscape
- Duration of impacts (temporary or permanent) under construction and operation phases and

- Reversibility of change

The degree of significance of landscape impact is derived from the magnitude of change which the project will cause to the LRs/LCAs and the sensitivity of the LRs/LCAs . This makes a comparison between the landscapes, which would have existed in the absence of the Project with that predicted as a result of the implementation of the project. The significance threshold for impacts to LRs and LCAs is rated as significant, moderate, slight or negligible. The impacts may be beneficial or adverse.

The significance threshold is derived from the following matrix:

Magnitude of Change caused by Project				
	Large	Moderate Impact	Moderate / Significant Impact	Significant Impact
	Intermediate	Slight / Moderate Impact	Moderate Impact	Moderate / Significant Impact
	Small	Slight Impact	Slight / Moderate Impact	Moderate Impact
	Nil	Negligible	Negligible	Negligible
		Low	Medium	High
		Sensitivity of LRs/LCAs		

6.3.1.4 Tree Survey Methodology

To minimize conflicts with existing vegetation a preliminary tree survey in accordance with ETWB TCW No. 3/2006, 'Tree Preservation' has been undertaken to inform the potential tree impact assessed in this LVIA as a result of the proposed works. This tree survey involves the identification of individual trees within the proposed works area. The survey includes individual tree species, sizes, health condition, form, and amenity value and their treatment as a result of the implementation of proposed works. The information contained in this part of the report has been abstracted from the tree survey undertaken by the consultants for each component of the proposed scheme.

This existing tree data allows the fine tuning of the detailed design for the proposed works and ensures that any significant trees including potential old and valuable trees or rare or protected tree species, where possible, be protected in current location or through transplantation during both the construction and operational phases of the Project.

6.3.2 Visual Impact

6.3.2.1 Visual Baseline Review and Impact Assessment

The assessment of the potential visual impact of the scheme comprises two distinct parts:

- Baseline survey and
- Visual impact assessment which includes the identification of the sources of visual impact, and their magnitude, that would be generated during construction and operation phases of the proposed works; and identification of the principal visual impacts primarily in consideration of the degree of change to the baseline conditions.

The assessment area for the Visual Impact Assessment (VIA) is defined by an Visual Envelope (VE) which includes all areas from which the proposed works can be seen, or the area forms the view shed formed by natural / manmade features such as existing ridgelines, built development and for example areas of woodland / large trees. Within the VE, Zone of Visual Influence (ZVI) is identified to demonstrate the visibility of the proposed works. This is achieved through a combination of detailed walkover surveys, and desk-top study of topographic maps and photographs, and preparation of cross-sections to determine visibility of the improvement works from various locations.

The baseline survey of all views towards the proposals is undertaken by identifying:

- The VE and ZVI as have been described above and may contain either wholly or partially within views. This must also include indirect effects such as offsite construction activities and temporary works; and
- The visually sensitive receivers (VSRs) within the visual envelope whose views will be affected by the scheme

The potential receivers are considered as four groups:

- Views from residences – the most sensitive of receivers due to the high potential of intrusion on the visual amenity and quality of life;
- View from workplaces – less sensitive than above due to visual amenity being less important within the work environment;
- Views from recreational landscapes – including all areas apart from the above, e.g., public parks, recreation grounds, footpaths, cultural sites etc. Sensitivity of this group depends on the length of stay and nature of activity, e.g. sitting in a park as opposed to an active sporting pursuit; and
- Views from riverside access, public roads and railways – including vehicle travellers with transitory views.

The assessment of sensitivity has also been based on the quality and extent of the existing view. Therefore a view from a residential property, which would normally be considered the most sensitive view, may be less so if for example it is degraded by existing development or partially screened by intervening visual obstacles such as existing vegetation. Factors affecting the sensitivity of receivers for evaluation of visual impacts include:

- Value and quality of existing views;
- Availability and amenity of alternative views;
- Type and estimated number of receiver population;
- Duration or frequency of view; and,
- Degree of visibility.

Views available to the identified VSRs are rated according to their sensitivity to change using low, medium or high.

The location and direction of its view relative to the scheme also influences the sensitivity of each group. Typical viewpoints from within each of the visually sensitive groups are identified and their views described. Both present and future (planned) visually sensitive receivers (PVSRs), if any, are considered.

The factors affecting the magnitude of change for assessing the visual impacts include the following:

- Scale of the works and the associated supporting facilities;
- Compatibility of the project with the surrounding landscape forming the view
  extent of visibility (level of potential blockage of the view);
- Viewing distance;
- Duration of impacts under construction and operational phases;
- Reversibility of change; and
- Night glare effect.

The magnitude of change to the views will be classified as follows:

- Large: e.g. large project works extent/ extensively blocked the views of VSRs / Project nature is not compatible to existing visual context / works area located in the foreground of the visual context / permanent impacts / irreversible of change;
- Intermediate: e.g. intermediate project works extent / partially blocked the views of VSRs / project nature is fairly compatible to existing visual context / works area located in the middle ground of the visual context and not immediately adjacent to VSRs or their views are already partially screened by existing topography, built structures or vegetation / permanent impacts/ Irreversible of change;
- Small: e.g. small project works extent / no blockage of views / project nature is compatible to existing visual context / works area located in distant to VSRs / permanent impacts and duration of construction impacts is short/ Irreversible change or temporary change of view; and
- Negligible: e.g. no discernible change in visual context.

The significance threshold for visual impact is rated in a similar fashion to the landscape impact, i.e. significant, moderate, slight and negligible. The impacts may be beneficial or adverse.

Therefore the impact is derived from the magnitude of change, which the project will cause, to the existing visual context and the sensitivity of VSRs. The significance threshold is derived from the following matrix:

Magnitude of Change Caused by Project			
Large	Moderate Impact	Moderate / Significant Impact	Significant Impact
Intermediate	Slight / Moderate Impact	Moderate Impact	Moderate / Significant Impact
Small	Slight Impact	Slight / Moderate Impact	Moderate Impact
Nil	Negligible	Negligible	Negligible
	Low	Medium	High
	Sensitivity of VSRs		

Table 6.1 provides an explanation of the degree of impact for both landscape and visual impact of the project.

Table 6.1: Degree of Impact

Impact	Description
Significant	Adverse / beneficial impact where the proposal would cause significant deterioration or improvement in existing landscape quality or visual amenity.
Moderate	Adverse / beneficial impact where the proposal would cause a noticeable deterioration or improvement in existing landscape quality or visual amenity.
Slight	Adverse / beneficial impact where the proposal would cause a barely perceptible deterioration or improvement in the existing landscape quality or visual amenity.
Negligible	No discernible change in the existing landscape quality or visual amenity.

6.3.3 Mitigation Measures

The purpose of mitigation is to avoid, reduce, and where possible remedy or offset any adverse effects on the environment arising from the proposed works. The ideal strategy for identifiable adverse impacts is one of avoidance. If this is not possible, alternative strategies of reduction, remediation and compensation should be explored.

Mitigation measures may be considered under two categories:

- Primary mitigation measures that intrinsically comprise part of the identification of proposed works through an iterative process. This form of mitigation is generally the most effective; and
- Secondary mitigation measures designed to specifically address the remaining (residual) adverse effects arising from the proposed works.

Primary mitigation measures form integrated mainstream components of the proposed works focusing on the adoption of alternatives to the alignment and their associated above-ground structures; and refinements to the basic engineering and architectural design including layout, built structures etc to avoid and/or minimize potential adverse impacts. The design philosophy can also describe the benefits to the design of alternative solutions, introduced to reduce potential adverse impacts, and indicate how these have been addressed.

Secondary mitigation measures are specifically designed to mitigate the adverse impacts of the proposed works and are considered in the assessment of the landscape and visual impacts. These may take the form of remedial

measures such as colour and textural treatment of built structure; and compensatory measures such as the implementation of landscape design measures (e.g. tree planting, creation of new amenity area etc) to compensate for unavoidable adverse impacts and to attempt to generate potentially beneficial long-term impacts.

6.3.4 Residual Impacts

The residual impacts are those, which remain after the proposed mitigation measures, have been implemented. This has been assessed both during the construction period and during the design year, which is often taken to be 10 to 15 years after the proposed scheme has been opened to normal operation when the soft landscape mitigation measures are deemed to have reached a level of maturity, which allows them to perform their original design objectives.

The level of impact is derived from the magnitude of change, which the project will cause to the LRs/LCAs and the visual context of VSRs taking into account the beneficial effects of the proposed mitigation and the sensitivity of LRs/LCAs and VSRs. The significance threshold is derived from the matrices described separately above for the landscape and visual impacts.

In accordance with Annex 10 of the EIAO-TM a final conclusion is also made of the residual landscape and visual impacts attributable to the proposed scheme. The degree of residual impact is considered in accordance with the Residual Impact Significance Threshold Matrix in **Table 6.2** below.

Table 6.2: Residual Impact Significance Threshold Matrix

Residual Impact	Description
Beneficial	The project will complement the landscape and visual character of its setting, will follow the relevant planning objectives and will improve overall and visual quality
Acceptable	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 with mitigation measures	There will be some adverse effects, but these can be eliminated, reduced or offset to a large extent by specific measures.
Unacceptable	The adverse effects are considered too excessive and are unable to mitigate practically;
Undetermined	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 for the specific effects in question.

6.3.5 Graphic Presentation of Mitigation Measures

In order to illustrate these landscape and visual impacts and to demonstrate the effectiveness of the proposed landscape and visual mitigation measures, photomontages at selected representative viewpoints have been prepared to illustrate:

- Existing conditions
- Day 1 of Operation Phase without Landscape and Visual Mitigation Measures
- Day 1 of Operation Phase with Landscape and Visual Mitigation Measures and
- Year 10 of Operation Phase with Landscape and Visual Mitigation Measures

6.4 Project Summary for LVIA

6.4.1 Proposed Works

The following project summary is based on **Section 2**. **Figure 1.1** shows the alignment for the proposed SIL(E), its associated above ground and underground works are illustrated on **Figures 2.6.1 to 2.6.12**.

The proposed South Island Line (East) - the Project, will comprise the following:

- Approximately 7km of partly underground and partly viaduct railway alignment from South Horizons via Lei Tung, Wong Chuk Hang and Ocean Park to Admiralty. This alignment will connect to the existing Island Line (ISL) and future Shatin Central Link (SCL) alignments.
- Construction of stations including South Horizons (SOH), Lei Tung (LET), Wong Chuk Hang (WCH), Ocean Park (OCP) and Admiralty (ADM). WCH and OCP Stations are designed to be elevated along the viaduct alignment while SOH, LET and ADM Stations are designed to be underground associated with above-ground station entrances and exits, vent shafts or plant building and will be constructed by either drill-and-blast or cut-and-cover tunnelling method.
- Construction of tunnels by drill-and-blast, mining and cut-and-cover method. Based on the current design, tunnel sections from Admiralty to Nam Fung Portal and from Lee Nam Road to Ap Lei Chau Drive will be constructed by drill-and-blast tunnelling method, whilst tunnel sections from Ap Lei Chau Drive to the portal at the southern side of Aberdeen Channel Bridge will be constructed by mining and cut and cover tunnelling method;
- Construction of the tunnel portals southern side of Aberdeen Channel Bridge and Nam Fung Road at the ex-Canadian Hospital site;
- Construction of the ventilation shafts along the alignment associated with the proposed stations, at Harcourt Garden, Hong Kong Park, Lee Wing Street and Nam Fung Road;
- Construction of a depot at the ex-Wong Chuk Hang Estate site.
- Construction of viaduct section from Aberdeen Channel Bridge via Wong Chuk Hang and Ocean Park to the tunnel entrance adjacent to Nam Fung Portal.
- Construction of a railway bridge alongside of Ap Lei Chau Bridge across the Aberdeen Channel.
- Provision of site offices, areas for construction material storage, construction shafts, barging points and magazine site during construction.
- Operation of the railway system and the depot.

The engineering design of the SIL(E) corridor is still being developed and hence the construction methods for individual sections mentioned in the above sections are subject to review.

6.4.2 Considerations on Alternative Schemes for Stations, Tunnel Portal/Ventilation Buildings and Viaduct structures

6.4.2.1 Admiralty Station Extension and Associated Facilities

ADM station will become a major interface station for the SIL(E), the future SCL and the existing Island Line (ISL) and Tsuen Wan Line (TWL). The works will include an extension east of the existing ADM station to accommodate interchange concourse, necessary circulation areas and plant rooms.

Efforts have been taken in minimizing potential landscape and visual impacts through reducing the land-take for the provision of aboveground facilities during design stage. However, the extent of works area and design of ADM station and associated operation facilities are determined by the following physical and design constraints to accommodate enough working areas for constructing tunnel section from Admiralty to Nam Fung portal as well as the necessary space for railway operation, station concourse, passenger circulation, plant room and ventilation structures. These constraints as well as the design intent of the ADM station extension are described in details in **Appendix 6.3**.

The extension of ADM Station is physically constrained by the existing Harcourt and Rodney underground car parks formed a barrier negating additional loading above the car parks and undermining of the structure below the car parks; existing TWL and Harcourt Road limited expansion of the station footprint and this is further complicated by the geological conditions; existing electrical sub-station sit on top of the TWL tunnel box, and; the ISL track and its ventilation and smoke extraction structures currently located in the centre of Harcourt Garden and also foundation of commercial buildings adjacent to Harcourt Garden. All these existing above ground or underground structures should be maintained and hence determined proposed works area and location of the extension of ADM station for the SIL(E).

Design constraints are also considered to meet the operation and safety requirement for future passenger. These include pedestrian circulation between existing ISL and TWL, the SIL(E) and planned SCL underground platforms and station concourses and accommodation of lift shafts, escape/ access stairs to facilitate efficient and direct vertical connectivity. In addition, certain station components should be put at grade or above ground to meet the FSD or functional requirements; these components include electric traction, power equipment rooms, transformers and associated plant rooms. Such rooms are proposed on the perimeter of the building where possible to afford direct access and efficient ventilation. Headroom requirement within these plant rooms varies between 4.5m to 7.0m.

Tunnel ventilation fan rooms, shafts and ventilation structures for the planned SCL previously proposed to the north of Harcourt Road have also been moved into the station building. This integration reduces the land take and extent of works within the soft ground conditions to the north of Harcourt Road.

Ventilation facilities provide routes for air exchange and in the emergency events such as fire and smoke control and inevitably there is a requirement for ventilation structures above the station building. The requirement for these is further exacerbated by smoke exhaust segregation parameters defined by FSD. The ventilation requirements have been significantly increased as introduced by FSD that all smoke zones within the building are to be provided with independent smoke extraction system. The detailed design consultants (DDCs) have been carefully considered the form and mass of the new ventilation shafts for the SIL(E) and planned SCL and the integration of existing ventilation shafts within such a small and constrained site. The DDCs have developed the design aesthetic according to practical requirements such as separation distance. It should be noted that efforts were made during the development of the design to unify and unite the ventilation shafts to achieve a conjoined solution. The location of the ventilation shafts is determined by the shafts serving them within the building. Transfer zones above ground level which would increase the mass of the ground floor have been avoided where possible, resulting in most of the ventilation shafts being located directly above the vertical ducts within the building.

Based on the above physical site constraints and station design requirement, alternative massing and design of Harcourt Garden are carefully studied and carved out until the most preferred design option is reached. The DDCs has identified design opportunities to ensure that the design of future Harcourt Garden could fulfill the safety requirements of FSD and operational requirements for proposed ADM station extension as well as minimise potential landscape and visual impact to surrounding neighbourhoods. The ADM station extension and terrace garden on top is designed with optimization of size, form and shape in accordance to the specific site context.

Headroom required for the proposed plant rooms at ground level in response to the FSD requirements determined the structural roof levels of the station building. These varying levels across the roof dictated optimum locations for planting and hard landscape to make the best use of available soil depths whilst restricting the overall height of the landscape deck. Resulting from the minimum height required to accommodate ground level plant rooms, proposed finishing level of the top of terrace gardens/ landscape deck is now similar to the level of existing footbridge connecting to the site. It was therefore deemed appropriate to use the landscape deck to replace the footbridge across the site. This becomes advantageous and allows for direct access via the footbridge to surrounding developments, including Citic Tower and the new HK Government Headquarters. Such immediate and easy access will naturally encourage a greater use of Harcourt Garden.

The landscape design approach to the re-provision of Harcourt Garden is holistic in nature (**Figures 6.9.1.1 and 6.9.1.3** refer). The Garden as a whole is divided into three zones according to the massing finished above ground at the levels of approximately +6mPD and +12.65mPD and formed the basis of a terraced garden topography. The height of this garden and the screening arrangement of the vent shafts to the North diminish the traffic noise from Harcourt Road. The East Garden, which has a large lawn area and formal arrangement of trees, connects the public to Harcourt Road and the walkway serving the HK Academy for Performing Arts. The South Garden addresses the main entrance to the park from Queensway, and provides a plaza space. The terrace gardens/ landscape deck to the west is designed following the topography of above ground structures such as plant rooms, existing and planned vent shafts and provided convenient and comfortable circulation from underground to street and footbridge levels. To assist in public movement from the lower part of Harcourt Garden (street level) to the terrace gardens/ landscape deck levels,

the design of the station incorporates grand staircases on the East façade, at a gradual incline. Terraced edges of the landscape deck is designed with lush planting to soften the building edges formed visually connected with tree planting at street and upper levels. The planting proposals will utilise a variety of plant, providing different colours, shapes and types. The design also tends to provide shaded seating areas for future park users to dwell and encourage local office workers to relax outdoors during their break time, this will enhance the robustness of existing Harcourt Garden which is now largely for circulation purposes. Appropriate shading is a vital component of the success of any park in this region. The current layout also allows preservation of some existing trees at the southern and eastern periphery of the Garden. This mature green buffer will visually screen the traffic of Queensway and create instant enclosure for future park users. This would also help to screen some construction activities during the implementation of SIL(E) and SCL within the Garden. Natural material and colour palette will be utilised in paving and hard landscape finishes achieving the naturalist effect. A continuous EVA is required from the north to the west of the Garden for emergency access of fire engine, decorative paving will be applied to disguise its functional appearance.

The aesthetic appearance of railway and operation facilities within the Garden will utlise a modern architectural approach to fit into existing commercial landscape context and integrate with new modern park design that would create a new gathering place for both local neighbourhoods and visitors. The vent shafts will be clad in a palette of natural materials to break up the massing and provide appropriate scale of finish due to facing outwards, or inwards. Louvers, trellises and screens will be aluminium. In line with the design objectives, the adopted design solution serves to minimise the volume, visual mass and height of the vent shafts. At the interface between the low level garden and the elevated landscape deck, an iconic structure in a form of a slender clock tower is located alongside the grand staircase connecting the two levels. The clock tower is the highest structure within the garden and will be perceived as the icon of the future Harcourt Garden. Its top is about 18m aboveground so that it stands proud of the other vent structures within the garden. It will display the time for people using the garden and will no doubt become an interesting backdrop for photos. The use of a clock tower (a tall structure) to signify an important public space is quite common. The clock tower also serves another function, which is to disguise one of the vent shafts within the garden by giving this shaft a function, while at the same time expressing it as a distinctive architectural feature. The vent outlet will be hidden behind the architectural stainless steel wire mesh facade which integrates with the natural stone massing of the tower, producing sleek lines and a contemporary outlook for the clock tower. The design of the clock tower will be further developed and refined in the detailed design stage.

The design team have capitalised on the opportunities for connectivity with the footbridges, and provided garden facilities directly accessible to a greater number of public. This has effectively maximised the area, and increased the facilities available to the users of Harcourt Garden.

6.4.2.2 Vent Shafts and Plant Buildings

Given the operation requirements, vent shaft structures and associated plant rooms are necessary to be located above ground. The ventilation shafts/ plant buildings along the alignment at Hong Kong Park, Lee Wing Street and Nam Fung Road and other built structures associated with the railway and stations are designed with minimum land take as well as provide enough space for the facilities required for railway operation. The site planning, massing, building height profile and disposition of these built structures are carefully considered to minimise the impact on existing trees and visual appearance in the views of VSRs located in proximity or in distance.

Having considered the operational requirement, direct vehicular access to the building frontage is always required and exhaust openings should be clear from all obstacles that would limit tree planting opportunities right in front of the building. In addition, wider hard paved frontage is also required for vent building at Hong Kong Park for the manoeuvring of refuse collection truck to adjacent RCP. This paved area is also reserved for future construction site for SCL. Design measures will be considered to alleviate the visual and landscape impact including the building design and façade treatment. It would be evident through the use of various types of naturalistic material to disguise the functional appearance. In addition, greening measures are incorporated on roof or building façade where technically feasible and the louver would not be obstructed. Other than the building, the remaining works area will be re-instated with new planting proposals which will integrate with existing landscape context of individual sites. Tree planting

opportunities would be maximised where space allows and technically feasible including the sloping areas behind the built structures and roadside planting areas adjacent to the built structures. This responsive design approach is applied to all vent buildings for SIL(E).

6.4.2.3 WCH Depot

WCH Depot is bounded by proposed WCH Station to the north, Nam Long Shan and Police School Roads to the east, south and west. The extent of footprint of the depot is determined by the area required for the proper depot operation including the track arrangement requirements, the EVA layout in compliance with FSD requirement as well as the accommodation providing all necessary operation within the depot. Having considered site constraints, the depot will be located diagonally which is only long enough to accommodate two number of trains back to back in a single track and fulfils the overrun requirements and track radii. Any adjustment of the depot footprint will have significant impact to the depot capacity and operation. Uniform site level at about +15mPD is also required to enable connectivity of the depot with the mainline and thus the existing site has to be lowered and reformed by up to approximately 4m. Given the design requirement above, the majority of existing trees in the Wong Chuk Hang Estate are not feasible to be retained in current location with exceptional of a few of them which are good candidates for transplantation. In addition northern portion of Nam Long Shan and Police School Roads are required to be widened to meet the future traffic needs upon completion of WCH Station, that is another reason why majority of existing trees on the pavement or at the periphery of Wong Chuk Hang Estate are not able to be retained in their current locations.

The visual appearance of the depot is carefully studied to cater the operational and ventilation requirement as well as to minimise the visual impact at both street and elevated levels. The massing, building height profile and façade treatment of the Depot are considered in the views of VSRs located in proximity or in distance. Given that existing and widened footpath surrounding the Depot will be congested with underground utilities, new street trees would be planted where space allows adjacent to the preserved ones to provide continuous greening along the depot façade and create a shaded walking environment for pedestrians. The depot façade treatment would be largely concrete finished with greening measures such as green wall to soften the building edge at where technically feasible and the louvers would not be obstructed. These planting proposals are illustrated in **Figures 6.9.13** and **6.9.14**.

6.4.2.4 Viaducts and Aberdeen Channel Bridge

The alignment and appearance of these above ground structures are carefully considered to meet the operation and structural requirement connecting the railway section from Nam Fung Portal to Ap Lei Chau. Their forms, finishes and landscape proposals are designed to minimise visual intrusion and building mass. The following design measures have been taken at detailed design stage to improve the visual appearance of the viaduct to alleviate the potential visual and landscape impact in balance with operational and structural requirement:

- Majority alignment utilises single viaduct (twin track) single pier design instead of twin viaduct (two separate single track) with twin piers. This track arrangement reduces the visual mass;
- Given the operational requirements, sections of viaduct needed to be refined. These include multiple tracks at varying levels are needed at the entry to the depot to the east of WCH Station, the standard pier arrangement cannot be used due to the presence of the Staunton Creek Nullah and the box girders would need to be carried on portal frames. Both the portal posts and the lintel have been shaped to reduce their apparent form and disguise the functional appearance;
- Box girder structural form of the viaduct has been adopted to reduces the number of different structural arrangements required along the alignment;
- An oval section pier to support the viaduct has been selected to give a more slender and elegant appearance;
- The extent of works has been minimised to preserve existing trees as far as possible, it would be achieved through fine tuning of the viaduct column location. For example, existing Old and Valuable Tree and tree with a DBH over 1M in the vicinity of Wong Chuk Hang Road Garden would be preserved in their current location. The preservation of these mature trees in combination with new roadside planting would provide instant visual mitigation at street level along the viaduct alignment; and

- The affected area will be reinstated with greening measures. Tree planting will be maximised where space allows and technically feasible, otherwise other greening measures such as shrub and climbing plants will be considered to soften the appearance of the columns. Upon the full establishment of the greening measures it is anticipated to form continuous green corridor and green backdrop for the alignment.

Noise barrier or semi-enclosure is required along the viaduct and Aberdeen Channel Bridge forming the major noise mitigation measures for the railway. Panels in natural colour palette are utilised to fit into adjacent landscape context. . The support frame of the noise barriers have been integrated with the overhead line support to slim down the overall height and volume.

Regarding to Aberdeen Channel Bridge design, the form of the new bridge is very much influenced its close proximity to the existing Ap Lei Chau Bridge. The design concept is not to seek to compete with or dominate the existing bridge but to sit alongside it and by using the same materials and basic form present a pair of similar structures that read as one. No landscape treatment is proposed for the bridge itself but there will be associated woodland reinstatement works at either end of the bridge where is adjoins the viaduct on the north shore and tunnel on the south shore. The wooded slopes to the west of the Holy Spirit Seminary and Sham Wan Towers at landings of the bridge will be reinstated with tree and shrub planting to screen and soften the structures and help integrate them visually into the green slope backdrop.

The physical and design constraints, operational and structural requirement mentioned above determine basic shape of the above ground structures for SIL(E). Based on this design framework, the appearance of structures are designed with responsive approach to make better integration with the local context and considered as optimal solution to minimise the potential visual and landscape impact in balance with constraints. These schemes form the basis of this assessment.

6.4.2.5 Ocean Park Station

Ocean Park Station is set within a hard landscaped road network serving Ocean Park and the entrance of the planned Ocean Park extension is located about 50m away from proposed station. The station footprint is confined within a very tight site between Wong Chuk Hang Road and Ocean Park Road, a planned GIC development site to the north and the EVA and access roads for Ocean Park extension to the south.

The rail level at the station is dictated by the need for the viaduct to pass over Wong Chuk Hang Road elevated link to Aberdeen Tunnel entrance. The track spacing and platform arrangement dictates the width of the station at the platform level which in turn dictates the concourse width. The above constraints leave only a narrow linear space at ground floor level park-and-ride (less than 1.5m wide) from southern site boundary of the station. Along the southern edge of the site, an external "zoo fence" is required along the boundary of Ocean Park and its extension for safety reason. The remaining open space is reserved for pedestrian escape routes leaving no room for street trees with the site boundary of proposed station.

Given the limitation of land take, site constraints and operation requirement, tree planting will be accommodated at entrance areas where the pedestrian circulation would not be obstructed. Vertical greening is also proposed on stair bookends of the station and on the ground level park-and-ride wall. This planting proposal is demonstrated on **Figure 6.10.11**.

6.5 Review of Planning and Development Control Framework

A review of the existing planning studies and documents has been undertaken to gain an insight into the planned role of the site, its context and to help to determine if the project fits into the wider landscape context. The assessment does not consider all of the areas zoned on the OZP but focuses on only those affected by the proposed works. The locations of these areas are shown on **Figures 6.1.1** to **6.1.5**. This review considered the following aspects of the identified planning designations:

- Zoning areas which would be physically affected by the proposals, that is where the implementation of the proposed works would lead to the actual loss of an area;

- The potential degradation of the landscape setting of an area which might affect the viability of it's landscape planning designation but not result in a loss of zoning area;
- The visual amenity enjoyed by future residents or users; and
- The general fit of the proposals into this future landscape.

The assessment covers areas shown on the following Outline Zoning Plans:

- S/H4/13 Central District;
- S/H24/6 Central District (Extension);
- S/H11/15 Mid-levels West;
- S/H14/10 The Peak Area;
- S/H15/26 Aberdeen and Ap Lei Chau;
- S/H19/10 Stanley ; and
- S/H10/15 Pok Fu Lam;
- S/H17/11 Shouson Hill & Repulse Bay.

Given most of the alignment will be largely constructed in the form of tunnel by drill and blast tunnelling method, for the large part the construction works will be undertaken underground with no physical impact to existing topography and structures above ground. Therefore the proposed works have no implication on existing or planned designations as shown in OZPs S/H24/6 Central District (Extension), S/H11/15 Mid-levels West and S/H14/9 The Peak Area. The main areas that would be physically affected by construction of proposed elevated or above ground structures include the proposed viaduct, bridge section, ventilation shafts and tunnel portals, some stations or tunnel sections constructed using cut and cover methods; and temporary works areas including barging points and magazine site where there is encroachment to individual zonings. The majority of the proposed works will not directly affect the existing land uses, with exception of the following:

- Open Space (O) Zones at Admiralty, Wong Chuk Hang and Ap Lei Chau – Open spaces such as Hong Kong Park, Harcourt Garden will be in conflict with the tunnelling works and construction of ventilation shafts. Open spaces to the north of Ap Lei Chau Bridge and at the periphery of Wong Chuk Hang Road Garden will be temporarily acquired for site offices and temporary work areas.
- Some proposed slope works will encroach on the Green Belt (GB) zones located to the north of the Aberdeen Tunnel Portal, to the west of Lei Tung Estate, to the east of Lee Nam Road adjacent to South Horizons and adjacent to the St. Mary Home for the Aged and Holy Sprit Seminary; and Sham Wan Towers.
- Excavation works for the ADM and SOH Stations will encroach on the periphery of the Commercial Zones (C) located to the west of Harcourt Garden and commercial centre within South Horizons at Yi Nam Road.
- Residential Group A (R(A)) Zone –The SOH Station will encroach on the zoning containing South Horizons.
- Comprehensive Development Area (CDA) Zone – The former Wong Chuk Hang Estate site will be redeveloped for WCH Station and a railway depot.
- Government, Institution or Community (GIC) Zones – The ex-Canadian Hospital Site will be required for construction of the tunnel box and Nam Fung portal / ventilation building. The proposed viaduct above Staunton Creek Nullah will encroach on the periphery of the Hong Kong Police Training School. The proposed cut-and-cover tunnel from Aberdeen Channel Bridge to Ap Lei Chau Drive will encroach on the site of the ex-Harbour Mission School. The Wong Chuk Hang City Bus Depot and vacant sites to the east of Ap Lei Chau Driving Test Centre will be acquired for temporary works areas or barging points for transporting construction materials.
- The proposed barging points located to the south of Lee Nam Road will encroach on the periphery of existing cargo handling areas zoned as Other Specified Uses (OU).
- The proposed magazine site located to the east Chung Hom Shan at abandoned quarry site will encroach on the area zoned as Other Specified Uses (Composite Signals Organization Station Complex) (OU).

Only the vehicular access and small portion of proposed barging point at Telegraph Bay will encroach to the area between existing Sewage Treatment Plant for Cyber Port and adjacent construction site zoned as Other Specified Uses (Cyber Port) (OU) and partially fall within an area partly shown as "Road". Although there are some impacts to zoned areas, the proposed works utilising drill and blast tunnelling method would not degrade the landscape setting of

the area or affect its viability or existing character. Sections of the tunnel alignment from Ap Lei Chau Drive to Aberdeen Channel Bridge and at SOH and ADM Stations which utilise cut and cover construction method would temporary affect the landscape setting or affect its viability and existing character during construction phase however the existing condition of the site will be reinstated after the works. Hence the proposed works would not lead to permanent implication on the existing or planning landuse designation.

The section of alignment between Ap Lei Chau Bridge and Nam Fung Portal is designed in the form of viaduct and elevated stations (WCH and OCP) with above ground railway depot at Wong Chuk Hang. Therefore the existing industrial, institutional and infrastructure landscape setting alongside the alignment would potentially be affected. Given most of the viaduct alignment follows the existing engineered nullah, the proposed works will be relatively compatible with existing landuse planning designations. Although a small proportion of GB zone to the south of Heung Yip Road and the nullah will be required for construction of viaduct, the change of landscape setting from a landuse planning perspective would be acceptable with mitigation measures such as responsive design of engineering structures and planting adjacent to the viaduct. The impact on the GB zone will be largely alleviated through responsive engineering design to minimise the impact to existing trees and provision of new tree planting on the disturbed area.

In addition to the review of OZP, the proposed works area to the north of Harcourt Road at Fenwick Street will partly encroach to study area of Urban Design Study for the New Central Harbourfront. This works area will be temporarily in nature and will be occupied for site storage purpose. The occupancy could be restricted to a yearly basis with three months advance notice for termination when there is a fixed implementation programme of planned works under the Study and Government would to like to take back this land. The proposed station and tunnelling works in Harcourt Garden are in proximity to planned civic developments and planned enhancement works at Central Harbourfront. However these proposed works will not encroach to the planned works under the Study, hence the proposd railway works are tolerable to the planning and design intentions of New Central Waterfront. Futhermore the Harcourt Garden will be reinstated in form of new urban park utilised a modern design approach with new park facilities and provision of elevated pedestrian circulation, this will enhance the connection from Admiralty inland areas to the waterfront and follows the urban park design principles at the waterfront stipulated under the Urban Design Study for the New Central Harbourfront. The followings are the urban design issues identified in the Study.

- To extend the vitality of the city core
- Appropriate built-forms, heights, massing and layout design to respond to the natural context and to integrate with the surrounding areas
- Harbourfront enhancements, nodal attractions and anchoring public spaces to achieve vibrancy and sense of place
- Conservation of the cultural heritage of Central
- A sustainable transport system and comprehensive pedestrian linkages to enhance connectivity to the harbourfront
- Environmental friendly building design, landscape strategy and greening to enhance the environmental quality
- Harmonizing the design of utility buildings and infrastructure with the waterfront setting

Given the above summary and detailed review in **Table 6.3**, the proposed works with mitigation measures including responsive building and structural design and new tree planting adjacent to the built structures largely fit within the planning and development control framework and can be integrated with the future outlook of the urban and urban fringe landscape context. Given that any proposed scheme/ works authorised under Railway Ordinance shall be deemed to be approved under the Town Planning Ordinance, no landuse review is required on the OZPs. In addition, the works areas of barging points and magazine site are temporary in nature, again no landuse review is required for the respective sites.

Table 6.3: Review of Existing Planning and Development Control Framework

Land Use Zonings		Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts/Approx. Area Affected by the Proposed Works / Total Zoning Area	Mitigation Measures and Future Outlook of the Area with the Proposed Works
Outline Zoning Plan number S/H4/13 Central District				
1.	Open Space (O)	This zone covers Harcourt Garden at Admiralty. The planning intention of this zone is to designate areas for the provision of outdoor open-air public space for active/passive recreational uses serving the need of local residents as well as the general public.	The Harcourt Garden is located at ground floor level above the MTR Admiralty Station and underground car park. Approximately 80% of the western portion of the Garden will be acquired for the construction site of ADM Station. 1.6ha / 2 ha (80%) Magnitude: Large	Given that the proposed ADM station is mainly located underground with the station entrance and vent shafts located above ground, the disturbed garden area will be reinstated and partially raised upon to completion of works; the proposed works are thus considered to be tolerable to the planning intention for this area. The design of station extension can be designed to better integrate with the future recreation landscapes. In addition new tree planting will mitigate potential impacts to existing trees and soften the form of the proposed structures.
		This zone covers Hong Kong Park. The planning intention of this zone is to designate areas for the provision of outdoor open-air public space for active/passive recreational uses serving the need of local residents and the general public.	The existing electricity sub-station, refuse collection point and area adjacent to the southern entrance of Hong Kong Park at Supreme Court Road will be acquired for construction of a vent shaft. 0.5 ha / 7.36 ha (6%) Magnitude: Small	The disturbance to these areas including the existing utility and planting due to the construction of the proposed vent shaft will be reinstated upon to completion of works. Therefore with this reinstatement the proposed works are considered to be tolerable to the planning intention for this area. Responsive design of the vent shaft and proposed use of planting to mitigate the potential impacts of the proposed built structures will ensure their successful integration within the future landscape context.
Outline Zoning Plan number S/H15/26 Aberdeen and Ap Lei Chau				
2.	Green Belt (GB)	This zone encompasses the existing vegetated lower slope of Mount Cameron to the north of Nam Fung Road. The planning intention of this zone is to define the limits of urban and suburban development areas using natural features, to contain urban sprawl as well as to provide passive	Some sloping area adjacent to proposed Nam Fung portal / vent building will be reinforced during the construction of the tunnel and portal. 1 ha / 3ha (30%) Magnitude: Small	Given that the proposed works occupy a small portion of this zone, the location of the tunnel portal relative to the main part of the zone and that the vegetation will be reinstated with new woodland mix planting to mitigate potential impacts to existing trees and soften the form of the proposed

Land Use Zonings	Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts/Approx. Area Affected by the Proposed Works / Total Zoning Area	Mitigation Measures and Future Outlook of the Area with the Proposed Works
	recreational outlets.		structures. The proposed works are thus considered tolerable to the planning intention.
3. Government / Institution / Community (GIC)	This zone is intended to provide a wide range of GIC facilities including Wong Chuk Hang Hospital and the St. Paul Co Education Primary School.	The proposed Nam Fung portal / vent building, box structure and associated viaduct leading to OCP Station will be located to the south of Nam Fung Road at the ex-Canadian Hospital site between Wong Chuk Hang Path and the St. Paul Co-Education Primary School. 2.6 ha / 12.5ha (20%) Magnitude: Small	As the proposed work site is currently vacant and originally formed for hospital development, the proposed works are considered to be tolerable to the planning intention for this area. The responsive design of the proposed portal and box structure will ensure that any potential impacts will be minimised.
4. Government / Institution / Community (GIC)	This zone is intended to provide a wide range of GIC facilities including the City Bus Depot and Aberdeen Sports Ground.	The existing City Bus Depot will be acquired for the construction of the OCP station and associated viaduct leading to the Nam Fung Portal and WCH Station. 1.8 ha / 8ha (20%) Magnitude: Small	As the work site is currently occupied by transport facilities the proposed scheme is considered to be tolerable to the planning intention for this area. Responsive design of the station and its associated adjacent landscape areas will serve minimise potential impacts with the future landscape context particularly the recreational landscapes to the west and south.
5. Comprehensive Development Area (CDA)	This area encompasses the Wong Chuk Hang Estate which was demolished on 2009. The area is intended for comprehensive development/ redevelopment of the site for residential and commercial uses together with a rail depot and station with the provision of public transport and other supporting facilities. These proposals are subject to planning permission from TPB.	The fomer Wong Chuk Hang Estate will be acquired for the construction of the WCH Station and railway depot. 7.17 ha / 7.17a (100%) Magnitude: Large	Given that the site will be comprehensively redeveloped with the proposed railway facilities and the potential residential and commericial components of the development above the depot. the proposals are considered to be tolerable to the zone's planning intention. The potential impacts on the landscape setting of the site and the immediate environs will be minimised through the responsive design of depot facilities. In addition new street tree planting will be accommodated at where space allows, mitigating potential impacts to existing trees and soften the form of the

Land Use Zonings		Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts/Approx. Area Affected by the Proposed Works / Total Zoning Area	Mitigation Measures and Future Outlook of the Area with the Proposed Works
				proposed structures. Given the proposed works with mitigation measures are thus considered to be tolerable to the planning intention.
6.	Green Belt (GB)	This zone encompasses the existing vegetated slopes to the south of the engineered nullah. It forms a narrow linear remnant of the area used for the construction of the nullah and the utility developments to the south. The planning intention of this zone is to define the limits of urban and suburban development areas using natural features, to contain urban sprawl and provide passive recreational outlets.	Some sloping area adjacent to the nullah will be acquired to accommodate the footing for the viaduct leading to the proposed Aberdeen Channel Bridge and WCH Station. 1 ha / 3ha (30%) Magnitude: Intermediate	Potential impacts will be limited as the proposed works will occupy a relatively small portion of this zone, an area characterised by existing engineered slopes which was originally formed during the development of the existing utilities to the south. The vegetation on the disturbed area will be reinstated with woodland planting providing integration with the wooded area to the west. Given these factors the proposed works with mitigation measures are thus considered to be tolerable to the planning intention.
7.	Open Space (O)	This zone covers the promenade recreational area to the northeast of Ap Lei Chau adjacent to the Ap Lei Chau Bridge embankment. The planning intention for this zone is to designate areas for the provision of waterfront open-air public space for active/passive recreational uses serving the need of local residents and the general public.	A portion of this zone will be acquired for the construction site and temporary works areas for the construction of Aberdeen Channel Bridge aligned to the south of existing Ap Lei Chau Bridge and the tunnel section leading to the LET Station. 1ha / 12ha (8%) Magnitude: Small	As a large part of the works site will be reinstated to its original condition upon the completion of works the proposals are considered to be tolerable to the planning intention for this area. Potential impacts will be minimised through the careful design of the new bridge structure and the proposed new tree planting at the promenade make a better integration to future recreation landscapes.
8.	Green Belt (GB)	This zone encompasses the remnant vegetated slopes to the north of Sham Wan Towers. This is narrow linear sloping area left after the construction of the Ap Lei Chau Bridge and residential developments to the south. The planning intention of this zone is to define the limits of urban and suburban development areas by natural features, to contain urban sprawl as well as to provide passive recreational outlets.	Some sloping area adjacent to Sham Wan Towers will be acquired for the proposed Aberdeen Channel Bridge landing and leading tunnel to the underground LET Station. 0.5 ha / 2 ha (25%) Magnitude: Small	Given that the majority of works are proposed on engineered slopes originally formed during the infrastructure and residential development and that the vegetated sloping area affected will be reinstated with new tree planting that makes a better integration to existing infrastructure and residential developments, the proposed works with mitigation measures are thus considered to be tolerable to the planning

Land Use Zonings	Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts/Approx. Area Affected by the Proposed Works / Total Zoning Area	Mitigation Measures and Future Outlook of the Area with the Proposed Works
			intention. .
9. Government / Institution / Community (GIC)	This zone intends to provide GIC facilities and originally occupied by Harbour Mission School.	This site will be acquired for the construction of bridge landing and tunnel to the LET Station. 0.3 ha / 0.3ha (100%) Magnitude: Large	As the proposed works will be contained within an individual GIC zone which is currently vacant and surrounding by high-rise residential developments the proposals are considered to be tolerable to the planning intention for this area. The use of a responsive design for the bridge landing and its associated roadside planting will serve to minimise potential impacts.
10. Residential (Group A) (R(A))	This area encompasses the Lei Tung Estate. It is also intended for high-rise residential redevelopments subject to planning permission from the TPB.	The roadside areas of Lei Tung Estate will be acquired for the construction of entrances and exits for the LET underground Station. 0.5 ha / 10ha (5%) Magnitude: Small	Given that a small portion of roadside areas within the zone will be affected the proposal are considered to be tolerable to the planning intention for this area. The use of a responsive station entrance design will serve to minimise potential impacts and enhance integration with the adjacent high density residential landscapes.
11. Green Belt (GB)	This zone encompasses the vegetated knoll between the Lei Tung Estate and South Horizons. The planning intention of this zone is to define the limits of urban and suburban development areas by natural features, to contain urban sprawl as well as to provide passive recreational outlets.	A portion of the sloping area near to Lee Nam Road adjacent to South Horizons and the Hong Kong School of Motoring will be acquired for the construction of SOH Station and a plant building. 0.8 ha / 23 ha (3%) Magnitude: Small	The majority of works in this area will utilise a tunnelling construction method, and the station and plant building will be located on existing engineered slopes. The vegetated slopes affected by the works will be reinstated with new tree planting enhancing the sense of integration and the minimising potential impacts on the adjacent residential developments. Therefore the proposed works are considered to be tolerable to the planning intention of this zone.
12. Residential (Group A) (R(A))	This area encompasses the South Horizons residential area. It is also intended for high-rise residential redevelopments subject to planning permission from TPB.	Roadside areas of South Horizons at Yi Nam Road will be acquired for the construction of entrances and exits for the proposed SOH Station. 0.1 ha / 20ha (1%) Magnitude: Small	Given that only a small portion of roadside areas within the zone will be affected the proposed works are considered to be tolerable to the planning intention for this area. Responsive station entrance design will ensure that the potential impacts are

Land Use Zonings	Landscape Planning, Design and Conservation Intention of Zoning	Potential Impacts/Approx. Area Affected by the Proposed Works / Total Zoning Area	Mitigation Measures and Future Outlook of the Area with the Proposed Works
			minimised on the adjacent high density residential landscapes.
Outline Zoning Plan number S/H19/10 Stanley OZP			
Other Specified Uses (Composite Signals Organization Station Complex) (OU)	This zone intends to provide areas for the Composite Signals Organization Station Complex and the site is originally occupied by a quarry.	The proposed magazine site will be located to east Chung Hom Kok Shan at the abandoned quarry site encroaching on the area zoned. 0.2 ha / 10ha (2%) Magnitude: Small	Given that the site was originally occupied by a quarry the proposed magazine site is considered to be tolerable to the planning intention for this area.
Outline Zoning Plan number S/H10/15 Pok Fu Lam			
13. Other Specified Uses (Cyber Port)(OU)	This zone tends to establish a base for the clustering of creative information service business and related businesses with an extensively landscaped, high-quality living and working environment which blends in well with the surrounding neighbourhood.	The proposed barging point is located at the waterfront to the south of this area zoned. Majority of the barging point is located on non-designated zone, only proposed access to the barging point encroaching to this area zoned. 0.02 ha / 35.61ha (2%) Magnitude: Small	Given that the site is located on non-designated zoned area and only proposed access is sited in this area zoned between existing sewage treatment plant and construction site in Cyber Port the proposed barging point is considered to be tolerable to the planning intention for this area.
Outline Zoning Plan number S/H17/11 Shouson Hill & Repulse Bay			
14. Open Space (O)	This zone covers Wong Chuk Hang Road Garden, adjacent vacant lands and remaining villages located to the eastern roadside area approaching to Aberdeen Tunnel. The planning intention of this zone is intended primarily the provision of outdoor open-air public space for active and /or passive recreational uses serving the needs of local residents as well as the general public and visitors from other parts of the Territory.	Part of Wong Chuk Hang Road Garden and adjacent vacant land will be acquired as working area for the construction of viaduct section from Nam Fung Portal to OCP Station. 0.5ha / 4.42ha (11%) Magnitude: Small	As a large part of the works site will be reinstated to its original condition upon the completion of works the proposals with mitigation measures are considered to be tolerable to the planning intention for this area. Potential impacts will be minimised through the careful design of the viaduct structures and reinstatement of affected garden area with new amenity planting to make a better integration to future recreation landscapes and adjacent village settlements.

6.6 Baseline Condition

6.6.1 Landscape Baseline

6.6.1.1 Baseline Conditions

The baseline review of the existing landscape establishes the broad characteristics, identifies Landscape Resources (LRs), and then provides a characterisation and evaluation of the identified Landscape Character Areas (LCAs).

Figures 6.2.1 to **6.2.18** show the existing LRs found within the 100 m Study Area, according to the EIA Brief, with site photographs. **Figures 6.3.1** to **6.3.6** show the extent of the identified LCAs and Figures 6.4.1 to 6.4.5 illustrate the quality of LCAs with site photographs.

6.6.1.2 Topography

The topography of the Study Area is characterised by the harbour front hinterland urban area at Admiralty to the north of Hong Kong Island extending to Hong Kong Island South urban areas separated by the island ridgeline from Mount Gough and Mount Cameron. The urban areas within the southern part of Hong Kong Island include Wong Chuk Hang and Ap Lei Chau set alongside the Aberdeen Channel bounded by Shouson Hill, Nam Long Shan and Yuk Kwai Shan. The area to the south is characterised by Nam Long Shan and Ocean Park located on the highland area facing Sham Shui Kok.

Admiralty, extending east from the Central Business District, is characterised by commercial high-rise buildings alongside Queensway and Harcourt Road. This is also one of major MTR stations with an interchange for the MTR Island and Tsuen Wan Lines. This station is located underground along Queensway with pedestrian access to adjacent commercial centres. Moving to the southwest of the commercial centres, the area is dominated by Hong Kong Park with its lush tree lined setting on sloping area bounded by Cotton Drive and Kennedy Road. To the north, Mount Gough is characterised by wooded hill slopes interspersed with low to medium-rise residential developments at the Mid-levels forming the greenback drop in views from Admiralty when viewed from the south particularly from the Harbour.

Moving to the east, the vegetated valleys forming Magazine Gap and Wan Chai Gap bisect Mount Gough and Mount Cameron. This area is largely wooded crossed by roads and punctuated by low-rise residential developments extending to the east and west along Stubbs Road.

To the south, the Aberdeen Reservoir is set within a valley between Tin Wan Shan, Bennet's Hill, Mount Cameron and Mount Nicholson forming part of Aberdeen Country Park. This is also the point of demarcation between Hong Kong Island north and south.

The urban areas of Hong Kong Island South are situated within the flat coastal landscape strip lining the Aberdeen Channel with Tin Wan Shan, Bennet's Hill and Mount Nicholson forming the green back drop to the north and Yuk Kwai Shan and Nam Long Shan to the south. To the north of the Aberdeen Channel from the west, the waterfront and its hinterland is characterised by commercial and residential high-rises at Aberdeen, industrial and institutional medium-rise development at Wong Chuk Hang and residential low-rise development adjacent to Shouson Hill to the far west end separated by the Aberdeen Tunnel Portal. Major roads linking these locations include Aberdeen Praya Road and Wong Chuk Hang Road. To the south of the Aberdeen Channel, Ap Lei Chau forms combination between highly developed residential areas including the medium to high-rise residential developments of South Horizons, Ap Lei Chau Estate and Lei Tung Estate. The Ap Lei Chau Bridge is the major vehicular link from the island to Aberdeen. Two vegetated knolls (less than 200mPD) located to the southeast portion of the island are the major landscape component on the island separating the residential uses to the north and industrial uses to the south.

The hill slopes to the west of Nam Long Shan are characterised by schools and hospitals whilst the waterfront is occupied by the Sham Wan Marina, dockyard and other industrial uses where the landscape setting contrasts with the amusement park to the south and northeast of Nam Long Shan.

6.6.1.3 Vegetation

The broad-brush tree survey covers the areas which will be affected by the proposed works with exception of tunnel sections constructed using a drill and blast tunnelling method. Where the proposed tunnelling utilises drill and blast method the trees will be unaffected by the proposed works. The areas of existing tree growth which will potentially be affected by the proposed works are listed as follows and impacts on existing trees will be reviewed in detail under **Section 6.7.4** of this report:

- Amenity tree planting within Harcourt Garden within the works area of the proposed ADM station;
- Roadside tree planting and amenity tree planting adjacent to entrance of Hong Kong Park at Supreme Court Road at the location of the proposed ventilation shaft;
- Woodlands on the slopes to the east of the former ex-Canadian Hospital Site which will accommodate the construction of the proposed Nam Fung portal / vent building, box structure and viaduct leading to the OCP Station;
- Roadside plantation along Aberdeen Tunnel Road and Wong Chuk Hang Road, some existing trees alongside the Staunton Creek Nullah and amenity trees within Wong Chuk Hang Road Garden which may be affected by the construction of the viaduct and elevated stations from the proposed OCP Station to WCH Station;
- Plantation woodland within Wong Chuk Hang Estate and alongside Heung Yip Road, Police School Road and Nam Long Shan Road in areas required for the proposed elevated WCH Station and railway depot;
- Amenity tree planting within Nam Long Shan Road Children's Playground and the woodland plantation on the engineered and remnant natural slopes to the north of St. Mary Home for Aged and Tung Wah Rehabilitation Complex which may be affected by the construction of the proposed viaduct between WCH Station and the proposed bridge structure lining the existing Ap Lei Chau Bridge;
- Trees on the remnant natural slopes between Ap Lei Chau Bridge, Holy Sprit Seminary and Sham Wan Tower adjacent to the proposed Aberdeen Channel Bridge;
- Plantation woodland within the Harbour Mission School adjacent to the proposed Aberdeen Channel Bridge;
- Plantation woodland on the engineered slopes to the northeast of Yue On Court at an area which will accommodate the proposed landing for the Aberdeen Channel Bridge leading to the underground LET Station constructed using the drill and blast tunnelling method;
- Plantation woodland within the amenity area between Sunny Court and Hope Kit Court and to the north of the Lei Tung Estate which will be reserved for the construction of station exit for the LET Station; and
- Trees on the engineered slopes lining Lee Nam Road affected by the construction of the proposed tunnel portion leading to SOH Station;
- Existing trees at the proposed barging point sites at Telegraph Bay and Lee Nam Road and Wah Kwai works area; and
- Existing trees within the Magazine Site at Chung Hom Shan and adjacent natural terrain hazard zone.

Approximately 5,768 trees have been identified within the works areas including approximately 2,570 trees located within public open spaces, roadside amenity areas and on pavement, 1,966 slope trees, approximately 1,125 *Leucaena leucocephala* (銀合歡), undesirable species, and 107 dead trees are found in the survey. A broad brush tree survey undertaken by Detailed Design Consultants of the Project (hereafter DDCs) is enclosed in Appendix 6.1 Tree Assessment Schedule and 6.2 Tree Survey Plans. The existing trees with a DBH of over 500mm, over 1M and Registered OVTs are highlighted in the tree survey plans. Photographic records of OVTs within the survey boundary are shown in **Figure 6.2.18**. These important landscape resources are considered to be preserved in-situ or through transplantation during the development of railway works and their final treatment will be assessed during the detailed design stage. During detailed design stage tree felling application will be prepared and circulated to the relevant government departments for approval. The majority of these trees are located at the roadside along the existing infrastructure corridors while a lesser number of trees within the Study Area are located on remnant natural or engineered slopes adjacent to Staunton Creek Nullah and the amenity trees located within the existing parks, gardens and sitting out areas. Registered OVTs and few protected tree species are found in the tree survey undertaken by DDCs which include the following:

- Three OVTs LCSD CW/115, LCSD CW/116 and LCSD CW/117 (*Ficus Microcarpa*) are found at roadside planting areas at the western end of Supreme Court Road adjacent to Hong Kong Park Entrance. Another two OVTs LCSD S/8 (*Ficus elastica*) and LCSD S/9 (*Albizia saman*) are at Wong Chuk Hang Road Garden and at the junction with Shouson Hill Road respectively. Photograph of these OVTs are illustrated on **Figure 6.2.16** and their location refers to **Appendix 6.2 Figure A6-902-2** and **A6-903-4.** OVT LCSD S/8 which in the vicinity of the viaduct construction will be preserved and protected on site. Other OVTs, LCSD CW/115, LCSD CW/116, LCSD CW/117 and LCSD S/9 will remain unaffected.
- Four *Ailanthus fordii* found on sloping area at Wong Chuk Hang Road at the junction with Shouson Hill Road , another three *Aquilaria sinensis* found to the north of the Holy Sprit Seminary are protected tree species under Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) and/or China Valuable and Protected Plants List. Their location refers to **Appendix 6.2 Figure A6-903-1** to **16**.
- In addition to those rare and/or protected tree identified in the tree survey, some undersized rare and/or protected tree, shrub or herb, which have local or global conservation interest, are identified in the wider study context of **Section 4** ecological assessment. As these plants are undersized plant, shrub or herb, they are not contained in the tree survey. Their locations refer to **Figures 4.6, 4.8** and **4.9**.

In addition to registered OVTs, rare and/or protected species, the tree survey also identified approximately ten existing trees which have a DBH over 1M. Two of them are located in ex-Canadian Hospital Site (shown on **Figure A6-903-2**), one on sloping area to the north of Sham Wan Towers (shown on **Figure A6-902-6**), and one located at ex-Wong Chuk Hang Estate (**Figure A6-904-1**). The remaining six trees with a DBH over 1M are found in Wong Chuk Hang Road Garden and its adjacent vacant land (Figure **A6-903-3&4**). Trees having a DBH ranged from 500 to 1000mm are also highlighted in the tree survey, approximately 129 in numbers, these resources will be preserved in-situ or transplanted as far as technically feasible during the construction of proposed works. Final treatment of the above mature trees is further reviewed during formal tree felling application stage, the application is currently seeking for relevant government departments' approval.

6.6.2 Landscape Resources

The important determinants of the landscape character within the Study Boundary include the key landscape resources (LRs) including a combination of natural woodland on upland areas, mixed woodland planting on remnant and lower hill slopes between existing development and infrastructure, plantation alongside the key roads and nullah, plantation woodland and amenity trees within the parks and open spaces, plantation and tree planting within individual developments; modified stream courses and water bodies, major roads and infrastructure; and the main concentrations or massing of the built environment. These LRs are shown on **Figures 6.2.1** to **6.2.16**. The following LRs have been identified within the Study Area and **Table 6.4** provides an assessment of the sensitivity of each of the identified LRs:

LR1 Major Roads and Highways – The major roads and highways contained within the Study Area include Queensway, Harcourt Road, Aberdeen Tunnel Road and Portal, Wong Chuk Hang Road, Heung Yip Street, Ap Lei Chau Bridge Road, Lee Nam Road and Yi Nam Road. This resource is manmade feature which has relatively low landscape and amenity value; and so is able to accommodate extensive modification and so is considered to have a low sensitivity in general with exception of LR1.2 Supreme Court Road, LR1.3 Nam Fung Road and LR1.12 Chung Hom Kok Road which have a medium sensitivity. Given slightly different characteristic of this resource in different geographical locations along proposed railway alignment, LR1 is sub-divided into following sub-categories.

- *LR1.1 Major Roads at Admiralty* - Queensway, Harcourt Road and Fenwick Pier Street are major roads in island north connecting CBD and Wan Chai. Queensway and Harcourt Road are multi-lane road corridors enclosed by commercial high-rises and civic buildings. Tramway is the major component along Queensway. Fenwick Pier Street is connecting road from Admiralty to Wan Chai North. Footpaths are relatively wide and paved with better quality pavers to match with surrounding commercial context. Given their relatively low landscape and amenity value due to busy traffic; and so is able to accommodate modification and so is considered to have a low sensitivity.
- *LR1.2 Supreme Court Road* - This is the access road leading to Supreme Court, Queensway Government Offices and Hong Kong Park at the higher elevation to the southern fringe of Admiralty. The road corridor is framed by civil

buildings, greenery in Hong Kong and mature pavement trees in roadside planters. Given their relatively higher landscape and amenity value; it is relatively sensitive to modification and so is considered to have a medium sensitivity.

- *LR1.3 Nam Fung Road-* Two lanes local road provides access to GIC and institutional facilities at Wong Chuk Hang East. Urban fringe road corridor is framed by buildings and vegetated slopes at the fringe of Aberdeen Country Park. Footpaths are relatively narrow and finished with concrete surface. Given the relatively higher landscape and amenity value of its surrounding context, this is considered to have a medium sensitivity.
- *LR1.4 Aberdeen Tunnel Approaching Roads* – Multi-lane road network leads to Aberdeen Tunnel. The road corridor is interfered by footbridges. Given the highly urbanised setting and busy traffic, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.5 Ocean Park Road* – Approaching road to Ocean Park, bus deport, open car parking and construction sites are located alongside of the road. Footpaths are relatively narrow. Given the on-going change of road alignment due to further development of Ocean Park, it is able to accommodate further modification and so is considered to have a low sensitivity.
- *LR1.6 Major Roads at Wong Chuk Hang* – These are approaching roads to Wong Chuk Hang industrial areas. The road corridor is framed by industrial buildings, elevated roads and man-made nulllah. Footpaths are degraded by loading and unloading activities extending from adjacent industrial buildings. Given their highly urbanised setting, busy industrial traffic, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.7 Ap Lei Chau Bridge Approaching Roads* - The approaching roads leads to Ap Lei Chau Bridge. Given the highly urbanised setting along Aberdeen and Ap Lei Chau waterfront, busy traffic and its engineered appearance, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.8 Lei Tung Estate Approaching Roads* – Local roads leads to Lei Tug Estate. The road corridor is framed by high-rise residential buildings and man-made slopes. Footpaths are narrow and finished with paving blocks. Given their urbanised residential setting, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.9 South Horizon approaching roads* - Local roads leads to South Horizons and Ap Lei Chau Estate. The road corridor is framed by high-rise resident buildings, local shopping centres and bus terminal. Given their urbanised setting, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.10 Lee Nam Road* – The two-lane road corridor is framed by industrial and utilities buildings to the south of Ap Lei Chau. Footpaths are narrow and finished with monotonous paving block. Street tree planting is limited. Given their urbanised industrial setting, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.11 Cyber Port approaching roads* - Local roads leads to high technology, utilities and residential areas in Cyberport. Footpaths are narrow and finished with paving blocks matching with the style of adjacent high-tech and residential developments. Given their urbanised setting, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR1.12 Chung Hom Kok Road-* Local roads leads to ex-quarry site and utilities areas in southern end of Chung Hom Kok. Road is framed by manmade slopes and remnant vegetated sloping areas. Given their countryside setting behind the development, it is relatively higher sensitive to modification and so considered to have a medium sensitivity

LR2 Developed Area – The main urbanised areas located within the southern part of Hong Kong Island waterfront and its hinterland include a combination of high-rise commercial developments in Admiralty giving way to medium-rise and house type residential developments at the Mid-levels, high-rise residential developments within Aberdeen and Ap Lei Chau, industrial and institutional developments at Wong Chuk Hang, maritime development and dockyard type land uses alongside the Aberdeen Channel, industrial development along southwest waterfront of Ap Lei Chau and low-rise type residential development of Shouson Hill. A combination of tree and shrub planting within amenity areas within individual residential urban developments enhancing the amenity of developed areas. They contribute to the local landscape context both in the form of groups and often through the utilisation of individual specimens of ornamental species. This resource makes up a large proportion of the urban landscape of Hong Kong and despite what might be

considered to be its unique qualities able to accommodate change, hence, it is considered to have a low to medium sensitivity.

- *LR2.1 Commercial and Institutional Developments at Admiralty* - The area is composed of commercial high-rises and medium-rise institutional development along busy roads. Given their highly urbanised setting, with limited vegetation at grade or on elevated levels of the developments, it is less sensitive to modification and so considered to have a medium sensitivity.
- *LR2.2 Civil Developments at Supreme Court Road* -The area is composed of civil buildings, hotel developments and Hong Kong Park. Given their highly urbanised setting, it is less sensitive to modification and so considered to have a medium sensitivity.
- *LR2.3 Institutional Developments at Nam Fung Road* - The area is composed of schools, hospitals, elderly homes and community facilities to the north of Aberdeen Tunnel. Given their highly urbanised setting, it is less sensitive to modification and so considered to have a medium sensitivity.
- *LR2.4 Village and Residential Developments at Lower Slope of Shouson Hill* -The area is composed of remnant village settlements, medium to low-rise residential developments and a green nursery. Some vegetation are found in courtyard gardens of residential development and adjacent to the village. Given this urban fringe setting, it is less sensitive to modification and so considered to have a medium sensitivity.
- *LR2.5 Carparking and Bus Deport adjacent to Ocean Park* -The area is composed of infrastructure developments to facilitate visitors to Ocean Park. Given their highly urbanised setting, with limited vegetation, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.6 Industrial Developments at Wong Chuk Hang* - The area is composed of medium-rise industrial buildings. Given their highly urbanised setting with degraded buildings and limited or no vegetation in the area, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.7 Institutional Developments at Wong Chuk Hang* - The area is composed of medium-rise institutional buildings on the area of vegetated slopes. Plantation on sloping areas within and adjacent to the developments have a combination of native woodland and plantation species due to previous modification of these sloping areas. Tree species include *Caryota mitis, Cinnamomum camphora, Carica papaya, Dimocarpus longan, Cratoxylum cochinchinense, Ficus hispida, Macaranga tanarius and Microcos paniculata etc.* Majority threes has a DBH less than 500mm. It has a medium sensitivity locally to be respected.
- *LR2.8 Demolition Site of Ex-Wong Chuk Hang Estate* – Demolition of the Estate is now completed, the site is fenced off pending for the proposed railway development. Plantation originally within Wong Chuk Hang Estate are pending for removal or transplanting upon Government approval. They are common ornamental planting including *Aleurites moluccana, Bauhinia blakeana, Lagerstroemia speciosa, Delonix regia, Ficus religiosa and Ficus microcarpa etc.* in garden areas of the Estate and *Acacia confusa, Celtis sinensis, Alangium chinense, Leucaena leucocephala and Macaranga tanarius etc.* on remnant slopes surrounding the site. Condition of majority plantation is fair to poor regarding to the limitation of growing space within small planting areas. Only 5% of trees within the Site have a DBH over 500mm. Another one, *Ficus elastica,* had a DBH over 1M is found in the Site, it is characterised by aggressive aerial root. Given the nature of construction site, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.9 Residential Developments at Aberdeen Waterfront* - The area is composed of high-rise residential buildings with a few tree planting and vegetation within individual developments. Given their highly urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.10 Residential Developments at Ap Lei Chau Waterfront* - The area is composed of high to medium-rise residential buildings with very limited vegetation adjacent to the developments. Given their highly urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.11 Mixed-use Developments at Ap Lei Chau Main Street* – The area is composed of individual high to medium-rises along the Street. Given their highly urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.

- *LR2.12 Public Housing Developments at Lei Tung* - The area is composed of typical public housing developments. Given their highly urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.13 Industrial and Utilities Developments at Lee Nam Road* - The waterfront area is composed of medium-rise industrial buildings. Given their highly urbanised setting with degraded buildings and limited or no vegetation in the area, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.14 Residential Developments at Ap Lei Chau West* - The area is composed of high to medium-rises residential and public housing. The area is interspersed with street trees, amenity vegetation within the estates and vegetation on remnant slopes. Given their urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.15 Residential Developments at Pok Fu Lam* - The area is composed of high to medium-rises residential buildings. Some amenity vegetation are found in the courtyards of the development whilst seldom vegetation is found along waterfront where occupied by utilities or construction sites. Given their urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.16 Utilities Facilities and Industrial Developments at Tin Wan waterfront* - The area is composed of low to medium-rise cold storage and godowns extending from Aberdeen. Given their highly urbanised setting with limited vegetation at the periphery of the LRs including *Broussonetia papyrifera* and *Leucaena leucocephala*, majority of them have a DBH less than 500mm, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.17 Mixed Use High Technology Developments at Pok Fu Lam* - The area is composed of high to medium-rises high technology/commercial buildings. Some amenity vegetation are found in the courtyards of the development whilst seldom vegetation is found along waterfront where occupied by utilities or construction sites. Given their urbanised setting, it is less sensitive to accommodate modification and so considered to have a medium sensitivity.
- *LR2.18 Utilities Facilities at Chung Hom Kok* - The area is composed of low-rise teleport substations. Given their utility setting with limited vegetation in the area, it is able to accommodate modification and so considered to have a low sensitivity.
- *LR2.19 Ocean Park*- An amusement park with aquarium, zoological and botanic gardens developed at the northern lower slope of Brick Hill. Given the area is designated for recreational activities, largely covered with mature vegetation and undertaken on-going extension works, it is able to accommodate modification and so considered to have a medium sensitivity.

LR3 Natural Woodland – This LR includes the secondary woodland coverage and woodland stands of the Mid-levels; and the upland areas of central Hong Kong Island including Mount Gough, Magazine Gap, Wan Chai Gap and Mount Cameron, on upland areas surrounding Aberdeen Reservoirs within the Aberdeen Country Park, and on the upland areas of Yuk Kwai Shan and Nam Long Shan in the southern part of Hong Kong Island. The majority of this resource although secondary or plantation remains untouched by the urbanization of Hong Kong Island, hence it is regionally significant in terms of its contribution to the landscape context and sensitive to small changes. Therefore the sensitivity of LR3 is considered to be high to medium. Given slightly different character of the above resources, LR3 is sub-divided into following sub-categories according to different combination of landscape components:

- *LR3.1 Natural Woodland at the Peak and Mid-level Sloping Areas* – mature woodland is largely undisturbed, highly sensitive and is an important LR to be respected regionally. A fung shui wood is situated on the hillside north of Nam Fung Road and currently is zoned as a SSSI. Common woodland species includes *Celtis sinensis, Litsea glutinosa, Schefflera heptaphylla, Cratoxylum cochinchinense, Mallotus paniculatus, Ficus variegata, Bridelia tomentosa* and *Microcos paniculata*. It is in combination fo native shrubs including *Artocarpus styracifolius, Artocarpus tonkinensis, Camellia salicifolia, Chrysophyllum lanceolatum, Cryptocarya concinna, Gleditsia fera, Uvaria calamistrata and Mallotus peltatus*. Four species listed under the Forestry Regulations (Cap. 96 sub. leg.): *Cleisostoma simondii, Enkianthus quinqueflorus, Lagerstroemia fordii* and *Pavetta hongkongensis* and three rare species *Castanopsis carlesii, Gleditsia fera* and *Gleditsia australis* were recorded in the woodland within the Aberdeen Country Park. Detailed information refers to **Section 4** of this report.

- *LR3.2 Natural Woodland on sloping area to the south of Wong Chuk Hang Estate* – located at northern lower slope of Nam Long Shan, it is a mature woodland and remains largely undisturbed, it has a medium sensitivity and is an important LR to be respected locally. Common native species include *Celtis sinensis, Cratoxylum cochinchinense and Macaranga tanarius etc. in combination of large amount of undesirable species, Leucaena leucocephala.*
- *LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary* – remnant natural slope during the development of Wong Chuk Hang, some lower portions are disturbed due to development of channel improvement works, it has a medium sensitivity and is an important LR to be respected locally. Dominant native species include *Celtis sinensis, Litsea glutinosa, Schefflera heptaphylla, Cratoxylum cochinchinense, Mallotus paniculatus, Ficus variegata, Bridelia tomentosa* and *Microcos paniculata etc.*. Three *Aquilaria sinensis* are found on sloping area which are protected species listed under the Forestry Regulations (Cap.96 sub. Leg.) Majority trees have a DBH less than 500mm due to their dense growing condition.
- *LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers* – remnant natural slope during the development of Ap Lei Chau Bridge, medium sensitive and important LR locally to be respected. Dominant native species include *Macaranga tanarius, Mallotus paniculatus*, *Sapium sebiferum and Schefflera heptaphylla etc. with combination of some self-seeded, Bauhinia variegata.* Only 5% of them have a DBH over 500mm due to their dense growing condition.

LR4 Mixed Woodland – This resource includes patches of mixed woodland stands on remnant hill slopes interspersed between the corridors of the main infrastructural and urban development at Wong Chuk Hang and Ap Lei Chau. It forms green islands within an urban landscape largely devoid of significant vegetation and serves to provide sense of integration for the development within the area particularly where it is established along existing road and infrastructure development. For a large part this resource is isolated within the woodland on upland areas to the north of the Study Area and so is locally significant in terms of its contribution to the landscape context. Given that these resources are largely disturbed by adjacent infrastructure development and despite being reasonability tolerant to small changes the sensitivity of LR4 is considered to be medium to low. Given slightly different character of the above resources, LR4 is sub-divided into following sub-categories:

- *LR4.1 Mixed Woodland on sloping areas alongside of Nam Fung Road* – woodland strand located on roadside modified slopes, dominated by native and exotic trees. It has a medium sensitivity and is to be respected locally. Dominant species include *Acacia confusa, Aleurites moluccana, Ficus hispida, Ficus variegata var. chlorocarpa, Broussonetia papyrifera, Delonix regia , Mallotus paniculatus etc.* and some fruit trees. Only 2% of them have a DBH over 500mm. Two Ficus are found to have a DBH over 1000mm.
- *LR4.2 Mixed Woodland in sloping areas to the east of Wong Chuk Hang San Wai* – remnant slope during the development of adjacent road and developments, dominated by a combination of native and exotic species. It has a medium sensitivity and is to be respected locally. Dominant species include *Acacia confusa, Aleurites moluccana, Bauhinia variegata , Delonix regia etc.* and some fruit trees.
- *LR4.3 Mixed Woodland on sloping areas to the north of Hong Kong Police College* – engineered slopes at the interface between the Nullah and alongsides developments. It has a medium sensitivity and is to be respected locally. Dominant species include *Acacia confusa, Aleurites moluccana, Bauhinia variegata , Casuarina equisetifolia, Delonix regia, Ficus hispida, Macaranga tanarius, Pinus massoniana and Sterculia lanceolata etc..* Large amount of bamboo are originally planted at the peripheries of School for screening purposes. Only 2% of them have a DBH over 500mm.
- *LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah* – engineered sloping area alongside of the Nullah, the upper portion of the slope is natural. It has a medium sensitivity and is to be respected locally. Dominant species include *Acacia confusa, Aleurites moluccana, Bauhinia blakeana, Cratoxylum cochinchinense, Ficus hispida, Ficus microcarpa, Cinnamomum camphora Microcos paniculata and Sterculia lanceolata etc. in combination of large amount undesirable species, Leucaena leucocephala.* Only 1% of them have a DBH over 500mm due to competition of growing spaces.
- *LR4.5 Mixed Woodland on sloping areas to the north of Ap Lei Chau Bridge Road* – engineered slope formed during the development of the road. It has a low sensitivity and is an less important LR to be respected due to

previously disturbed during construction of Ap Lei Chau Briage. Dominant species include *Araucaria heterophylla, Albizia lebbeck , Bauhinia blakeana, Carica papaya, Ficus variegata var. chlorocarpa and Macaranga tanarius etc. in combination of undesirable species, Leucaena leucocephala.* Majority trees have a DBH less than 500mm.

- *LR4.6 Mixed Woodland on sloping areas at the junction of Ap Lei Chau Bridge Road and Lee Nam Road* – engineered lower slope of Yuk Kwai Shan. It has a low sensitivity and is an less important LR to be respected. Dominant species include Acacia confusa, *Bauhinia variegata and Macaranga tanarius. etc.* All trees have a DBH less than 500mm.
- *LR4.7 Mixed Woodland on sloping areas to the north of Lee Nam Road* – engineered lower slope of Yuk Kwai Shan. It has a low sensitivity and is an less important LR to be respected. Dominant species include Acacia confusa, *Bauhinia variegata, Macaranga tanarius, Khaya senegalensis, Melaleuca quinquenervia and Leucaena leucocephala etc.* All trees have a DBH less than 500mm.
- *LR4.8 Mixed Woodland on sloping areas to the south of Police School Road* – a combination of engineered slope and remnant slope formed during development of the road. It has a medium sensitivity and is an important LR to be respected locally, it is dominated by *Macaranga tanarius in combination of large amount of undesirable species, Leucaena leucocephala.* Majority trees have a DBH less than 500mm.
- *LR4.9 Mixed Woodland on sloping areas surrounding Chung Hom Kok Quarry* – naturalised plantation alongsides of the access road. It has a low sensitive and is a less important LR to be respected, it is dominated by *Macaranga tanarius in combination of large amount of undesirable species, Leucaena leucocephala.* Abundant *Dalbergia hancei, Neyraudia reynaudiana* and *Sageretia thea* were identified in the shrubland. Only 2% of them have a DBH over 500mm.

LR5 Roadside Amenity – This resource are plantations along roadside and waterfront (nullah and harbour areas) often established in planters or on engineered slopes along the major infrastructure corridors usually serving as buffer planting between developments and major road and infrastructure such as the Aberdeen Tunnel Road, Heung Yip Road and Ap Lei Chau Bridge Road etc. Those plantations make the greatest contribution to the local landscape context in the form of a groups rather than as individual specimen trees as they are largely formed by fast growing non-native species, commonly found in roadside planting areas in Hong Kong and have a high tolerance to the harsh urban and traffic environment. These tree groups are often planted at close centres designed to create an instant effect along transport corridors. This resource although important from a landscape perspective has less value particularly ecological value than the mixed secondary woodland on the hill slopes above. This resource is relatively tolerant and is considered to have a medium to low sensitivity. Given slightly different character of the above resources, LR5 is sub-divided into following sub-categories:

- *LR5.1 Roadside Plantation at Admiralty* – common roadside trees in raised planter along Queensway, Harcourt Road, Fenwick Pier Street, Supreme Court Road and Cotton Tree Drive. It has a medium sensitivity and is an important LR along busy traffic corridor to be respected, amenity species include *Ficus microcarpa, Delonix regia , Magnolia grandiflora, Lagerstroemia speciosa* and *Schefflera actinophylla* etc. Three OVTs LCSD CW/115, LCSD CW/116 and LCSD CW/117 (*Ficus Microcarpa*) and some *street trees, Melaleuca leucadendron L are found on pavement along Supreme Court Road* adjacent to Hong Kong Park Entrance. Even some street trees located along Supreme Court Road are relatively mature, however the remaining roadside trees of this LRs have a DBH less than 500mm.
- *LR5.2 Roadside Plantation alongsides of approaching roads to Aberdeen Tunnel* – common roadside trees in raised planter with exception of those located on a vacant land to the north and on sloping areas to the south of Wong Chuk Hang Road Garden. Majority roadside species include *Cinnamomum camphora, Bauhinia purpurea, Livistona chinensis, Spathodea campanulata and Washingtonia robusta etc..* Majority of them have a DBH over 500mm. However, trees located on the vacant land are relatively mature, and there are six trees have a DBH over 1000mm. In addition, a *Ailanthus fordii* which is protected species listed under the Forestry Regulations (Cap.96 sub. Leg.) are found. Trees located on sloping areas located to the south of Wong Chuk Hang Road Garden are comparatively smaller in size due to their dense growing condition. Another three *Ailanthus fordii* are also found on the slopes. Given the characteristic of this LR mentioned above, it has a medium sensitivity and is an important LR along busy traffic corridor to be respected,

- *LR5.3 Roadside Plantation at the periphery of carparking area to the north of Ocean Park* -– common roadside trees in at grade planter. It has a medium sensitivity and is an important LR along traffic corridor to be respected, amenity species include *Albizia lebbeck, Bauhinia purpurea, Pterocarpus indicus and Roystonea regia etc..* Over half of them have a DBH over 500mm but none of their DBH is larger than 1000mm.
- *LR5.4 Roadside Amenity at Lee Wing Street* -– common roadside trees in pavement and raised planter in the sitting areas. It has a medium sensitivity ., Amenity species include *Albizia lebbeck, Archontophoenix alexandrae, Callistemon viminalis, Hibiscus tiliaceus and Melaleuca leucadendron etc..* All trees have a DBH less than 500mm.

LR6 Grassland / Shrubland Mosaic – This is relatively common resource at higher elevations particularly near some of the summits of the hill within the Study Area such as Yuk Kwai Shan and Nam Long Shan and the lower slope of Bennet's Hill and Tin Wan Shan adjacent to the Wong Chuk Hang and Aberdeen urban areas. Although this landscape resource is relatively resilient it still forms an important part of the overall landscape character of the Study Area and provides a contribution to the overall context. However in the context of this project the resource is considered to a have a medium sensitivity. Common shrub species include *Litsea rotundifolia, Ficus hispida, Dalbergia benthamii, Lantana camara* and *Gordonia axillaris*.

LR7 Waterbody – The Aberdeen Channel is a major landscape feature with the southern portion of Hong Kong Island and is characterised by its variety of maritime activities including the marina and dockyard and floating fish market etc but also in the remnants of the natural rocky shore. This resource is regionally significant in terms of its contribution to Hong Kong Island and particularly to the landscape context of Aberdeen. Despite the waterfront areas being significantly modified they are considered to have a high to low sensitivity. Given slightly different character of the above resources, LR7 is sub-divided into following sub-categories:

- *LR7.1 Aberdeen Channel* – channelised waterbody. It has a medium sensitivity due to man-made sea wall alongsides of Aberdeen and Ap Lei Chau waterfront and is an less important LR to be respected.
- *LR7.2 Telegraph Bay* – reclaimed wateredge for the development of Cyber Port. It has a low sensitivity due to man-made sea wall alongside of waterfront, utilities and construction activities at areas approaching to waterfront and is an less important LR lto be respected.
- *LR7.3 Chung Hom Kok* – approaching natural rocky shore along the southern edge of Chung Hom Kok Peninsula. It has a high sensitivity concerning the natural rock outcrops and untouched coastal area of Chung Hom Kok Peninsula and is a highly important LR in island south to be respected.

LR8 Modified Watercourse – Whilst the Staunton Creek Nullah is manmade concrete channel along Heung Yip Road adjacent to Wong Chuk Hang industrial area it makes contribution to the local landscape character. It may be considered that the engineered form of this water channel located within an industrial landscape context, has less to offer the local landscape character and visual amenity. It has a low sensitivity due to its urban setting and limited of vegetation and is a less important LR to be respected.

LR9 Marshland – A small seasonal marshland area, located within the grounds of the ex-Canadian Hospital site, is likely to have developed from a wasteland formally planned for hospital development, but was abandoned due to the water logging of the topography. Although not aesthetically attractive and with a piecemeal distribution it helps in enhancing the sense of variety within the landscape and contributes to the local context. Given its relatively small size, distribution and unmanaged state it is likely to have a relatively low sensitivity. Common plant species include *Leucaena leucocephala, Mikania micrantha, Ranunculus sceleratus* and *Commelina diffusa etc.* They are loosely disturbed at the periphery of this LR. All of them have a DBH less than 500mm.

LR10 Wasteland and Open Field –The ex-Canadian Hospital Site was originally a construction site and was abandoned for years, the area is characterized its extensive disturbance.. As described above a small part of the site forms a marsh like landscape resource and the remainder is covered by a combination of coarse grass, and shrub and small tree growth which has colonised the site from the adjacent vegetated slopes. An open field area is located to the east of the Ap Lei Chau waterfront adjacent to warehouses and vessel repair areas associated with the Aberdeen Typhoon Shelter. This area is currently used for the storage of dragon boats with an intermittent coverage of vegetation. Given that these areas are largely disturbed and derelict landscapes they are considered to be reasonability tolerant to

change and so have a low sensitivity. Given slightly different character of the above resources, LR10 is sub-divided into following sub-categories:

- LR10.1 Open yard at waterfront promenade under Ap Lei Chau Bridge – informal waterfront promenade currently occupied by ship repairing yards. *A few Ficus variegata var. chlorocarpa, Macaranga tanarius and Leucaena leucocephala are found at the edge of this LR,* they are self-seeded trees extending from adjacent sloping areas. All of them are relatively small in size.
- LR10.2 Open yard at ex-Chung Hom Kok Quarry – originally occupied by quarry activities.
- LR10.3 Open yard at ex-Canadian Hospital Site – originally occupied by construction activities. Only a few self-seeded *Leucaena leucocephala* are found in this LR.

LR11 Agricultural Field – A fragmentary remnant of the agriculture fields in Wong Chuk Hang Sun Wai which once formed a more significant part of this landscape is located near the village settlement adjacent to portal for the Aberdeen Tunnel. Recorded plant species are common crops such as *Raphanus sativus, Ipomoea batatas* and *Carica papaya*. However given the disturbed and fragmentary nature of this resource it is reasonability tolerant to further modification and so has a low sensitivity.

LR12 Open Space – These areas include a combination of tree, shrub planting with many having lawn areas located within parks and amenity areas within individual residential urban developments enhancing the amenity of recreational and residential spaces and accommodate both passive and active recreation uses. It contributes to the local recreation and residential landscape context both in the form of groups and often through the utilisation of individual specimens of ornamental species. This resource makes up a large proportion of the urban landscape of Hong Kong. Some registered Old and Valuable Trees (OVTs) or trees with a diameter at breast height (DBH) of over 1M are found in Wong Chuk Hang Road Garden. These trees form important landscape resources and so are considered for preservation in their current location or through transplantation. However it is inevitable that some of the existing trees within the amenity areas will be affected by the proposed works and so the potential impacts and means of mitigating these impacts shall be further investigated during the completion of the detailed tree survey and assessment. This resource has a medium landscape value for local context and in some instances an ecological value. However given that these areas have been planted as part of the urbanisation of Hong Kong although valuable to the overall character of the city, it is relatively tolerant to change (providing it can be replaced as part of the proposed landscape mitigation strategy) and so it is considered to have a low to medium sensitivity. Given slightly different character of the above resources, LR12 is sub-divided into following sub-categories:

- *LR12.1 Harcourt Garden* – urban park built on top of existing Admiralty Station (Island Line) and underground car parking facilities. Approximately 30% of garden area is hard paved, no recreation facilities with only seating area and food kiosk provided. Plantation in Harcourt Garden is common ornamental species include *Archontophoenix alexandrae, Ficus microcarpa, Delonix regia, Lagerstroemia speciosa and Roystonea regia etc.. Only 4% of total number of trees have a DBH over 500mm.* In term of function, it is an open space largely for pedestrian circulation and limited facilities for visitor's enjoyment. Given the above reason it has a medium sensitivity and is to be respected locally.
- *LR12.2 Hong Kong Park*– Hong Kong Park is a regionally important park serves as a botanic garden in Hong Kong. A wide combination of planting, botanic showcase. The diversity and maturity of vegetation contributes to the landscape context. It has a high sensitivity and is an important LR to be respected regionally, amenity species include *Archontophoenix alexandrae,* Cassia siamea, *Cinnamomum camphora, Ficus hispida, Ficus microcarpa, Delonix regia, Livistona chinensis, and Roystonea regia .etc.. Majority of them located with the study area has a DBH less than 500mm.*
- *LR12.3 Admiralty Garden –.* Admiralty Garden also contains mature ornamental planting including *Ficus superba, Chrysalidocarpus lutescens, Phoenix roebelenii and Melaleuca leucadendron L.etc..* Even the garden area is relatively small, the maturity of vegetation contributes to the commercial and roadside landscape context. It has a high sensitivity and is an important LR both in urban area to be respected locally.
- *LR12.4 Wong Chuk Hang Road Garden* – Given to its relatively small size and largely served as sitting area for adjacent neighbourhood, have mature planting area but only a few or without recreational facilities, it has a medium

sensitivity and is to be respected locally. The central core of the Garden is mainly covered by shrub planting. Existing trees are located at the periphery of the Garden, they are ornamental species including *Bauhinia ssp., Cleistocalyx operculatus, Callistemon viminalis, Koelreuteria bipinnata, Lophostemon confertus and Peltophorum pterocarpum etc. An OVT, Ficus elastica, is located within the Garden.* Majority trees have a DBH less than 500mm.

- *LR12.5 Aberdeen Sports Ground* – Typical district recreational ground covered with grass and coloured running tracks in the middle portion and auditorium surrounding it, occasionally used for sport events. Plantation are concentrated at the peripheries of the site, largely planted with bamboo for screening purposes. It has a medium sensitivity and is an important LR in Aberdeen to be respected.
- *LR12.6 Sitting Out Area at Heung Yip Road* – Small sitting out area for industrial neighbourhoods with some tree planting include *Acacia confusa and Aleurites moluccana.* All trees have a DBH less than 500mm. It has a low sensitivity and is a less important LR to be respected locally.
- *LR12.7 Sitting Out Area adjacent to Staunton Creek Nullah* – it is a local sitting out areas for industrial neighbourhoods, tree planting provides shade for the users. Majority tree species are *Acacia confusa, Bauhinia blakeana and Cassia surattensis,* majority of them have a DBH less than 500mm. It has a medium sensitivity and is an important LR to be respected locally.
- *LR12.8 Aberdeen Tennis and Squash Centre* – Open air sport grounds for the use of Aberdeen residential neighbourhood. Vegetation is largely located at the peripheries adjacent to the waterfront due to functional requirement. It has a medium sensitivity and is an important LR to be respected locally.
- *LR12.9 Ap Lei Chau Park and Waterfront Promenade* – Largely hard paved with vegetation only at the southern periphery, landing step provides vessel parking facilities. Majority tree species are *Leucaena leucocephala and Macaranga tanarius*, all of them have a DBH less than 500mm. Regarding to its waterfront location, it has a medium sensitivity and is an important LR to be respected locally.
- *LR12.10 Football Pitch at Ap Lei Chau Bridge Road West* – Recreational ground for the use of residential neighbourhoods. Largely covered with grass for functional purposes with plantation on sloping areas surrounding the site. It has a medium sensitivity and is an important LR to be respected locally.

For the purposes of this assessment the landscape resources are represented by the existing land coverage. The condition of these landscape resources is also important in determining the landscape quality of the Study Area and its sensitivity to change as described above. Therefore the preservation and enhancement of the existing landscape resources is important to the successful integration of the proposals within the landscape context of the Study Area. Magnitude of change of these LRs and landscape Impact are assessed under **Section 6.7.5**.

Table 6.4: Sensitivity of Landscape Resources (LRs)

LR1 Major Roads and Highways

Criteria / ID no.	LR1.1	LR1.2	LR1.3	LR1.4	LR1.5	LR1.6
Area	3Ha.	1.3Ha.	0.7Ha.	3.5Ha.	2Ha.	2.9 Ha.
Quality	Low	Medium	Medium	Low	Low	Low
Important/ Rarity	Low	Low	Low	Low	Low	Low
Ability to accommodate change	High	Medium	Medium	High	High	High
Significance Local/Regional	Low/ Low	Low/ Low	Low/ Low	Low/ Low	Low/ Low	Low/ Low
Maturity	Low	Low	Low	Low	Low	Low
Sensitivity	**Low**	**Medium**	**Medium**	**Low**	**Low**	**Low**

Criteria/ ID no.	LR1.7	LR1.8	LR1.9	LR1.10	LR1.11	LR1.12
Area	2Ha.	2.3Ha.	5.3Ha.	1.6Ha.	0.7Ha.	0.4Ha.
Quality	Low	Low	Low	Low	Low	Medium
Important/ Rarity	Low	Low	Low	Low	Low	Low
Ability to accommodate change	High	Medium	High	High	High	Medium
Significance Local/Regional	Low/ Low	Low/ Low	Low/ Low	Low/ Low	Low/ Low	Low/ Low
Maturity	Low	Low	Low	Low	Low	Low
Sensitivity	**Low**	**Low**	**Low**	**Low**	**Low**	**Medium**

LR2 Developed Area

Criteria / ID no.	LR2.1	LR2.2	LR2.3	LR2.4	LR2.5	LR2.6
Area	12Ha.	2Ha.	10Ha.	1.6Ha.	2Ha.	10Ha.
Quality	Medium	Medium	Low	Medium	Low	Low
Important/ Rarity	Medium	Medium	Low	Medium	Low	Low
Ability to accommodate change	High	High	High	High	High	High
Significance Local/Regional	Medium/ Low	Medium/ Low	Low/ Low	Medium/ Low	Low/ Low	Low/ Low
Maturity	Low	Low	Low	Low	Low	Low
Sensitivity	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Low**

Criteria/ ID no.	LR2.7	LR2.8	LR2.9	LR2.10	LR2.11	LR2.12
Area	13Ha.	6.5Ha.	0.5Ha.	3.5Ha	1.4Ha.	4.5Ha
Quality	Medium	Low	Medium	Medium	Low	Low
Important/ Rarity	Low	Low	Medium	Medium	Medium	Medium
Ability to accommodate change	Medium	High	High	High	Medium	Medium
Significance Local/Regional	Medium/ Low	Low/ Low	Medium/ Low	Medium/ Low	Medium/ Medium	Medium/ Medium
Maturity	Medium	Low	Low	Low	Medium	Medium
Sensitivity	**Medium**	**Low**	**Medium**	**Medium**	**Medium**	**Medium**

Criteria/ ID no.	LR2.13	LR2.14	LR2.15	LR2.16	LR2.17	LR2.18
Area	6.5Ha	8Ha.	4.5Ha.	1.8Ha.	3.7Ha.	1.5Ha.
Quality	Low	Medium	Medium	Low	Medium	Low
Important/ Rarity	Low	Medium	Medium	Low	Medium	Low
Ability to accommodate change	High	High	High	High	High	High
Significance Local/Regional	Low/ Low	Medium/ Low	Medium/ Low	Low/ Low	Medium/ Low	Low/ Low
Maturity	Low	Low	Low	Low	Low	Low
Sensitivity	**Low**	**Medium**	**Medium**	**Low**	**Medium**	**Low**

Criteria/ ID no.	LR2.19
Area	1.5Ha
Quality	Medium
Important/ Rarity	Medium
Ability to accommodate change	Medium
Significance Local/Regional	Medium/ Medium
Maturity	Low
Sensitivity	**Medium**

LR3 Natural Woodland

Criteria / ID no.	LR3.1	LR3.2	LR3.3	LR3.4
Area	87.5Ha	1.5Ha	1.2Ha	0.53Ha
Quality	High	Medium	Medium	Medium
Important/ Rarity	High	Medium	Medium	Medium
Ability to accommodate change	Low	Medium	Medium	Medium
Significance Local/Regional	High/High	High/Medium	High/Medium	High/Medium
Maturity	High	Medium	Medium	Medium
Sensitivity	**High**	**Medium**	**Medium**	**Medium**

LR4 Mixed Woodland

Criteria / ID no.	LR4.1	LR4.2	LR4.3	LR4.4	LR4.5	LR4.6
Area	2.28Ha.	1Ha.	1.7Ha.	0.95Ha.	18Ha.	4.8Ha.
Quality	Medium	Medium	Medium	Medium	Low	Low
Important/ Rarity	Medium	Medium	Medium	Medium	Low	Low
Ability to accommodate change	Medium	Medium	Medium	Medium	Medium	High
Significance Local/Regional	Medium/Low	Low/Low	Medium/Low	Medium/Low	Low/ Low	Low/ Low
Maturity	Medium	Medium	Medium	Medium	Low	Low
Sensitivity	**Medium**	**Medium**	**Medium**	**Medium**	**Low**	**Low**

Criteria/ ID no.	LR4.7	LR4.8	LR4.9
Area	1.7Ha.	0.54Ha.	6.8Ha.
Quality	Low	Medium	Low
Important/ Rarity	Low	Medium	Low
Ability to accommodate change	High	Medium	High
Significance Local/Regional	Low/ Low	Low/Low	Low/ Low
Maturity	Low	Medium	Low
Sensitivity	**Low**	**Medium**	**Low**

LR5 Roadside Amenity

Criteria / ID no.	LR5.1	LR5.2	LR5.3	LR5.4
Area	0.2Ha.	2Ha.	1.5Ha.	0.15Ha.
Quality	Medium	Medium	Medium	Medium
Important/ Rarity	Low	Low	Low	Low
Ability to accommodate change	High	High	High	High
Significance Local/Regional	Low/ Low	Low/ Low	Low/ Low	Low/ Low
Maturity	Medium	Medium	Medium	Medium
Sensitivity	**Medium**	**Medium**	**Medium**	**Medium**

LR6 Grassland / Shrubland Mosaic

Criteria / ID no.	LR6
Area	6Ha.
Quality	Medium
Important/ Rarity	Low
Ability to accommodate change	Medium
Significance Local/Regional	Medium/ Low
Maturity	Medium
Sensitivity	**Medium**

LR7 Waterbody

Criteria / ID no.	LR7.1	LR7.2	LR7.3
Area	14Ha.	2Ha.	2Ha.
Quality	Medium	Low	High
Important/ Rarity	Medium	Low	High
Ability to accommodate change	Medium	High	Low
Significance Local/Regional	Medium/ Medium	Low/ Low	High/ Medium
Maturity	Medium	Low	High
Sensitivity	**Medium**	**Low**	**High**

LR8 Modified Watercourse

Criteria / ID no.	LR8
Area	2.3Ha.
Quality	Low
Important/ Rarity	Low
Ability to accommodate change	High
Significance Local/Regional	Low/ Low
Maturity	Low
Sensitivity	**Low**

LR9 Marshland

Criteria / ID no.	LR9
Area	1Ha.
Quality	Low
Important/ Rarity	Low
Ability to accommodate change	High
Significance Local/Regional	Low/ Low
Maturity	Low
Sensitivity	**Low**

LR10 Wasteland and Open Field

Criteria / ID no.	LR10.1	LR10..2	LR10.3
Area	2Ha.	0.4Ha.	0.8Ha.
Quality	Low	Low	Low
Important/ Rarity	Low	Low	Low
Ability to accommodate change	High	High	High
Significance Local/Regional	Low/ Low	Low/ Low	Low/ Low
Maturity	Low	Low	Low
Sensitivity	**Low**	**Low**	**Low**

LR11 Agricultural Field

Criteria / ID no.	LR11
Area	0.3Ha.
Quality	Low
Important/ Rarity	Low
Ability to accommodate change	High
Significance Local/Regional	Low/ Low
Maturity	Low
Sensitivity	**Low**

LR12 Open Space

Criteria / ID no.	LR12.1	LR12.2	LR12.3	LR12.4	LR12.5	LR12.6
Area	1.7Ha.	1.1Ha.	0.17Ha.	0.5Ha.	7Ha.	0.1Ha.
Quality	Medium	High	High	Medium	Medium	Low
Important/ Rarity	Medium	High	High	Medium	Medium	Low
Ability to accommodate change	Medium	Low	Low	Medium	Medium	High
Significance Local/Regional	High/Low	High/High	High/High	High/Low	High/Low	Low/Low
Maturity	Medium	High	High	Medium	Medium	Low
Sensitivity	**Medium**	**High**	**High**	**Medium**	**Medium**	**Low**

Criteria/ ID no.	LR12.7	LR12.8	LR12.9	LR12.10
Area	0.1Ha.	0.82Ha.	3.5Ha.	0.2Ha.
Quality	Medium	Medium	Medium	Medium
Important/ Rarity	Medium	Medium	Medium	Medium
Ability to accommodate change	Medium	Medium	Medium	Medium
Significance Local/Regional	High/Low	High/Low	High/Low	High/Low
Maturity	Medium	Medium	Medium	Medium
Sensitivity	**Medium**	**Medium**	**Medium**	**Medium**

6.6.3 Landscape Character

The landscape character of the Study Boundary is characterised by urban areas in Hong Kong north and south waterfront hinterlands separated by the ridgeline of Mount Gough and Mount Cameron. Admiralty in the north is a commercial centre extending from the west of Central Business District. Urban areas in Hong Kong South composed of Aberdeen, Wong Chuk Hang and Ap Lei Chau districts are set alongside of Aberdeen Channel interspersed by vegetated knolls such as Yuk Kwai Shan and Nam Long Shan in the south and green background in the north surrounding by Aberdeen Country Park, Tin Wan Shan and Bennet's Hill.

Figures 6.3.1 to **6.3.6** shows the location of the LCAs listed below, which form the Study Area, and **Figures 6.4.1** to **6.4.5** provide a photographic record of the LCAs. The identified LCAs are described below. Magnitude of change of these LCAs and landscape Impact are assessed under **Section 6.7.6**.

- *LCA1 Admiralty Commercial Landscape* – The area is characterised by commercial landscape composed of the high-rise lining Harcourt Road and Queensway. The local context is a highly urbanised hinterland to the south of Victoria Harbour. The main concentrations of vegetation are found along the major roads, within Admiralty Garden, Harcourt Garden and Hong Kong Park and podium gardens associated with commercial developments. Given the above reason the sensitivity of this LCA is medium.
- *LCA 2 Hong Kong Park Recreational Landscape* – Hong Kong Park, located to the southwest of Admiralty, is one of the key landscape spaces in urban Hong Kong known for its botanical garden. It is surrounded by commercial high-rise developments in Admiralty and the residential developments in the Mid-levels to the south. The Park contains a great diversity of tree and shrub planting and it is its mature size which contributes to the landscape context of the local area. Given the significance of landscape resources in the Park and its regional importance in urban area, the sensitivity of this LCA is high.
- *LCA 3 Mid-Level Upland Landscape* – This area is characterised by scattered residential developments within the Mid-levels of Hong Kong Island amongst the vegetated hill slopes of Mount Gough, Magazine Gap, Wan Chai Gap and Mount Cameron. Given the comparatively low density of existing development and their separated locations,

the area is still dominated by natural woodland stands at the middle and upper hills slopes forming a significant green backdrop to views of Hong Kong Island particularly from the Harbour and is an important characteristic in the urban skyline. Given that much of the upland areas at Mid-levels retain a woodland covering and is largely composed of native it is regionally important to the Hong Kong landscape context, the sensitivity of this LCA is high.

- *LCA 4 Aberdeen Country Park Landscape* – The Park is surrounded by Mount Gough to the north, Mount Cameron to the east and Tin Wan Shan and Bennet's Hill to the south. The area is characterised by modified watercourses, upper and lower Aberdeen Reservoirs which cut through the hill slopes. The central portion is surrounded by mixed woodland at lower elevations with a greater proportion of native woodland at higher elevations on the surrounding mountains. The park contains recreational facilities for the enjoyment of visitors. Given its local significance with the island south landscape context and its contribution to the green back drop in the views looking from Aberdeen Channel, the sensitivity of this LCA is high.
- *LCA 5 Shouson Hill Low-rise Residential Landscape* – This area is characterised by low-rise or house developments set within an existing, undulating and elevated topography to the south of Mount Nicholson and Aberdeen Tunnel. The original green character of the area is largely replaced by amenity landscape associated with the individual developments which punctuate the landscape of the area. The infrastructure landscape to the northwest at Aberdeen Tunnel is another major urbanised element within this landscape context. Given the area is largely urbanised the sensitivity of this LCA is medium.
- *LCA 6 Wong Chuk Hang Industrial and Institutional Landscape* – This area is located to the west of Aberdeen Tunnel, a major entrance gateway to the Island South area. The northeast portion of the area adjacent to Aberdeen Tunnel is characterised by institutional developments including schools and hospitals with remnant village settlements to the north of existing tunnel portal. The western portion of the area is dominated by medium-rise industrial buildings alongside Wong Chuk Hang Road and Heung Yip Road; and the area is bounded by Staunton Creek Nullah to the south. Given the landscape context is highly urbanised with relatively limited green features within the Wong Chuk Hang amenity areas and playgrounds the sensitivity of this LCA is medium.
- *LCA 7 Nam Long Shan Maritime and Recreational Landscape* – This area is characterised by the maritime and recreational facilities developed along the edge of the Aberdeen Channel and to the south and east the sloping areas of Nam Long Shan form a major landscape feature within the context. Sham Wan Marina and Ocean Park are located within the area. Whilst there is some instructional development and a public estate located along the northern periphery opposite to Wong Chuk Hang industrial area on the other side of the nullah the landscape character is slightly more recreational character at the south. Given that the context is largely dominated by mountain and maritime landscapes with some urbanised elements along the channel and nullah frontages at the periphery of the area, with the main vegetation concentrated within the central portion and to the south east the sensitivity of this LCA is medium.
- *LCA 8 Aberdeen Waterfront Landscape* – This area is located to the west of Wong Chuk Hang. It was originally a well known fishing village and market in the Island South area. Since 1970 the area underwent rapid urbanisation with a combination of industrial, commercial and residential developments. Tin Wan Shan forms the green back drop to this area to the north and the Aberdeen Channel forms its waterfront amenity to the south. The western potion of the area is characterised by a cemetery. Given the highly urbanised character of this area and the limited amount of vegetation (located at the promenade and within the amenity areas) and associated with individual developments the sensitivity of this LCA is medium.
- *LCA 9 Ap Lei Chau Island Landscape* – An island located to the south of Aberdeen Channel this area is characterised by two vegetated knolls to the south of the island. The northwest portion of the island is largely urbanised composed of high to medium-rise residential buildings alongside the waterfront, near the Ap Lei Chau Bridge Road and Lee Nam Road. A waterfront promenade associated with Ap Lei Chau Park is located to the northeast portion of the island will views to the north and east towards Ap Lei Chau Bridge and providing recreation facilities for residents living on the island. There is a few industrial uses including industrial buildings, dockyards, a sewage treatment plant and fuel storage located along the northeast and southwest waterfront of the island. The main concentrations of vegetation are located within Ap Lei Chau Park and amenity areas within individual residential developments, and the upper hill slopes of the two knolls which are largely covered with grass and

shrubland mosaic with woodland at lower elevations. Although this area is highly urbanised the urban form is softened to an extent by the pockets of vegetation and the so the sensitivity of this LCA is medium.

- *LCA 10 Chung Hom Kok Utilities Landscape*-This area is located to the south of Chung Hom Lok Shan at a abandon quarry adjacent to telecom facilities along the access road. The site is very remote and isolated. It is characterised by disturbed landscape with mixed woodland tree along the access road at lower elevation, the higher elevation of the slope is dominated by boulders and scrubland with scattered small trees. Given the landscape context is highly disturbed by previous quarry activities with relatively limited green features within the site the sensitivity of this LCA is Low.
- *LCA 11 Telegraph Bay Institutional Landscape* -This area is located to the northwestern end of Cyber Port. The site is characterised by sewage treatment plant and barging points for other construction sites at the waterfront. One of the entertainment building for the use of public and Cyber Port tenant is located to the north of the site. Given the landscape context is highly developed with relatively limited green features within the site the sensitivity of this LCA is Low.
- *LCA 12 Wah Kwai Utilities Landscape*- This area is located at the waterfront to the south of Wah Kwai Estate. This is an informal waterfront promenade originally form with the development of Wah Kwai Estate. The site is characterised by a linear lawn with row of slope trees at the northern edge along the road and the southern edge is bounded by concrete parapet. Given the landscape context falls within highly developed area the sensitivity of this LCA is Low.

Table 6.5 provides an assessment of the sensitivity of each of the identified LCAs.

Table 6.5: Sensitivity of Landscape Character Areas (LCAs)

Criteria// ID no.	**LCA1**	**LCA2**	**LCA3**	**LCA4**	**LCA5**	**LCA6**
Quality	Medium	High	High	High	Medium	Medium
Important/ Rarity	Low	High	High	High	Medium	Medium
Ability to accommodate change	Medium	Low	Low	Low	Medium	Medium
Significance	Low	High	High	High	Low	Medium
Maturity	Medium	High	High	High	Medium	Medium
Sensitivity	**Medium**	**High**	**High**	**High**	**Medium**	**Medium**

Criteria	**LCA7**	**LCA8**	**LCA9**	**LCA10**	**LCA11**	**LCA12**
Quality	Medium	Medium	Medium	Low	Low	Medium
Important/ Rarity	Medium	Medium	Medium	Low	Low	Low
Ability to accommodate change	Medium	Medium	Medium	High	High	High
Significance **Local/Regional**	Medium	Medium	Medium	Low	Low	Low
Maturity	Medium	Medium	Medium	Low	Low	Low
Sensitivity	**Medium**	**Medium**	**Medium**	**Low**	**Low**	**Low**

6.6.4 Visual Baseline

6.6.4.1 Existing Visual Context

Visual Envelope and Zones of Visual Influence

The visual envelope, the area from which the proposed development will be seen, is shaped by a combination of the existing adjacent built development and the upland landform in the central portion of the proposed alignment. The

extent of the visual envelope and the zones of visual influence are presented as **Figures 6.6.1 to 6.6.5** Visual Envelope and Zone of Visual Influence.

Given that the majority of the proposed construction works along the railway alignment will utilise the drill and blast tunnelling method, in particular the section between the proposed ADM Station and the Nam Fung Portal, the Visual Envelope (VE) for remaining works is limited locally to areas adjacent to the proposed underground stations such as the ADM, LET and SOH Stations, and above ground structures including the vent buildings, viaduct sections, bridge structures.

To the north of the Study Area the VE is confined to the urban area surrounding the proposed ADM Station at Harcourt Garden, and the Hong Kong Park works site for the proposed ventilation shaft and tunnels to the ADM and Nam Fung Portal. The adjacent high and medium-rise developments in these areas serve to provide visual enclosure limiting the extent of the VE. In terms of the available viewing distances, typical views extend not more than 200m from the proposed works due to the visual enclosure offered by the adjacent built environment.

Within the southern portion of the Study Area the VE is more extensive due to the existing topography and the nature of the adjacent built development surrounding the proposed works. The VE is located in the areas adjacent to the proposed above ground structures including station entrances, vent shafts, or plant buildings etc., areas adjacent to proposed viaduct section with elevated stations, OCP and WCH Stations, and from the proposed Nam Fung Portal to Ap Lei Chau Bridge which aligns with the existing major road and nullah corridors. The alignment is bounded by medium and high-rise developments and extends from areas which have a view of the existing Ap Lei Chau Bridge which aligns with proposed Aberdeen Channel Bridge, and areas adjacent to proposed temporary work areas and barging points.

Given the nature of project with the proposed alignment going through the most urbanised areas in south Hong Kong Island, the VE would also be limited by existing buildings adjacent to the alignment and ZVI would not be extensive. The exception to this would be the proposed Aberdeen Channel Bridge due to its dominant location within the open visual context of Aberdeen Channel. In additional to the proposed works mentioned above, a magazine site located in an ex-quarry site at Chung Hom Kok is proposed to facilitate this railway project however the site is remote from visual sensitive receivers and enclosed by existing topography and adjacent utility facilities and buildings. The operation of this magazine site is compatible with existing landscape context and will be largely imperceptible from surrounding locations and so is not considered in the following visual impact assessment. In terms of the available viewing distances, typical views extend not more than 100m within infrastructure corridors and 1000m within Aberdeen Channel corridor.

Existing Visually Detracting Elements

A number of the existing elements within the landscape of the Study Area may be considered as visually detracting in that they are visually incompatible with the existing landscape and visual context. These elements and their role within the visible landscape include:

- Aberdeen Tunnel and approaching elevated roads;
- Staunton Creek Nullah;
- Chinese Permanent Cemetery at Aberdeen; and
- Existing degraded industrial buildings at Wong Chuk Hang.

Existing Visual Amenity and Visual Sensitive Receivers

Visually Sensitive Receivers (VSRs) identified within the ZVI are grouped by residents who have views of the proposed aboveground structures, and recreational users in parks, sitting-out areas and waterfront promenade, staff and visitors in commercial, industrial and institutional buildings, pedestrians on footpaths or waterfront areas and vehicular travellers on the roads and marine locations who will be subject to similar views. **Table 6.6** describes the sensitivity of the selected VSRs within the ZVI, the quality of their existing views and their ability to accommodate change. **Table 6.7** identifies the magnitude of change and the potential impacts on their visual amenity and the residual impact with

recommended landscape mitigation measures fully established. The potential visual impacts are mapped in **Figures 6.8.1** to **6.8.4.**

The visual amenity available to the identified VSRs within the ZVIs is largely characterised by the views contained within road and channel corridors and are largely limited low to medium-level views. The open views along the corridors are generally shaped by the local topography, infrastructure, build environment and vegetation. The visual quality within these ZVIs ranges from low to high and includes the more degraded and restricted views available along the channel corridor at Wong Chuk Hang where the context is dominated by unsightly industrial buildings to the more scenic views across the Aberdeen Channel available from the surrounding uplands and from the Aberdeen waterfront looking towards North Ap Lei Chau, Aberdeen and Sham Wan. Alternative views are only available to VSRs at waterfront area and the more open views from VSRs at elevated levels.

The sensitivity of the identified VSRs to further change ranges from high to low due with the value and quality of existing views being restricted by intervening local topography, built environment and vegetation along road corridors and within the main urban areas or more open and expansive views from upland and elevated locations and from the waterfront. The VSRs are represented by both transient or permanent receivers and their populations range from large to small.

VSRs identified within the ZVI are listed below and their existing visual context illustrated in **Figures 6.6.1** and **6.6.5**. Magnitude of change of these VSRs and visual Impact are assessed under Section 6.7.7.

- *VSR R1 Residents of Wah Kwai Estate* – These VSRs are living at elevated levels and have an open panoramic maritime views and developments alongside the Aberdeen Channel. Given their wide open, visual context and permanent nature, their sensitivity to change is high. They will have an oblique view of the proposed Aberdeen Channel Bridge in distance.
- *VSR R2.1 Residents of Ap Lei Chau Estate* – These VSRs are located at the Ap Lei Chau Estate alongside of Ap Lei Chau Bridge Road. Their visual context is highly contained along the road corridor and adjacent buildings and they have glimpsed views of Yuk Kwai Shan to the southeast. Given their visual context is restricted along road corridors and that the views are permanent in nature, their sensitivity to change is high particularly to any visual change along the corridors. They will have views from both low and elevated levels towards the proposed SOH Station.
- *VSR R2.2 Residents of South Horizons* - These VSRs are located at South Horizons at western Ap Lei Chau along Yi Nam Road and Lee Nam Road. Their visual context is highly contained along the road corridor and adjacent buildings and they have glimpsed views of Yuk Kwai Shan to the southeast. Given their visual context is restricted along road corridors and to the garden area within the development and that the views are permanent in nature, their sensitivity to change is high particularly to any visual change along the corridors. They will have views from both low and elevated levels towards the proposed SOH Station.
- *VSR R3.1 Residents of estates in eastern Ap Lei Chau* - These VSRs are located at northeast Ap Lei Chau adjacent the waterfront Their visual context is highly contained along the road corridor and adjacent buildings to the south and expanding an overview along Aberdeen Channel and Aberdeen high-rise built up areas to the north. Given their expansive views across Aberdeen Channel to the north and that the views are permanent in nature, sensitivity to change of those residents facing north have views of the Channel is high. They will have views from elevated levels towards the proposed Aberdeen Channel Bridge.
- *VSR R3.2 Residents of mansions at Ap Lei Chau Main Street* - These VSRs are located at north Ap Lei Chau along Ap Lei Chau Main Street. Their visual context is highly contained along the road corridor and adjacent buildings. Given the visual context along Ap Lei Chau Main Street is restricted along road corridors by buildings and that the views are permanent in nature, sensitivity to change of those residents is high. Only those residents living adjacent to proposed LET station entrance will have views of the works from street and elevated levels.
- *VSR R4 Residents of estates in western Aberdeen* – These VSRs are living on the eastern periphery of Tin Wan Estate have open views towards the Aberdeen Channel at elevated levels with the Chinese Permanent Cemetery in the foreground to the east and industrial areas to the south. Although views are permanent in their nature their visual context is largely characterised by disturbed landscapes in the foreground and so their sensitivity to change

is medium. These VSRs will have a distant view looking towards the proposed Aberdeen Channel Bridge interrupted by the high-rise development of Aberdeen and the structure of existing Ap Lei Chau Bridge.

- *VSR R5 Residents of estates in eastern Aberdeen* – These VSRs are located at the southern periphery of the Aberdeen core urban area with open views of the Aberdeen Channel, waterfront promenade in the foreground and the residential high-rise development of Ap Lei Chau beyond. Given their open, expansive visual context and permanent nature, their sensitivity to change is considered to be high. They will have a partially obstructed view towards the proposed Aberdeen Channel Bridge interrupted by the structure of the existing Ap Lei Chau Bridge and the elevated infrastructure elements along Aberdeen Praya Road.
- *VSR R6 Residents of community facilities to the east of Ap Lei Chau Bridge* – These VSRs are located at the Holy Sprit Seminary, TWGHS Jockey Club Rehabilitation Complex and St. Mary Home for the Aged within close proximity of the proposed Ap Lei Chau Bridge landing area and Staunton Creek Nullah. Their visual context is largely interrupted by elevated infrastructure elements and adjacent industrial buildings. Given their degraded visual quality and permanent nature of the available views their sensitivity to change is medium. These VSRs will have views of the proposed viaduct and landing area of Aberdeen Channel Bridge.
- *VSR R7 Residents of estates in Wong Chuk Hang* - These VSRs are located at the South Wave Court development at the lower northwest slope of Nam Long Shan and have views towards the Aberdeen Typhoon Shelter and Sham Wan Marina to the west and elevated views towards Wong Chuk Hang to the northeast. The available views are also partially interrupted by the Wong Chuk Hang Estate and adjacent community facilities. Given their visual context is expansive to the west and restricted by surrounding buildings to the north and the permanent nature of the views their sensitivity to change is medium. These VSRs will be subject to views of the proposed Wong Chuk Hang railway depot and viaduct in the distance.
- *VSR R8 Residents of Wong Chuk Hang Hospital and Complex for the Elderly*– These VSRs are living in the Elderly Home adjacent to Aberdeen Tunnel whose views are largely interrupted by adjacent hospital developments and infrastructure. Given their restricted visual context and permanent in their nature, their sensitivity to change is medium. They will have glimpse views of proposed Nam Fung Portal and viaduct leading to Wong Chuk Hang.
- *VSR R9 Residents of developments on Shouson Hill* – These VSRs are located within the low-rise or house type developments at the northwest periphery of Shouson Hill. Low-level views are largely contained in their courtyard gardens while more elevated views from upper floors have framed and partial views towards the wider context. Views towards the north are characterised by the buffer planting associated with the Aberdeen Tunnel Portal with glimpsed views of the portal and box structures leading to OCP Station. Given the limited extent of views with the developments and the quality of the landscape to the north is interrupted by infrastructure at the area approaching to Aberdeen Tunnel, their sensitivity to change is high. These VSRs will have partial views towards the proposed Nam Fung Portal and box structure leading to OCP Station.
- *VSR R10 Residents of developments at the Peak* on Mount Kellett– The visual context for these VSRs is largely dominated by the wooded hill slopes of Mount Kellet and Aberdeen Country Park in the foreground with expansive views of the south of Hong Kong Island and the Lamma Channel beyond. Given the expansive nature, the quality of the existing visual amenity and the permanent nature of the views the sensitivity of these VSRs to change is high. VSRs in this location will have partial and glimpsed long distance views of the proposed Aberdeen Channel Bridge.
- *VSR R11 Residents of developments on Mount Cameron* – The visual context of these VSR is largely dominated by the surrounding wooded landscape. Given the quality of view and permanent nature the sensitivity of these VSRs to change is high. As there is no above ground works proposed along the drill and blast tunnel section of the alignment, their visual context will remain unchanged.
- *PVSR R12 Future residential developments in the area zoned "R(E)" abutting Ap Lei Chau Praya Road* –These VSRs are the future residents of the planned developments located at waterfront to the south of Ap Lei Chau Bridge Road with views of the Aberdeen Channel, Aberdeen to the north with Hong Kong True Light College in foreground and existing bridge structure in the middle ground; and Sham Wan and Aberdeen South Typhoon Shelter to the immediate south and east. Lower level views towards the waterfront are largely interrupted by adjacent industrial built structures. Given the expansive nature of views towards the Aberdeen Channel and the interrupted nature of alternative views to the north and west due to the structure of the existing Ap Lei Chau Bridge and Sham Wan

Towers, and the permanent nature of the views their sensitivity to change is high. The VSRs located at the periphery of these residential estates will have oblique views of the proposed viaduct section leading to the Aberdeen Channel Bridge along southern the side of Ap Lei Chau Bridge.

- *VSR R13 Staff and Patients of Grantham Hospital* - These VSRs are patients or visitors at Grantham Hospital whose views are largely facing hill slopes to the north and have an overview of Ocean Park and Shouson Hill from higher levels of the hospital with Aberdeen Tunnel and its approaching infrastructural area in the foreground. The lower level views are largely enclosed by mature trees inside the garden area and surrounding the hospital. Given their visual context are restricted to the north and open up to the south and partially permanent and transient views in nature, their sensitivity to change is medium. They will have glimpse views of proposed OCP Station and viaduct leading to Wong Chuk Hang in distance.
- *VSR C1 Visitors of Permanent Chinese Cemetery, Aberdeen* – The visual context for these VSRs is characterised by the structures of the cemetery landscape in the foreground and open views towards Aberdeen Channel beyond. Given a combination of the degraded visual quality and transient nature of these views their sensitivity to change is low. These occasional VSRs will have oblique views towards the proposed Aberdeen Channel Bridge in the distance.
- *VSR C2 Hikers in Aberdeen Country Park* – The visual context available to these VSRs is dominated by the surrounding wooded and reservoir landscapes. Views looking south towards Aberdeen and Ap Lei Chau are occasionally available through the dense vegetation which lines many of the footpath trails. Despite the quality of these views their transient nature results in a low sensitivity to change. These VSRs will have distant views of the proposed Aberdeen Channel Bridge, WCH Station and railway depot within the context of the Wong Chuk Hang urban area.
- *VSR C3 Recreational users of Ap Lei Chau waterfront promenade and park* – These VSRs have views of the Aberdeen Channel framed by adjacent high-rise developments and built environment of Aberdeen beyond. Views looking to the east are dominated by existing form of the Ap Lei Chau Bridge. Despite the quality of the existing views the transient nature of the VSRs results in a medium sensitivity to change. These VSRs will have partial views towards the proposed Aberdeen Channel Bridge beyond the existing structure of the Ap Lei Chau Bridge and its associated works area.
- *VSR C4 Recreational users in Sham Wan Marina* – The low-level views available to these VSRs are dominated by vessels within the typhoon shelter with Ap Lei Chau Bridge in the background. Although the visual quality in views from this location is high many of the VSRs are transient in nature and so the sensitivity to change is medium. These VSRs will have views of the proposed Aberdeen Channel Bridge and its approach viaduct.
- *VSR C5 Visitors to Ocean Park* – Views available to these VSRs are largely contained within the Park with occasional open views towards the Aberdeen Channel in the distance from the more elevated locations at Tai Shue Wan. Given the quality of the visual context and the transient nature of these VSRs their sensitivity to change is medium. From these locations there will be views towards the proposed OCP Station in middle ground and the proposed Aberdeen Channel Bridge beyond.
- *VSR C6 Users of Pao Yue Kong Swimming Pool Complex* – The visual context for these VSRs is largely contained within the swimming pool complex and views low-level. Given the enclosed visual context and the transient nature of these VSRs their sensitivity to change is medium. These VSRs will have glimpsed views of the proposed WCH Station and railway depot.
- *VSR C7 Users of sitting-out areas and playground at Heung Yip Road adjacent to the Nullah* – The visual context available to these VSRs is dominated by the industrial traffic along Heung Yip Road and adjacent engineered watercourse partially screened by vegetation adjacent to these areas. Given the partial visual enclosure and the transient nature of these VSRs their sensitivity to change is medium. These VSRs will have views towards the proposed viaduct structure.
- *VSR C8 Visitors to Tai Wong Ye Temple* – The views available from this location are contained by the surrounding medium to high-rise developments to the south and industrial buildings across the nullah to the north. Given the restricted visual context and transient nature of these VSRs their sensitivity to change is medium. These VSRs will have views of the proposed viaduct structure along the nullah.

- *VSR C9 Users of Aberdeen Sport Ground* – The visual context available to these VSRs is largely contained within the sport ground surrounded by the spectator stand. The existing views extend to and are contained by the elevated floors of the industrial building to the west. Given the restricted visual context and the transient nature of these VSRs the sensitivity to change is medium. These occasional VSRs will have a glimpsed view of proposed viaduct structures and OCP Station in the distance.
- *VSR C10 Visitors to Hong Kong Park* – These VSRs are located at the park entrance at Supreme Court Road. The visual context available to VSRs is largely contained within the Park by mature vegetation, the existing topography and the surrounding commercial buildings. Given the restricted landscape context and transient nature of the VSRs their sensitivity to change is medium. These VSRs will have views of the proposed vent shaft at the entrance area to the park.
- *VSR C11 Users of Lee Nam Road Sitting-out Areas*– The visual context available to these VSRs is largely contained by their industrial and waterfront utilities neighbourhoods. The existing views extend to and are contained by rock cut slope to the west and industrial buildings and utilities facilities to the east and south. Given the restricted visual context and the transient nature of these VSRs the sensitivity to change is low. .During the construction stage, these sitting-out areas will be acquired for barging point and temporary works areas for the construction of the Lee Wing Street plant building. Hence no such VSRs is identified at the construction stage. After the reinstatement of these sitting-out areas following the completion of plant building, these future occasional VSRs will have an oblique view of proposed plant building during operation stage.
- *VSR O1 Staff and Students of Hong Kong True Light College* – These VSRs are located to the south of Sham Wan Towers. Views looking towards the typhoon shelter are available to the east. Yuk Kwai Shan and dockyards at waterfront characterise views to the south. Given the visual quality and transient nature of the VSRs their sensitivity to change is medium. These VSRs will have glimpsed views of proposed Aberdeen Channel Bridge through Ap Lei Chau Drive and the typhoon shelter interrupted by adjacent the high-rise development and vessels within typhoon shelter.
- *VSR O2 Workers of dockyard alongside of typhoon shelter* – These VSRs have open or partially screened views towards the typhoon shelter and the Ap Lei Chau Bridge. Views looking north are largely obstructed by high-rise and infrastructure developments. Given their partial access to the visual context and the transient nature of the VSRs the sensitivity to change is low. These VSRs will have an obstructed view towards the proposed viaduct structure and the Aberdeen Channel Bridge.
- *VSR O3 Workers in the Wong Chuk Hang Industrial Buildings* – These VSRs are located beside Heung Yip Road and Staunton Creek Nullah. The industrial buildings have limited views due to the lack of windows in the building facades looking south towards a landscape characterised by residential and institutional landuses. Given the relatively poor quality of the visual context within the industrial area and transient nature of the VSRs their sensitivity to change is low. Where views exist these VSRs will look towards the proposed viaduct, and the proposed elevated station and railway depot developments.
- *VSR O4 Staff and Students in Police College* – Given the nature of police training, views for these VSR are largely contained within the college and screened by the existing boundary fence. Views extend to the elevated portions of the surrounding industrial buildings to the northwest from the open training area located to the west. A combination of the enclosed and restricted character of views available from this location, the visual quality and the transient nature of these VSRs their sensitivity to change is medium.
- *VSR O5 Staff and Students in South Island School* – The visual context available to these VSRs is largely contained within the school site. Open views extend towards Mount Cameron and Mount Nicholson at elevated levels with the Shouson Hill residential landscape and Aberdeen Tunnel in the foreground. Given the restricted nature of the available views, the existing visual quality and the transient nature of the VSRs their sensitivity of change is medium. These VSRs will have distant views towards the proposed Nam Fung Portal and its approach viaduct within a context characterised by the structures associated with the Aberdeen Tunnel.
- *VSR O6 Workers in Commercial Buildings along Queensway and Harcourt Road* – The visual context for these VSRs is largely contained by the medium and high-rise development lining the Queensway and Harcourt Road corridors. More open views to the north towards the Harbour are available from elevated levels in the developments

along the northern periphery of Harcourt Road. Given a combination of the highly urbanised visual quality of the local area, the vegetated amenity areas which punctuate the district at street level and on commercial podium; and the transient nature of the VSRs their sensitivity to change is medium. From elevated floors these VSRs will have views of the proposed works areas at Harcourt Garden.

- *VSR O7 Staff and Students at the Hong Kong Academy of Performing Arts* – These VSRs include users of the garden located to the west of the Academy and students at the elevated floors at the western side of the building. Views looking from street level are largely screened by the mature vegetation which bounds these spaces although views from more elevated locations extend towards the commercial developments of Admiralty and oblique views towards the Harbour. The mature vegetation which characterises Harcourt Garden forms a major component in foreground views towards the proposed works area. Given a combination of the existing visual quality and transient nature of the VSRs their sensitivity to change is medium. These VSRs will have overview of the construction site in Harcourt Garden for the proposed ADM station and associated tunnelling works.
- PVSR O8 Future Staff and Visitors in Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central – These VSRs are future users of the gardens located between buildings under construction and future staffs in the government complex at elevated floors to the south. Views looking from street level are largely screened by road traffic to the south and east and the barracks to the west, contained within future gardens in the centre and open to the waterfront at the north. Overview of Harcourt Garden and Admiralty commercial landscape to the south and seaward views to the north are available at elevated levels of government complex. Given their visual quality and transient in their nature, their sensitivity to change is medium. These VSRs will have overview of construction site area in Harcourt Garden for ADM station and associated tunnelling works.
- *VSR O9 Staff and Visitors to the Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter* – Their low level views are dominated by vessels inside typhoon shelter with Ap Lei Chau Bridge to the north and Sham Wan Marina to the east. Given the unique visual quality and transient in their nature, their sensitivity to change is medium. These VSRs will have views to proposed Aberdeen Channel Bridge and its approaching viaduct.
- *VSRO10 St. Paul's Co-educational College Primary School* -These VSRs are staffs and students at the school at Nam Fung to the east of the ex-Canadian Hospital site whose views are largely facing hill slopes to the north and have an overview of Aberdeen Tunnel and its approaching infrastructural area in the foreground to the south. The lower level views are largely enclosed by mature roadside trees adjacent to the Tunnel. Given their visual context are restricted and transient views in nature, their sensitivity to change is medium. Those VSRs had views to ex-Canadian Hospital site will have views of proposed Nam Fung Portal, and box structure leading to OCP Station.
- *VSRO11 Workers and Visitors in Cyber Port* -These VSRs are staffs and visitors to Cyber Centre in Cyber Port whose views at street are largely facing to the harbour and interrupted by utilities and construction activities at the waterfront, their elevated views from the Cyber Centre for entertainment adjacent to the site are largely enclosed due to commercial and film showing purposes, views from other buildings in the further northeast to the north are contained by the Cyber Centre. Given their visual context are restricted and transient views in nature, their sensitivity to change is medium. Only VSRs at street level will have an oblique view to proposed barging point at Telegraph Bay adjacent to the utilities and construction facilities.
- *VSR T1 Travellers along the Aberdeen Channel* – Visual context of these VSRs is framed by high-rise to the north and Yuk Kwai Shan and Nam Long Shan to the south. Their views are largely interrupted by maritime vessels using the channel and typhoon shelter. Given their visual quality and transients in their nature, their sensitivity to change is low. VSRs located to south of existing Ap Lei Chau Bridge will have views to proposed Aberdeen Channel Bridge.
- *VSR T2 Travellers on the Ap Lei Chau Bridge* – Their visual context is open to Aberdeen Channel with an overview of Aberdeen and Ap Lei Chau urban areas. Given their open visual context and transient in their nature, their sensitivity to change is low. These VSRs will have a close view to proposed Aberdeen Channel Bridge along its eastern side.
- *VSR T3 Travellers along Heung Yip Road and Ocean Park Road* – Visual context of these VSRs is dominated by the engineered stream course, industrial and institutional buildings alongside of the roads and recreational landscapes. Given their restricted visual context, relatively poor visual quality with very limited vegetation and

transient in their nature, their sensitivity to change is low. These VSRs will have views to proposed viaduct structures, elevated WCH and OCP Stations and railway depot.

- *VSR T4 Travellers on Wong Chuk Hang Road* – Visual context of these VSRs is largely dominated by infrastructure at the area approaching to Aberdeen Tunnel. Views are confined along road corridors. Given their visual quality and transient in their nature, their sensitivity to change is low. These VSRs will have glimpse views to proposed viaduct structures and elevated OCP and WCH Stations and railway depot through street corridors towards Heung Yip Road.
- *VSR T5 Travellers on Nam Fung Road* – These VSRs have a fairly restricted visual context at street level enclosed by trees. Overview of Aberdeen Tunnel and its approaching areas is occasionally available through spaces between existing tree strands. Given their visual quality and transient in their nature, their sensitivity to change is low. These VSRs will have close views to the works area for Nam Fung portal / vent building.
- *VSR T6 Travellers on Harcourt Road* – Visual context of these VSRs is confined along road corridors by high-rise commercial buildings with exception for those travelling along the eastbound pavement that might have glimpse views to the Harbour. Given their urbanised visual quality characterised by busy traffic and their transient in nature, their sensitivity to change is low. These VSRs will have some local views to works proposed within Harcourt Garden for proposed ADM Station and associated tunnelling works.
- *VSRT7 Travellers on Queensway* – Visual context of these VSRs is confined along road corridors by high-rise commercial buildings. Given their urbanised visual quality characterised by busy traffic and their transient in nature, their sensitivity to change is low. These VSRs will have some local views to works proposed within Harcourt Garden for proposed ADM Station and associated tunnelling works.
- *VSR T8 Travellers on Supreme Court Road* – Visual context of these VSRs is characterised by Hong Kong Park landscape to the south and commercial podium gardens to the north. Their views are largely limited to the road corridor. Given their visual quality and transient in nature, their sensitivity to change is low. These VSRs will have views to proposed vent shaft located at the entrance of Hong Kong Park.

Table 6.6: Sensitivity of Visually Sensitive Receivers (VSRs)

Criteria	VSR R1 Residents of Wah Kwai Estate	VSR R2.1 Residents of Ap Lei Chau Estate	VSR R2.2 Residents of South Horizons	VSR R3.1 Residents of estates in eastern Ap Lei Chau	VSR R3.2 Residents of mansions at Ap Lei Chau Main Street	VSR R4 Residents of estates in western Aberdeen	VSR R5 Residents of estates in eastern Aberdeen	VSR R6 Residents of community facilities to the east of Ap Lei Chau Bridge	VSR R7 Residents of estates in Wong Chuk Hang	VSR R8 Residents of Wong Chuk Hang Hospital and Complex for the Elderly	VSR R9 Residents of developments on Shouson Hill	VSR R10 Residents of developments at the Peak on Mount Kellet	VSR R11 Residents of developments on Mount Cameron	PVSR R12 Future residential developments in the area zoned "R(E)" abutting Ap Lei Chau Praya Road	VSR R13 Staff and Patients of Grantham Hospital
Quality of View	High	Medium	High	Medium	Medium	Medium	High	Medium	Medium	Medium	High	High	High	High	Medium
Availability and Amenity of Alternative Views	High Open seaward views to the south at elevated level of towers located at southern periphery of the estates and alternative views of residential towers and courtyard garden landscapes to the north are available.	High Restricted views along road corridor and to South Horizons at southern periphery of the estates and alternative views of building blocks and courtyard garden landscapes to the north are available.	High Open seaward views to the south at elevated level of towers located at southern periphery of the estates and alternative views of residential towers and courtyard garden landscapes to the north are available.	Medium Open views to Aberdeen Channel to the north and restricted views of high-rises in Ap Lei Chau Main Street to the south.	Medium Restricted along road corridor and adjacent buildings to the north. Open views to Aberdeen Channel are available at elevated level of these estates located to the eastern periphery.	Medium Open view to Aberdeen Channel at elevated levels with Chinese Permanent Cemetery in the foreground to the east and industrial areas to the south.	High Open view of Aberdeen Channel, waterfront promenade in the foreground and residential high-rise in Ap Lei Chau in distance.	Medium Views looking to the north are largely interrupted by elevated infrastructure elements leading to Ap Lei Chau Bridge and adjacent industrial buildings I Wong Chuk Hang.	Medium Views looking to the north are largely intervened by high-rise while open view to Sham Wan Marina and Aberdeen Channel is available to the west.	Medium Views are largely interrupted by adjacent hospital developments and infrastructure approaching Aberdeen Tunnel.	Medium Views are largely contained within individual low-rise developments.	High Immediate views to the wooded landscape of Mount Kellet and Aberdeen Country Park in the foreground and Island South landscape in distance.	High Views are contained within individual developments and surrounding wooded landscape.	High Overview to Aberdeen Channel, Aberdeen to the further north with Hong Kong True Light College in foreground and existing bridge in the middle ground, Sham Wan and Aberdeen South Typhoon Shelter to the immediate east and south.	Medium Views are largely enclosed by mature trees surrounding the hospital at low level. Elevated views are open to Ocean Park and Shouson Hill in distance and dominated by infrastructure at Aberdeen Tunnel approaching area in the foreground.
Type (Permanent or Transient) / No. of VSRs (Few/ Small/ Intermediate/ Large)	Permanent/ Large	Permanent/ Large	Permanent/ Large	Permanent/ Large	Permanent/ Large	Permanent/ Large	Permanent/ Large	Permanent/ Intermediate	Permanent/ Intermediate	Permanent/ Intermediate	Permanent/ Few	Permanent/ Intermediate	Permanent/ Few	Permanent/ Intermediate	Permanent/ Transient Intermediate

Criteria	VSR R1 Residents of Wah Kwai Estate	VSR R2.1 Residents of Ap Lei Chau Estate	VSR R2.2 Residents of South Horizons	VSR R3.1 Residents of estates in eastern Ap Lei Chau	VSR R3.2 Residents of mansions at Ap Lei Chau Main Street	VSR R4 Residents of estates in western Aberdeen	VSR R5 Residents of estates in eastern Aberdeen	VSR R6 Residents of community facilities to the east of Ap Lei Chau Bridge	VSR R7 Residents of estates in Wong Chuk Hang	VSR R8 Residents of Wong Chuk Hang Hospital and Complex for the Elderly	VSR R9 Residents of developments on Shouson Hill	VSR R10 Residents of developments at the Peak on Mount Kellet	VSR R11 Residents of developments on Mount Cameron	PVSR R12 Future residential developments in the area zoned "R(E)" abutting Ap Lei Chau Praya Road	VSR R13 Staff and Patients of Grantham Hospital
Duration and Frequency of Views to Proposed Works	Short and Stable Only VSRs living at the southern periphery of the estates will have overview to proposed material storage site and nursery at waterfront.	Short and Stable Only VSRs living at the southern periphery of the estates will have overview to proposed SOH station entrances during construction of tunnel section from LET to SOH stations.	Short and Stable Only VSRs living at Yi Nam Road and Lee Nam Road will have overview to proposed SOH station entrances construction of tunnel section from LET to SOH stations.	Long and Stable Only VSRs have views facing Ap Lei Chau Bridge will have views of proposed Aberdeen Channel Bridge and works areas of tunnel leading to LET Station in front of Sham Wan Towers.	Long and Stable Only VSRs living alongside of Ap Lei Chau Bridge Road will have views of proposed drive portal connecting Aberdeen Channel Bridge and tunnel section leading to LET Station.	Long and Stable Only VSRs living at elevated floors will have an oblique view in distant looking towards proposed Aberdeen Channel Bridge interrupted by high-rise in Aberdeen and Ap Lei Chau Bridge.	Long and Stable Only VSRs living at waterfront will have view of proposed Aberdeen Channel Bridge intervened by existing Ap Lei Chau Bridge.	Long and Stable Only VSRs living at northern periphery of the facilities have an immediate views looking towards proposed Aberdeen Channel Bridge and its approaching viaduct within existing infrastructure and industrial context.	Long and Stable Only VSRs living at northern periphery of the estates have an immediate views looking towards proposed WCH station and depot contained in existing industrial landscape whilst VSRs living at the western periphery of the estates will have views in middle range to proposed Aberdeen Channel Bridge and its approaching viaduct with Aberdeen South Typhoon Shelter in the foreground.	Long and Stable Only VSRs living at elevated floors of the facilities at the eastern periphery will have overview to Nam Fung portal / vent building and its approaching viaduct.	Long and Stable Only VSRs living at elevated floors of the developments at the western periphery of Shouson Hill will have glimpse view to Nam Fung portal / vent building and its approaching viaduct largely intervened by adjacent developments, Aberdeen Tunnel and its roadside planting.	Long and Stable Only VSRs living at southern periphery of the Peak area will have a long distance view of proposed Aberdeen Channel Bridge	Long and Stable As there is no above ground works proposed along the drill and blast tunnel section of the alignment, their visual context remains unchanged.	Long and Stable Only VSRs living at eastern periphery of will have an oblique view of proposed Aberdeen Channel Bridge	Long and Stable Only VSRs at elevated floors of the hospital facing south will have views to proposed OCP Station and viaduct leading to WCH Station
Degree of Visibility	High	High	High	Medium	Medium	Medium	High	Medium	Medium	Medium	High	High	High	High	Medium
Sensitivity/ Quality of VSR	High	High	High	High	High	Medium	High	Medium	Medium	Medium	High	High	High	High	Medium

Table 6.7: Sensitivity of Visually Sensitive Receivers

Criteria	VSR C1 Visitors of Permanent Chinese Cemetery, Aberdeen	VSR C2 Hikers in Aberdeen Country Park	VSR C3 Recreational users of Ap Lei Chau waterfront promenade and park	VSR C4 Recreational users in Sham Wan Marina	VSR C5 Visitors to Ocean Park	VSR C6 Users of Pao Yue Kong Swimming Pool Complex	VSR C7 Users of sitting-out areas and playground at Heung Yip Road adjacent to the Nullah	VSR C8 Visitors to Tai Wong Ye Temple	VSR C9 Users of Aberdeen Sport Ground	VSR C10 Visitors to Hong Kong Park	VSR C11 Users of Lee Nam Road Sitting-out Areas	VSR O1 Staff and Students of Hong Kong True Light College	VSR O2 Workers of dockyard alongside of typhoon shelter	VSR O3 Workers in Wong Chuk Hang Industrial Buildings	VSR O4 Staff and Students in Police College
Quality of View	Low	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Medium	Low	Low	Medium
Availability and Amenity of Alternative Views	Medium Dominated by unique cemetery landscape in the foreground and open view to Aberdeen Channel in distance.	Medium Views looking south to Aberdeen and Ap Lei Chau are occasionally available through dense vegetation.	Medium Overview of Aberdeen Channel framed by adjacent high-rise and Aberdeen urban developments in distance.	Medium Low level views are dominated by vessels inside typhoon shelter with Ap Lei Chau Bridge in the background	Medium Views are largely contained within the Park and occasionally have open view to Aberdeen Channel in distance from elevated levels at Tai Shue Wan.	Medium Views are largely contained within the facilities.	Medium Dominated by the industrial traffic along Heung Yip Road and adjacent engineered watercourse partially screened by vegetation inside the areas.	Medium Views are contained by surrounding medium to high-rise developments to the south and industrial buildings across the nullah to the north.	Medium Views are largely contained within the sport ground surrounding by auditorium.	Medium Views are largely contained within the park enclosed by mature tree.	Medium Views are largely contained within the sitting-out area andsurrounding by industrial neighbourhood.	Medium Views looking toward typhoon shelter are available to the east. Yuk Kwai Shan and dockyards at waterfront is dominated in the views to the south.	Low Open or partially screened views to typhoon shelter and Ap Lei Chau Bridge. Views looking towards the north are largely obstructed by high-rise and instruction developments.	Low Window views are limited or not available on these industrial buildings, views looking south to residential and institutional landscape is restricted.	Medium Views of these VSR is largely contained with the college and screened by boundary fence.
Type (Permanent or Transient) / No. of VSRs (Few/ Small/ Intermediate/ Large)	Occasional / Few	Occasional / Few	Transient/ Intermediate	Transient/ Intermediate	Transient/ Intermediate	Transient/ Intermediate	Transient/ Few	Transient/ Few	Occasional/ Few	Transient / intermediate	Transient /Few	Transient /Intermediate	Transient / Few	Transient / Few	Transient /Intermediate
Duration and Frequency of Views to Proposed Works	Short and Varies Only VSRs visit the cemetery occasionally during festivals will have distant view to proposed Aberdeen Channel Bridge.	Short and Varies Only VSRs at the hiking trail will have distant view to proposed Aberdeen Channel Bridge, WCH Station and railway depot in the context of Wong Chuk Hang urban area through dense vegetation along the trail.	Short and Varies Only VSRs in the eastern promenade will have overviews to proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge and its associated works area.	Short and Varies Overviews to proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge and its associated works area.	Short and Varies Only VSRs at the park entrance will have views to OCP Station intervened by park facilities and VSRs at elevated level of Tai Shue Wan will have a distant view to proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge.	Short and Varies Occasionally have glimpse view to WCH Station and railway depot.	Short and Varies Immediate glimpse view through vegetation in the sitting-out area to WCH Station and viaduct leading to the station.	Short and Varies Immediate view to WCH Station and viaduct leading to the station.	Short and Varies Glimpse view of proposed viaduct structures, OCP Station in distance	Short and Varies Only VSRs at park entrance of Supreme Court Road will have overview of proposed vent shaft.	Short and Varies No VSRs identified during construction phaseas these areas are acquired for temporary works areas and barging point. After resinstatment of the areas during operation stage, these future VSRs will have an oblique view of Lee Wing Road plant building.	Short and Varies VSRs will have a glimpse view of proposed Aberdeen Channel Bridge through Ap Lei Chau Drive and typhoon shelter interrupted by adjacent high-rise and vessels in typhoon shelter.	Short and Varies VSRs will have an obstructed view to proposed viaduct and Aberdeen Channel Bridge.	Short and Varies VSRs working at lower levels of the buildings will perceive the viaduct, WCH elevated station and railway depot development in proximity	Short and Varies VSRs will have a glimpse view of proposed viaduct structures leading to WCH Station.
Degree of Visibility	Low	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Medium	Low	Low	Medium
Sensitivity/ Quality of VSR	Low	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Medium	Low	Low	Medium

Criteria	VSR O5 Staff and Students in South Island School	VSR O6 Workers in Commercial Buildings along Queensway and Harcourt Road	VSR O7 Staffs and Students in Hong Kong Academy of Performing Arts	PVSR O8 Future Staff and Visitors in Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central	VSR O9 Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter	VSR O10 St. Paul's Co-educational College Primary School	VSR O11 Workers and Visitors in Cyber Port	VSR T1 Travellers along the Aberdeen Channel	VSR T2 Travellers on the Ap Lei Chau Bridge	VSR T3 Travellers along Heung Yip Road and Ocean Park Road	VSR T4 Travellers on Wong Chuk Hang Road	VSR T5 Travellers on Nam Fung Road	VSR T6 Travellers on Harcourt Road	VSR T7 Travellers on Queensway	VSR T8 Travellers on Supreme Court Road
Quality of View	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Low	Low	Low	Low	Low	Low	Low
Availability and Amenity of Alternative Views	Medium Open views towards Mount Cameron and Mount Nicholson are available at elevated levels with Shouson Hill residential landscape and Aberdeen Tunnel in the foreground.	Medium Open views looking towards the Harbour is only at elevated levels at the northern periphery of Harcourt Road.	Medium Views looking from street level are largely screened by mature vegetation in the garden whilst views looking towards Admiralty commercial landscape and oblique views to the Harbour are available at elevated levels.	Medium Views looking from street level are largely screened by road traffic to the south and east and the barracks to the west, contained within future gardens in the centre and open to the waterfront at the north.	Medium Low level views are dominated by vessels inside typhoon shelter with Ap Lei Chau Bridge to the north and Sham Wan Marina to the east.	Medium Views are largely interrupted by adjacent hospital developments and infrastructure approaching Aberdeen Tunnel.	Medium Views are largely interrupted by sewage treatment and construction facilities at the waterfront at street level. Views from higher level are enclosed due to film showing purposes.	Medium Views are framed by high-rise to the north and Yuk Kwai Shan and Nam Long Shan to the south. Their views are largely interrupted by maritime vessels using the channel and typhoon shelter.	Medium Open view to Aberdeen Channel with an overview of Aberdeen and Ap Lei Chau urban areas.	Low Visual context of these VSRs is dominated by engineered stream course, industrial and institutional buildings alongside of the roads and recreational landscapes.	Low Largely dominated by infrastructure at the area approaching to Aberdeen Tunnel.	Low Fairly restricted visual context at street level enclosed by trees. Overview of Aberdeen Tunnel and its approaching areas is occasionally available through spaces between existing tree strands.	Low Confined along road corridors by high-rise commercial buildings with exception for those travelling along the eastbound pavement that might have glimpse views to the Harbour.	Low Confined along road corridors by high-rise commercial buildings.	Low Characterised by Hong Kong Park landscape to the south and commercial podium gardens to the north.
Type (Permanent or Transient) / No. of VSRs (Few/ Small/ Intermediate/ Large)	Transient / Intermediate	Transient / Large	Transient / Few	Transient / Intermediate	Transient / Intermediate	Permanent/ Intermediate	Transient / Intermediate	Transient / Few	Transient / Few	Transient / Few	Transient / Few	Transient / Few	Transient / Few	Transient / Few	Transient / Few
Duration and Frequency of Views to Proposed Works	Short and Varies VSRs will have views to proposed Nam Fung Portal and its approaching viaduct in distance and in the context of Aberdeen Tunnel.	Short and Varies VSRs will have views of works area at Harcourt Garden from elevated floors.	Short and Varies VSRs at elevated levels will have overview of construction site area in Harcourt Garden for ADM station and associated tunnelling works..	Short and Varies VSRs will have overview of construction site area in Harcourt Garden for ADM station and associated tunnelling works.	Short and Varies VSRs will have views to proposed Aberdeen Channel Bridge and its approaching viaduct.	Long and Stable Only VSRs at elevated floors facing west will have view of Nam Fung portal / vent building and box structures leading to OCP Station.	Short and Varies Only VSRs at street level will have an oblique to proposed barging point at Telegraph Bay.	Short and Varies VSRs located to south of existing Ap Lei Chau Bridge will have views to proposed Aberdeen Channel Bridge.	Short and Varies VSRs will have a close view to proposed Aberdeen Channel Bridge along its eastern side.	Short and Varies VSRs will have views to proposed viaduct structures, elevated WCH and OCP Stations and railway depot.	Short and Varies VSRs will have glimpse views to proposed viaduct structures and elevated OCP and WCH Stations and railway depot through street corridors towards Heung Yip Road.	Short and Varies VSRs will have close views to the works area for Nam Fung portal / vent building.	Short and Varies VSRs will have some local views to works proposed within Harcourt Gardens for proposed ADM Station and associated tunnelling works.	Short and Varies VSRs will have some local views to works proposed within Harcourt Gardens for proposed ADM Station and associated tunnelling works.	Short and Varies VSRs will have views to proposed vents shaft located at the entrance of Hong Kong Park.
Degree of Visibility	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Low	Low	Low	Low	Low	Low	Low
Sensitivity/ Quality of VSR	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low	Low	Low	Low	Low	Low	Low	Low

6.7 Identification and Evaluation of Environmental Impact

6.7.1 Impact on Existing Trees

A preliminary tree survey in accordance with ETWB TCW No. 3/2006, 'Tree Preservation' has been undertaken by the DDCs which forms part of the assessment of the existing condition and potential impacts to the landscape resources of the Study Area. This tree survey contained in **Appendices 6.1** and **6.2** involves the identification of individual trees within or adjacent to the works area, including a minimum 5m offset from either side of the proposed railway alignment and site boundary of the associated station entrances, tunnel portals, vent shafts, plant building and temporary works areas. Although there are other existing trees within the 100m LVIA study boundary, they are not in conflict with the proposed works, and hence the tree survey has been limited to the works area and not the whole LIA Study Area.

The survey includes the identification of individual trees, their species, size, health condition, form, and amenity value.

The assessment found approximately 5,768 trees within or located very close to the proposed works areas of the Project, including approximately 2,570 trees located within public open spaces, roadside amenity areas and on pavement, 1,966 slope trees, 1,125 *Leucaena leucocephala (*銀合歡), undesirable weedy species, and 107 dead trees are found in the survey. Given the ex-Canadian Hospital site and ex-Wong Chuk Hang Estate have been abandoned for quite some time, *Leucaena leucocephala* which is fast growing species naturally colonised the area and become dominant in these two sites. As previously mentioned the majority of the existing trees are located at the roadside along the existing infrastructure corridors whilst the rest of tnem are located on the remnant natural or engineered slopes adjacent to Staunton Creek Nullah; and within the existing parks, gardens and sitting out areas. The existing tree species are largely non-native. The main concentrations of native species include the roadside areas and remnant slopes at Wong Chuk Hang and Ap Lei Chau, and within the ex-Canadian Hospital Site. These areas contain a combination of planted trees and specimens which have naturally colonised the site.

- All five OVTs found in the survey will remain unaffected or preserved and protected on site. Seven numbers of protected trees will be preserved either in their current locations or through transplantation.
- Four numbers of tree had a DBH over 1M will be in conflict with proposed works. One *Ficus elastica* located in ex-Wong Chuk Hang Estate will be in conflict with the construction for WCH Depot. Having considered its extensive aerial root system, it is not a good candidate for transplantation. Its aggressive root and invasive growing characteristic might affect the built structures and underground utilities. Pruning of majority of these supporting roots might also be required during transplantation that would seriously affect the balance and form of the trees. Given the above horticultural and railway operation considerations, this tree is considered to be felled instead of retention. Another three slope trees located at ex-Canadian Hospital site and to the north of Sham Wan Towers are in conflict with the construction works for the box structure and tunnel. Having considered their dense growing condition on steep slope where will not able to prepare a viable root ball for the success of transplantation, therefore these slope trees are not able to be retained..
- 57% of trees having a DBH ranged from 500 to 1000mm will be preserved in their current locations or through transplantation. As discussed in **Section 6.6.1.3**, few examples of Registered Old and Valuable Trees (OVTs), rare and/or protected trees and trees with a DBH over 1M are considered as important landscape resources that would be preserved as far as technically feasible or through transplantation and their final treatment will be subject to the tree felling application.
- A breakdown of tree impacts on individual LRs are listed in **Table 6.8** and summarised in the following sections.

6.7.2 Tree Retention

The proposed scheme has been designed to avoid impacts to existing trees as far as possible and so minimise impacts on the landscape character and amenity of the Study Area. Based on the findings of the preliminary tree survey it is estimated that approximately 1,178 (20%) trees can be retained in their current locations.

6.7.3 Tree Transplantation Proposals

It is inevitable that despite the objective of preserving trees wherever possible that some trees will be in conflict with the proposed works. These trees are first considered for preservation through transplantation to a recipient site where they can still contribute to the landscape and visual amenity of the local area. In terms of assessing the feasibility for transplanting the existing trees a number of factors have been considered including their form, health and amenity value. Also considered was the existence of rare and/or protected and/or native species, the accessibility for machinery required for transplantation; age; and the availability and the technical feasibility of providing recipient sites. Based on the preliminary tree survey and with consideration for the factors described above it is recommended that approximately 437 (8%) of the existing trees are suitable for transplantation.

The proposed transplantation of these trees will be required before the commencement of the proposed works. The trees identified for transplantation include those of fair to good form and health condition having contribution to the local landscape context, relatively younger and accessible to machinery. Tree species, such as *Bombax ceiba* and *Roystonea regia* also have a higher predicted survival rate after transplantation than less robust species. Wherever possible native species such as *Ficus spp.* which have a relatively high ecological and landscape value and are resilient to disturbance are also recommended for transplantation. Transplanting these trees directly to a permanent recipient site is preferred from a horticultural perspective. Possible off-site planting areas include Medium Term Site under "Southern District Greening Master Plan" at Wong Chuk Hang Area, Hong Kong Park and other LCSD gardens in Yuen Long and Sham Shui Po and Lok Ma Chau and West Rail Wetland. Other transplanted trees will be taken to a temporary holding nursery before being taken to their final recipient locations at a later stage in the project. The final locations include the planting areas along the alignment or within the proposed station areas as close as possible to their original situation. The potential recipient sites would avoid encroach to potential development sites. Some of potential recipient locations for the transplanted trees within the works areas are shown in **Figures 6.9.1.1 to 6.9.27** Landscape Mitigation Measures. This transplanting proposal is subject to review at detailed design stage and to agreement-in-principle with the relevant management and maintenance agents and/or government departments.

6.7.4 Tree Felling Proposals

Given the scale of the proposed works, the need for the temporary works areas and the operational requirement for railway, it is inevitable to have some impact on existing trees. These trees in conflict with the proposals are first considered for transplantation. Where this is not possible the trees will be recommended for felling and as such it would not be feasible to retain or transplant approximately 1,293 (22%) of existing trees within open space or in roadside amenity area and 1,628 slope trees (29%) However for a large part these trees are non-native roadside or amenity trees, such as *Acacia confusa, Bauhinia blakeana, Bauhinia purpurea, Cassia siamea, Callistemon viminalis, Plumeria rubra etc.* having lower individual ecological and amenity value. According to ETWB TCW No. 3/2006, Tree Preservation, all dead tree and undesirable species, *Leucaena leucocephala,* approximately 21% of total number of trees, are proposed to be removed following good horticultural practices to avoid spreading of undesirable tree species and to ensure the public safety at where adjacent to dead trees.

6.7.5 Compensatory Planting Principles

Compensatory planting forms major part of landscape mitigation measures. The planting principles will concentrate on planting new trees in the proposed amenity areas along the alignment and surrounding the stations, and providing infill planting between the retained and transplanted trees; and on the disturbed slope areas. According to ETWB TCW No. 3/2006, Tree Preservation, compensatory planting requirement is not applicable for felling of dead trees and self-seeded trees of undesirable species, *Leucaena leucocephala.*

Given the above principles, the preliminary compensatory planting proposal will follow the Technical Circular ETWB TCW No. 3/2006 except for felling of trees for slope works which are exempted from the compensation planting ratio requirement. New tree planting in general roadside and planting areas adjacent to proposed stations and above ground structures and within reinstated public open spaces will utilise a combination of semi-mature to standard sized stock as

shown in **Figures 6.9.1.1** to **6.9.27** to create an instant greening effect at local level. New planting areas along the alignment will accommodate approximately 2,000 new trees. Planting of more board-leave tree species will be considered where space allows and location is suitable for tree establishment, this planting concept would create comfortable shaded area for pedestrians and visitors in open spaces.

For the affected tree on the sloping areas, due to constrained growth conditions, whip planting will be proposed on slopes which have gentler gradient at a planting distance of about 1500mm. Slopes have a gradient more than 30 degree, hydroseeding will be applied instead. Upon full establishment of whip planting and hydroseeding, greening coverage on affected sloping areas will be reinstated. Following the above planting principles, the newly formed and remnant sloping areas along the alignment of approximately 1.3 ha, would accommodate approximately 7,360 whips.

Based on a preliminary estimation, the above planting proposal would achieve a replanting ratio of minimum 1:1 in terms of quantity and quality except for slope works according to in accordance with ETWB TCW No. 3/2006. This tree replanting ratio would compensate the total girth and number of tree loss within open space or in roadside amenity area, as well as the total number of tree loss on sloping area. Given the constraints of growing condition and safety reasons of planting larger size tree stock on sloping areas, greening measures on new formed and remnant slopes, including extensive hydroseeding and whips planting, would restore the quality of these greenback drop in urban area. The retention of existing trees through their preservation in-situ and transplanting and the successful establishment of the newly planted trees will enhance amenity of the local areas and provide the thermal comfort of pedestrians. In the wider landscape context, the green backdrop will be reinstated upon full establishment of replanting proposals on sloping areas. Proposed planting on slope will utilise woodland mix with majority of native species. The species selection for the areas along the railway alignment and adjacent to proposed stations within the main urban areas will utilise a range of ornamental and amenity tree species. These proposals will be subject to further development during the detailed design stage of the project.

As mentioned above the findings and recommendations of the preliminary tree survey report are subject to the completion of a detailed tree survey and assessment and the preparation of a felling application in accordance with ETWB TCW No. 3/2006. This will be conducted during the detailed design stage of the project by DCCs and submitted to DLO for approval. The methodology and scope including the programme for the tree survey and felling application are also subject to the approval of the relevant authorities namely LandD, HyD, LCSD and AFCD.

6.7.6 Impact on Existing Landscape Resources

Given the utilisation of the drill and blast tunnelling method for the tunnel section between Admiralty and Nam Fung Portal the natural woodland on upper Mid-levels area and the surrounding Aberdeen Country Park will be preserved and the landscape context of these areas largely unchanged. In addition the same tunnelling method will also be utilised for the section of the alignment between the proposed SOH and LET Stations, and so the plantation on Yuk Kai Shan will also largely be preserved in-situ. With the exception of the above, the following are the potential sources of impact to landscape resources:

- Some existing carriageway and roadside spaces along proposed alignment will be in conflict with cut and cover tunnelling works and the station and viaduct construction works.
- The existing Wong Chuk Hang Estate will be redeveloped to accommodate the proposed WCH Station and railway depot.
- Part of roadside spaces within the Lei Tung Estate will be affected by works for proposed LET Station entrance and exit and the associated ventilation structures.
- The periphery of South Horizons will be affected by proposed SOH Station works.
- Some mixed and secondary woodland on remnant slopes at the embankment of the Ap Lei Chau Bridge and along Staunton Creek Nullah will be affected by works for the proposed Aberdeen Channel Bridge and viaduct from the Aberdeen Channel to Nam Fung Portal;
- The construction of the proposed tunnel box and Nam Fung portal / vent building at the ex-Canadian Hospital Site may encroach slightly on the fragment/degraded marsh type landscape within the site.

- Some of the existing amenity tree planting within Harcourt Garden, at the entrance of Hong Kong Park; within the playgrounds and amenity areas at the Wong Chuk Hang and Lei Tung Estates; and along the Lee Nam Road and the amenity area at Heung Yip Road will be affected by the works.
- The Aberdeen Channel adjacent to the existing crossing at the Ap Lei Chau Bridge will be slightly affected by the column works for new Aberdeen Channel Bridge.
- Some existing trees at Telegraph Bay and Lee Nam Road barging points, Wah Kwai works area and magazine site at Chung Hom Kok Shan will be affected by proposed temporary materials transporting and storage works and temporary green nursery.

Table 6.8 describes the source of impacts as a result of the railway proposals and presents the magnitude of change on individual LRs. Magnitude of change on individual LRs are listed as follows:

Large

According to the assessment result in **Table 6.8, having considered** the determinants listed under **Section 6.3.1.3**, the magnitude of change on some LRs would be large. It is due to either extent of impacts on landscapae resources and the scale of proposed works within individual LRs are relatively larger as a result of proposed works such as LR2.5 Carparking and Bus Deport adjacent to Ocean Park, LR2.8 Demolition Site of Ex-Wong Chuk Hang Estate and LR12.1 Harcourt Garden, and/or LRs have a relatively lower compatability to proposed works including LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary, LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers and LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah.

Intermediate

According to the assessment result in **Table 6.8,** the magnitude of change on some LRs would be intermediate. It is due to either the extent of affected area within the LRs, and/or the scale of proposed works and its compatability to indivudal LRs, and duration of impact. These LRs include LR1.4 Aberdeen Tunnel approaching roads, LR1.5 Ocean Park Road, LR1.6 Major roads at Wong Chuk Hang, LR1.9 South Horizon approaching roads, LR1.10 Lee Nam Road, LR4.1 Mixed Woodland on sloping areas along sides of Nam Fung Road, LR4.5 Mixed Woodland on sloping areas along Ap Lei Chau Bridge Road, LR4.6 Mixed Woodland on sloping areas at the junction of Ap Lei Chau Bridge Road and Lee Nam Road, LR5.2 Roadside Plantation alongsides of approaching roads to Aberdeen Tunnel, LR5.3 Roadside Plantation at the periphery of carparking area to the north of Ocean Park, LR8 Staunton Creek Nullah, LR 9 Marshland, LR10.2 Open yard at ex-Chung Hom Kok Quarry, LR12.4 Wong Chuk Hang Road Garden, LR12.9 Ap Lei Chau Park and Waterfront Promenade and LR12.10 Football Pitch at Ap Lei Chau Bridge Road West .

Small

According to the assessment result in **Table 6.8,** the magnitude of change some LRs would be small as a result of proposed works. It is due to the relatively smaller extent of affected area, and/or relatively higher compatability of proposed works and its smaller scale within individual LRs, and/or the relatively higher reversibility of LRs. These LRs include LR1.1 Major Roads at Admiralty, LR1.2 Supreme Court Road, LR1.3 Nam Fung Road, LR1.7 Ap Lei Chau Bridge approaching roads, LR1.8 Lei Tung Estate approaching roads, LR1.11 Cyber Port approaching roads, LR1.12 Chung Hom Kok Road, LR2.7 Institutional Developments at Wong Chuk Hang, LR2.12 Public Housing Developments at Lei Tung, LR2.13 Industrial and Utilities Developments at Lee Nam Road, LR2.14 Residential Developments at Ap Lei Chau West, LR2.16 Utilities Facilities and Industrial Developments at Tin Wan waterfront, LR2.17 Mixed Use High Technology Developments at Pok Fu Lam, LR3.1 Natural Woodland at the Peak and Mid-level Sloping Areas, LR3.2 Natural Woodland on sloping area to the south of Wong Chuk Hang Estate, LR4.3 Mixed Woodland on sloping areas to the north of Hong Kong Police College, LR4.7 Mixed Woodland on sloping areas to the north of Lee Nam Road South, LR4.9 Mixed Woodland on sloping areas to surrounding Chung Hom Kok Quarry, LR5.1 Roadside Plantation at Admiralty, LR5.4 Roadside Amenity at Lee Wing Street, LR 6 Grassland / Shrubland Mosaic, LR7.1 Aberdeen Channel, LR7.2 Telegraph Bay, LR10.1 Open yard at waterfront promenade under Ap Lei Chau Bridge and LR10.3 Wasteland at ex-Canadian Hospital Site and LR12.2 Hong Kong Park.

Nil

According to the assessment result in **Table 6.8**, there would be nil change on the LRs including LR2.1 Commercial and Institutional Developments at Admiralty, LR2.2 Civil Developments at Supreme Court Road, LR2.3 Institutional Developments at Nam Fung Road, LR2.4 Village and Residential Developments at Lower Slope of Shouson Hill, LR2.6 Industrial Developments at Wong Chuk Hang, LR2.9 Residential Developments at Aberdeen Waterfront, LR2.10 Residential Developments at Ap Lei Chau Waterfront, LR2.11 Mixed-use Developments at Ap Lei Chau Main Street, LR2.15 Residential Developments at Pok Fu Lam, LR2.18 Utilities Facilities at Chung Hom Kok, LR2.19 Ocean Park, LR4.2 Mixed Woodland on sloping area to the east of Wong Chuk Hang Sun Wai, LR4.8 Mixed Woodland on sloping areas to the south of Police School Road, LR7.3 Chung Hom Kok, LR 11 Agricultural Field, LR12.3 Queensway Garden, LR12.5 Aberdeen Sports Ground, LR12.6 Sitting Out Area at Heung Yip Road, LR12.7 Sitting Out Area adjacent to Staunton Creek Nullah and LR12.8 Aberdeen Tennis and Squash Centre.

Table 6.9 presents the predicted unmitigated and mitigated (Day 1 and Yr 10/residual) impacts on the existing landscape resources resulting from the proposed works during the construction and operational phases of the project. These impacts also are mapped on **Figures 6.5.1** to **6.5.13**. The mitigated (residual) impacts are assessed during the design year for the purpose of this study and is taken as being between 10 and 15 years after the schemes opening when the proposed mitigation planting is deemed to have reached a level of maturity, which is sufficient for it to perform the design objectives. Significance thresholds of unmitigated impact are summarised as follows:

Significant Impact

Given some of LRs, which have a relatively higher sensitivity including woodland or mature plantation or open spaces, and the magnitude of change as a result of proposed works on these LRs is relatively larger, these LRs would therefore experience a significant impact. These LRs include LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary, LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers, LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah and LR12.1 Harcourt Garden.

This loss of these LRs will be mitigated through reinstatement of planting areas in Harcourt Garden with ornamental trees, wooded areas to the north of Holy Sprit Seminary and Sham Wan Tower and alongside of the nullah with woodland mixed planting. Open spaces and associated planting areas acquired for temporary works areas will be reinstated

Moderate Impact

Given some of LRs, which have a low to medium sensitivity including roads or developed areas, mixed woodland, roadside amenity, grassland, wasteland and yards, waterbody, marshland or open spaces, and the magnitude of change as a result of proposed works on these LRs is large to intermediate, these LRs therefore would experience a moderate impact. Besides, some LRs, which have a relatively high sensitivity such as natural woodland, and the magnitude of change as a result of proposed works on these LRs is relatively small, these LRs would also experience a moderate impact. These LRs include LR1.2 Supreme Court Road, LR1.3 Nam Fung Road, LR1.4 Aberdeen Tunnel approaching roads, LR1.5 Ocean Park Road, LR1.6 Heung Yip Road, LR1.9 South Horizon approaching roads, LR1.10 Lee Nam Road, LR1.12 Chung Hom Kok Road, LR2.5 Carparking and Bus Deport adjacent to Ocean Park, LR2.7 Institutional Developments at Wong Chuk Hang, LR2.8 Demolition Site of ex-Wong Chuk Hang Estate, LR2.12 Public Housing Developments at Lei Tung, LR2.14 Residential Developments at Ap Lei Chau West, LR2.17 Mixed Use High Technology Developments at Pok Fu Lam, LR3.1 Natural Woodland at the Peak and Mid-level Sloping Areas, LR3.2 Natural Woodland on sloping area to the south of Wong Chuk Hang Estate, LR4.1 Mixed Woodland on sloping areas along sides of Nam Fung Road, LR4.3 Mixed Woodland on sloping areas to the north of Hong Kong Police College, LR4.5 Mixed Woodland on sloping areas to the north of Ap Lei Chau Bridge Road, LR4.6 Mixed Woodland on sloping areas at the junction of Ap Lei Chau Bridge Road and Lee Nam Road, LR5.1 Roadside Plantation at Admiralty, LR5.2 Roadside Plantation alongsides of approaching roads to Aberdeen Tunnel, LR5.3 Roadside Plantation at the periphery of carparking area to the north of Ocean Park, LR5.4 Roadside Amenity at Lee Wing Street, LR 6 Grassland / Shrubland Mosaic, LR7.1 Aberdeen Channel, LR 9 Marshland, LR10.2 Open yard at ex-Chung Hom Kok Quarry, LR12.2 Hong Kong Park, LR12.4 Wong Chuk Hang Road Garden, LR12.9 Ap Lei Chau Park and Waterfront Promenade and LR12.10 Football Pitch at Ap Lei Chau Bridge Road West

The loss of LRs will be mitigated through the reinstatement of sloping and garden areas with both native and amenity species integrated with preserved trees, responsive slope stabilising method to reduce the impact on slope trees, reinstatement of roadside planting areas and waterfront area. Greening measures on depot façade in combination of new street tree planting on the footpath surrounding the depot, in-filled between the preserved street trees at where space allows will be implemented to alleviate the impact.

Slight

Given some of LRs, which have a low sensitivity including roads or developed areas, mixed woodland, roadside amenity, waterbody, or wasteland and open yards, and the magnitude of change as a result of proposed works on these LRs is small, these LRs are therefore experienced a slight impact. These LRs include LR1.1 Major Roads at Admiralty, LR1.7 Ap Lei Chau Bridge approaching roads, LR1.8 Lei Tung Estate approaching roads, LR1.11 Cyber Port approaching roads, LR2.13 Industrial and Utilities Developments at Lee Nam Road, LR2.16 Utilities Facilities and Industrial Developments at Tin Wan waterfront, LR4.7 Mixed Woodland on sloping areas to the north of Lee Nam Road South, LR4.9 Mixed Woodland on sloping areas to surrounding Chung Hom Kok Quarry, LR7.2 Telegraph Bay, LR8 Staunton Creek Nullah, LR10.1 Open yard at waterfront promenade under Ap Lei Chau Bridge and LR10.3 Wasteland at ex-Canadian Hospital Site.

This impact will be alleviated through the reinstatement of affected planting areas, with temporary planting proposals such as climbing plants and bamboo planting adjacent to proposed built structures at where pending for future GIC or property developments at ex-Canadian hospital site, OCP Station and WCH Depot.

Negligible

As a result of proposed works that would not encroached to the LRs, these LRs would not experience any perceptible change including LR2.1 Commercial and Institutional Developments at Admiralty, LR2.2 Civil Developments at Supreme Court Road, LR2.3 Institutional Developments at Nam Fung Road, LR2.4 Village and Residential Developments at Lower Slope of Shouson Hill, LR2.6 Industrial Developments at Wong Chuk Hang, LR2.9 Residential Developments at Aberdeen Waterfront, LR2.10 Residential Developments at Ap Lei Chau Waterfront, LR2.11 Mixed-use Developments at Ap Lei Chau Main Street, LR2.15 Residential Developments at Pok Fu Lam, LR2.18 Utilities Facilities at Chung Hom Kok, LR2.19 Ocean Park , LR4.2 Mixed Woodland on sloping area to the east of Wong Chuk Hang Sun Wai , LR4.8 Mixed Woodland on sloping areas to the south of Police School Road , LR7.3 Chung Hom Kok, LR 11 Agricultural Field, LR12.3 Admiralty Garden, LR12.5 Aberdeen Sports Ground, LR12.6 Sitting Out Area at Heung Yip Road, LR12.7 Sitting Out Area adjacent to Staunton Creek Nullah, LR12.8 Aberdeen Tennis and Squash Centre.

The assessment contained in **Table 6.9** concluded that even though there is significant to moderate impact on some of LRs, the majority of the works areas will be reinstated to its original status or with proposed new roadside and amenity planting areas along the alignment and woodland mixed planting on disturbed sloping areas. In combination with tree preservation proposals, these will mitigate the loss and will retore and enhance the landscape context. The Conceptual Landscape Master Plans shown in **Figures 6.9.1.1** to **6.9.27** illustrate landscape proposals along the railway alignment and adjacent to built structure as that will alleviate the potential impact on the LRs. The recommended landscape mitigation measures and residual impact on these LRs is further discussed in **Sections 6.8** and **6.9**.

Table 6.8: Magnitude of Change for Landscape Resources

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR1.1 Major Roads at Admiralty	ADM Station construction works at Fenwick Pier Street Temporary change of road layout and loss of roadside areas, will be reinstated after works	0.07/ 3Ha. 2%	High	Small	Long/Nil	High	Small	Small
LR1.2 Supreme Court Road	Road modification and traffic re-arrangement for construction works at Hong Kong Park entrance Temporary change of road layout and loss of roadside areas, will be reinstated after works	0.2 / 1.3Ha. 15%	Medium	Small	Long/Nil	Medium	Small	Small
LR1.3 Nam Fung Road	Construction of Nam Fung Portal and access road to the site will slightly alter the existing pavement. Loss of roadside areas, will be reinstated after works. Change of road layout to accommodate vehicular access to Nam Fung Portal	0.04 / 0.7Ha. 5%	Medium	Small	Long/Nil	Medium	Small	Small
LR1.4 Aberdeen Tunnel approaching roads	Construction of viaduct from Nam Fung Portal to OCP Station Impact on the road layout to accommodate viaduct column.	1.1 / 3.5Ha. 31%	High	Small	Long/Long	High	Intermediate	Intermediate

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR1.5 Ocean Park Road	Construction of OCP Station and its approaching viaduct Impact on the road layout to accommodate viaduct column.	1/ 2Ha. 50%	High	Intermediate	Long/Long	High	Intermediate	Intermediate
LR1.6 Major roads at Wong Chuk Hang	Construction of viaduct from OCP Station to Aberdeen Channel Bridge, Wong Chuk Hang Station and Depot Impact on the road layout to accommodate viaduct column.	0.98 / 2.9 Ha. 34%	High	Intermediate	Long/Long	High	Intermediate	Intermediate
LR1.7 Ap Lei Chau Bridge approaching roads	Construction of viaduct and Aberdeen Channel Bridge from Aberdeen to Ap Lei Chau Impact on the road layout to accommodate viaduct column.	0.5 / 2Ha. 25%	High	Intermediate	Long/Long	High	Small	Small
LR1.8 Lei Tung Estate approaching roads	Construction of LET Station entrances and associated road modification works Temporary loss of roadside areas and change of road layout during construction. Areas adjacent to station entrances will be reinstated.	0.5/ 2.3Ha. 22%	High	Small	Medium/Nil	High	Small	Small
LR1.9 South Horizon approaching roads	Construction of SOH station entrance, footbridge and associated road modification works Temporary loss of roadside areas, areas adjacent to the station entrances will be	1.8/ 5.3Ha. 34%	High	Intermediate	Long/Long	High	Intermediate	Intermediate

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	reinstated after works							
LR1.10 Lee Nam Road	Construction of access road to proposed Lee Nam Road Plant Building Loss of roadside areas and change of road layout to accommodate access to the Plant Building.	0.6 / 1.6Ha. 38%	High	Intermediate	Long/Long	High	Intermediate	Intermediate
LR1.11 Cyber Port approaching roads	Construction of access road to proposed barging point at the waterfront Temporary loss of roadside areas, will be largely reinstated after works	0.03/ 0.7 Ha. 4%	High	Small	Medium/Nil	High	Small	Small
LR1.12 Chung Hom Kok Road	Access to proposed Magazine Site , minor modification works involved. Temporary loss of roadside areas, will be largely reinstated after works	0.05 / 0.4Ha. 12%	High	Small	Medium/Nil	High	Small	Small
LR2.1 Commercial and Institutional Developments at Admiralty	No direct impact on these commercial developments. Proposed tunnel works from ADM Station to Nam Fung Portal will be underground.	0 / 12Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.2 Civil Developments at Supreme Court Road	No direct impact on these civic developments.	0 / 2Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR2.3 Institutional Developments at Nam Fung Road	No direct impact on these institutional developments.	0 / 10Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.4 Village and Residential Developments at Lower Slope of Shouson Hill	No direct impact on these institutional developments.	0 / 1.6Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.5 Carparking and Bus Deport adjacent to Ocean Park	Construction of OCP Station, viaduct and associated works area. Infrastructure facilities will be replaced by elevated railway station.	1.3 / 2Ha. 65%	High	Large	Long/Long	Medium	Large	Large
LR2.6 Industrial Developments at Wong Chuk Hang	No direct impact on these industrial developments	0 / 10Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.7 Institutional Developments at Wong Chuk Hang	Construction of WCH Station and viaduct Some slope stabilisation works for the construction of viaduct will encroach to the periphery of the developments. Tree affected: approximately 61% and 2% of total 125 trees within the works boundary proposed to be felled and transplanted respectively. Another 29% of total	0.5/ 13Ha. 3%	Medium	Small	Long/Nil	Medium	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.							
LR2.8 Demolition Site of Ex-Wong Chuk Hang Estate	Construction of WCH Station and viaduct and Depot and associated road widening works for Police School and Nam Long Shan Road Tree affected: Majority trees including 28% of *Leucaena leucocephala* and dead trees are proposed to be felled due to their poor condition or restricted growing condition which not viable to be transplanted with exception of approximately 4% of total 338 trees within the works boundary would able to be transplanted.	6.5/ 6.5Ha. 100%	High	Large	Long/Nil	Low	*Large*	Large
LR2.9 Residential Developments at Aberdeen Waterfront	No direct impact on these residential developments	0/ 0.5Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.10 Residential Developments at Ap Lei Chau Waterfront	No direct impact on these residential developments	0/ 3.5Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.11 Mixed-use Developments at	No direct impact on these developments	0/ 1.4Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
Ap Lei Chau Main Street								
LR2.12 Public Housing Developments at Lei Tung	Construction of entrances at existing bus terminus, station concourse is largely underground, impact on planting areas within the developments. Tree affected: approximately 62% and 15% of total 34 trees within the works boundary proposed to be felled and transplanted.	0.5/ 4.5Ha. 11%	High	Small	Medium/ Medium	High	Small	Small
LR2.13 Industrial and Utilities Developments at Lee Nam Road	Proposed barging point at Lee Nam Road Temporary impact on existing utilities site only.	0.13/ 6.5Ha. 2%	High	Small	Medium/Nil	High	Small	Small
LR2.14 Residential Developments at Ap Lei Chau West	Construction of entrances at roadside area, impact on planting areas within the developments. Tree affected: approximate 26% and 50% of total 42 trees within the works boundary proposed to be felled and transplanted.	0.5/ 8Ha. 6%	High	Small	Medium/ Medium	High	Small	Small
LR2.15 Residential Developments at Pok Fu Lam	No direct impact on these developments	0/ 1Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.16 Utilities Facilities and Industrial	Small portion of exiting utilities sites will be used as barging point	0.3/ 3.7Ha. 8%	High	Small	Medium/Nil	High	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
Developments at Tin Wan waterfront	for proposed works. Impact on vacant land at waterfront and trees at its periphery. Tree affected: approximately 21% and less than 1% of total 504 trees within the works boundary proposed to be felled and transplanted. Another 60% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.							
LR2.17 Mixed Use High Technology Developments at Pok Fu Lam	Small portion of exiting utilities or construction sites will be used as barging point for proposed works.	0.3/ 3.7Ha. 8%	High	Small	Medium/Nil	High	Small	Small
LR2.18 Utilities Facilities at Chung Hom Kok	No direct impact on these developments	0/ 0.15Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR2.19 Ocean Park	No direct impact on these developments	0/ 1.5Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR3.1 Natural Woodland at the Peak and Mid-level Sloping Areas	Only a small portion of sloping area at Nam Fung Road where required slope stabilisation works based on the recommendation of natural terrain hazard assessment of detailed design stage. Other portion along the tunnel alignment will remain unchanged	1.8 / 87.5Ha 2%	High	Small	Long/Long	High	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	Existing trees are largely preserved.							
LR3.2 Natural Woodland on sloping area to the south of Wong Chuk Hang Estate	Only portion of northern slope of Nam Long Shan required slope stabilisation works based on the recommendation of natural terrain hazard assessment of detailed design stage. Other portion of Nam Long Shan will not be affected. Existing trees are largely preserved.	0.59 / 1.5Ha 39%	High	Small	Long/Long	High	Small	Small
LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary	Due to introduction of viaduct column adjacent or on the sloping area and the loss of vegetated sloping area Tree affected: approximately 58% and 6% of total 563 trees within the works boundary proposed to be felled and transplanted respectively.	0.6 / 1.2Ha 50%	Low	Large	Long/Long	Medium	Large	Large
LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers	Due to cut and cover tunnelling works required removal of majority vegetation within the works area. Tree affected: approximately 75% and 3% of total 173 trees within the works boundary proposed to be felled and transplanted respectively. Another 5% of total number are *Leucaena leucocephala* and dead trees, and	0.5 / 0.53Ha 94%	Low	Large	Long/Long	Medium	Large	Large

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	are proposed to be removed.							
LR4.1 Mixed Woodland on sloping areas along sides of Nam Fung Road	Due to construction of Nam Fung Portal and box structures within ex-Canadian School Site. Majority vegetation within the site will be removed for the works as well as pending for future GIC developments. Tree affected: approximately 47% and less than 1% of total 641 trees within the works boundary proposed to be felled and transplanted. Another 47% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.86/2.28Ha. 38%	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LR4.2 Mixed Woodland on sloping area to the east of Wong Chuk Hang Sun Wai	No direct impact on the sloping area.	0 / 1Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR4.3 Mixed Woodland on sloping areas to the north of Hong Kong Police College	Construction of viaduct section from OCP to WCH Station and road widening works for Police School Road. Impact on the vegetation on sloping area. Tree affected: approximately 54% and less than 1% of total 149 trees within the works boundary proposed to be felled and transplanted. Another 9% of total	0.32/ 1.7Ha. 19%	Medium	Small	Long/Long	Medium	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.							
LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah	Construction of viaduct column on sloping areas. Impact on vegetation on sloping areas. Tree affected: approximately 61% and less than 1% of total 279 trees within the works boundary proposed to be felled and transplanted. Another 8% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.95 / 0.95Ha. 100%	Medium	Large	Long/Long	Medium	Large	Large
LR4.5 Mixed Woodland on sloping areas along Ap Lei Chau Bridge Road	Large portion of access to proposed entrance of LET Station are constructed through tunnelling. Impact on this LR restricted to the area constructing the station entrance. Tree affected: approximately 85% of total 346 trees within the works boundary proposed to be felled.No slope tree is technically viable to be transplanted. Another 10% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	1.7 / 18Ha. 10%	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LR4.6 Mixed Woodland on sloping areas at	Due to construction of SOH plant building and associated slope stabilisation works. Majority works	2.38 / 4.8Ha. 50%	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
the junction of Ap Lei Chau Bridge Road and Lee Nam Road	are undertaken underground. Impact on vegetation on the slope. Tree affected: approximately 58% of total 154 trees within the works boundary proposed to be felled. No slope tree is technically viable to be transplanted. Another 21% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.							
LR4.7 Mixed Woodland on sloping areas to the north of Lee Nam Road South	Impact on vegetation on the slope due to construction of plant building. Tree affected: approximately 82% and 5% of total 57 trees within the works boundary proposed to be felled and transplanted.	0.38 / 1.7Ha. 22%	Medium	Small	Long/Long	Medium	Small	Small
LR4.8 Mixed Woodland on sloping areas to the south of Police School Road	No impact on the sloping area.	0/0.54Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR4.9 Mixed Woodland on sloping areas to surrounding Chung Hom Kok Quarry	Impact on vegetation on the slope due to slope stabilisation works and the formation of Magazine Site Tree affected: approximately 9% of total 99 trees within the works boundary proposed to be felled. No slope tree is technically viable	1.6/6.8Ha. 23%	Medium	Small	Long/Long	Medium	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	to be transplanted. Another 42% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.							
LR5.1 Roadside Plantation at Admiralty	Proposed tunnelling works have impact on roadside plantation at Fenwick Street and road modification works at Supreme Court Road Tree affected: approximately 23% and 33% of total 115 trees within the works boundary proposed to be felled and transplanted.	0.23/ 0.8Ha. 30%	Medium	Small	Long/Long	Medium	Small	Small
LR5.2 Roadside Plantation alongsides of approaching roads to Aberdeen Tunnel	Impact on roadside plantation due to construction of viaduct Tree affected: approximately 50% and 7% of total 624 trees within the works boundary proposed to be felled and transplanted. Another 18% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.43/ 1.2Ha. 36%	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR5.3 Roadside Plantation at the periphery of carparking area to the north of Ocean Park	Impact on roadside plantation due to construction of OCP Station and viaduct Tree affected: approximately 55% and 1% of total 493 trees within the works boundary proposed to be felled and transplanted. Another 28% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.5/ 1.5Ha. 33%	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LR5.4 Roadside Amenity at Lee Wing Street	Impact on roadside plantation and sitting area at Lee Wing Street due to construction of Plant Building. Tree affected: approximately 44% of total 57 trees within the works boundary proposed to be felled. Another 28% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.5/ 1.5Ha. 33%	High	Small	Long/Long	Medium	Small	Small
LR 6 Grassland / Shrubland Mosaic	Temporary loss of LR due to potential slope stabilisation works	1.5/ 6Ha. 25%	High	Small	Long/Long	Medium	Small	Small
LR7.1 Aberdeen Channel	Temporary loss of LR due to construction of Aberdeen Channel Bridge	0.3 / 14Ha. 2%	Low	Small	Long/Long	Medium	Small	Small
LR7.2 Telegraph Bay	Temporary loss of LR due to barging point required facilities	0.12 / 2Ha. 2%	Low	Small	Long/Long	Medium	Small	Small

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR7.3 Chung Hom Kok	No direct impact on the waterbody surrounding Chung Hom Kok Peninsula	0/ 14Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR8 Staunton Creek Nullah	Modification of this manmade channel due to construction of viaduct	1.4 / 2.3Ha. 60%	High	Large	Long/Long	Medium	Intermediate	Intermediate
LR 9 Marshland	Impact on vegetation due to construction of box structure at ex-Canadian School Site. The site is pending for future GIC development. Tree affected: approximately 40 trees within the works boundary proposed to be felled.	0.4 / 1Ha. 40%	Low	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LR10.1 Open yard at waterfront promenade under Ap Lei Chau Bridge	Impact on the yard and existing vegetation due construction of Aberdeen Channel Bridge Tree affected: approximately 63% of total 115 trees within the works boundary proposed to be felled. Another 28% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.5 / 2Ha. 25%	Low	Small	Long/Nil	Medium	Small	Small
LR10.2 Open yard at ex-Chung Hom Kok Quarry	Impact on the Quarry due to the setting up of Magazine Site	0.4 / 0.4Ha. 100%	High	Large	Long/Nil	Medium	Intermediate	Intermediate

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR10.3 Wasteland at ex-Canadian Hospital Site	Impact on vegetation due to construction of box structure and Nam Fung Portal at ex-Canadian School Site. The site is pending for future GIC development Tree affected: approximately 44% of total 78 trees within the works boundary proposed to be felled. Another 56% of total number are *Leucaena leucocephala* and dead trees, and are proposed to be removed.	0.15 / 0.8Ha. 18%	High	Small	Long/Long	Medium	Small	Small
LR 11 Agricultural Field	No direct impact	0 / 0.1Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR12.1 Harcourt Garden	Impact on existing vegetation in the garden due to construction of ADM Station and associated above ground facilities. Majority works area will be reinstated as garden area. Tree affected: approximately 26% and 41% of total 573 trees within the works boundary proposed to be felled and transplanted.	1.5 / 1.7Ha. 88%	Low	Large	Long/Long	Low	Large	Large

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR12.2 Hong Kong Park	Impact on vegetation adjacent to existing RCP facilities at Supreme Court Road entrance area due to construction of ventilation facilities. Disturbed area will be occupied by building structures and traffic manoeuvring area for ventilation facilities and RCP. Greening measures will be limited and shall not affect the operation of vent building. Tree affected: approximately 53% and 25% of total 110 trees within the works boundary proposed to be felled and transplanted. One dead tree to be removed.	0.2 / 0.7Ha. 29%	Low	Small	Long/Long	Low	Small	Small
LR12.3 Queensway Garden	No impact to the garden	0 / 0.3Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR12.4 Wong Chuk Hang Road Garden	Due to construction of viaduct from Nam Fung Portal to OCP Station and temporary works area. Majority existing trees within and at the periphery of the Garden will be preserved during construction. Whole garden area will be reinstated. Tree affected: approximately 48% and 2% of total 44 trees within the works boundary proposed to be felled and transplanted.	0.15 / 0.5Ha. 30%	Low	Medium	Long/Long	Low	Intermediate	Intermediate
LR12.5 Aberdeen Sports Ground	Works will be undertaken at its periphery roadside area, no impact to the sport ground.	0/ 7Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR12.6 Sitting Out Area at Heung Yip Road	Works will be undertaken at its periphery roadside area, no impact to the garden.	0/ 1.5Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR12.7 Sitting Out Area adjacent to Staunton Creek Nullah	Works will be undertaken at its periphery roadside area, no impact to the garden.	0/ 0.07Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LR12.8 Aberdeen Tennis and Squash Centre	Works will be undertaken at its periphery roadside area, no impact to the sport ground.	0/ 0.82Ha. 0%	N/A	N/A	Nil/Nil	N/A	Nil	Nil

Landscape Resource	Description of Impacts	Loss (Ha) /Total Area of Resource (Ha)	Determinants for Magnitude of Change				Magnitude of Change	
			Compatibility (N/A / Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LR12.9 Ap Lei Chau Park and Waterfront Promenade	Some vegetation along the promenade will be affected due construction of Aberdeen Channel Bridge and temporary works area. Promenade will be reinstated. Tree affected: approximately 15 trees proposed to be felled.	1.98/ 3.5Ha. 57%	Medium	Large	Long/Long	Medium	Intermediate	Intermediate
LR12.10 Football Pitch at Ap Lei Chau Bridge Road West	Whole football pitch will be used for temporary works area.	0.2/ 0.2Ha. 100%	Medium	Large	Long/Nil	Medium	Intermediate	Intermediate

Table 6.9: Existing Landscape Resources and Predicted Impacts

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR1.1 Major Roads at Admiralty	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas including decorative screen hoarding. CP3 – Replanting the existing/replacement of disturbed roadside vegetation adjacent to Harcourt Garden CP5- Coordination with SCL concurrent projects	Slight Adverse	Slight Adverse	Negligible
LR1.2 Supreme Court Road	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas including decorative screen hoarding. CP3 – Replanting the existing/replacement of disturbed roadside vegetation adjacent to Hong Kong Park and Supreme Court CP4 – Transplanting affected trees to adjacent roadside planting area, final location subject to relevant Government approval. CP5- Coordination with SCL concurrent projects OP2- New planting including trees and shrubs at roadside planters. OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible
LR1.3 Nam	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement	Slight Adverse	Slight	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
Fung Road						Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP4- Treatment of roadside reinstated slopes through the use of woodland planting.		Adverse	
LR1.4 Aberdeen Tunnel approaching roads	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting along viaduct alignment OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible
LR1.5 Ocean Park Road	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
						roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting along viaduct alignment OP3- Compensatory planting in planned roadside planters			
LR1.6 Heung Yip Road	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas OP2- New roadside planting along viaduct alignment	Slight Adverse	Slight Adverse	Negligible
LR1.7 Ap Lei Chau Bridge approaching roads	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation OP4- Treatment of roadside reinstated slopes through the use of woodland planting	Negligible	Negligible	Negligible
LR1.8 Lei Tung Estate approaching roads	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation	Negligible	Negligible	Negligible
LR1.9 South Horizon	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement	Slight Adverse	Slight	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
approaching roads						Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting OP3- Compensatory planting in planned roadside planters.		Adverse	
LR1.10 Lee Nam Road	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible
LR1.11 Cyber Port approaching roads	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial): Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial): Year 10
LR1.12 Chung Hom Kok Road	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4 – reinstatement of disturbed sloping areas through the use of woodland planting	Slight Adverse	Slight Adverse	Negligible
LR2.1 Commercial and Institutional Developments at Admiralty	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.2 Civil Developments at Supreme Court Road	Medium	Nil	Nil	Negligible	Negligible	OP2- New roadside planting.	Negligible	Negligible	Slight Beneficial
LR2.3 Institutional Developments at Nam Fung Road	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
LR2.4 Village and Residential Developments at Lower Slope of Shouson Hill	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.5 Carparking and Bus Deport adjacent to Ocean Park	Low	Large	Large	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible
LR2.6 Industrial Developments at Wong Chuk Hang	Low	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.7 Institutional Developments at Wong Chuk Hang	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						COP3- Compensatory planting OP4- Treatment of reinstated slopes through the use of woodland planting			
LR2.8 Demolition Site of Ex-Wong Chuk Hang Estate	Low	Large	Large	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. CP5- Coordination with planned/ concurrent property development above WCH Depot OP2- New roadside planting OP3- Compensatory planting	Slight Adverse	Slight Adverse	Negligible
LR2.9 Residential Developments at Aberdeen Waterfront	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.10 Residential Developments at Ap Lei Chau Waterfront	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.11 Mixed-	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
use Developments at Ap Lei Chau Main Street									
LR2.12 Public Housing Developments at Lei Tung	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting OP3- Compensatory planting	Slight Adverse	Slight Adverse	Negligible
LR2.13 Industrial and Utilities Developments at Lee Nam Road	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas	Negligible	Negligible	Negligible
LR2.14 Residential Developments at Ap Lei Chau West	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting OP3- Compensatory planting			
LR2.15 Residential Developments at Pok Fu Lam	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR2.16 Utilities Facilities and Industrial Developments at Tin Wan waterfront	Low	Small	Small	Slight Adverse	Slight Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting OP3- Compensatory planting	Negligible	Negligible	Negligible
LR2.17 Mixed	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement	Slight Adverse	Slight	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
Use High Technology Developments at Pok Fu Lam						Works and Temporary Works Areas		Adverse	
LR2.18 Utilities Facilities at Chung Hom Kok	Low	Nil	Nil	Negligible	Negligible	OP2- New roadside planting through the use of woodland species	Negligible	Negligible	Slight Beneficial
LR2.19 Ocean Park	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR3.1 Natural Woodland at the Peak and Mid-level Sloping Areas	High	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Slight Adverse	Slight Adverse	Negligible
LR3.2 Natural Woodland on sloping area to the south of Wong Chuk Hang Estate	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP4- Enhanced and reinstated sloping areas through the use of woodland	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						planting			
LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary	Medium	Large	Large	Significant Adverse	Significant Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Moderate Adverse	Moderate Adverse	Slight Adverse
LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers	Medium	Large	Large	Significant Adverse	Significant Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval.	Moderate Adverse	Moderate Adverse	Slight Adverse

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting			
LR4.1 Mixed Woodland on sloping areas along sides of Nam Fung Road	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Slight Adverse	Slight Adverse	Negligible
LR4.2 Mixed Woodland on sloping area to the east of Wong Chuk Hang Sun Wai	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR4.3 Mixed Woodland on sloping areas to the north of	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial): Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial): Year 10
Hong Kong Police College						Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting			
LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah	Medium	Large	Large	Significant Adverse	Significant Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Moderate Adverse	Moderate Adverse	Slight Adverse

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR4.5 Mixed Woodland on sloping areas to the north of Ap Lei Chau Bridge Road	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Slight Adverse	Slight Adverse	Negligible
LR4.6 Mixed Woodland on sloping areas at the junction of Ap Lei Chau Bridge Road and Lee Nam Road	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Slight Adverse	Slight Adverse	Negligible
LR4.7 Mixed Woodland on sloping areas to the north of Lee Nam Road South	Low	Small	Small	Slight Adverse	Slight Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting			
LR4.8 Mixed Woodland on sloping areas to the south of Police School Road	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR4.9 Mixed Woodland on sloping areas to surrounding Chung Hom Kok Quarry	Low	Small	Small	Slight Adverse	Slight Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR5.1 Roadside Plantation at Admiralty	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation at Fenwick Street and Supreme Court Road CP4 – Transplanting affected trees to adjacent roadside planting area, replanting final locations within the works areas is subject to relevant Government approval. CP5- Coordination with SCL concurrent project OP3- Compensatory planting	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR5.2 Roadside Plantation alongsides of approaching roads to Aberdeen Tunnel	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing roadside vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting along viaduct alignment OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR5.3 Roadside Plantation at the periphery of carparking area to the north of Ocean Park	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing roadside vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed roadside vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside planting along viaduct alignment OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR5.4 Roadside Amenity at Lee Wing Street	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation at roadside and sitting areas. CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP2- New roadside and amenity planting at roadside and sitting areas. OP3- Compensatory planting in planned roadside planters	Slight Adverse	Slight Adverse	Negligible
LR 6 Grassland / Shrubland Mosaic	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation	Slight Adverse	Slight Adverse	Negligible
LR7.1 Aberdeen Channel	Medium	Small	Small	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						OP2- New amenity planting at waterfront area OP6- Responsive design of Aberdeen Channel Bridge			
LR7.2 Telegraph Bay	Low	Small	Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas and reinstated the barging point to its original status	Slight Adverse	Slight Adverse	Negligible
LR7.3 Chung Hom Kok	High	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR8 Staunton Creek Nullah	Low	Intermediate	Intermediate	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas OP2- New amenity planting along the nullah OP7 – Reinstated and creation of new amenity areas along the nullah	Negligible	Negligible	Slight Beneficial
LR 9 Marshland	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of periphery vegetation within ex-Canadian Hospital site CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation at the periphery of the site. CP5 Coordination with future GIC developments OP3- Compensatory planting in planned roadside planters OP6- Responsive design of box	Slight Adverse	Slight Adverse	Negligible Upon completion of future GIC development within the site

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						structures with temporary greening measures including climbing plants and bamboo planting to allow flexibility for planned hospital development.			
LR10.1 Open yard at waterfront promenade under Ap Lei Chau Bridge	Low	Small	Small	Slight Adverse	Slight Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting the existing/replacement of disturbed vegetation OP3- Compensatory planting OP6- Responsive design of Aberdeen Channel Bridge and its embankment aligned with existing Ap Lei Chau Bridge	Negligible	Negligible	Slight Beneficial
LR10.2 Open yard at ex-Chung Hom Kok Quarry	Low	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement of the Magazine Site CP3 – Replanting the existing/replacement of disturbed vegetation OP6- Responsive selection of magazine site	Slight Adverse	Slight Adverse	Negligible
LR10.3 Wasteland at ex-Canadian Hospital Site	Low	Small	Small	Slight Adverse	Slight Adverse	CP1-Preservation of periphery vegetation within ex-Canadian Hospital site CP2- Management and reinstatement	Slight Adverse	Slight Adverse	Negligible Upon completion of future GIC

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
						Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation at the periphery of the site. CP5 Coordination with future GIC developments OP3- Compensatory planting in planned roadside planters OP6- Responsive design of box structures with temporary greening measures including climbing plants and bamboo planting to allow flexibility for planned hospital development.			development within the site
LR 11 Agricultural Field	Low	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR12.1 Harcourt Garden	Medium	Large	Large	Significant Adverse	Significant Adverse	CP1-Preservation of existing vegetation at the periphery of the garden CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. CP5- Coordination with SCL concurrent project OP1 – Responsive design of ADM station associated facilities and vent shaft, integration with existing station facilities to maximise the planting opportunities for park reinstatement OP2- New roadside and amenity planting through establishment of planting on terraced garden/ landscape deck. OP3- Compensatory planting with ornamental tree planting OP7- Enhanced and reinstated open spaces and amenity areas for the use of neighbourhoods.	Moderate Adverse	Moderate Adverse	Slight Adverse

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change: Construction (Nil / Small / Intermediate / Large)	Magnitude of Change: Operation (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Unmitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	Mitigation Measures	Significance Threshold (Mitigated): Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Day 1	Significance Threshold (Mitigated): Operation Negligible, Slight, Moderate and Significant (adverse or beneficial) Year 10
LR12.2 Hong Kong Park	High	Small	Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation at the garden CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation CP4 – Transplanting affected trees to adjacent planting areas, replanting final locations within the works areas is subject to relevant Government approval.. CP5- Coordination with SCL concurrent project OP1 – Responsive design of vent building to maximise the opportunities for green measures. OP2- New roadside planting OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting OP7- Enhanced and reinstated open spaces and amenity areas for the use of neighbourhoods.	Slight Adverse	Slight Adverse	Negligible
LR12.3 Admiralty Garden	High	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR12.4 Wong Chuk Hang Road Garden	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation at the periphery of the garden CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. OP1 – Responsive design of viaduct alignment to minimise the disturbance to the Garden OP2- New roadside and amenity planting OP3- Compensatory planting with ornamental tree planting OP7- Enhanced and reinstated open spaces and amenity areas for the use of neighbourhoods.	Slight Adverse	Slight Adverse	Negligible
LR12.5 Aberdeen Sports Ground	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR12.6 Sitting Out Area at Heung Yip Road	Low	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR12.7 Sitting Out Area adjacent to Staunton Creek Nullah	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR12.8 Aberdeen Tennis and Squash Centre	Medium	Nil	Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LR12.9 Ap Lei Chau Park and Waterfront Promenade	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation OP2- New amenity planting at bridge embankment OP3- Compensatory planting OP6- Responsive design of Aberdeen Channel Bridge OP7- Enhanced and reinstated water front promenade for the use of neighbourhoods.	Slight Adverse	Slight Adverse	Negligible

Landscape Resource	Sensitivity (Low / Medium/ High)	Magnitude of Change		Significance Threshold (Unmitigated)		Mitigation Measures	Significance Threshold (Mitigated)		
		Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)	Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)		Construction Negligible, Slight, Moderate and Significant (adverse or beneficial)	Operation Negligible, Slight, Moderate and Significant (adverse or beneficial)	
								Day 1	Year 10
LR12.10 Football Pitch at Ap Lei Chau Bridge Road West	Medium	Intermediate	Intermediate	Moderate Adverse	Moderate Adverse	CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation OP2- New amenity planting in filled between preserved vegetation OP7- Enhanced and reinstated recreation ground for the use of neighbourhoods.	Slight Adverse	Slight Adverse	Negligible

6.7.7 Impact on Existing Landscape Character

Due to the scale of the proposed scheme there are likely to be some adverse impacts on the existing landscape character although some sensitive areas will be spared impact due to the proposed construction approach. Given the proposed use of the drill and blast tunnelling method for the tunnel section between Admiralty and proposed Nam Fung Portal and the section between the proposed SOH and LET Stations majority landscape characters would subject to a slight to moderate impact due to construction of viaduct, Aberdeen Channel Bridge, above ground stations, vent shaft and plant buildings. **Table 6.11** presents the predicted unmitigated and mitigated (residual) impacts on the existing landscape character areas resulting from the proposed works during the construction and operational phases of the Project. These impacts also are mapped on **Figure 6.3.1** to **6.3.6.** The mitigated (residual) impacts are assessed during the design year for the purpose of this study and taken as being between 10 and 15 years after railway extension open to public when the proposed mitigation planting is deemed to have reached a level of maturity, which is sufficient for it to perform the design objectives. The predicted mitigated (residual) impacts are further discussed in **Section 6.9**.

Table 6.10 describes the source of impacts as a result of the railway proposals and presents the magnitude of change on individual LCAs. Magnitude of change on individual LCAs is listed as follows:

Intermediate

According to the assessment criteria set up in **Section 6.3.1.3** and the result in **Table 6.10**, certain extent of perceptible change on landscape characters as a result of the loss of landscape resources such as Harcourt Garden, wooded slopes along Staunton Creek Nullah, Aberdeen Channel and ex-Quarry site at Chung Hom Kok, the magnitude of changed of some LCAs is intermediate including LCA1 Admiralty Commercial Landscape, LCA 6 Wong Chuk Hang Industrial and Institutional Landscape, LCA 7 Nam Long Shan Maritime and Recreational Landscape and LCA 10 Chung Hom Kok Utilities Landscape (construction phase only).

Small

According to the assessment criteria set up in **Section 6.3.1.3** and the result in **Table 6.10**, small extent of perceptible change on landscape characters as a result of proposed works, the magnitude of change on LCAs is therefore small. These LCAs include LCA 2 Hong Kong Park Recreational Landscape, LCA 8 Aberdeen Waterfront Landscape, LCA 9 Ap Lei Chau Island Landscape, LCA 11 Telegraph Bay Institutional Landscape (construction phase only) and LCA 12 Wah Kwai Utilities Landscape.

Nil

No perceptible change on LCA 4 Aberdeen Country Park Landscape, LCA 3 Mid-Level Upland Landscape and LCA 5 Shouson Hill Low-rise Residential Landscape as a result of proposed works, the landscape character remain unchanged, the magnitude of change is therefore negligible.

- .

Besides, given proposed works in LCA 10 Chung Hom Kok Utilities Landscape and LCA 11 Telegraph Bay Institutional Landscape are temporary in nature, no works will be undertaken during operation, there is no perceptible change during operation phase.

Table 6.11 presents the predicted unmitigated impacts and are discussed in the following sections.

- *LCA1 Admiralty Commercial Landscape* - Given Harcourt Garden will be utilised for the construction of ADM Station and associated tunnel works, existing commercial landscape character of Admiralty will be affected during construction due to the temporary loss of this garden area. Besides, proposed use of works area at Fenwick Pier Street will affect some of roadside vegetation. The magnitude of change on this urbanised landscape character is intermediate due to temporary loss of open space and roadside vegetation. Given the medium sensitivity of this LCA and the intermediate change on the local landscape character as a result of proposed works, this LCA will be subject to a moderate adverse impact due to the construction works and during the operational phase of the project.

- *LCA 2 Hong Kong Park Recreational Landscape* –The majority of the landscape features contained within the Park are not in conflict with the proposed works, the area affected is located adjacent to the entrance of the Park at Supreme Court Road. A ventilation shaft is proposed for this area with temporary traffic arrangement works at Supreme Court Road, this will lead to the loss of some amenity areas and roadside planting. The extent of works, scale and massing of proposed vent building is relatively small. Given the above reasons, the magnitude of change to local landscape character is small. The impact on the overall recreational character of this regional importance landscape would not be significant. Given the high sensitivity of this LCA and the small change on the character as a result of proposed works, this LCA will be subject to a moderate adverse impact due to the construction works and during the operational phase of the project.
- *LCA 3 Mid-Level Upland Landscape & LCA 4 Aberdeen Country Park Landscape*- Given the use of drill and blast tunnelling method for the tunnel section between Admiralty and proposed Nam Fung Portal the landscape characters of these LCAs would remain unchanged. No perceptible change of amenity is expected. These LCAs are subject to a negligible impact.
- *LCA 5 Shouson Hill Low-rise Residential Landscape* – Shouson Hill is dominated by low-rise housing development integrated with the vegetated sloping area along the access road to the area. The northern periphery of the area is dominated by Aberdeen Tunnel and its associated approaching road. No proposed works are proposed within the area. Indirect impact on this LCA is due to construction works of Nam Fung portal/ vent building and box structure in ex-Canadian Hospital site located in distance on the other side of Aberdeen Tunnel and the temporary loss of Wong Chuk Hang Road Garden and its adjacent vacant land for temporary works areas for the project. Given the location and nature of works is designed associated with existing infrastructure system, and outside this LCA, change of its character is not perceptible, hence this LCA would be negligible due to the indirect impacts on the landscape amenity of the area largely characterised by the existing Aberdeen Tunnel in the north.
- *LCA 6 Wong Chuk Hang Industrial and Institutional Landscape* - The introduction of the Nam Fung portal / vent building, and viaduct connecting the elevated OCP and WCH Stations would lead to changes in the amenity areas approaching the Aberdeen Tunnel and Staunton Creek Nullah. Despite the proposed alignment and stations being elevated within this character area it should be noted that existing landscape has been largely degraded though infrastructure and industrial development hence the proposed works would fit within this context. In addition the proposed WCH Station and railway depot following the redevelopment of the Wong Chuk Hang Estate will lead to a comprehensive change to the existing landscape character. Change on the industrial character is therefore intermediate. Given the medium sensitivity of this LCA, this LCA would be subject to a moderate adverse unmitigated impact due to the construction works and during the operational phase of the project.
- *LCA 7 Nam Long Shan Maritime and Recreational Landscape* – As a large part of the above ground alignment would follow the Staunton Creek Nullah it is likely that it will be screened to an extent by the existing institutional uses at the northern periphery when looking from the south. Change on the local landscape character is intermediate. Despite the change of amenity being limited to the northern periphery of the area, considered its medium sensitivity, the unmitigated impacts on this LCA will be moderate during the construction and operational phases of the project.
- *LCA 8 Aberdeen Waterfront Landscape* – Owing to its proximity to proposed Aberdeen Channel although no construction work is proposed directly within this area it is likely that there will be some indirect impacts due to the construction of the proposed Aberdeen Channel Bridge and the associated works areas along the waterfront promenades of Aberdeen and Ap Lei Chau. Change on waterfront character is small due to construction works for the proposed bridge. Given the medium sensitivity of this LCA, the unmitigated impact on this LCA will be moderate during the construction and operational phases of the project.
- *LCA 9 Ap Lei Chau Island Landscape* – Given portion of alignment between LET and SOH Stations will utilise the drill and blast tunnel method the landscape character of Yuk Kwai Shan will be largely untouched by the works. The potential impact would be limited to the urbanised areas approaching to the proposed SOH Station where a cut-and-cover method will be utilised, the construction of vent buildings for SOH Station and at Lee Nam Road and its associated works area and barging point. It should be noted that the island landscape is largely urbanised and Yuk Kwai Shan character is mainly composed of rock boulder and grass. Change on this urbanised residential

landscape is hence small due to construction works for Aberdeen Channel Bridge landing, LET and SOH Stations and associated vent buildings. Given the medium sensitivity of this LCA, the unmitigated impacts on this LCA will be moderate adverse during the construction and operational phases of the project due to the scale and proximity of the visible components of the proposed works.

- *LCA 10 Chung Hom Kok Utilities Landscape* – Existing Chung Hom Kok Shan is largely characterised by boulders and grass at higher elevation whilst the lower elevation is dominated by slope trees and shrubland alongside of the access road to the quarry and telecom utilities at the toe of southern slope. The selection of magazine site in the quarry which is a disturbed landscape would minimise the impact to the amenity and fit into the landscape context. Given the extent of affected area is sited at the ex-quarry that would minimise the impact on existing landscape context, the magnitude of change is found intermediate. Given its low sensitivity, this LCA will be subject to a slight adverse unmitigated impact during the construction stage. Given the nature of proposed works is temporary use only during construction phase, unmitigated impact on this LCA is negligible during operation phase.
- *LCA 11 Telegraph Bay Institutional Landscape* – Similar to the careful site selection of magazine site, selected location of barging point at Telegraph Bay waterfront associated with existing sewage and construction facilities adjacent to Cyber Port would fit into the landscape context , hence the magnitude of change to landscape amenity is small. Given its low sensitivity, this LCA will be subject to a slight adverse unmitigated impact. Given the nature of proposed works is temporary use only during construction phase, unmitigated impact on this LCA is negligible during operation phase.
- *LCA 12 Wah Kwai Utilities Landscape* – Similar to LCAs 10 and 11, selected location of works area or potential site for the nursery of transplanted trees at waterfront to the south of Wah Kwai Estate would fit in the local landscape context. This waterfront area is dominated by linear lawn with trees to the north along the access road, hence the magnitude of change is small. Given its low sensitivity, this LCA is therefore subject to a slight adverse unmitigated impact during the construction and operation of proposed works.

Table 6.10: Magnitude of Change for Landscape Character Areas

Landscape Character Area	Description of Impacts	Affected Area (Ha) /Total Area of LCA (Ha)	Determinants for Magnitude of Change				Magnitude of Change (Large / Intermediate / Small / Negligible)	
			Compatibility (N/A/ Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
LCA1 Admiralty Commercial Landscape	Temporary loss of open space, vegetation and roadside amenity due to ADM Station construction works at Harcourt Garden and Fenwick Pier Street The affected areas will be reinstated to its original status as far as technically feasible with minimum alternation on the overall commercial LCA.	1.7ha / 10 ha (16%)	High	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LCA 2 Hong Kong Park Recreational Landscape	Proposed vent shaft/building at Hong Kong Park entrance	0.5ha / 7.6 ha (6%)	Medium	Small	Long/Long	Low	Small	Small
LCA 3 Mid-Level Upland Landscape	No direct impact as a result of utilising tunnelling method for construction	0.5 ha / 32 ha (0%)	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LCA 4 Aberdeen Country Park Landscape	No direct impact as a result of utilising tunnelling method for construction	0 ha / 391 ha (0%)	N/A	N/A	Nil/Nil	N/A	Nil	Nil
LCA 5 Shouson Hill Low-rise Residential Landscape	No direct impact as a result of responsive alignment away from this LCA Indirect impact at the periphery of LCA as a result of proposed box structure and viaduct alignment at	0ha / 34ha (0%)	N/A	N/A	Nil/Nil	N/A	Nil	Nil

Landscape Character Area	Description of Impacts	Affected Area (Ha) /Total Area of LCA (Ha)	Determinants for Magnitude of Change				Magnitude of Change (Large / Intermediate / Small / Negligible)	
			Compatibility (N/A/ Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
	ex-Canadian Hospital site and Aberdeen Tunnel approaching areas.							
LCA 6 Wong Chuk Hang Industrial and Institutional Landscape	Proposed Nam Fung Portal and vent building, associated box structure at ex-Canadian Hospital site and viaduct connecting to OCP Station	3.8ha / 60ha (6%)	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LCA 7 Nam Long Shan Maritime and Recreational Landscape	Proposed Aberdeen Channel Bridge aligned with existing Ap Lei Chau Bridge	14 ha / 239 ha (5%)	Medium	Intermediate	Long/Long	Medium	Intermediate	Intermediate
LCA 8 Aberdeen Waterfront Landscape	Proposed Aberdeen Channel Bridge aligned with existing Ap Lei Chau Bridge and associated temporary works areas at waterfront	1 ha / 87 ha (<1%)	Low	Small	Long/Long	Medium	Small	Small
LCA 9 Ap Lei Chau Island Landscape	Proposed Aberdeen Channel Bridge aligned with existing Ap Lei Chau Bridge and associated temporary works areas at waterfront	4 ha / 130 ha (3%)	Medium	Small	Long/Long	Medium	Small	Small
LCA 10 Chung Hom Kok Utilities Landscape	Proposed magazine site at ex-Quarry site	2.3 ha / 7ha (33%)	High	Intermediate	Long/Nil	High	Intermediate	Nil
LCA 11 Telegraph Bay	Proposed barging point	0.4ha / 24ha (2%)	Medium	Small	Long/Nil	Medium	Small	Nil

Landscape Character Area	Description of Impacts	Affected Area (Ha) /Total Area of LCA (Ha)	Determinants for Magnitude of Change				Magnitude of Change (Large / Intermediate / Small / Negligible)	
			Compatibility (N/A/ Low / Medium / High)	Scale (N/A / Small / Intermediate / Large)	Duration of Impact (Construction/ Operation) (Nil / Short / Medium / Long)	Reversibility (N/A/Low / Medium/ High)	Construction (Nil / Small / Intermediate / Large)	Operation (Nil / Small / Intermediate / Large)
Institutional Landscape								
LCA 12 Wah Kwai Utilities Landscape	Proposed temporary works areas and green nursery	1.6 ha / 12ha (1%)	Medium	Small	Long/Short	High	Small	Small

Table 6.11: Existing Landscape Character and Predicted Impacts

Landscape Character Area	Sensitivity (Low / Medium/ High)	Magnitude of Change (Construction / Operation Phase) (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		Mitigation Measures	Significance Threshold (Mitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		
			Construction	Operation		Construction	Operation	
							Day 1	Year 10
LCA1 Admiralty Commercial Landscape	Medium	Intermediate/ Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation at the periphery of Harcourt Garden and HKAPA garden CP2- Management and reinstatement Works and Temporary Works Areas CP3- Replanting the existing/disturbed vegetation. Integrated vertical greening approach on built structures. CP4 – Transplanting affected trees to temporary nursery site, replanting final locations within the works areas is subject to relevant Government approval. CP5- Coordination with SCL concurrent project, integrated vent shafts approach.	Slight Adverse	Slight Adverse	Negligible

Landscape Character Area	Sensitivity (Low / Medium/ High)	Magnitude of Change (Construction / Operation Phase) (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		Mitigation Measures	Significance Threshold (Mitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		
			Construction	Operation		Construction	Operation	
							Day 1	Year 10
					OP1 – Responsive design of ADM station associated facilities and vent shaft, integration with existing station facilities. OP2- New roadside and amenity planting through establishment of planting on terraced garden/ landscape deck. OP3- Compensatory planting with ornamental tree planting OP7 – Enhancement and reinstatement of open spaces.			
LCA 2 Hong Kong Park Recreational Landscape	High	Small/ Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation in the garden and along side of Supreme Court Road, in particularly the OVTs at roadside planters CP2- Management and reinstatement Works and Temporary Works Areas CP3- Replanting of existing/disturbed roadside vegetation. Integrated greening measures on built structures. CP4 – Transplanting affected trees to adjacent roadside planters. CP5- Coordination with SCL concurrent project, reserved future works areas in front of vent shaft. OP1 – Responsive design of Hong Kong Park Vent Building with vertical greening measures OP2- New roadside and amenity planting OP3- Compensatory planting with ornamental roadside tree planting. OP4-Treatment on disturbed sloping areas OP7 – Enhancement and reinstatement of open spaces.	Slight Adverse	Slight Adverse	Negligible

Landscape Character Area	Sensitivity (Low / Medium/ High)	Magnitude of Change (Construction / Operation Phase) (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		Mitigation Measures	Significance Threshold (Mitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		
			Construction	Operation		Construction	Operation	
							Day 1	Year 10
LCA 3 Mid-Level Upland Landscape	High	Nil / Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LCA 4 Aberdeen Country Park Landscape	High	Nil / Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LCA 5 Shouson Hill Low-rise Residential Landscape	Medium	Nil / Nil	Negligible	Negligible	N/A	Negligible	Negligible	Negligible
LCA 6 Wong Chuk Hang Industrial and Institutional Landscape	Medium	Intermediate/ Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation on sloping areas adjacent to LCA through limitation of works area CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of existing/disturbed vegetation at slope toe near the nullah OP3- Compensatory planting OP4- Enhanced and reinstated sloping areas through the use of woodland planting OP1 & 6- Responsive design of viaduct structures and WCH Station and depot	Slight Adverse	Slight Adverse	Negligible
LCA 7 Nam Long Shan Maritime and Recreational Landscape	Medium	Intermediate/ Intermediate	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3– Replanting of disturbed vegetation OP6- Responsive design of Aberdeen Channel Bridge and its embankment aligned with existing Ap Lei Chau Bridge OP7 – Enhancement and reinstatement of open spaces.	Slight Adverse	Slight Adverse	Negligible

Landscape Character Area	Sensitivity (Low / Medium/ High)	Magnitude of Change (Construction / Operation Phase) (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		Mitigation Measures	Significance Threshold (Mitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		
			Construction	Operation		Construction	Operation	
							Day 1	Year 10
LCA 8 Aberdeen Waterfront Landscape	Medium	Small / Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP3 – Replanting of disturbed vegetation OP6- Responsive design of Aberdeen Channel Bridge and its embankment aligned with existing Ap Lei Chau Bridge OP7 – Enhancement and reinstatement of open spaces.	Slight Adverse	Slight Adverse	Negligible
LCA 9 Ap Lei Chau Island Landscape	Medium	Small / Small	Moderate Adverse	Moderate Adverse	CP1-Preservation of existing vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP4 – Replanting of disturbed vegetation OP1- Responsive design of LET and SOH Station OP6- Responsive design of Aberdeen Channel Bridge and its embankment aligned with existing Ap Lei Chau Bridge OP7 – Enhancement and reinstatement of open spaces.	Slight Adverse	Slight Adverse	Negligible
LCA 10 Chung Hom Kok Utilities Landscape	Low	Intermediate/ Nil	Slight Adverse	Negligible	CP1-Preservation of existing coastal vegetation CP2- Management and reinstatement Works and Temporary Works Areas CP4 – Replanting of disturbed vegetation OP1- Responsive selection of magazine site at ExQuarry site OP2- New roadside planting	Negligible	Negligible	Negligible
LCA 11 Telegraph Bay Institutional Landscape	Low	Small/Nil	Slight Adverse	Negligible	CP2- Management and reinstatement Works and Temporary Works Areas	Negligible	Negligible	Negligible

Landscape Character Area	Sensitivity (Low / Medium/ High)	Magnitude of Change (Construction / Operation Phase) (Nil / Small / Intermediate / Large)	Significance Threshold (Unmitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		Mitigation Measures	Significance Threshold (Mitigated) Negligible, Slight, Moderate and Significant (adverse or beneficial)		
			Construction	Operation		Construction	Operation	
							Day 1	Year 10
LCA 12 Wah Kwai Utilities Landscape	Low	Small/Small	Slight Adverse	Slight Adverse	CP2- Management and reinstatement Works and Temporary Works Areas	Negligible	Negligible	Negligible

6.7.8 Visual Impacts

The potential visual impacts (unmitigated) on identified VSRs resulting from the proposed works during the construction and operational phases of the Project are summarised in the following sections and listed in **Table 6.12**. These impacts are also mapped on **Figures 6.8.1** to **6.8.4**. The mitigated (residual) impacts are assessed during the design year which for the purpose of this study is taken as being between 10 and 15 years after the schemes opening when the proposed mitigation planting is deemed to have reached a level of maturity, which is sufficient for it to perform the design objectives. The residual impacts (mitigated) are discussed under **Section 6.9**.

Significant

Although some amenity of VSRs will be spared impact due to the proposed tunnel construction, there are likely to be some significant adverse impacts on the visual amenity of some VSRs due to introduction of above ground structures including viaduct, above ground OCP and WCH Stations, WCH Depot and Nam Fung portal/ vent building and Aberdeen Channel Bridge such as VSR R6 Residents of community facilities to the east of Ap Lei Chau Bridge, VSR R7 Residents of estates in Wong Chuk Hang, VSR C7 Users of sitting-out areas and playground at Heung Yip Road adjacent to the nullah, VSR C8 Visitors to Tai Wong Ye Temple and VSR T3 Travellers along Heung Yip Road and Ocean Park Road. These VSRs will be subject to a large change of visual context and amenity with the temporary loss of roadside amenity areas and vegetated sloping areas and proximity to the works. However, the majority of the works areas will be reinstated with provision of new amenity area adjacent to station and underneath the viaduct.

Moderate

Due to the proximity of Aberdeen Channel Bridge, viaduct, box structure at ex-Canadian Hospital site, and partially or above ground stations (ADM, OCP and WCH Stations), vent buildings at Hong Kong Park and Nam Fung Road and plant building at Lee Wing Street, VSRs such as VSR R1 Residents of Wah Kwai Estate, VSR R2.1 Residents of Ap Lei Chau Estate, VSR R2.2 Residents of South Horizons, VSR R3.1 Residents of estates in eastern Ap Lei Chau, VSR R3.2 Residents of mansions at Ap Lei Chau Main Street, VSR R5 Residents of estates in eastern Aberdeen, VSR R8 Residents of Wong Chuk Hang Hospital and Complex for the Elderly, VSR R9 Residents of developments on Shouson Hill, PVSR R12 Future residential developments in the area zoned “R(E)” abutting Ap Lei Chau Praya Road, VSR R13 Staff and Patients of Grantham Hospital, VSR C3 Recreational users of Ap Lei Chau waterfront promenade and park, VSR C4 Recreational users in Sham Wan Marina, VSR C5 Visitors to Ocean Park, VSR C6 Users of Pao Yue Kong Swimming Pool Complex, VSR C9 Users of Aberdeen Sport Ground, VSR C10 Visitors to Hong Kong Park, VSR C11 Users of Lee Nam Road Sitting-out Areas (during operation phase only), VSR O2 Workers of dockyard alongside of typhoon shelter, VSR O3 Workers in Wong Chuk Hang Industrial Buildings, VSR O4 Staff and Students in Police College, VSR O6 Workers in Commercial Buildings along Queensway and Harcourt Road, VSR O7 Staff and Students in Hong Kong Academy of Performing Arts PVSR O8 Future Staff and Visitors in Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central, VSR O9 Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter , VSR O10 St. Paul’s Co-educational College Primary School, VSR T1 Travellers along Aberdeen Channel, VSR T2 Travellers on the Ap Lei Chau Bridge, VSR T4 Travellers on Wong Chuk Hang Road, VSR T5 Travellers on Nam Fung Road, VSR T6 Travellers on Harcourt Road, VSR T7 Travellers on Queensway Road and VSR T8 Travellers on Supreme Court Road, will be subject to a small to intermediate change of visual context with the temporary loss of park and roadside amenity areas and vegetated sloping areas and proximity to the works. However, the majority of the works areas will be reinstated or new urban park and amenity areas with greening measures adjacent to built structures. Their visual amenity contained by urbanised or infrastructures landscapes would subject to intermediate change. Hence these permanent/ transient VSRs will experience a moderate impact in the absence of mitigation measures during construction and operation phase.

Slight

VSRs such as VSR R4 Residents of estates in western Aberdeen, VSR C1 Visitors of Permanent Chinese Cemetery, Aberdeen, VSR C2 Hikers in Aberdeen Country Park, VSR O1 Staff and Students of Hong Kong True Light College,

VSR O5 Staff and Students in South Island School and VSR O11 Workers and visitors in Cyber Port, will have views in distance or partially obstructed/ oblique views to proposed Aberdeen Channel Bridge or barging point at Po Fu Lam. Given to the nature of views and viewing distance involved, proposed bridge will not form a major component in the wider context of urbanised Aberdeen. The barging point adjacent to Cyber Port will stop operation after the construction phase. The magnitude of change of their visual amenity is small. These permanent/ transient VSRs will experience a slight impact in the absence of mitigation measures during construction and operation phase.

Negligible

Given the viewing distance (over 1000m) and nature of views, visual amenity of Residents of developments on the VSR R10 Peak and Mount Kellet and VSR R11 Residents of developments on Mount Cameron who have an overview of Aberdeen and Ap Lei Chau will not have perceptible change as a result of proposed works which will merged into the building areas, and hence these VSRs will experience a negligible impact.

Table 6.12: Visually Sensitive Receivers and Predicted Impacts

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R1 Residents of Wah Kwai Estate	High	100m Only VSRs living at the southern periphery of the estates will have overview to proposed material storage site and nursery at waterfront. No blockage of views.	Low	Small for VSRs immediately adjacent to the works area.	Reversible	3yrs / temporary	Small/ Nil Majority of works area will be reinstated to its original status. Given the above, the works will become a minor component in the waterfront context.	Moderate Adverse	Negligible	CP1, CP2, CP3, OP1, OP2, OP4, and OP6.	Moderate Adverse	Negligible	Negligible

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R2.1 Residents of Ap Lei Chau Estate	High	50m Only VSRs living at the southern periphery of the estates will have views of SOH entrance No blockage of views	Low	Small for VSRs immediately adjacent to the works area.	Reversible	3yrs / temporary	Intermediate/ Intermediate Majority of works area utilised cut and cover construction method will be reinstated to its original status. Some VSRs who have views looking towards Yi Nam Road will see the entrances of SOH station during operation Given the above, the works will become a minor component in the waterfront context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse	Slight Adverse
VSR R2.2 Residents of South Horizons Photomontage Figures 6.10.34 and 35 refer	High	50m Only VSRs living Yi Nam Road and Lee Nam Road will have views of SOH entrances. No blockage of views.	Low	Small for VSRs immediately adjacent to the barging point.	Reversible	3yrs / temporary	Intermediate/ Intermediate Majority of works area will be reinstated to its original status. Given the above reason, the works will significant during construction but minor after reinstatement of the works area.	Moderate Adverse	Moderate Adverse	CP1, CP3, CP4, OP1, OP2 and OP4, OP5 and OP6.	Moderate Adverse	Slight Adverse	Slight Adverse

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R3.1 Residents of estates in eastern Ap Lei Chau Photomontage Figures 6.10.30and 33 refer	High	50m Only VSRs had views of Ap Lei Chau Bridge will also have views of proposed Aberdeen Channel Bridge and works areas for tunnel section connecting to LET Station. No blockage of existing views	Medium	Intermediate	Irreversible	4yrs. / Permanent	Intermediate/ Intermediate The nature and scope of works are restricted to existing roadside corridor and adjacent abandoned school site which is located at lower level than these VSRs. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting on disturbed sloping areas. Given the above reasons, the proposed works will not become a major component in this urban context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2 and OP4, OP5 and OP6.	Moderate Adverse	Slight Adverse	Slight Adverse

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R3.2 Residents of mansions at Ap Lei Chau Main Street	High	50m Only VSRs living adjacent to proposed LET Station entrance will have view to the works. No blockage of existing views	Medium	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate/ Intermediate The nature and scope of works are restricted to existing roadside corridor and adjacent abandoned school site which is located at lower level than these VSRs. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting on disturbed sloping areas. Given the above reasons, the proposed works will not become a major component in this urban context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP5 and OP6.	Moderate Adverse	Slight Adverse	Negligible Upon full establishment of planting proposals.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R4 Residents of estates in western Aberdeen	Medium	1000m Only VSRs living at elevated floors will have an oblique view in distant looking towards proposed Aberdeen Channel Bridge interrupted by high-rise in Aberdeen and Ap Lei Chau Bridge. No blockage of existing views	High	Intermediate	Irreversible	4yrs ./ Permanent	Small / Small The nature and scope of works are restricted to the other side of Ap Lei Chau Bridge which is in distance to these VSRs. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting along waterfront promenade. Given the above reasons, the proposed works will not become a major component in this urban context.	Slight Adverse	Slight Adverse	CP1, CP2, CP3,, OP1, OP2, OP4, OP5 and OP6.	Negligible	Negligible Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and bridge will soften the engineering structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R5 Residents of estates in eastern Aberdeen	High	100 to 500m Only VSRs living at waterfront will have view of proposed Aberdeen Channel Bridge intervened by existing Ap Lei Chau Bridge. No blockage of existing views	High	Intermediate	Irreversible	4yrs. / Permanent	Intermediate/ Intermediate Even these VSRs are located closed to the proposed works, the nature and scope of works are restricted to the other side of Ap Lei Chau Bridge which is away from these VSRs. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting along waterfront promenade. Given the above reasons, the proposed works will not become a major component in this urban context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4, OP5 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and bridge will soften the engineering structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R6 Residents of community facilities to the east of Ap Lei Chau Bridge Photomontage Figures 6.10.12 to 16 refer	Medium	20m Only VSRs living at northern periphery of the facilities have an immediate views looking towards proposed Aberdeen Channel Bridge and its approaching viaduct within existing infrastructure and industrial context. Some blockage of existing views at low level of these facilities.	Low	Large	Irreversible	4yrs ./ Permanent	Large/ Large The nature of the proposed works at relatively lower profile than the facilities are integrated with surrounding industrial and drainage uses. Majority of works area along the drainage channel and adjacent sloping area will be reinstated. Given the above reasons, the proposed works will not form a major component in their industrial and infrastructure context.	Significant Adverse	Significant Adverse	CP1, CP2, CP3,, OP1, OP2 and OP4, OP5 and OP6.	Significant Adverse .	Moderate Adverse Reinstatement of roadside amenity area with plantation, in combination of new amenity areas below the viaduct, ensures the channel side visual quality will be restored. Responsive design of the viaduct integrated with exiting visual context.	Slight Adverse Upon full establishment of planting on sloping areas.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R7 Residents of estates in Wong Chuk Hang Photomontage Figures 6.10.12 to 16, 30 and 31 refer	Medium	25 to 100m Views looking to the north are largely intervened by high-rise while open view to Sham Wan Marina and Aberdeen Channel is available to the west. No blockage of existing views.	Medium	Large	Irreversible	4yrs. / Permanent	Large / Large The introduction of elevated station and depot replacing degraded Wong Chuk Hang Estate integrated with surrounding industrial and institutional uses. Given the above reasons, the proposed works will not form a major component in their industrial and infrastructure context.	Significant Adverse	Significant Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP5 and OP6.	Significant Adverse	Moderate Adverse Reinstatement of roadside amenity area. Although subject to detailed design the structure should aim to be responsive to context, reduce the apparent visual mass, integrate greenery wherever possible and allow for the integration of the structure with the surrounding landscape.	Slight Adverse Upon full establishment of the above mitigation measures the visual impacts will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R8 Residents of Wong Chuk Hang Hospital and Complex for the Elderly Photomontage Figures 6.10.12 to 16 refer	Medium	100m Only VSRs living at elevated floors of the facilities at the eastern periphery will have overview to Nam Fung Portal and its approaching viaduct. No blockage of existing views as majority tunnel portal and approaching viaduct is located at lower level than these VSRs.	Medium	Intermediate	Irreversible	4yrs. / Permanent	Intermediate/ intermediate The introduction tunnel portal and viaduct in this urban fringe area will integrated with adjacent to Aberdeen Tunnel, elevated roads and GIC facilities Given the above reasons, the proposed works will not form a major component in the urban fringe context already intervened by infrastructures.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4, OP5 and OP6.	Moderate Adverse .	Slight Adverse Reinstatement of vegetated areas with plantation to soften the engineering structures, the visual quality will be enhanced. Responsive design of the building structures integrated with exiting visual context	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R9 Residents of developments on Shouson Hill Photomontage Figures 6.10.20 to 22 refer	High	200 to 1000m Only VSRs living at elevated floors of the developments at the western periphery of Shouson Hill will have glimpse view to Nam Fung Portal and its approaching viaduct largely intervened by adjacent developments, Aberdeen Tunnel and its roadside planting. No blockage of existing views.	High	Small	Irreversible	4yrs. / Permanent	Small / Small Given views towards the proposed works are largely screened by adjacent development and intervened by Aberdeen Tunnel, the proposed works will form a minor component in the urban fringe context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP5 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of vegetated areas with plantation to soften the engineering structures, the visual quality will be enhanced. Responsive design of the building structures integrated with exiting visual context.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R10 Residents of developments at the Peak on Mount Kellett	High	2000m Only VSRs living at southern periphery of the Peak area will have a long distance view of proposed Aberdeen Channel Bridge. No blockage of existing views.	High	Small	Irreversible	4yrs. / Permanent	Imperceptible / Imperceptible Given views towards the proposed works are largely screened by adjacent wooded area and in distance, the proposed works will form a minor component in Aberdeen urban context.	Negligible	Negligible	CP1, CP2, CP3,, OP1, OP2, OP4, OP5 and OP6.	Negligible	Negligible	Negligible
VSR R11 Residents of developments on Mount Cameron	High	1500m As there is no above ground works proposed along the drill and blast tunnel section of the alignment, their visual context remains unchanged. No blockage of existing views.	High	Small	Irreversible	4yrs ./ Permanent	Imperceptible / Imperceptible Given views towards the proposed works are largely screened by adjacent wooded area and in distance, the proposed works will form a minor component in Aberdeen urban context.	Negligible	Negligible	CP1, CP2, CP3, OP1, OP2, OP4 and OP5.	Negligible	Negligible	Negligible

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
PVSR R12 Future residential developments in the area zoned "R(E)" abutting Ap Lei Chau Praya Road	High	300m Only VSRs living at eastern periphery of will have an oblique view of proposed Aberdeen Channel Bridge. No blockage of existing views.	Medium	Large	Irreversible	4yrs ./ Permanent	Intermediate/ Intermediate Even these VSRs are located closed to the proposed works, the nature and scope of works are restricted to the area immediately adjacent to the Ap Lei Chau Bridge. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting along waterfront promenade. Given the above reasons, the proposed works will not become a major component in this urban context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4. and OP6	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and bridge will soften the engineering structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR R13 Staff and Patients of Grantham Hospital Photomontage Figures 6.10.25 refer	Medium	250m Only VSRs at elevated floors of the hospital facing south will have overview to OCP Station and viaduct leading to WCH Station. No blockage of existing views.	Medium	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate/ intermediate The introduction of viaduct in this urban fringe area will integrated with adjacent to Aberdeen Tunnel, elevated roads and GIC facilities Given the above reasons, the proposed works will not form a major component in the urban fringe context already intervened by .infrastructures.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4 and OP6	Moderate Adverse	Slight Adverse Reinstatement of vegetated areas with plantation to soften the engineering structures, the visual quality will be enhanced. Responsive design of the building structures integrated with exiting visual context.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C1 Visitors of Permanent Chinese Cemetery, Aberdeen	Low	1000m Only VSRs visit the cemetery occasionally during festivals will have distant view to proposed Aberdeen Channel Bridge. No blockage of existing views	High	Small	Irreversible	4yrs ./ Permanent	Small / Small Even these VSRs are located closed to the proposed works, the nature and scope of works are restricted to the other side of Ap Lei Chau Bridge which is away from these VSRs. The proposed works integrated with existing infrastructure. Majority of works area will be reinstated with planting along waterfront promenade. Given the above reasons, the proposed works will not become a major component in this urban context.	Slight Adverse	Slight Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Negligible	Negligible Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and bridge will soften the engineering structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C2 Hikers in Aberdeen Country Park	Low	700 to 1500m Only VSRs at the hiking trail will have distant view to proposed Aberdeen Channel Bridge, WCH Station and railway depot in the context of Wong Chuk Hang urban area through dense vegetation along the trail. No blockage of existing views	High	Small	Irreversible	4yrs ./ Permanent	Small / Small Given the viewing distance, the proposed works will integrated with Wong Chuk Hang and Aberdeen urban context and will form a minor component in this urban context.	Slight Adverse	Slight Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Negligible	Negligible Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and bridge will soften the engineering structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C3 Recreational users of Ap Lei Chau waterfront promenade and park Photomontage Figures 6.10.30 and 31 refer	Medium	Distance varies Only VSRs in the eastern promenade will have overviews to proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge and its associated works area. No blockage of existing views	High	Large	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, design of bridge alignment integrated with existing bridge, will not form a major component in this urban waterfront context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas in combination with new amenity areas, will ensure the visual quality is restored. Responsive design of the viaduct and bridge structures to reduce visual mass, soften form and ease integration	Negligible . Upon full establishment of the above mitigation measures, level of visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C4 Recreational users in Sham Wan Marina	Medium	Distance varies Overview of the proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge and its associated works area. No blockage of existing views	High	Large	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, design of bridge alignment and integration with existing bridge, it will not form a major component within urban waterfront context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4. and OP6	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas in combination with new amenity areas, to ensure visual quality restored. Responsive design of the viaduct and bridge structures to reduce visual mass, soften form and ease integration.	Negligible Upon full establishment of the above mitigation measures, level of visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C5 Visitors to Ocean Park Photomontage Figures 6.10.10, 11,18 and 19 refer	Medium	Distance varies Park entrance will have views to OCP Station intervened by park facilities and VSRs at elevated level of Tai Shue Wan will have a distant view to proposed Aberdeen Channel Bridge along existing Ap Lei Chau Bridge. No blockage of existing views	Medium	Large	Irreversible	4yrs. / Permanent	Intermediate / Intermediate Given the viewing distance, design of station, viaduct and bridge alignment integrated with existing recreational context which majority views contained within the park, the proposed works will not form a major component.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas with plantation and landscape areas associated with the station ensures the visual quality will be restored. Responsive design of built structures will enhance the integration with existing context.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C6 Users of Pao Yue Kong Swimming Pool Complex Photomontage Figures 6.10.26 to 29 refer	Medium	100m Occasionally have glimpse view to WCH Station and railway depot. No blockage of existing views.	Medium	Large	Irreversible	4yrs ./ Permanent	Intermediate/ Intermediate The introduction of elevated station and depot replacing degraded Wong Chuk Hang Estate integrated with surrounding industrial and institutional uses. Given the above reasons, and existing views are largely contained within the facilities, the proposed works will not form a major component in their inwards recreational context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6	Moderate Adverse	Slight Adverse	Slight Adverse/ Undetermined

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C7 Users of sitting-out areas and playground at Heung Yip Road adjacent to the nullah Photomontage Figures 6.10.12 to 16 refer	Medium	Large Immediate glimpse view through vegetation in the sitting-out area to WCH Station and viaduct leading to the station. Some views are blocked by viaduct columns.	Low	Large	Irreversible	4yrs ./ Permanent	Large / Large Given the viewing distance, the proposed works will form a major component in their industrial context.	Significant Adverse	Significant Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP6 and OP7.	Significant Adverse	Moderate Adverse Implementation of responsive viaduct design,	Slight Adverse Full establishment of greening measures underneath the viaduct and restoration of disturbed areas, visual impact will be alleviated

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C8 Visitors to Tai Wong Ye Temple Photomontage Figures 6.10.13 refer	Medium	Large Immediate view to WCH Station and viaduct leading to the station. No blockage of existing views	High	Small	Irreversible	4yrs ./ Permanent	Large/ Large Given the proposed works will in the proximity of these VSRs hence the works will form a major component in the context.	Significant Adverse	Significant Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP6 and OP7	Significant Adverse	Moderate Adverse Reinstatement of disturbed roadside and sloping areas with plantation, in combination of new amenity areas, ensures the visual quality will be restored. Responsive design of the viaduct and location of column to avoid view blockage andl soften the engineering structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C9 Users of Aberdeen Sport Ground Photomontage Figures 6.10.17refer	Medium	Large Glimpse view of proposed viaduct structures, OCP Station in distance. No blockage of views.	High	Intermediate	Irreversible	4yrs ./ Permanent	Small / Small Given the viewing distance, and intervened by peripheral plantation at the sport ground, the proposed works will form a minor component in their recreation context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse	Negligible
VSR C10 Visitors to Hong Kong Park Photomontage Figures 6.10.5 and 6 refer	Medium	Immediate Only VSRs at park entrance of Supreme Court Road will have overview of proposed vent shaft. No blockage of views.	Medium	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, design of vent shaft integrated with park entrance, it will not form a major component in this roadside context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4, OP6 and OP7.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas with plantation ensures the visual quality will be restored. Responsive design of built structures.	Negligible .Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR C11 Users of Lee Nam Road Sitting Out Areas	Low	Immediate No VSRs indentified during construction stage. Only future users of the sitting out areas after their reinstatement during operation phase will have an oblique view of proposed Lee Wing Street plant building. Their views at street level will be dominant by pavement trees and proposed tree planting within the sitting-out areas. No blockage of views.	Medium	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, design of plant building which integrated with exiting rock cut slope and industrial neighbourhoods, it will not form a major component in this roadside and industrial context.	N/A Acquired for temporary works areas and barging ponts, no VSRs identified	Moderate Adverse	CP1, CP2, OP1, OP2, OP3,OP4 and OP7.	N/A	Slight Adverse Reinstatement of disturbed vegetation and sitting - out areas with plantation ensures the visual quality of the future users will be restored. Responsive design of built structures.	Negligible .Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O1 Staff and Students of Hong Kong True Light College Photomontage Figures 6.10.30 to 33 refer	Medium	150m VSRs will have a glimpse view of proposed Aberdeen Channel Bridge through Ap Lei Chau Drive and typhoon shelter interrupted by adjacent high-rise and vessels in typhoon shelter. No blockage of views.	Medium	Intermediate	Irreversible	4yrs. / Permanent	Small / Small Given their viewing angle is largely focus to Lei Tung Estate, proposed drive portal connecting Aberdeen Channel Bridge and LET Station,will not form a major component in their visual context.	Slight Adverse	Slight Adverse	CP1, CP2, CP3,, OP1, OP2, OP4 and OP6.	Negligible	Negligible Reinstatement of disturbed roadside and sloping areas with plantation ensures the visual quality will be restored. Responsive design of built structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O2 Workers of dockyard alongside of typhoon shelter Photomontage Figures 6.10.30 and 31 refer	Low	75m VSRs will have an obstructed view to proposed viaduct and Aberdeen Channel Bridge. No blockage of views.	Medium	Large	Irreversible	4yrs. / Permanent	Intermediate / Intermediate Given the viewing distance and angle, alignment and design of proposed Aberdeen Channel Bridge will integrate with existing Ap Lei Chau Bridge, will not form a major component in the waterfront context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Slight Adverse	Slight Adverse Reinstatement of disturbed waterfront and sloping areas with plantation ensures the visual quality will be restored. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O3 Workers in Wong Chuk Hang Industrial Buildings Photomontage Figures 6.10.12 to 17 refer	Low	Immediate VSRs working at lower levels of the buildings will perceive the viaduct, WCH elevated station and railway depot development in proximity. Some blockage of views.	Medium	Large	Irreversible	4yrs ./ Permanent	Large / Large Given the viewing distance, and blockage of view at some lower level of industrial buildings along Heung Yip Road, proposed WCH Station and viaduct will form a major component in the road and drainage corridor.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of affected area with new planting at where condition allows. Greening measures on depot façade to ensure the visual quality of industrial landscape will be restored and enhanced. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O4 Staff and Students in Police College Photomontage Figures 6.10.17 refer	Medium	Immediate VSRs will have a glimpse view of proposed viaduct structures leading to WCH Station. Some blockage of view from the building adjacent to the nullah.	Medium	Small	Irreversible	4yrs ./ Permanent	Small / Small Given the viewing distance, blockage of view is limited to VSRs at the northern periphery of the college, proposed WCH Station and viaduct will form a major component in specific location.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside areas with plantation on elevated level of the station and greening measures on depot façade ensures the visual quality of industrial landscape will be restored and enhanced. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O5 Staff and Students in South Island School	Medium	680m VSRs will have views to proposed Nam Fung Portal and its approaching viaduct in distance and in the context of Aberdeen Tunnel. No blockage of views.	Medium	Intermediate	Irreversible	4yrs. / Permanent	Small / Small Given the viewing distance, existing oblique views to proposed Nam Fung Portal and viaduct leading to OCP Station will not form a major component in their visual context largely screened by vegetation along Nam Fung Road.	Slight Adverse	Slight Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Slight Adverse	Negligible Reinstatement of disturbed roadside and sloping areas with plantation associated with engineering structures ensures the visual quality of urban fridge landscape will be restored and enhanced. Responsive design of built structures.	Negligible/ Undetermined Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O6 Workers in Commercial Buildings along Queensway and Harcourt Road Photomontage Figures 6.10.1 to 4 refer	Medium	Distance Varies VSRs will have views of works area at Harcourt Garden from elevated floors. No blockage of views.	High	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, existing direct views to works areas are limited to high-rise buildings adjacent to proposed works, hence the works will not form a major component in overall visual context of urban area.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP6 and OP7.	Moderate Adverse	Slight Adverse Reinstatement of disturbed garden areas with new plantation integrated with preserved trees associated with station entrances and engineering structures ensures the visual quality of urban landscape will be restored and enhanced through introduction of new amenity area. Responsive design of built structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O7 Staff and Students in Hong Kong Academy of Performing Arts Photomontage Figures 6.10.1 to 4 refer	Medium	100m VSRs at elevated levels will have overview of construction site area in Harcourt Garden for ADM station and associated tunnelling works. No blockage of views.	High	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, existing direct views to works areas are limited to high-rise buildings adjacent to proposed works, hence the works will not form a major component in overall visual context of urban area.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed garden areas with new plantation integrated with preserved trees associated with station entrances and engineering structures ensures the visual quality of urban landscape will be restored and enhanced through introduction of new amenity area. Responsive design of built structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
PVSR O8 Future Staff and Visitors in Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central Photomontage Figures 6.10.1 to 4 refer	Medium	Distance Varies VSRs will have overview of construction site area in Harcourt Garden for ADM station and associated tunnelling works. No blockage of views.	High	Intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, existing views to proposed works areas are limited to the southern periphery of this Government Complex , hence the works will not form a major component in overall visual context of urban area.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4, OP6 and OP7.	Moderate Adverse	Slight Adverse Reinstatement of disturbed garden areas with new plantation integrated with preserved trees associated with station entrances and engineering structures ensures the visual quality of urban landscape will be restored and enhanced through introduction of new amenity area. Responsive design of built structures.	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O9 Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter Photomontage Figures 6.10.30and 31 refer	Medium	200m VSRs will have views to proposed Aberdeen Channel Bridge and its approaching viaduct. No blockage of views.	High	Intermediate	Irreversible	4yrs. / Permanent	Intermediate / Intermediate Given the viewing distance, the integration of proposed Aberdeen Channel Bridge with existing Ap Lei Chau Bridge, hence the works will not form a major component in overall visual context of typhoon shelter.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed waterfront areas with new plantation integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O10 St. Paul's Co-educational College Primary School Photomontage Figures 6.10.7 to 9 refer	Medium	Immediate Only VSRs had views facing the ex-Canadian Hospital Site have views to Nam Fung Portal and its approaching viaduct. Partial blockage of existing views to WCH hospital.	Medium	Intermediate	Irreversible	4yrs / Permanent	Intermediate/ intermediate The introduction tunnel portal and viaduct in this urban fringe area will integrated with adjacent to Aberdeen Tunnel, elevated roads and GIC facilities Given the above reasons, the proposed works will not form a major component in the urban fringe context already intervened by .infrastructures.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse .	Slight Adverse Reinstatement of vegetated areas with plantation to soften the engineering structures, the visual quality will be enhanced. Responsive design of the building structures integrated with exiting visual context.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR O11 Workers and visitors in Cyber Port	Medium	100m Only VSRs working in the buildings located at the southwest periphery will have an oblique view to proposed barging point at Telegraph Bay. No blockage of views.	Low	Small	Reversible	3yrs / temporary	Small/ Nil Majority of works area will be reinstated. Given the above, the works will become a minor component in the waterfront context.	Slight Adverse	Negligible	CP1, CP2, CP3, OP1, OP2, OP4, and OP6.	Slight Adverse	Negligible	Negligible

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T1 Travellers along Aberdeen Channel Photomontage Figures 6.10.30 and 31 refer	Low	Distance Varies VSRs located to south of existing Ap Lei Chau Bridge will have views to proposed Aberdeen Channel Bridge. No blockage of views.	High	Intermediate	Irreversible	4yrs. / Permanent	Intermediate / Intermediate Given the viewing distance, the integration of proposed Aberdeen Channel Bridge with existing Ap Lei Chau Bridge, hence the works will not form a major component in overall visual context of typhoon shelter.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed waterfront areas with new plantation integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T2 Travellers on the Ap Lei Chau Bridge Photomontage Figures 6.10.30 and 31 refer	Low	Immediate VSRs will have a close view to proposed Aberdeen Channel Bridge along its eastern side. No blockage of views.	High	Large	Irreversible	4yrs. / Permanent	Large/Large Given proposed works are undertaken immediate to these VSRs , hence the works will form a major component in their visual context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed waterfront areas with new plantation integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T3 Travellers along Heung Yip Road and Ocean Park Road Photomontage Figures 6.10.12 to 17 refer	Low	Immediate VSRs will have views to proposed viaduct structures, elevated WCH and OCP Stations and railway depot. No blockage of views.	Medium	Large	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, existing degraded landscape, hence the works will not form a major component in overall visual context of these road corridors.	Significant Adverse	Significant Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Moderate Adverse Reinstatement of disturbed roadside and sloping areas along the engineered channel with new plantation below viaduct and greening measures integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T4 Travellers on Wong Chuk Hang Road	Low	Immediate VSRs will have views to proposed viaduct structures, elevated WCH and OCP Stations and railway depot. No blockage of views.	Medium	Large	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, existing degraded landscape, hence the works will not form a major component in overall visual context of these road corridors.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas along the engineered channel with new plantation below viaduct and greening measures integrated with preserved trees ensures the visual quality of urban landscape will be restored Responsive design of built structures.	Slight Adverse Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T5 Travellers on Nam Fung Road	Low	Distance varies VSRs will have close views to the works area for Nam Fung portal / vent building. No blockage of views.	Medium	intermediate	Irreversible	4yrs. / Permanent	Intermediate / Intermediate Given the viewing distance, and proposed works are undertaken at a lower level to Nam Fung Road, hence the works will not form a major component in these transit receivers.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and sloping areas with new plantation below viaduct and greening measures integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures.	Negligible/ Undetermined Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T6 Travellers on Harcourt Road	Low	Distance varies VSRs will have some local views to works proposed within Harcourt Garden for proposed ADM Station and associated tunnelling works. No blockage of views.	Medium	intermediate	Irreversible	4yrs ./ Permanent	Intermediate / Intermediate Given the viewing distance, nature of receivers, viewing angle of these VSRs are limited to road corridor and only have transient views of work sites, hence the proposed works is not a major component in their visual context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, OP4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside and garden areas with new plantation and greening measures integrated with preserved trees ensures the visual quality of urban landscape will be restored. Responsive design of built structures	Negligible . Upon fully established of the above mitigation measures, visual impact will be alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T7 Travellers on Queensway Road Photomontage Figures 6.10.1 to 4 refer	Low	Distance varies VSRs will have some local views to works proposed within Harcourt Garden for proposed ADM Station and associated tunnelling works. No blockage of views.	Medium	intermediate	Irreversible	4yrs / Permanent	Intermediate / Intermediate Given the viewing distance, nature of receivers, viewing angle of these VSRs are limited to road corridor and only have transient views of work sites, hence the proposed works is not a major component in their visual context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3, OP1, OP2, Op4 and OP6.	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside. The restored garden will be partially raised to accommodate the proposed facilities and so will have a different visual form. The vegetation including tree and shrub planting will be integrated with the preserved trees to ensure the visual quality of urban landscape will be maintained. Responsive design of built structures.	Negligible Upon full establishment of the above mitigation measures, visual impact will be largely alleviated.

Visually Sensitive Receivers (VSR)	Sensitivity	Determinants for Magnitude of Change					Magnitude of Change (Construction / Operation Phase)	Impact Significance Threshold (Unmitigated)		Mitigation Measures	Impact Significance Threshold (Mitigated)		
		Viewing Distance (m) / Blockage of View	Compatibility with Surrounding Landscape	Scale	Reversibility	Duration Construction/ Operation		Construction	Operation		Construction	Operation	
												Day 1	Yr10
VSR T8 Travellers on Supreme Court Road Photomontage Figures 6.10.5 and 6 refer	Low	Immediate VSRs will have views to proposed vents shaft located at the entrance of Hong Kong Park. No blockage of views.	Medium	intermediate	Irreversible	4yrs ./ Permanent	Intermediate/ intermediate Given the viewing distance, nature of receivers, hence the proposed works is not a major component in their visual context.	Moderate Adverse	Moderate Adverse	CP1, CP2, CP3,OP1, OP2, OP4 and OP6	Moderate Adverse	Slight Adverse Reinstatement of disturbed roadside with new plantation ensures the visual quality of urban landscape will be restored. Responsive design of built structures	Negligible Upon fully established of the above mitigation measures, visual impact will be alleviated.

6.7.9 Cumulative Impacts

This section reviews the projects currently in progress or planned within the Study Area, such as the Central Government Complex and LegCo Complex at the Tamar Site and the proposed Ocean Park extension and hotel development currently under construction, and planned GIC or property development at ex-Canadian Hospital Site, adjacent to OCP Station and above WCH Depot , which will result in landscape and visual cumulative impacts including the degradation of landscape character and visual amenity, and the loss of landscape resources.

The construction works for the proposed expansion of Ocean Park and hotel development under the project entitled "Repositioning and Long Term Operation Plan of Ocean Park" is taking place concurrently and the work sites involved are in the vicinity of the proposed OCP Station. Based on available information on the current programme, it is envisaged that all major civil engineering works required for the expansion and redevelopment of the Park will have been completed by the time these proposals are implemented. Besides the GIC site to the west of OCP Station will be acquired for temporary works area for this project, the implementation programme of this GIC development is not available yet. Similar to the GIC site at OCP Station, there is no firm programme for the hospital development at ExCanadian Hospital site. Landscape mitigation measures are proposed at the roadside and periphery of the site whilst temporary mitigation measures including climbing plants are proposed on the box structure to allow flexibility for future development.

Given the potential to develop the top of WCH depot to the proposed property development tentatively a year or two upon the completion of Depot construction and some of the roof space are reserved for vent or louver for the depot ventilation, greening measures are not technically feasible on the roof. The greening measures for the depot itself would be focused on roadside and depot façade at where the operation of the depot would not be interfered. The landscape and visual amenity will likely be further enhanced through the landscaping measures undertaken in the proposed property development stage.

Based on the latest programme available, the following planned project will be completed during the construction phase or before the operation of proposed railway, it is not envisaged that there will be cumulative landscape and visual impacts from the concurrent implementation of the following planned projects:

- Central Reclamation Phase III;
- Wan Chai Development Phase II and Central-Wan Chai Bypass; and
- Central Government Complex and LegCo Complex at the Tamar Site.

The enabling works of SCL will be carried out under SIL(E) at the time of ADM construction. Some SCL facilities have been integrated with proposed works under SIL(E) to minimise cumulative impacts to landscape and visual context.

Mitigation measures to address the potential cumulative impacts would be incorporated into the design of each of the approved projects. The resulting changes to the existing landscape character, landscape resources and visual amenity have been taken into account in the baseline assessment. Cumulative impacts from these projects are therefore taken into account through their inclusion in the baseline conditions for this EIA.

6.8 Mitigation of Adverse Environmental Impact

6.8.1 General

The landscape mitigation measures described in this report are at a level which both demonstrates their ability to alleviate the potential landscape and visual impacts identified in the assessment and also to allow the proposals to be carried forward during the detailed design stage. The measures are designed to address both the construction and operational phases of the project. More detailed landscape and compensatory planting proposals are developing by DDCs during detailed design of this project following the completion of the detailed Tree Survey Report and will seek approval from relevant departments at that stage.

The landscape and visual mitigation measures are described both in a generic sense for measures, which apply to all of works area and in terms of the proposed landscape strategy for the proposed permanent works including for example the proposed above ground structures, viaducts, stations and new bridge structures. The aim of the mitigation measures is to:

- Alleviate where possible those landscape and visual impacts which are unavoidable through the review of alignment and locations of the proposed above ground structures associated with the railway operation.
- Establish a coherent and integrated landscape strategy creating a framework which draws together visually disparate components of the proposed scheme and where possible reduces its visual prominence and enhances the integration of the structures within their landscape setting.
- Enhance the existing landscape character and visual context of the surrounding areas.
- Provide a co-ordinated approach between the ecological and landscape mitigation proposals where there is an interface.

The Landscape Design Concept Drawings of proposed station and alignment and associated railway structure and the Conceptual Landscape Plans presented as **Figure 6.9.1.1** to **6.9.27** demonstrate the main landscape and visual mitigation strategies and the application of design mitigation measures including integrated design approach, compensatory and new roadside planting proposals and slope treatment. Application of the recommended mitigation measures are mapped on the plans.

It is recommended that the Environmental, Monitoring and Audit Requirements (EM&A) for landscape and visual resources described in **Section 6.10** of this report is undertaken during detailed design stage and both the construction and operational phases of the Project.

6.8.2 Primary Mitigation Measures

In accordance with the EIAO-TM, the hierarchy for landscape and visual impact mitigation is first avoidance of impact, then minimisation of impact and finally compensation of impact. As has been described in the Project description in this report, the current proposals have been undertaken to fulfil the following objectives:

- Minimisation of potential impacts on landscape resources such as watercourses and existing trees by review of the alignment and location of above ground structures.
- Restoration and enhancement of existing landscapes through planting large feature and ornamental trees following the completion of the construction phase of the project, this will create an instant greening effect be apparent in the enhancement of the streetscape.
- Review of the work sites and areas to ensure that sufficient space is reserved within the facilities for compensatory planting and other landscape works.

In accordance with the EIAO-TM, mitigation measures for the construction and operational phases of the project have been designed to minimize predicted landscape and visual impacts, and to compensate for lost landscape resources as far as is possible given the Project constraints.

6.8.3 Secondary Mitigation Measures

A series of mitigation measures designed to alleviate impact and where possible compensate for loss of landscape resources, change of landscape character and visual amenity for VSRs resulting from the construction and operational phases of the project. The implementation, funding, and management and maintenance for the amenity landscape areas associated with the proposed works will be undertaken by project proponent and/or relevant departments.

The proposed landscape and visual impact mitigation measures are summarised in **Tables 6.13** and **6.14**.

Table 6.13: Proposed Construction Phase Mitigation Measures

Mitigation Code	Mitigation Measure
CP1	*Preservation of Existing Vegetation* - The proposed works should avoid disturbance to the existing trees and vegetation as far as practicable within the works areas. The tree preservation proposals should coordinate with the layout and design of the engineering and architectural works. It is recommended that a full tree survey and felling application be undertaken and submitted for approval by the relevant government departments in accordance with ETWB TCW No. 3/2006, 'Tree Preservation' during the detailed design phase of the project. Where possible all trees which are not in conflict with the proposals would be retained and shall be protected by means of fencing where appropriate to prevent potential damage to tree canopies and root zones from vehicles and storage of materials. Specifications for the protection of existing trees will be provided during the preparation of the detailed tree survey by Detailed Design consultants at detailed design and construction stage.
CP2	*Works Area and Temporary Works Areas* - The landscape of these works areas should be restored to their original condition or enhanced through the introduction of new amenity areas or open spaces following the completion of the construction phase. Construction site controls shall be enforced, where possible, to ensure that the landscape and visual impacts arising from the construction phase activities are minimized including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage. Screen hoarding may not be practicable at some locations due to the close viewing distances involved, the length of the alignment and the spatial constraints of the works area. Where hoarding is practicable the design of the finishes will adopt a coherent approach with a decorative effect.
CP3	*Implementation of Mitigation Planting and planting species selection* - Replanting of existing/disturbed vegetation should be undertaken at the earliest possible stage of the construction phase of the project and this should use predominantly native and/or ornamental plant species. Proposed mitigation planting shall not only limit to conventional amenity planting, but also considered alternative greening measures such as vertical greening for screening or soften the built structures. Small shrubs, climbing plants, grass and groundcovers shall be used in specific locations according to site condition and at where would not interfere the operation of railway and its associated facilities.
CP4	*Transplantation of Existing Trees* – Approximately 437 existing trees, from roadside amenity areas or open spaces are recommended to be transplanted under the current proposals. The final recipient sites should be, as far as space allows, adjacent to their current locations alongside of the alignment to retain their contribution to the local landscape context. However the majority of the transplanted trees will be relocated directly to off-site planting areas. Possible off-site planting areas include Medium Term Site under "Southern District Greening Master Plan" at Wong Chuk Hang Area, Hong Kong Park and other LCSD gardens in Yuen Long and Sham Shui Po and Lok Ma Chau and West Rail Wetland. Other transplanted trees will be taken to a temporary holding nursery before being taken to their final recipient locations at a later stage in the project. The final locations include the planting areas along the alignment or within the proposed station areas as close as possible to their original situation. The potential recipient sites would avoid encroach to potential development sites. Transplated trees placed within the temporary holding nurseries will be relocated to the future planting areas along the alignment or within the proposed station areas located, as far as possible, adjacent to their original locations. The implementation programme for the proposed works should reserve enough time for the advanced tree transplanting preparation works to enhance the survival of the transplanted trees. The transplanting proposals will be subject to the findings in tree felling applications which are currently being circulated to government departments for approval.
CP5	Coordination with Concurrent Projects - Coordinated implementation programme with concurrent projects to minimise potential impacts and where possible reduce the period of disturbance.

Table 6.14: Proposed Operation Phase Mitigation Measures

Mitigation Code	Mitigation Measure
OP1	The design of the proposed engineering and building structures - will incorporate design features as part of design mitigation measures including: *Integrated design approach* *Building massing* - the proposed use of a responsive design for the disposition of the main elements

Mitigation Code	Mitigation Measure
	of the proposed schemes including the locations of the proposed above ground structures. Grouping of station facilities and structural components as far as technically feasible to reduce the mass of above ground structures. The disposition and height profile of the proposed above ground structures to respond to the existing context and minimise potential wall effects. Measures may include the creation of setbacks, articulating the development frontage, maintenance of view corridors and the utilisation of stepped or articulated height profile to enhance the sense of visual integration with the existing context, avoid abrupt transitions between the existing and proposed built environment and reduce the apparent visual mass of the proposed developments. *Treatment of built structures* - the architectural design should seek to reduce the apparent visual mass of the facilities further through the use of natural materials such as colour blocking, innovative surface treatments and vertical greening. Responsive finishes for the proposed structures - In terms of the building finishes natural tones should be considered for the colour palette and non-reflective finishes recommended for the outward facing building facades to reduce the potential glare effect. Incorporation of landscaped terraced edges or other form of greening measures on built structures where conditions allow particularly those fronting the public realm to reduce the apparent visual mass of the structure and create a more subtle transition with the pedestrian level streetscape. Innovative architectural design includes the adoption of recessive colours for the building, viaduct and noise barrier finishes and colour blocking to reduce the collective visual mass of the development. *Responsive lighting design* – Aesthetic design of architectural and track lighting with following glare design measures: • Directional and full cut off lighting is recommended particularly for recreation and roadside areas to minimize light spillage to the surrounding areas. • Minimize geographical spread of lighting, only applied for safety at the key access points and staircases; • Limited lighting intensity to meet the minimum safety and operational requirement; and • High-pressure sodium road lighting is recommended for more stringent light control reducing spillage and thus visual impacts.
OP2	*Roadside and Amenity Planting* – The planting proposals will utilise large ornamental trees to maximise the area of visible greenery, soften the interface between the proposed scheme and adjacent urban fabric and enhance the thermal comfort of adjacent spaces. The implementation of new planting shall be undertaken as soon as technically feasible at sectional completion stage during construction to ensure the effectiveness of this mitigation during operational stage. Planting proposals will respond to the need for visual access in the views from the adjacent neighbourhoods to the roadside or rural landscape. Whereas dense foliage plants will be provided at other locations to screen and frame views, provide a more shaded environment for pedestrians and provide accents within the existing roadside planting. The planting on sloping ground and areas adjacent to existing woodland will utilise predominantly native species improving the ecological connectivity between existing woodland habitats and creating a more unified and coherent landscape framework.
OP3	Compensatory Planting Proposals – Given that the works are largely located within urban areas, alongside existing roads and beside the Staunton Creek Nullah areas for new tree planting are limited. However the proposals have sought to utilise all available spaces for new tree and shrub planting to screen views of the proposals and where this is not possible soften their architectural form and enhance their visual integration within the future landscape context. The preliminary compensatory planting proposal will follow the Technical Circular ETWB TCW No. 3/2006 except for felling of trees for slope works which are exempted from the compensation planting ratio requirement. New tree planting in general roadside and planting areas adjacent to proposed stations and above ground structures and within reinstated public open spaces will utilise a combination of semi-mature to standard sized stock as shown in Figures 6.9.1.1 to 6.9.27 to create an instant greening effect at local level. New planting areas along the alignment will accommodate approximate 2,000 new trees. Planting of more broad-leave tree species will be considered where space allows and location is suitable for tree establishment. This planting concept would create comfortable shaded area for pedestrians and visitors in open spaces. For the affected tree on the sloping areas, due to constrained growth conditions, whip planting will

Mitigation Code	Mitigation Measure
	be proposed on slopes which have gentler gradient at a planting distance of about 1500mm. Slopes have a gradient more than 30 degree, hydroseeding will be applied instead. Upon full establishment of whip planting and hydroseeding, greening coverage on affected sloping areas will be reinstated. Following the above planting principles, the newly formed and remnant sloping areas along the alignment of approximately 1.3 ha, would accommodate approximately 7,360 whips. Based on a preliminary estimation, the above planting proposal would achieve a replanting ratio of minimum 1:1 in terms of quantity and quality except for slope works according to ETWB TCW No. 3/2006. This tree replanting ratio would compensate the total girth and number of tree loss within open space or in roadside amenity area, as well as the total number of tree loss on sloping area. Given the constraints of growing condition and safety reasons of planting larger size tree stock on sloping areas, greening measures on new formed and remnant slopes, including extensive hydroseeding and whips planting, would restore the quality of these greenback drop in urban area. The retention of existing trees through their preservation in-situ and transplanting and the successful establishment of the newly planted trees will enhance amenity of the local areas and providing for the thermal comfort of pedestrians. In the wider landscape context, the green backdrop will be reinstated upon full establishment of replanting proposals on sloping areas. Proposed planting on slope will utilise woodland mix with majority of native species. The species selection for the areas along the railway alignment and adjacent to proposed stations within the main urban areas will utilise a range of ornamental and amenity tree species. These proposals will be subject to further development during the detailed design stage of the project. As mentioned above the findings and recommendations of the preliminary tree survey report are subject to the completion of a detailed tree survey and assessment and the preparation of a felling application in accordance with ETWB TCW No. 3/2006, Tree Preservation and LAO PN 7/2007 Tree Preservation and Tree Removal Application for Building Development in Private Projects. This will be conducted during the detailed design stage of the project by DCCs and submitted to DLO for approval. The methodology and scope including the programme for the tree survey and felling application are also subject to the approval of the relevant authorities namely LandD, HyD, LCSD and AFCD.
OP4	The proposed treatment of Retaining Wall and Slopes will be undertaken in accordance with GEO Publication No. 1/2000 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls". These engineering structures will be aesthetically enhanced through the use of soft landscape works including tree and shrub planting to give man-made slopes a more natural appearance blending into the local rural landscape. Whip sized tree planting is preferred on the face of soil cut slopes and at the crest and toe of the slope, and within berm planters. The smaller, younger plant stock will adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly.
OP5	*Noise Mitigation Structures* - Under the current proposals the requirement for noise barriers would be limited to the viaduct and bridge section of the scheme proposals along the Staunton Creek nullah and across Aberdeen Channel. The proposed noise attenuation structures will form a combination of noise barriers and semi-enclosures. The design of these structures would be responsive to the landscape through which the track would pass which is essentially an urban / urban fringe/ semi-rural environment characterised by high-rise residential property and commercial / warehouse premises; and the wooded hill slopes of the landscape lining the course of the nullah. The barriers would also pick up on existing design themes in the station complexes responding to the local context such as greenback drop along the nullah and maritime character of Aberdeen Channel to ensure that the new structure would be visually compatible with structures to which it is connected. The design criteria for the noise mitigation structures installed along the trackside should not be limited to the functional requirements of mitigating train noise. It should also seek to make a positive contribution to the urban / urban fringe / semi-rural landscape character of this area and by doing so improve the perceived landscape quality of the area. These barriers would be visible from some VSRs identified in the study. The design criteria should seek to: • Promote the innovative use of materials for absorptive panel, such as Plexiglas, fibreglass, reinforced concrete etc, whilst remaining aware of the design life span of each of the elements incorporated in the design; • Reduce the visual effect of the structure through the use of form, materials, textures colours and tones; • Incorporation of articulation in the façade of the noise barriers / enclosures through the use

Mitigation Code	Mitigation Measure
	of some transparent sections near the upper portion of the proposed structure to break up the horizontal emphasis of viaduct and bridges; • Reflect the chromatic context of the surrounding urban landscape through the use of colour panels in the proposed noise barrier, and create themes for various section responding to local characters; and, • Utilise materials, which are non-reflective avoiding glare from incident sunlight.
OP6	The design of the proposed Engineering Structures such as viaduct should pay particular attention to the appearance and construction methods of the structures which form part of these proposals, these would include the following: • The detailed design landscape consultants shall work in unison with the engineers on the aesthetic aspects of the structures and their relationship with the landscape. The major engineering structures shall seek approval from ACABAS on design principle and approach for these engineering structures. This will then inform the design and visual appearance of the proposed structures in the detailed design phase of the project. Even though overall the designs would consider the following principles: • The viaduct structures would aim to "touch" the ground as lightly as possible in order to minimise disturbance to the existing landscape and vegetation below the structures. This would be achieved by designing slender, rounded viaduct columns spaced the maximum distance apart. Where conditions allow, the viaducts would be constructed using pre-cast methods and launched from columns rather than scaffolding. The viaduct should be designed to achieve where appropriate a graceful, curving alignment; • Landform and vegetation in areas disturbed by construction works would be reinstated to blend with the existing landscape patterns; • Wherever light levels, the water regime and the requirements of the enviromental mitigation measures permit, trees and vegetation would be reinstated below or adjacent to the structures. Irrigation may be required in some locations and hard landscape solutions considered where the clearance is low. Planting would be used wherever possible to minimise the apparent height of structures and to soften their appearance in medium and long distance views; • The design of the viaduct should avoid unnecessary visual clutter, this would be achieved through the co-ordination of the various engineering disciplines involved to arrive at innovative design solutions. Such as the location of columns of viaduct should not block any views from VSRs in the proximity and the shape of column should be slim down as far as technically feasible to reduce the structural mass at street level, at where space is allowed planting area for shade tolerant tree, shrub and climber species would be provide at the base of the column to soften the vertical emphasis at street level; • Fair faced concrete would not be used for viaduct parapets to minimise glare from the structure and to avoid the visually detracting effect of staining; and • Drainage structures would where possible be concealed within the structure of the proposed viaducts.
OP7	*Reinstatement and Creation of Open Spaces and Gardens* – The open spaces acquired for temporary works areas for the project including Wong Chuk Hang Road Garden, Football Pitch at Ap Lei Chau Bridge Road and sitting out areas at Lee Nam Road will be reinstated. Harcourt Garden above proposed ADM Station will be redesigned with a modern park approach creating more welcoming urban park spaces to encourage the visitors or neighbourhood to dwell. Replanting of disturbed vegetation within these open spaces should be undertaken at the earliest possible stage of the construction phase of the project and this should use predominantly native and/or ornamental plant species. In addition, spaces underneath the viaduct, at where space allows and suitable, would be designed as new public spaces in form of plazas and sitting out areas or

Mitigation Code	Mitigation Measure
	channelside walk alongside the Nullah with tree and shrub planting.

6.8.4 Programme for Landscape Works

The landscape works will closely follow the completion of the construction of the proposed works. The design year for the purpose of this study is taken as approximately 10 to 15 years after the scheme opening when the proposed soft landscape mitigation is mature. The landscape works will be implemented at the earliest possible time in the planting season immediately following the sectional completion of the construction works. The implementation schedule of landscape works is presented in **Section 14** in this report and also presented in the EM&A Manual.

6.9 Evaluation of Residual Impact

6.9.1 General

Overall, in terms of residual landscape and visual impacts the main effects will primarily result from the disturbance to a number of park and open space landscapes, some woodland areas and the interruption of existing roadside and waterfront landscapes. As the majority of works areas will be reinstated to their original condition or enhanced to form new amenity areas, it is evident that the predicted impacts will be alleviated upon full establishment of landscape and visual mitigation measures.

For the most part the landscape character of the Study Area will largely remain unchanged after the full establishment of the recommended mitigation measures, as:

- Responsive scale and building height profile integrated with local urban context will be adopted.
- Integration as far as technically feasible new built structures with existing.
- Provision of planting areas along the alignment and adjacent to proposed stations.
- Reinstate temporary works areas to new landscape sitting areas and/or recreation areas for the use of neighbourhood community.
- Incorporation of vertical greening and green roof on built structures as far as technically feasible.
- Tree preservation and new tree planting proposals, where space allows, will be implemented alongside and underneath the viaduct and adjacent to proposed stations.

The planting proposals also form part of compensatory planting proposals for the loss of landscape resources, such as existing trees, it will benefit the future landscape and ecology context within the Study Area.

6.9.2 Residual Impact on Landscape Resources (Yr10)

Landscape and visual mitigation measures recommended and mitigated (residual/Yr10) impact for individual LRs assessed in **Table 6.9** and summarised as follows.

Slight

The significant impact on some LRs including wooded area and open space will be alleviated from significant to moderate (Day 1 construction and operation) to slight impact (Yr10). The is evident through full establishment of the mitigation measures discussed in **Section 6.8**, including the reinstatement of wooded sloping and open spaces with both native and amenity species integrated with preserved trees, and other form of greening measures at where condition allows. The disturbed open spaces and gardens will be reinstated or redesigned with a modern park design approach. These LRs include LR3.3 Natural Woodland on sloping area to the north of Holy Sprit Seminary, LR3.4 Natural Woodland on sloping area to the north of Sham Wan Towers, LR4.4 Mixed Woodland on sloping areas alongside of Staunton Creek Nullah and LR12.1 Harcourt Garden.

Negligible

The moderate to slight impact on the majority of remaining LRs including roads and highways, developed areas, wooded sloping areas, roadside amenity, grassland/shrubland mosaic, waterbody, wasteland and football pitch will be alleviated from moderate to slight adverse (Day 1 construction and operation) to negligible (Yr10) with full establishment of landscape mitigation measures including the re-instatement of disturbed areas as far as technically feasible with plantation of woodland mix on sloping areas and ornamental roadside planting.

Slight Beneficial

The creation of new open spaces with tree and shrub planting and sitting out areas underneath proposed viaduct will also beneficial to existing landscape context along Staunton Creek Nullah (LR8). Open yard at waterfront promenade under Ap Lei Chau Bridge (LR10.1) originally utilised for dragon boat storage and vessel repair area will be enhanced with full establishment of planting at the embankment of proposed Aberdeen Channel Bridge. The context of utilities Facilities at Chung Hom Kok (LR2.18) will be enhanced by new tree planting. The landscape mitigation approach would also include tree planting to compensate for the loss of the existing trees and enhance the local landscape context particularly in the screening and visual integration of the proposed engineering structures. The proposed scheme has sought to preserve existing trees wherever possible and where this is not possible transplant them to new locations within the works site. Therefore upon full establishment of the recommended mitigation measures will benefit these LRs.

6.9.3 Residual Tree Impact

The preliminary compensatory planting proposal will follow the Technical Circular ETWB TCW No. 3/2006 except for felling of trees for slope works which are exempted from the compensation planting ratio requirement. New tree planting in general roadside and planting areas adjacent to proposed stations and above ground structures and within reinstated public open spaces will utilise a combination of semi-mature to standard sized stock as shown in **Figures 6.9.1.1** to **6.9.27** to create an instant greening effect at local level.

Following the planting concepts discussed in **Section 6.7.5**, a replanting ratio of minimum 1:1 in terms of quantity and quality would be achieved except for slope works according to ETWB TCW No. 3/2006. The retention of existing trees through their preservation in-situ and transplanting and the successful establishment of the newly planted trees will form part of the roadside and slope planting enhancing the amenity of the local areas and providing for the thermal comfort of pedestrians. In the wider landscape context, the green backdrop will be reinstated upon full establishment of greening on sloping areas. The proposed compensatory and new tree planting will utilise native species to Hong Kong and woodland mix for the slope areas and ornamental species alongside the infrastructure corridors. The species selection for the areas adjacent to proposed stations and within the main urban areas will utilise a range of amenity tree species. In combination with preservation of 1,615 trees in-situ or through transplantation and planting of 2,000 new trees along the alignment and within the parks and gardens and 7,360 whips on sloping areas, there will be a net gain of trees upon full establishment of proposed tree planting in roadside planting and amenity area and whip planting on sloping areas. These proposals will be subject to further development during the detailed design stage of the project.

6.9.4 Residual Impact on Landscape Character Areas

Landscape and visual mitigation measures recommended and mitigated (residual) impact for individual LCAs assessed in **Table 6.11** and summarised as follows.

Negligible impacts

The moderate impact on overall Admiralty Commercial Landscape (LCA1) due to the temporary loss of Harcourt Garden and roadside planting at Fenwick Pier Street and Supreme Court Road will be alleviated to a slight level during the construction and operation phases (Day 1) of the project through the preservation of existing LRs including trees and the impact will be further reduced to a negligible level during operation phase (Year 10) of the Project with full establishment of landscape and visual mitigation measures. These measures include reinstatement of Harcourt Garden

with a modern park design approach with multi-levelled greening measures to disguise the functional appearance of above ground station facilities and provision of urban park facilities for the enjoyment of future visitors and neighbourhoods.

The landscape character of Harcourt Garden will be changed from single level garden area currently lack of variation of recreation facilities and largely used for pedestrian circulation purpose to a terraced modern urban park character accommodated shaded seating area and other recreation facilities. The form of new Harcourt Garden is designed around and integrated with electrical sub-station, existing and planned vent shafts, and other above ground components of ADM Station. Following the completion of the construction phase of the project, the garden areas will be reinstated with multi-levelled greening and additional recreational facilities, in combination with tree preservation at the southeast corner of the site, existing commercial landscape character will be enhanced through reinstatement of Harcourt Garden with a modern urban park approach that would create robustness open space for visitors and neighbourhood to dwell.

The moderate impact on the character of Hong Kong Park Recreational Landscape (LCA 2) in particular the entrance area adjacent to proposed vent shaft will be alleviated to a negligible level during operation phase (Year 10) of the Project through the preservation of existing trees, full establishment of new roadside planting integrated with existing OVTs and vertical greening on built structures. The affected area will be reinstated although largely its frontage would be hard paved for maintenance access and manoeuvring of refuse collection truck to re-instated RCP adjacent to the building and reserved for the works area for SCL. Besides, the road modification works is carefully designed to avoid impact on existing OVTs in roadside planters.

The character of Wong Chuk Hang Industrial and Institutional Landscape (LCA 6), Aberdeen Waterfront Landscape (LCA 8) and Ap Lei Chau Island Landscape (LCA 9) will be subject to relatively extensive construction phase works and their attendant disturbance to the setting and landscape amenity of these areas resulting in a moderate level of impact. However with the implementation of the proposed mitigation measures these impacts will be alleviated to a slight level of impact during the construction and operation phases (Day 1) of the project. These impacts will be negligible during operation phase (Year 10) of the project upon full establishment of the mitigation measures. These measures include reinstatement of disturbed areas, introduction of new roadside and amenity planting and new woodland mix planting on disturbed sloping areas and introduction of new open spaces etc. Particularly the new planting along the viaduct alignment and associated with station works and the provision of new landscaped open space along the nullah will mitigate potential impacts to an extent and enhance the industrial context within LCA6. For LCA8, the potential impact would also be alleviated to an extent through the careful and responsive design of the bridge structure aligned with existing Ap Lei Chau Bridge, theme noise barrier panel design and reinstated the bridge landing area with new planting. For LCA 9, the potential construction impact will be alleviated to an extent through the careful design, sequencing and programming of the construction works. Following the construction phase the railway alignment will be largely underground and areas adjacent to stations and the affected amenity area adjacent to proposed vent building at Lee Nam Road will be reinstated as far as technically feasible to accommodate or re-provide more amenity areas for the enjoyment of neighbourhood residents. These measures are designed to reduce the level of landscape intrusion resulting from the introduction of new engineering structure with the urban and semi-rural landscapes represented within the Study Area. The sensitive and responsive design of the above ground structures (the proposed station entrance and vent shafts) includes the utilisation of subtle material finishes and the measures designed to soften their engineered form and improve visual integration within the future landscape setting.

- Proposed Aberdeen Channel Bridge is aligned with the existing Ap Lei Chau Bridge that would reduce the potential impact to the existing maritime and recreation landscape. The potential impact would also be alleviated to an extent through the careful and responsive design of the structure for the viaduct and bridge including the application of greening measures at the base of column structures where feasible, theme noise barrier panel design and reinstatement of affected areas with new planting areas and open space. The moderate impact on the character of Nam Long Shan Maritime and Recreational Landscape (LCA 7) will be alleviated to slight adverse during the construction and operation phases (Day 1) of the project whilst the residual impact during operation phase (Year10) of the Project will be further reduced to a negligible level through integration of proposed works with existing

landscape character, and reinstatement of temporary works areas and barging points immediately after construction period.

Upon to the completion of construction stage of the Project, working areas, barging points and magazine site will be reinstated to its original status, given implementation of this measures, impacts on Chung Hom Kok Utilities Landscape (LCA 10), Telegraph Bay Institutional Landscape (LCA 11) and Wah Kwai Utilities Landscape (LCA 12) will be alleviated from slight to negligible level.

The negligible impact of LCA 3 Mid-Level Upland Landscape, LCA 4 Aberdeen Country Park Landscape and LCA 5 Shouson Hill Low-rise Residential Landscape would remain unchanged during operation phase (Year10) of the Project. Although there is no proposed works actually proposed in these LCA5, the Nam Fung portal/ vent building and box structures leading to OCP Station are remote and fit into the infrastructure landscape of Aberdeen Tunnel and its approaching road network right next to the western lower elevation of Shouson Hill. With the full establishment of mitigation measures, including mitigation planting with tree and bamboo adjacent to portal/ vent building, tree planting adjacent to the box structures and at the base of viaduct, climber plant on box structure and responsive and innovative design of noise mitigation panels, the residual impact to these LCAs would be negligible.

6.9.5 Residual Impact on Visual Amenity (Year 10)

Landscape and visual mitigation measures recommended and mitigated (residual) impact for individual VSRs assessed in **Table 6.12** and summarised as follows.

Residual Impact during Construction Phase

Due to the scale of the Project, even with mitigation measures implemented during construction including preservation of existing trees, responsive hoarding, tidy site management and careful planning of construction program, the predicted level of impacts on the views of majority VSRs would persist due to the scale and complexity of proposed works. These mitigation measures for construction phase are more effective in the views of VSRs at street or lower levels and in proximity to the works areas.

Residual Impact during Operation Phase

Slight Adverse

The visual amenity of users of Pao Yue Kong Swimming Pool Complex (VSR C6), users of the sitting-out areas and playground at Heung Yip Road adjacent to the Nullah (VSRC7), Visitors to Tai Wong Ye Temple (VSRC8), and Travellers along Heung Yip Road and Ocean Park Road (VSRT3) and Travellers on Wong Chuk Hang Road (VSR T4) will be changed significantly through the introduction of viaduct along the existing road or nullah from Ocean Park to Wong Chuk Hang. This potential visual intrusion resulting form the railway structures will be alleviated to an extent through the responsive design of viaduct and noise enclosure / barrier structures; and the restoration of the disturbed areas with new amenity tree and shrub planting beneath the viaducts; and the use of vertical greening measures where possible on built structures. These areas will be for the use of the local community. Although these measures will not screen views of the proposed engineering structures the measures will soften the form of the structures and the interface with the existing nullah; create a greater sense of visual integration and enhance the overall landscape of the Wong Chuk Hang area. With the adoption of these measures the potential significant impact to the visual amenity of these VSRs will be mitigated to moderate during operation phase (Day 1) and slight adverse during operation phase (Year 10).

The impacts to visual amenity would be limited to the staff and students at elevated floors of St. Paul's Co-educational College Primary School (VSRO10) arising through the introduction of the proposed Nam Fung Portal and box structures adjacent to the school. Responsive buffer planting associated with the proposed structures will be provided minimising the change in terms of the character and setting of the hillside landscape. Given the combination of these

measures the potential impacts will be mitigated to a predicted slight adverse during operation phases (Day 1 and Year 10).

The visual amenity of Residents of Community facilities to the east of Ap Lei Chau Bridge (VSRR6) and Wong Chuk Hang Hospital and Complex for the Elderly (VSR R8) Workers in Wong Chuk Hang Industrial Buildings (VSRO3), and Staff and Students at the Police College (VSRO4) will be changed through the introduction of viaduct in their existing visual context. The existing view is dominated by the existing tunnel, highway structures and industrial buildings. As described above the area below the viaduct will be enhanced with new tree planting and the station design will incorporate greening measures as far as is technically feasible. These measures will mitigate the potential visual impacts to an extent and so the potential visual impacts for VSRs will be reduced from moderate during operation phase (Day 1) and slight adverse during operation phase (Year 10).

The existing visual context for the residents of estates in eastern Ap Lei Chau (VSR R3.1) will be changed as a result of the introduction of the proposed Aberdeen Channel Bridge with its associated noise enclosures / barriers. The adverse impact will be mitigated to an extent from moderate during operation phase (Day 1) and slight adverse during operation phase (Year 10) through the responsive design of new bridge alignment and noise barrier.

Other adverse impacts will include those experienced by Residents of Ap Lei Chau Estate (VSR R2.1), Residents of South Horizons (VSR R2.2) , Residents of estates in eastern Aberdeen (VSR R5), Residents of estates in Wong Chuk Hang (VSR R7), Future residential developments in the area zoned “R(E)” abutting Ap Lei Chau Praya Road (PVSR R12), Workers of dockyard alongside of typhoon shelter (VSR O2), Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter (VSR O9), Travellers along Aberdeen Channel (VSR T1), Travellers on Ap Lei Chau Bridge (VSR T2), Travellers along Heung Yip Road and Ocean Park Road (VSR T3), will also be alleviated to an extent through responsive built structure design, restoration of the disturbed areas with new tree and shrub planting; and the integration of greening measures on built structures where technically feasible.

Negligible

The majority of the works areas will be restored following the completion of the construction works and these proposals will be combined with new amenity areas implemented following the sectional completion of the station and above ground structures, and the railway alignment. Roadside tree and shrub planting will be introduced, where space allows, and the responsive design of built structures will be adopted. Through the implementation of the proposed mitigation strategies the visual intrusion of the above ground structures such as the station entrances, vent shafts, viaduct sections, bridge, tunnel portal and plant buildings will be significantly reduced. The moderate to slight impact to the visual amenity of VSRs including Residents of Wah Kwai Estate (VSR R1), Residents of mansions at Ap Lei Chau Main Street (VSR R3.2), Residents of estates in western Aberdeen (VSR R4), Residents of developments on Shouson Hill (VSR R9) , Staff and Patients of Grantham Hospital (VSR R13), Recreational users of Ap Lei Chau waterfront promenade and park (VSR C3), Recreational users in Sham Wan Marina (VSR C4), Visitors to Ocean Park (VSR C5), Users of Aberdeen Sport Ground (VSR C9), Visitors to Hong Kong Park (VSR C10), Users of Lee Nam Road Siting-out Areas (VSR C11), Travellers on Nam Fung Road (VSR T5), Travellers on Harcourt Road (VSR T6), Travellers on Queensway Road (VSR T7), Travellers on Supreme Court Road (VSR T8) will be mitigated to an extent to slight during operation phase (Day 1) and negligible during operation phase (Year 10) following the full establishment of the recommended mitigation measures.

The existing visual context for the VSR R4 Residents of estates in western Aberdeen, Visitors of Permanent Chinese Cemetery, Aberdeen (VSR C1), Hikers in Aberdeen Country Park (VSR C2), Staff and Students of Hong Kong True Light College (VSR O1), Staff and Students in South Island School (VSR O5), Workers and visitors in Cyber Port (VSR O11) will be changed as a result of the introduction of the proposed Aberdeen Channel Bridge with its associated noise enclosures / barriers. The adverse impact will be mitigated to an extent from slight adverse to negligible during operation phase (Day 1 and Year 10) through the responsive design of new bridge alignment and noise barrier.

The views and visual amenity available to Workers in Commercial Buildings along Queensway and Harcourt Road (VSR O6), Staff and Students in Hong Kong Academy of Performing Arts (VSR O7) and Future Staff and Visitors in

Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central (PVSR O8), who have views to Harcourt Garden will be subject to intermediate changes during the construction of ADM Station and associated tunnelling works. The Harcourt Garden will be replaced by a new design which incorporates the vent buildings and entrances into a terraced garden. The use of a combination of preserved and newly planted trees, greening and provision more shaded sitting areas within this dense urban context will enhance the amenity of the area. Therefore the potential adverse impact will be mitigated to an extent to slight adverse during operation phase (Day 1) and negligible during operation phase (Year 10) upon the full establishment of the recommended mitigation measures.

The impacts on VSRs including Residents of developments at the Peak on Mount Kellett (VSR R10) and Residents of developments on Mount Cameron (VSR R11) is negligible during operation phase (Day 1 and Year 10) due to their nature and viewing distance.

6.9.6 Photomontages

A series of computer generated images or photomontages have been prepared for the proposed works demonstrating a worst case scenario for the identified VSRs and are presented as **Figures 6.10.1** to **6.10.35**. The photomontages of the proposed works show the existing conditions, Day 1 of Operational Phase after the completion of the construction phase in the absence of mitigation measures and Day 1 of Operational Phase with mitigation measures. Year 10 of Operational Phase with mitigation measures to demonstrate the predicted residual impacts, which would exist in the design year during the operational phase taken as between 10 and 15 years after the completion of the construction phase.

Photographs were used to demonstrate the existing view. The photomontages of those views cannot cover the whole development in one single shot due to the effects of perspective and so are presented as a series of individual images.

Vantage Point A View at street level from eastern entrance of Harcourt Garden adjacent to Police Headquarters looking towards proposed ADM Station entrance, vent shafts and terraced garden

(Represents VSRs having views looking towards proposed ADM Station including Pedestrian and Travellers on Harcourt Road (VSR T6))

This vantage point (**Figures 6.10.1** and **2** refer) shows the proposed ADM Station entrance, vent shafts and terraced garden in the existing Harcourt Garden. The view is at a relatively close distance and is taken from pedestrian level to demonstrate the potential change in the amenity of views available to visitors to the garden, pedestrians and framed views for vehicle travellers on Harcourt Road. The image shows the proposed works in relation to adjacent commercial landscape and demonstrates the affectivity of the proposed landscape mitigation measures which will reinstate the area with an innovative terraced garden. The existing low-level views within the Garden are visually enclosed by the large trees which bound the garden and the view is characterised a combination of the amenity planting and the above ground structures including the footbridges and vent shafts of existing Admiralty Station.

Some of the mature trees within the site will be preserved through transplantation to future planting areas adjacent to the proposed station entrance and vent shafts or in an agreed off-site location (subject to the agreement of the relevant governments). Although unavoidable there are some existing trees required to be removed due to the works, however compensatory tree planting will mitigate these potential impacts wherever possible.

The mitigation measures will include restoration of the landscape with the introduction of the proposed terraced garden/ landscape deck design, a more sensitive and responsive and integrated design approach for the proposed vent shafts and new station entrance with consideration of maintaining existing underground car parking, sub station and railway facilities, in fulfillment of FSD requirement providing continuous EVA and locate all high fire risk components at ground floor level, these constraints shape the massing of ADM Station extension and provide opportunities for the creation of a multi-level greening framework for the garden. The proposed planting of new amenity trees and shrubs to recreate the sense of visual enclosure, enhance the amenity of the park and screen / visually soften views of the proposed ground structures. This new planting would be integrated with the preserved trees compensating for the loss of existing

trees and reinstate its urban park landscape character. The proposed mitigation measures would alleviate the potential visual impact and restore the landscape framework.

Vantage Point B View from an elevated level at footbridge looking towards proposed ADM Station entrance, vent shafts and terraced garden at Harcourt Garden.

(Represents VSRs having views looking towards proposed ADM Station including Workers in Commercial Buildings along Queensway and Harcourt Road (VSR O6), Staff and Students in Hong Kong Academy of Performing Arts (VSR O7), Future Staff and Visitors to the Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central (PVSR O8) and Travellers on Queensway and Harcourt Road (VSRs T6 and T7))

This vantage point (**Figures 6.10.3** and **4** refer) shows the restructuring of Harcourt Garden including the high fire risk components required at ground floor level of proposed ADM Station extension, integration of existing and planned vent shafts and the implementation for the terraced garden proposals for the central portion of the space. This elevated view point shows the views available to pedestrians on the adjacent footbridge but also demonstrates the potential change in the visual amenity for workers in the adjacent commercial buildings. This image shows the proposed works in relation to adjacent commercial landscape and demonstrates affectivity of the proposed landscape mitigation measures in reinstating the area with terraced garden. It will also demonstrate how the proposed new planting will be integrated with the preserved trees and their ability to soften the form and reduce the apparent visual mass of the proposed ADM Station extension and vent shafts. The main impacts will be apparent during the construction phase of the project due to the disturbance to the garden however these impacts will be mitigated through the reinstatement and enhancement of the garden following the implementation of the proposed terraced garden/ landscape design.

Vantage Point C View south at Supreme Court Road in front of Hong Kong Park entrance looking towards proposed vent shaft

(Represents VSRs having views looking towards proposed vent shaft at the entrance of Hong Kong Park including Travellers on Supreme Court Road (VSR T8) and Visitors to Hong Kong Park (VSR C10))

This vantage point (**Figures 6.10.5** and **6** refer) shows the location of the proposed vent shaft at Supreme Court Road next to the entrance to Hong Kong Park. This view is taken at the pedestrian level at a relatively close distance to demonstrate the potential impacts arising from the construction of the proposed structure at a potentially sensitive location and the affect of the proposals for visitors entering the park. The proposals will also potentially have an impact on the views available for pedestrians within the adjacent public realm and in views available to the staff working in the surrounding offices / commercial buildings.

The image shows the scale of the proposed vent shaft and the proposed building façade treatment with greening measures as far as condition allows to reduce its apparent visual mass. Although the frontage of the building is reserved for maintenance access to the building and, maneuvering area for refuse collection truck to adjacent RCP that limited the opportunities for tree planting, the greening measures on the building and the preservation of trees through transplanting to adjacent roadside planting area will continue their contribution to the landscape context and ensure that the scheme is integrated as far as possible within the landscape of the local area.

Vantage Point D View west from an elevated level at footbridge on Aberdeen Tunnel Toll Plaza looking towards the Nam Fung Portal and viaduct connecting to OCP Station

(Represents VSRs having views looking towards proposed the box structure and viaduct leading to OCP Station including Residents of Wong Chuk Hang Hospital and Complex for the Elderly (VSR R8) and Staff and St. Paul Co-educational College Primary School (VSR O10))

This vantage point (**Figures 6.10.7** and **8** refer) illustrates views which will be potentially available from medium distance, elevated positions towards the proposed development site. It demonstrates the potential change in the visual amenity enjoyed by residents, staff and students of the surrounding developments at Nam Fung Road and the path adjacent to the Aberdeen Tunnel. The image shows the scale of the proposed tunnel portal, railway tunnel approach

(box structure) and viaduct leading to the OCP Station and how it could be accommodated within a landscape context already characterised by existing infrastructure. The affected roadside planting area will be reinstated and new planting areas will be introduced along the viaduct alignment as far as technically feasible to reduce the horizontal emphasis of the structure and ensure that the completed structures are better integrated into the future landscape context. In addition, climbing plants, bamboo and hydroseeding are recommended at the bottom of box structure and on reinstated sloping areas adjacent to the structures in form of temporary greening measures before the implementation of hospital development. The design of the proposed viaduct and noise enclosure / barrier structures will adopt an innovative, curvilinear form with colour panels with local themes which will be better integrated with the existing landscape and visual context.

Vantage Point E View east at Nam Fung Road looking towards proposed portal

(Represents VSRs having views looking towards proposed Nam Fung Portal including Staffs and Students of St. Paul Co-educational College Primary School (VSR O10), Travellers on Nam Fung Road (VSR T5)and Residents of Wong Chuk Hang Complex for the Elderly and Residents of Wong Chuk Hang Hospital and Complex for Elderly (VSR R8))

This vantage point (**Figures 6.10.9** refer) shows the proposed works at in relatively close proximity and demonstrate the change of visual amenity at street level along Nam Fung Road. The image shows the nature of the existing landscape, the potential scale of the Nam Fung Portal / Vent Building and, how the proposals can be accommodated within the future landscape context. The existing trees at the edge of the site will be replaced by new tree planting upon completion of proposed vent building. The form of the proposed structure adopts a stepped, block-like form designed with greening measures on building façade where condition allows and not interfering with air ventilation to reduce the apparent visual mass of the structure. The proposed new tree planting and greening is designed to soften the form of the structure, partially screen views and enhance its visual integration with the wooded landscape beyond.

Vantage Point F View north at street level of Ocean Park Road adjacent to Ocean Park Development currently under construction looking towards the proposed OCP Station and the associated viaduct structure

(Represents Visitors to Ocean Park (VSR C5) having views looking towards proposed elevated OCP Station)

This vantage point (**Figures 6.10.10** and **11** refer) shows the medium distance views towards the proposed works from a pedestrian level (Ocean Park Road) and the views available from the future car parking area for the proposed Ocean Park extension. It is designed to demonstrate the potential change in the visual amenity for visitors approaching Ocean Park following the implementation of the proposed scheme. The image shows the scale of the proposed elevated station and viaduct within the future landscape context and the measures utilised to reduce its apparent visual mass and ensure it is integrated, these measures including roadside shrub planting and climbing plants on station facade. Due to the land take constraints, and consideration of smooth pedestrian circulation at the approaching area to the Station, street tree planting are not technically feasible. It should be also noted that views to OCP Station from this vantage point will be largely screened upon completion of Ocean Park Extension currently under construction. The existing visual context for VSRs visiting Ocean Park will be changed upon to the completion of Ocean Park extension, and the proposed OCP Station with its careful and responsive architectural and landscape design will fit into the future recreational context replacing the existing infrastructure dominated landscape adjacent to the Park.

Vantage Point G View west at elevated level of industrial building at Heung Yip Street looking towards the viaduct leading to Aberdeen Channel Bridge

(Represents VSRs including workers in Wong Chuk Hang Industrial Building (VSRO3) and Residents of community facilities to the east of Ap Lei Chau Bridge (VSRR6) having views looking towards proposed viaduct leading to proposed Aberdeen Channel Bridge)

This vantage point (**Figures 6.10.12** refer) shows how the proposed viaduct with noise mitigation measures at a relatively short viewing distance would appear from the elevated floors of the adjacent industrial buildings. The image shows the scale of the proposed viaduct and associated noise enclosures / barriers, the measures incorporated within

the design of these structures to ensure that potential impacts are minimised and ensure where possible that there is good fit between the proposals and the industrial landscape context to the north and institutional landscape on the knoll to the south.

The existing visual amenity available to VSRs including workers in the adjacent industrial buildings and residents and visitors in the local community facilities, and pedestrians along Heung Yip Street will be changed through the introduction of viaduct above the existing nullah. Potential impacts will be minimised as far as possible through the careful, responsive and innovative design of the proposed viaduct and noise enclosures / barrier structures and the landscape restoration works below the viaduct and along edge of the nullah with the proposed introduction of new amenity and woodland planting. The proposed planting is designed to maximise the area of visible greenery, reduce the horizontal emphasis of the proposed viaduct structure and ensure a better visual integration between the proposed viaduct and its future landscape context. The treatment of the proposed noise enclosures / barriers is designed to abstract colours from the existing landscape context and the curvilinear form of the structure designed to reduce its horizontal emphasis.

Vantage Point H – View west at an elevated level from the industrial buildings at Heung Yip Street looking towards the proposed viaduct from WCH station

(Represents VSRs including workers in Wong Chuk Hang Industrial Buildings (VSRO3) and Travellers on Heung Yip Street and Ocean Park Road (VSRT3) having views looking towards proposed elevated viaduct along the nullah)

This vantage point (**Figures 6.10.13** refer) shows the proposed works in close range views from elevated positions within the surrounding industrial buildings. It demonstrates how the proposals can be accommodated within a landscape ranging from the industrial landscape context to the north and existing cooked food market and temple context to the south. The image shows the scale of the viaduct and associated noise enclosure / barrier structures, and the measures incorporated into their design to minimise potential impacts and ensure the proposals are integrated within their setting.

The existing visual context of VSRs including workers in the industrial buildings, visitors to the cooked food market and temple, and pedestrians along Heung Yip Street will be changed through the introduction of viaduct above existing nullah. As with the previous view point the main views are confined by buildings along the road, the woodland belts and the nullah. Through the careful and responsive design of the viaduct and associated columns and noise enclosure / barrier structures including the adoption of an organic, curvilinear form and careful column location avoid blockage of views of adjacent VSRs; the proposed amenity tree and shrub planting along the banks of the nullah, provision of new open space/ plaza for neigbourhoods and the landscaping of the area below the proposed viaduct it is intended to minimise as far as possible the potential visual impacts arising from the scheme proposals and enhance the surrounding area at street level adjacent to the cooked food market and temple. The planting at intervals along the length of the proposed viaduct is also designed to draw visual emphasis away from the horizontality of its form and screen views of the vertical supporting columns.

Vantage Point I – View east at an elevated level from the Rehabilitation Complex looking towards the viaduct leading from WCH Station

(Represents VSRs including workers in the Wong Chuk Hang Industrial Buildings (VSRO3) and Residents of the community facilities to the east of the Ap Lei Chau Bridge (VSRR6) having views towards proposed elevated viaduct leading to WCH Station)

This vantage point (**Figures 6.10.14** refer) shows the proposed works in short distance views from the elevated level of the Rehabilitation Complex on the knoll to the south of Heung Yip Road. The image shows the scale of the proposed viaduct and associated noise enclosures / barriers in the foreground and WCH Station in background relative to the existing landscape and visual context, and how a sense of visual integration can be achieved with the industrial landscape to the north and institutional landscape on the knoll to the south.

The viewpoint demonstrates the existing visual amenity available to VSRs including workers within the industrial buildings; residents and visitors to the community facilities and pedestrians along Heung Yip Street; and how this view will change with the introduction of the station and viaduct structures above the existing nullah and WCH Depot. Again views are enclosed and framed by the buildings along the road. The careful and responsive design of the viaduct and noise enclosures / barriers, and the proposed landscape works to reinstate the amenity of the nullah would serve to minimise the potential impacts as far as possible. The curvilinear form of the proposed viaduct and its associated noise enclosures / barriers is designed to reduce the horizontal emphasis of the structure and create more organic form within what is essentially an engineered water course. The use of the colour blocking for the noise attenuation structures utilises the colours and tonal range of the natural landscape and the pattern is designed to reduce the linearity of the structure. The massing of WCH Depot is minimised and carefully design to meet multi-truck railway operational requirement.

Vantage Point J – View east at an elevated level from Ap Lei Chau Bridge looking towards the proposed viaduct above the nullah with the backdrop of the Holy Spirit Seminary

(Represents VSRs including workers in Wong Chuk Hang Industrial Buildings (VSRO3), Travellers on Ap Lei Chau Bridge (VSRT2) and Travellers on Heung Yip Road and Ocean Park Road (VSRT3) having views looking towards the proposed viaduct leading to Aberdeen Channel Bridge)

This vantage point (**Figures 6.10.15** and **16** refer) shows the close proximity view from the bridge east towards the existing nullah with the picturesque Holy Spirit Seminary on the wooded knoll to the south of the nullah. The image shows the scale of the viaduct above the nullah leading to WCH Station and the measures incorporated within the design to reduce its apparent visual mass and ensure the best possible integration with the future context. The existing context shows the linearity of the engineered form of the nullah and the juxtaposition of the natural form of the wooded knoll and the hard edges of the northern side of the nullah with its industrial development.

The VSRs with view from this location include vehicle travellers and pedestrians on the bridge, and the workers within the adjacent industrial buildings. Their views will be changed through the introduction of the proposed viaduct structures above the existing nullah. Given that existing views are largely confined by buildings and topography which line the road corridor it is important that the proposed mitigation measures not only address the appearance of the proposed structures but also look to enhance the adjacent landscape through the planting of new amenity and street planting creating some visual connectivity with landscape context of the green knoll to the south. This is achieved through the adoption of a visually lightweight structure for the proposed viaduct and its curvilinear form, the use of colour blocking and the abstraction of natural colours and the tonal range of the wooded context and the use of an undulating form for the noise attenuation structure. In addition the proposed alignment of the viaduct structure is designed to leave the main view corridor along the nullah intact and allow for the merging of the proposed structure with the wooded backdrop. These measures together with the restoration of the tree and shrub planting on the lower hill slopes below the viaduct structure will serve to reduce the apparent visual mass of the structure; and minimise potential visual impacts.

Vantage Point K – View west at street level of Heung Yip Street adjacent to the Police Training School looking towards the proposed WCH Station and viaduct structures

(Represents VSRs including workers in Wong Chuk Hang Industrial Buildinsg (VSRO3), Users of Aberdeen Sport Ground (VSRC9), Staff and Students in Police College (VSRO4) and Travellers on Heung Yip Road and Ocean Park Road (VSRT3) having views looking towards the proposed viaduct from OCP Station to WCH Station)

This vantage point (**Figures 6.10.17** refer) is to show the close proximity view at street level from Heung Yip Road adjacent to Aberdeen Sports Ground. The image illustrate the scale of the viaduct above the nullah leading to WCH Station and the measures incorporated within the design to reduce its apparent visual mass and ensure the best possible integration with the future context.

The VSRs with view from this location include the workers within the adjacent industrial buildings and pedestrians walking along Ocean Park Road and Heung Yip Street and occasional users of the Sports Ground. Their views will be changed through the introduction of station and viaduct structures above the existing nullah. Given that existing views are largely confined by buildings and topography which line the road corridor it is important that the proposed mitigation measures not only address the appearance of the proposed structures but also look to enhance the adjacent landscape through the planting of extensive new amenity and street planting creating some visual connectivity with landscape context of the green knoll to the south. This planting will also serve to screen views of the supporting structure for the proposed viaduct and create visual linkage with the organic form of the proposed noise attenuation structures.

Vantage Point L – View north from an elevated level in the cable car from Ocean Park looking towards the proposed OCP Station, Nam Fung Portal and connecting viaduct

(Represents VSRs having views towards the proposed Nam Fung Portal, the railway tunnel approach (box structures) and viaduct leading to OCP Station including the Residents of Wong Chuk Hang Hospital and Complex for the Elderly (VSR R8), Residents of the developments on Shouson Hill (VSRR9), Visitors to Ocean Park (VSRC5), Staff and Students of St. Paul's Co-educational College Primary School (VSR O10), Staff and Patients of Grantham Hospital (VSR R13)

This vantage point (**Figures 6.10.18** and **19** refer) shows the proposed scheme in medium distance views from an elevated level within Ocean Park and to demonstrate the change of visual amenity following the implementation of the scheme proposals for visitors to the park, residents of Shouson Hill and travellers on the approach to Aberdeen Tunnel. The image shows the scale of the proposed Nam Fung portal / vent building, railway tunnel approach (box structures) and viaduct leading to the proposed OCP Station and shows the proposed integration of the structure within the future landscape context.

Upon the completion of the Ocean Park extension works, views from inside Ocean Park looking towards the proposed OCP Station will be blocked by the buildings under construction however there will be occasional partial views of the viaduct section and Nam Fung portal / vent building for visitors moving through existing dense peripheral planting which bounds the park. The approach to the design of the proposed OCP station will be designed with robust streetscape components matching the future design of the Ocean Park entrance plaza creating a unified and coherent design for the two areas.

Vantage Point M – View northwest from an elevated level within a construction site at Shouson Hill looking towards the proposed viaduct from Nam Fung Portal to OCP station

(Represents VSRs having views looking towards proposed railway tunnel approach (box structures) and viaduct leading to OCP Station including Residents of developments of Shouson Hill (VSRR9), Residents of Wong Chuk Hang Hospital and Complex for the Elderly (VSR R8) and Staff and St. Paul Co-educational College Primary School (VSR O10))

This vantage point (**Figures 6.10.20** refer) shows medium distance views of the proposed scheme to demonstrate the potential change of visual amenity for residents of Shouson Hill. The image shows the scale of the proposed box structure and viaduct leading to OCP Station and demonstrates the measures incorporated within the design to minimise the potential visual mass of the structure and reduce its visual prominence. The scheme design has also sought to integrate the proposals within the existing infrastructure landscape context at the approach to the Aberdeen Tunnel.

The existing visual amenity enjoyed by from elevated positions looking towards the existing highway approach to the Aberdeen Tunnel portal will be changed with the introduction of the proposed box structure, and viaduct. The proposed landscape and visual mitigation measures include the careful and responsive design of the tunnel portal / vent building adjacent to the built area along Nam Fung Road, the responsive design of the box structure and viaduct following the existing highway structures and reinstatement of the roadside planting and the planting within the ex-Canadian Hospital site. In addition the proposed viaduct structure has been designed to be visually lightweight reducing its visual mass

relative to the landscape of its setting and permeability of the structure allowing visual access below the viaduct soffit. In combination these proposals will ensure that the potential visual impacts arising from the implementation of the scheme proposals will be minimised as far as possible both in terms of the appearance of the structure and its visual integration within the future landscape context.

Vantage Point N – Private viewpoint from 6A Shouson Hill towards the proposed Nam Fung Portal and viaduct to OCP Station

(Represents VSRs having views looking towards proposed Nam Fung Portal and viaduct to OCP Station including Residents of developments of Shouson Hill (VSRR9))

This vantage point (**Figures 6.10.21** and **22** refer) shows the medium distance views available to the residents of the exclusive Shouson Hill area north towards the proposed scheme. The image demonstrates the scale of proposed Nam Fung portal / vent building, viaduct and box structure leading to OCP Station and the measures designed to minimise its apparent visual mass in views from this location. It also demonstrates how through careful and responsive design including the noise barrier and climbing plants on box structures the potential impacts can be mitigated to an extent and the scheme better integrated into the future landscape context.

Vantage Point O – Private view point from 6A Shouson Hill towards the OCP Station and associated viaduct

(Represents VSRs having views looking towards proposed OCP Station and associated viaduct including Residents of developments of Shouson Hill (VSRR9))

This vantage point (**Figures 6.10.23** and **24** refer) shows the long to medium distance views available to the residents of the exclusive Shouson Hill area northwest towards the proposed scheme. The image illustrates the scale of proposed Ocean Park Station. It shows the measures designed to minimise the apparent visual mass of the proposed structures and the screening ability of the intervening topography, its covering of vegetation and the adjacent built structures. It also demonstrates how through careful and responsive design the potential impacts can be mitigated to an extent and the scheme better integrated into the future landscape context.

Vantage Point P – View south from the roof of Grantham Hospital looking towards the proposed OCP Station

(Represents VSRs having views looking towards proposed OCP Station and viaduct leading to WCH Station including Staff and Patients of Grantham Hospital (VSR O11))

This vantage point (**Figures 6.10.25** refer) was selected to show the medium distance views available to the staff and patients of the Grantham Hospital, views available from the existing bus depot and adjacent areas to the infrastructure landscape at the approach to Ocean Park. The image shows the scale of proposed OCP Station and viaduct leading to the Nam Fung Portal and the WCH Station. It also demonstrates how through careful and responsive design the potential impacts can be mitigated to an extent and the scheme better integrated into the future landscape context of the local area including the entrance to Ocean Park and its future development extensions.

Vantage Point Q – View east at street level from Nam Long Shan Road adjacent to Pao Yue Kong Swimming Pool looking towards the proposed WCH Depot

Vantage Point R – View west at street level from the Nam Long Shan Road adjacent to the secondary school looking towards the proposed WCH Depot

(Represents views from Users of Pao Yue Kong Swimming Pool Complex (VSRC6) and Residents of estates in Wong Chuk Hang (VSRR7) having views looking towards proposed WCH Depot)

These two vantage points (**Figures 6.10.26** to **28** refer) are designed to show the proposed works within close proximity from street level within Nam Long Shan Road looking towards the proposed WCH depot. The image shows the scale of proposed WCH Depot and how the proposals can be integrated within the existing residential and institutional landscape context. The existing bus terminal will be relocated and ex-WCH Estate have been demolished on 2009 and will be replaced by the proposed depot. The level of construction activity will have the short term impact

upon the character and amenity of the surrounding streetscape including Nam Long Shan Road. The depot façade will be fair faced concrete with greening measures at selected location where condition allows. New street trees will be planted as far as technically feasible within the pavement along the edge of the depot in combination of preserved trees to enhance the visible greenery at the pedestrian level and compensate for the loss of existing trees.

Vantage Point S – View south at street level from Police School Road looking towards the proposed WCH Depot

(Represents views available to Staff and Students in the Police College (VSR O4) having views looking towards the proposed WCH Depot)

Similar to vantage points Q and R, this vantage point (**Figure 6.10.29** refer) shows the proposed façade treatment for the depot when viewed from close proximity from street level on Police School Road. The image demonstrate the scale of proposed WCH Depot and the measures incorporated within its design to reduce its apparent visual mass and enhance the sense of integration with the surrounding landscape context. Although the appearance of the depot is subject to detailed design it should aim to enhance the future streetscape context and provide a measure of visual integration with greening measures on the façade and roadside planting.

Vantage Point T View north from Ap Lei Chau promenade adjacent to Sham Wan Towers looking towards Aberdeen Channel Bridge

(Represents views from Residents of estates in eastern Ap Lei Chau (VSR R3.1), Recreational users of Ap Lei Chau waterfront promenade and park (VSR C3), Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter (VSR O9) looking towards the Aberdeen Channel Bridge, Staff and Students of Hong Kong True Light College (VSR O1) and Workers of dockyard alongside the typhoon shelter (VSR O2))

This vantage point (**Figures 6.10.30** and **31** refer) shows the proposed works at a close to medium range distance at Ap Lei Chau South waterfront. The image shows the scale of proposed Aberdeen Channel Bridge and associated noise enclosures / barriers and how it can be accommodated within the existing infrastructure and waterfront landscape context. The proposed bridge is designed in line with existing bridge structure and this will serve to minimise the cumulative effect of introducing the proposed new bridge structure adjacent to an existing structure. The responsive design of the proposed bridge and noise attenuation structures will serve to reduce its visual mass and integrated the silhouette of the bridge structure with that of the existing bridge beyond. This measure in addition to the colour treatment of the proposed noise attenuation structures is designed disguise its functional appearance and reduces the impact to neighbourhood residents living at elevated level and visitors to Ap Lei Chau waterfront.

Vantage Point U View at an elevated level from the footbridge opposite to Sham Wan Towers looking towards the proposed works area for the tunnel section connecting proposed Aberdeen Channel Bridge and to the LET Station

(Represents views available to residents of estates in eastern Ap Lei Chau (VSR R3.1), Recreational users of Ap Lei Chau waterfront promenade and park (VSR C3), Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter (VSR O9) looking towards the Aberdeen Channel Bridge, Staff and Students of Hong Kong True Light College (VSR O1) and Workers of dockyard alongside the typhoon shelter (VSR O2))

This vantage point (**Figures 6.10.32** and **33** refer) shows the proposed tunnelling works from close proximity from the elevated footbridge level opposite to Sham Wan Towers. The image shows the scale of cut and cover works area for the tunnel section connecting the proposed Aberdeen Channel Bridge with the LET Station and how the scheme will be integrated within the existing infrastructure and waterfront landscape context. Given the scale of the proposed tunnelling works, and the proposed reinstatement with new tree planting to soften its engineered appearance, the quality of the landscape and visual amenity at both street and elevated levels will remain largely unchanged. The existing site with degraded buildings will be replaced by a recreational landscape that would also enhance the local visual amenity.

Vantage Point V – View north at street level from Lee Nam Road looking towards the proposed SOH Station Vent Building

(Represents views from Residents of South Horizons (VSR R2.2) looking towards the vent building of SOH Station at Lee Nam Road)

This vantage point (**Figures 6.10.34** and **35** refer) shows the proposed works at a close proximity from pedestrian level on Lee Nam Road. The image shows the scale of proposed vent building and the measures incorporated within its design to ensure it will be successfully integrated within the future residential and roadside landscape context. Greening measures will be incorporated within the building design as far as technically feasible to reduce the apparent visual mass of the structure, soften the built form, ensure good visual integration with existing rock cut slope, disguise its functional appearance and enhance the future roadside amenity. Given the scale and form of the proposed vent building and its physical integration within the existing landform it will not form a major component in the future views available to pedestrians and future residents.

6.10 Environmental Monitoring and Audit

The design, implementation and maintenance of landscape and visual mitigation measures is a key aspect and should be checked to ensure that they are fully realised, thus EM&A for landscape and visual resources should be undertaken. Implementation of the mitigation measures recommended shall be monitored through the site audit programme.

6.11 Conclusion

6.11.1 Compatible with the Landscape Planning Framework

The proposed railway works will encroach upon a number of zoning areas within the seven Outline Zoning Plans which cover the proposed alignment and a small part of study area at Fenwick Street under the Urban Design Study for the New Central Harbourfront which will be acquired as temporary works area for site storage. Areas zoned for Open Space, Government, Instruction and Community, Green Belt and Residential, Industrial etc. will be in conflict with the proposed works, however, for the large part of the proposed works will be located along road corridors and the affected zoning areas will be restored to their original condition. The occupancy as the temporary works area at Fenwick Street could be restricted to a yearly basis with three months advance notice for termination when there is a fixed programme for the implementation of works proposed under the current Urban Design Study and will be handed back to Government. Thus, the project will not lead to a permanent degradation of the landscape setting of an area following the full establishment of the recommended mitigation measures, and will not affect its viability in terms of being a landscape planning designation. The proposed scheme including the track alignment, the proposed above ground structures and associated developments thus considered to be tolerable to the planning intention of development control framework with full establishment of recommended landscape and visual mitigation measures and hence they will be integrated with the future outlook of this urban - rural landscape context.

6.11.2 Landscape Impact

With the implementation of responsive design of above ground structures with greening measures on the built structures where condition allows in combination with the full establishment of tree planting within the affected amenity or slope areas together with the preserved trees and restoration of the disturbed areas following the completion of the works, the residual impacts on the majority of the identified landscape resources would be slight to negligible.

The creation of new open spaces with tree and shrub planting and sitting out areas underneath proposed viaduct will also beneficial existing landscape context along Staunton Creek Nullah (LR8). Open yard at waterfront promenade under Ap Lei Chau Bridge (LR10.1) originally utilised for dragon boat storage and vessel repair area will be enhanced with full establishment of planting at the embankment of proposed Aberdeen Channel Bridge. The context of utilities Facilities at Chung Hom Kok (LR2.18) will be enhanced by new tree planting. The landscape mitigation approach

would also include tree planting to compensate for the loss of the existing trees and enhance the local landscape context particularly in the screening and visual integration of the proposed engineering structures. The proposed scheme has sought to preserve existing trees wherever possible and where this is not possible transplant them to new locations within the works site. Therefore upon full establishment of the recommended mitigation measures will benefit these LRs.

Following the planting concepts discussed and residual impact in **Section 6.7.5** and **6.9.3**, a replanting ratio of minimum 1:1 in terms of quantity and quality except for slope works according to in accordance with ETWB TCW No. 3/2006. This tree replanting ratio would compensate the total girth and number of tree loss within open space or in roadside amenity area, as well as the total number of tree loss on sloping area. Given the constraints of growing condition and safety reasons of planting larger size tree stock on sloping areas, greening measures on new formed and remnant slopes, including extensive hydroseeding and whips planting, would restore the quality of these greenback drop in urban area. The retention of existing trees through their preservation in-situ and transplanting and the successful establishment of the newly planted trees will form part of the roadside and slope planting enhancing the amenity of the local areas and providing for the thermal comfort of pedestrians. In the wider landscape context, the green backdrop will be reinstated upon full establishment of greening on sloping areas. The proposed compensatory and new tree planting, which include approximately 2,000 trees in open space and roadside planting areas and 7,360 whips on slope will utilise both ornamental, native species and woodland mix. Semi-mature to standard sized stock will be used to create an instant greening effect at local level. In combination with preservation of 1,615 trees in-situ or through transplantation, there will be a net gain of trees upon full establishment of proposed tree planting in roadside planting and amenity area and whip planting on sloping areas. These proposals will be subject to further development during the detailed design stage of the project.

Given that much of the proposed works will utilise tunnelling methods and that the proposed works areas will be restored following the completion of the works the identified LCAs will not for the most part be significantly impacted by the proposals. Impacts are likely to be negligible residual impact during operational phases (Year 10) of the project for all LCAs with full establishment of recommended landscape and visual mitigation measures. These measures include reinstatement of disturbed areas to its original status, introduction of new roadside and amenity planting and new woodland mix planting on disturbed sloping areas etc.

The proposed innovative and responsive design of the viaduct structures and their associated noise attenuation measures, their proposed alignment and horizontal form; and the introduction of extensive tree and shrub planting together with the preserved trees will serve to mitigate much of the potential adverse impacts. It is likely that with the full establishment of the proposed mitigation measures and the growth to maturity of the proposed tree and shrub planting the proposed scheme will form a relatively small component within the future landscape context.

6.11.3 Visual Impact

As has been described above the majority of the works areas disturbed by the proposed works will be restored following the completion of the construction phase of the project. These restoration measures in combination with the implementation of new amenity areas upon sectional completion of station and railway alignment will do much to mitigate potential impacts. However the key mitigation measure for the components of the proposed scheme has been the adoption of innovative and responsive designs for the proposed engineering structures including for instance the viaduct section, its associated noise barriers and enclosure and the above ground structures associated with the tunnel sections of the proposed alignment. As such the level of visual intrusion arising from the introduction of these structures further mitigated by the proposed tree and shrub planting will therefore be alleviated to an extent.

The visual amenity of users of the sitting-out areas and playground at Heung Yip Road adjacent to the Nullah (VSRC7), Visitors to Tai Wong Ye Temple (VSRC8), and Travellers along Heung Yip Road and Ocean Park Road (VSRT3) and Travellers on Wong Chuk Hang Road (VSR T4) will be changed significantly through the introduction of viaduct along the existing road or nullah from Ocean Park to Wong Chuk Hang. With the adoption of responsive design of viaduct and noise enclosure / barrier structures; and the restoration of the disturbed areas will new amenity tree and shrub

planting beneath the viaducts; and the use of vertical greening measures where possible on built structures, the potential residual impact to the visual amenity of these VSRs will be mitigated to slight adverse.

The impacts to visual amenity would be limited to the staff and students at elevated floors of St. Paul's Co-educational College Primary School (VSRO10) arising through the introduction of the proposed Nam Fung Portal and railway tunnel approach (box structures) adjacent to the school. Given the combination of buffer planting associated with the proposed structures the potential residual impacts will be mitigated to a predicted slight adverse.

The visual amenity of Residents of Community facilities to the east of Ap Lei Chau Bridge (VSRR6), Wong Chuk Hang Hospital and Complex for the Elderly (VSRR8), Workers in Wong Chuk Hang Industrial Buildings (VSRO3), and Staff and Students at the Police College (VSRO4) will be changed through the introduction of viaduct in their existing visual context. Upon full establisment of new tree planting and the station design will mitigate the potential visual impacts to an extent and so the potential visual impacts for VSRs will be reduced from moderate to slight adverse.

The existing visual context for the residents of estates in eastern Ap Lei Chau (VSR R3.1) will be changed as a result of the introduction of the proposed Aberdeen Channel Bridge with its associated noise enclosures / barriers. The residual impact will be mitigated to an extent from moderate to slight adverse through the responsive design of new bridge alignment and noise barrier.

Other adverse impacts will include those experienced by Residents of Ap Lei Chau Estate (VSR R2.1), Residents of South Horizons (VSR R2.2) , Residents of estates in eastern Aberdeen (VSR R5), Residents of community facilities to the east of Ap Lei Chau Bridge (VSR R6), Residents of estates in Wong Chuk Hang (VSR R7), Future residential developments in the area zoned "R(E)" abutting Ap Lei Chau Praya Road (PVSR R12), Workers of dockyard alongside of typhoon shelter (VSR O2), Staff and Visitors in Jumbo Floating Restaurant in Aberdeen South Typhoon Shelter (VSR O9), Users of Pao Yue Kong Swimming Pool Complex (VSR C6). Travellers along Aberdeen Channel (VSR T1), Travellers on the Ap Lei Chau Bridge (VSR T2), also be alleviated to slight adverse through responsive built structure design, restoration of the disturbed areas with new tree and shrub planting; and the integration of greening measures on built structures where technically feasible.

The majority of the works areas will be restored following the completion of the construction works and these proposals will be combined with new amenity areas implemented following the sectional completion of the station and above ground structures, and the railway alignment. Roadside tree and shrub planting will be introduced, where space allows, and the responsive design of built structures will be adopted. Through the implementation of the proposed mitigation strategies the visual intrusion of the above ground structures such as the station entrances, vent shafts, viaduct sections, bridge, tunnel portal and plant buildings will be significantly reduced. The moderate to slight impact to the visual amenity of VSRs including Residents of Wah Kwai Estate (VSR R1), Residents of mansions at Ap Lei Chau Main Street (VSR R3.2), Residents of developments on Shouson Hill (VSR R9) , Staff and Patients of Grantham Hospital (VSR R13), Recreational users of Ap Lei Chau waterfront promenade and park (VSR C3), Recreational users in Sham Wan Marina (VSR C4), Visitors to Ocean Park (VSR C5), Users of Aberdeen Sport Ground (VSR C9), Visitors to Hong Kong Park (VSR C10), Users of Lee Nam Road Sitting-out Areas (VSR C11), Travellers on Nam Fung Road (VSR T5), Travellers on Harcourt Road (VSR T6), Travellers on Queensway Road (VSR T7), Travellers on Supreme Court Road (VSR T8) will be mitigated to an extent to negligible following the full establishment of the recommended mitigation measures.

The potential impacts on the VSRs including Residents of estates in western Aberdeen (VSR R4), Visitors of Permanent Chinese Cemetery, Aberdeen (VSR C1), Hikers in Aberdeen Country Park (VSR C2), Staff and Students of Hong Kong True Light College (VSR O1), Staff and Students in South Island School (VSR O5), Workers and visitors in Cyber Port (VSR O11) will be mitigated to negligible through the responsive design of new bridge alignment and noise barrier.

The potential impact on the VSRs, including Workers in Commercial Buildings along Queensway and Harcourt Road (VSR O6), Staff and Students in Hong Kong Academy of Performing Arts (VSR O7) and Future Staff and Visitors in Central Government Complex and LegCo Complex and associated open spaces at Tamar Site, Central (PVSR O8),

who have views to the proposed works in Harcourt Garden, will be mitigated to negligible upon the full establishment of the recommended mitigation measures. The Harcourt Garden will be replaced by a new design which incorporates the vent buildings and entrances into a terraced garden. The use of a combination of preserved and newly planted trees, greening and provision more shaded sitting areas within this dense urban context will enhance the amenity of the area.

The impact on VSRs including Residents of developments at the Peak on Mount Kellett (VSR R10) and Residents of developments on Mount Cameron (VSR R11) is negligible due to their nature and viewing distance.

In accordance with Annex 10 of the EIAO-TM, the landscape and visual impacts of the proposed works would be 'acceptable with mitigation measures' that is to say 'there would be some adverse effects, but these can be eliminated, reduced or offset to a large extent by specific measures'.