

Annex B
Visual Impact Assessment



4 ASSESSMENT OF VISUAL IMPACTS

4.1 INTRODUCTION

4.1.1 To assess the visual impacts of the proposed installation, this chapter of the VIA will appraise the anticipated visual change at each Key Public VP and an assessment of the overall visual impact.

4.2 SOURCE OF VISUAL IMPACT

- 4.2.1 An extensive part of the proposed installation abutting Lots RBL No. 1220 and 1221, and travelling along the Access Road which leads towards Chung Hom Kok Road, together with the proposed Beach Manholes and future end-shore part of the ALC, will be laid underground.
- 4.2.2 The remaining surface mounted sections of the proposed cable landing ducts supported on racks which emerge above ground from the top of the soil slope below the Access Road and travel downhill to reach the proposed beach manholes are the main source of visual impact.
- 4.2.3 The permanent works components of the proposed installation which may give rise to potential visual impacts during the operational phase include the presence of approximately 26.60 linear metres of proposed surface mounted cable landing ducts within the Application Site. For PlanD's reference, outside the Application Site and within the Project Site, approximately 169.04 linear metres of the proposed surface mounted and underground cable landing ducts will be present.

4-3 PROPOSED VISUAL MITIGTAION MEASURES

4.3.1 The visual mitigation measures set out in **Table 4.1** are proposed to reduce or eliminate the landscape impacts of the proposed installation.

Table 4.1: Proposed Visual Mitigation Measures

ID No.	Landscape Mitigation Measures		
Design Stage Mitigation Measures			
DM1	Optimal / Sensitive Alignment of Cable Landing Ducts		
DM2	Optimal / Sensitive Location of Beach Manholes		
Construction Stage Mitigation Measures			
CM1	Minimal Extent of Working Areas		
CM2	Minimal Duration of Construction Works		
CM3	Removal and Replacement / Making Good of Boulders / Shingle Disturbed by Works		
Operational Stage Mitigation Measures			
OM1	Minimal Sizing of All Built Structures		
OM2	Recessive Chromatic Treatment of Built Structures (including Cable Landing Ducts)		
OM3	Compensatory Planting for Felled Trees (Off-site)		

4.3.2 These mitigation measures are set out in more detail below.



Visual Impact Assessment (Final)

Design Stage Mitigation Measures

DM1 - Optimal / Sensitive Alignment of Cable Landing Ducts

4.3.3 The alignment of the proposed cable landing ducts has been optimised to facilitate the landing of the ALC at the cable landing stations at Lots RBL No. 1220 and 1221 within the shortest possible distance from the high-water mark, thereby minimising its footprint within the "CPA" zone. It has also been designed to avoid trees as far as practicable, with the possibility of supporting racks being further adjusted section by section to account for on-site conditions, so as to minimise impact to trees and boulders.

DM2 - Optimal / Sensitive Location of Beach Manholes

4.3.4 The location of the proposed beach manholes has been selected to minimise disturbance to existing boulders on the rocky shore, thereby preserving the character of the shore as far as possible, whilst avoiding conflict with other existing and planned cable landing facilities in the same beach area.

Construction Stage Mitigation Measures

CM1 - Minimal Extent of Working Areas

4.3.5 The extent of the construction works area has been limited to a maximum 1.5m from the proposed cable duct alignment and associated structures. This will minimise potential disturbance to surrounding landscape and trees.

CM2 - Minimal Duration of Construction Works

4.3.6 The duration of the proposed construction works has been limited to the shortest possible time required to undertake the works whilst putting in place the necessary safety and environmental mitigation measures. This will ensure that the duration of the proposed works is minimised whilst ensuring safety and environmental acceptability of the works.

CM3- Removal and Replacement / Making Good of Boulders / Shingle Disturbed by Works

4.3.7 Boulders and shingle disturbed by the proposed construction works will be removed or lifted, stored and placed back at their original locations after the completion of works. This will ensure that the proposed works does not substantially alter the resources or character of the rocky shore on which a very limited portion of the proposed works lie.

Operational Stage Mitigation Measures

OM1 - Minimal Sizing of All Built Structures

4.3.8 All built structures are designed to be compact and of minimal sizing so as to minimise the overall footprint of the proposed installation. This will contribute to minimising ground vegetation clearance and visual prominence of the installation.

OM2 - Recessive Chromatic Treatment of Built Structures (including Cable Landing Ducts)

4.3.9 The above-ground sections of the proposed cable landing ducts (including supports) will be treated chromatically so as to minimise their visual prominence. To this end, a dark charcoal colour with a matte finish will be adopted.

OM3 - Compensatory Planting for Felled Trees (Off-site)

4.3.10 The feasibility of undertaking compensatory planting within the Application Site has been thoroughly and repeatedly examined. However, given the hillside terrain, thin soils and existing vegetation cover, planting opportunities are very limited within and around the Application Site.



Visual Impact Assessment (Final)

- 4.3.11 Government regulation (Page C2 of Appendix C of DEVB TC(W) No. 4/2020) states that seedling trees should be planted on slopes, as their root balls are better adapted to sloping terrain than larger Light Standard or Standard trees. Inside and around the Application Site, the thin, rocky soils and competition and shading from existing vegetation make planting and successful establishment of seedlings in these areas impracticable. In addition, space within the Application Site is extremely limited and seedling trees planted close to the cable ducts are likely to be shaded out by the shadows cast by the twin ducts themselves.
- 4.3.12 For this reason, compensatory tree planting is proposed to take place in the eastern part of Lot RBL No. 1220 to the north-east of the Application Site. This Lot forms part of the same project but is outside the scope of this Application (refer to **Figure 4.2 of the Landscape Impact Assessment**).
- 4.3.13 8 nos. compensatory trees for this project will be planted at Light Standard size at a compensation ratio of 1:1 by number, as there is insufficient space within the Lot to allow for a ratio of 1:1 by diameter at breast height (DBH).
- 4.3.14 Given the aforementioned site constraints within and around the Application Site, compensatory planting on site is impracticable. While the proposed compensatory planting will not mitigate the construction visual impact of loss of trees in the Application Site, it can be reasonably expected that in the medium and long term, colonisation and re-establishment of adventitious vegetation will act to mitigate these impacts.

4.4 APPRAISAL OF VISUAL CHANGE

VP1 Access Road

Visual Composition

- 4.4.1 The sky is visible in the background, whilst the Access Road leading towards Chung Hom Kok Road can be seen at the bottom of the foreground abutting a pedestrian footpath. In the middle ground lies existing vegetation along the edge of a slope which abuts the southwestern boundary of Lot RBL No. 1158. Entrance of the stairs which lead to a seemingly unmaintained, littered paved footpath heading towards the southern shore of Chung Hom Kok is barely visible behind the existing low scrubs in the middle ground.
- 4.4.2 The proposed cable landing ducts will emerge above ground from a pair of draw pits proposed to facilitate change in the direction of travel towards the shore to the south. Given that the cable landing ducts will enter the bank at low level and out of sight, they will not be visible from VP1 during the operational phase. As such, visual receivers are not expected to experience any change to the visual composition at VP1 following the implementation of the proposed installation.

Visual Obstruction

4.4.3 By entering the bank at lower level, the emergence of the proposed installation will not intercept or block any view of the sky nor the Access Road. The proposed installation will also not give rise to visual obstruction of trees and vegetation abutting the Access Road as it will be at lower level covered by the dense and seemingly overgrown low scrub and ground vegetation.

Visual Elements

4.4.4 A paved and seemingly overgrown pedestrian pavement abutting the vehicular Access Road is visible at lower level, with low scrub in the middle distance, and secondary woodland abutting the International Submarine Cable Landing Station in the background. The proposed installation will enter



Visual Impact Assessment (Final)

the bank at lower level and out of sight and therefore will not give rise to any change to the identified elements.

Visual Resources

4.4.5 The visual resources at VP1 mainly comprise secondary woodland abutting the seemingly overgrown pedestrian pavement and vehicular Access Road. The proposed installation will be barely visible at VP1 as it will be mostly screened by existing vegetation on the Access Road. It is therefore considered that the proposed installation will not change the condition, quality and character of the view which are largely shaped by the visual resources of VP1.

VP2 Southern Beach

Visual Composition

- 4.4.6 The existing view at VP2 is primarily composed of sandy and rocky shore in the foreground and middle ground, accompanied by secondary woodland above the shore in the background.
- 4.4.7 As the proposed beach manholes will be buried below ground with only the manhole cover at ground level be hidden by re-established grass, and given the very limited scale of the proposed installation overall, it is anticipated that the proposed installation will not substantially change the visual composition at VP2.

Visual Obstruction

4.4.8 Since the proposed installation will be screened by dense vegetation on the hillside, and since the proposed beach manholes will eventually be hidden by re-established grass (and therefore not be visible at VP2), it is considered that the proposed installation will not give rise to any visual obstruction at VP2.

Visual Elements

4.4.9 The visual elements visible at VP2 include coastal water, boulders and shingle on the rocky and sandy shore in the foreground and middle ground, and secondary woodland in the background. The proposed beach manholes will not be visible at VP2 given the screening effect of the re-established grass. Taking into account the very limited footprint of the proposed installation, it is not anticipated that the proposed installation will significantly alter the view as shaped by a composition of these visual elements. The loss of 12 nos. trees on the hillside with result in very slight visual impacts during construction when seen against the mass of woodland vegetation along the coastal hillside as a whole. It can reasonably be expected that these impacts will be mitigated in the medium and long term by the colonisation and re-establishment of adventitious vegetation.

Visual Resources

4.4.10 Given the very small scale of the proposed installation and the screening effect offered by the dense vegetation forming part of the secondary woodland on the toe of the hillside, only a very minor part of the proposed installation will be exposed and will be hardly visible at VP2. It is therefore considered that the proposed installation will not substantially affect the condition, quality and character of the view as defined by the visual resources identified.

4.5 IMPACT ON PUBLIC VIEWERS

VP1 Access Road

4.5.1 During the operation of the proposed installation, public viewers will not have clear views of the installation given that the works will leave the supporting racks and enter underground ducts in the



Visual Impact Assessment (Final)

- bank below the level of the Access Road itself. These viewers are also expected to focus on their respective activities and therefore will likely not notice the proposed installation, and will continue to enjoy views of existing vegetation abutting the access road.
- 4.5.2 Taking into consideration the lack of visibility of the proposed installation, the Moderate sensitivity of the public viewers, and that the proposed installation will not give rise to any substantial visual change at VP1, there will be **Negligible** impact on public viewers resulting from the proposed installation.

VP2 Southern Beach

4.5.3 Whilst a very minor southern portion of the proposed installation will be visible, it will gradually be covered by vegetation over time. Given that and the small scale of the proposed installation, with the implementation of proposed visual mitigation measures, the proposed installation is not anticipated to give rise to any visual obstruction nor substantially alter the visual composition, visual elements and visual resources of VP2. Taking into account the limited visibility, the High visual sensitivity of VP2, the Negligible visual change arising from the proposed installation following the implementation of the proposed mitigation measures, the potential impact of the potential installation at VP2 is considered **Negligible**.

4.6 ASSESSMENT OF OVERALL VISUAL IMPACT

4.6.1 The visual impact of the proposed installation is summarised in **Table 4.2**, taking into account the sensitivity of key public viewers, visual resources and amenities identified, the magnitude, extent and duration of impact, any consequent improvement and/or degradation of the surrounding area's visual quality and character, as well as the planning intention and any known planned developments in the area. As can be seen, the proposed installation is expected to result in an overall **Negligible** visual impact as defined in TPB PG-No. 41.

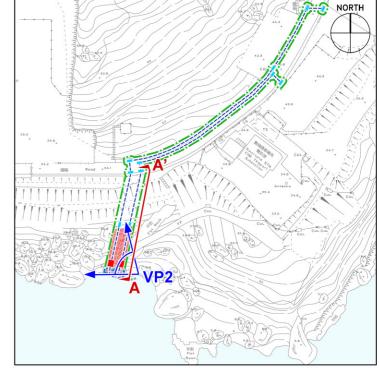
Table 4.2: Summary of Visual Impact Assessment

Viewing Point	VP1: Access Road	VP2: Southern Shore
Sensitivity of Public Viewers	Moderate	High
Effect on Visual Composition	Negligible	Negligible
Visual Obstruction	None	None
Effect on Public Viewers	Negligible	Very Slight upon completion and becoming Negligible over a period of time
Effect on Visual Resources	Negligible	Very Slight upon completion and becoming Negligible over a period of time
Overall Magnitude of Visual Change	Negligible	Very Small
Overall Visual Impact at Viewing Point	Negligible	Negligible
Overall Visual Impact of the Proposed Installation	Negli	igible



Before Implementation

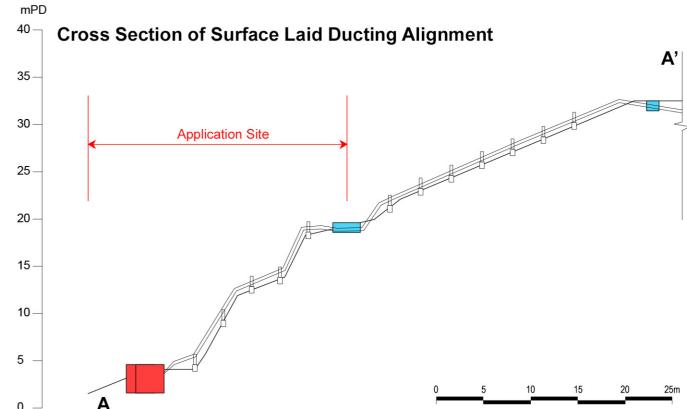




Key Plan



After Implementation



Section 16 Planning Application for Proposed Public Utility Installation (Submarine Cable and Landing System) at Chung Hom Kok, Hong Kong Island



VP2 View & Photomontage from Rocky Shore – Looking Northwest

Scale N.T.S.@ A3 Date October 2024 Figure No. 3.3