Appendix E

Replacement pages of revised Visual Impact Assessment

5 Assessment of Visual Impact

5.1.1 This Section evaluates the visual impact of the Indicative Scheme by comparing it with the Baseline Scheme. Reference is made to TPB PG No. 41 and the visual appraisal for the Indicative Scheme is carried out on the basis of:

- Visual composition,
- Visual obstruction,
- Effect on public viewers and
- Effect on visual resources.

5.1.2 The overall visual resultant impact of the Indicative Scheme on the visual sensitive receivers is appraised based on the classifications of visual impacts as set out in paragraph of 4.11 of the TPB PG No. 41, which includes:

- Enhanced;
- Partly enhanced/partly adverse;
- Negligible;
- Slightly adverse;
- Moderately adverse and
- Significantly adverse.

VP 1: Chow Tin Tsuen Playground (Figure 4)

5.1.3 This VP is taken inside Chow Tin Tsuen Playground. This short-range VP is located approximately 75m to the east of the Application Site and has a direct view to the Indicative Scheme. It represents views of users who engage in recreational activities in the basketball court and Children's Play Area. Therefore, the visual sensitivity is considered **high**.

5.1.4 **Effects on Visual Composition** – The visual composition of this VP comprises of park furniture such as children's play area, benches and lamp post in the foreground, village type housing of Chow Tin Tsuen with 2-3 storeys with vegetation between the building blocks in the middle-ground, and sky view in the background. Only part of AD3 will be visible behind the village type housing and the vegetation on the left side from this VP. While AD3 will block a portion of the open sky view in the background, the Indicative Scheme is considered compatible with the surrounding

environment comprised of existing village houses. Therefore, the effect on visual composition of the Indicative Scheme is **slightly adverse** as compared to the Existing Condition.

5.1.5 **Effects on Visual Obstruction** – Despite blocking part of the open sky view to the left in the background, a large portion of AD3 has been screened off by the village type housing and the vegetation in the middle ground, mitigating the visual bulkiness of the Indicative Scheme. The clear direct view towards the open sky in the middle view is also maintained in the Indicative Scheme. Thus, the visual obstruction is considered as **slightly adverse**.

5.1.6 **Effects on Public Viewers** – The VP is located at the Children's Play Area next to the basketball court, in which public viewers mainly engage in recreational activities. Due to the close distance to the Application Site, the visual effects on public viewers can hardly be neglected. However, the trees in the middle-ground have served as a visual relief, screening off lower portion of the AD3, a **slightly adverse** visual effect on public viewers is identified.

5.1.7 **Effects on Visual Resources** – The visual element in this VP is the open sky view on the background and the vegetation in the middle ground. As a short-range VP, AD3 slightly reduce the openness of the sky by screening part of the open sky view behind the tress. However, the clear direct view of the sky view is preserved, and the vegetation are also still clear in sight. Thus, the effects on visual resources are **slightly adverse**.

5.1.8 In the Reference Scheme, the LC2 protrudes from the dense tree cover, blocking a portion of the open sky view in the background, in a similar manner.

5.1.9 Despite AD3 blocks a small portion of the distant sky view, it will not alter the key visual composition, including the built-up structure in the foreground and the vegetation in the middle ground. In view of the screening effect of the existing village type housing and green resources, the visual impact of the Indicative Scheme to this VP is **slightly adverse**.

VP 2: Ta Ku Ling Ling Ying Public School (Figure 5)

5.1.10 This short-range VP is located immediately next to the Application Site. It represents views of the service users and workers of the Ta Ku Ling Ling Ying Public School, including teachers, students, and parents. This VP is

taken at the entrance of the School. Public viewers will have a direct view towards the Application Site when entering and leaving the School. Therefore, the visual sensitivity is considered **medium.**

5.1.11 **Effects on Visual Composition** – The visual composition from this VP comprises plants, shrubs and trees along two sides of the paved access road to the School in the foreground, the mature Fung Shui Woodland in the middle ground and the ridgeline of Robin's Nest and distant sky view in the background. The Application Site is located immediately on the two sides of the access road. In the Indicative Scheme, DC3 and AD2 are situated on the two sides of VP and are visible behind the shrubs and trees in the foreground. While the Indicative Scheme will bring in new visual element, green resources are still the main visual composition in this view. Soft landscape edges along the Development Site boundary have also been introduced for better blending in, with respect to the existing rural locality. Moreover, the clear direct view of the Fung Shui Woodland, ridgeline and open sky view in the background is preserved through the 40m-wide building separation in the Indicative Scheme. As such, the visual composition is subject to **moderately adverse** impact from this VP.

5.1.12 **Effects on Visual Obstruction** – While the Indicative Scheme will screen parts of the sky view on the two sides of this VP, unobstructed views towards the Fung Shui Woodland, ridgeline and open sky view are maintained through the wide building separation. Therefore, the impact of the Indicative Scheme on visual obstruction is **moderately adverse**.

5.1.13 **Effects on Public Viewers** – Given that the VP is located immediately next to the Application Site, the Indicative Scheme is noticeable from such a close distance. While the public viewers who pass through this VP briefly when entering or leaving the school are expected to have a less open sky view on the two sides, DC3 and the lower portion of AD2 are screened and softened by the tree plantings along the boundary of the Indicative Scheme. With the 40m-wide building separations between DC3 and AD2, the direct view towards the Fung Shui Woodland of Chow Tin Tsuen and Robin's Nest is preserved, providing a visual relief for public viewers. Hence, the impact on public viewers is considered **moderately adverse**.

5.1.14 **Effects on Visual Resources** – While a portion of the open sky view will be obstructed by the Indicative Scheme, a permeable view towards the Fung Shui Woodland of Chow Tin Tsuen in the middle ground and the ridgeline of Robin's Nest is maintained in the Indicative Scheme. The soft

edge of greening along the boundary of the Indicative Scheme will help mitigate the **moderately adverse** effect on visual resources.

5.1.15 As the negative visual impact of the Indicative Scheme can be mitigated by the incorporation of a 40m-wide building separation providing a sense of visual relief, the overall effect of the Indicative Scheme from this VP is considered **moderately adverse**.

VP 3: Lo Shue Ling (Figure 6)

5.1.16 This short-range VP is located at a distance of 180m to the west of the Application Site and is at an elevation of about 74.8mPD with a direct view towards the Application Site. It represents views of hikers and people engaging in recreational activities who would climb up Lo Shue Ling. Viewers from the VP clearly oversee the Application Site and its vicinity area and are sensitive to changes of the visual environment. Therefore, the visual sensitivity is considered **high**.

5.1.17 **Effects on Visual Composition** – The foreground of this VP is occupied by trees, fallow agricultural land and low-rise village houses in Ta Kwu Ling. The LT/HYW BCP, Heung Yuen Wai Highway, Northeast New Territories Landfill on Hong Kong side, and clusters of high-rise development on Shenzhen side are in the middle ground. The ridgeline of Robin Nest and that of Wutong Mountain with the Shenzhen TV Tower erected are in the background. Notwithstanding the Indicative Scheme will screen off part of the existing village settlements and greenery in the foreground and part of the ridgelines, the open sky view are maintained in the Indicative Scheme with a stepped building height profile descending from 120mPD to 80mPD. Moreover, building separations between R&D1 and R&D2, as well as DC3 and AD2 serve as important visual relief and corridors. Rooftop gardens, plantings and vertical vegetation on buildings will compensate the screened off green features. Architectural design features such as the use of colours and façade will also be given extra consideration during the detailed design stage for better visual compatibility with the rural context. As such, the existing visual composition is subject to **moderately adverse** impact from this VP.

5.1.18 **Effects on Visual Obstruction** – Given that the Indicative Scheme consists of mixed development, the existing fields, village settlements and foothills in the middle ground and part of the ridgelines in the back ground will be blocked. The open sky view in the background are unaffected by the Indicative Scheme. To minimise the impacts, the incorporation of

will cause **moderately adverse** visual impact from this VP with the incorporation of design mitigation measures in place.

VP 4: Fung Wong Wu Village Hall (Figure 7)

5.1.23 This medium-range transient VP is at a distance of about 330m to the east of the Application Site. It represents views of residents of Fung Wong Wu who will pass through this area when they enter or leave the village. The Indicative Scheme will be visible in the background with open area, refuse collection facilities, car parking spaces, and lush trees in the fore- and middle-ground. Therefore, the visual sensitivity is considered **medium**.

5.1.24 **Effects on Visual Composition** – The visual composition of this VP comprises dense shrubs and trees in the middle ground, filling up a large portion of the viewpoint with a backdrop of the open sky. Hard-paved driveway with car parking spaces available for villagers' use, refuse and recyclables collection bins are in the foreground. The dense trees screen off large portions of the Indicative Scheme, and only a small upper portion of AD2, AD3 and DC3 are visible behind the tall trees. While DC3 with a BH of 80mPD partly protrudes from the tree canopy and screen off the lower part of the sky view, the clear direct view of the dense vegetation and open sky view is largely preserved. The provision of rooftop gardens on DC3 also resonates with the existing green resources. Therefore, the impact on visual composition is considered **slightly adverse.**

5.1.25 **Effects on Visual Obstruction** – The major visual components of the VP are the open space area outside the Village Hall in the foreground, trees in middle ground, and the open sky view in the background. Though the Indicative Scheme reduces a small portion of the distant sky view, the incorporation of a stepped building height profile and the 40m-wide visual corridor will provide clear visual corridors towards the open sky view which will be largely preserved. With these design measures adopted, the visual bulkiness of the Indicative Scheme will be reduced and a permeable view towards the key visual resources is maintained. Therefore, the visual impacts on visual obstruction and visual permeability are considered **slightly adverse**.

5.1.26 **Effects on Public Viewers –** Though the public viewers who are primarily villagers of Fung Wong Wu would notice the upper parts of buildings proposed in the Application Site, they pass by the VP mostly for commuting purpose or gather only at special occasions. Since the line of trees in the foreground will largely screen off the lower portion of the

Indicative Scheme and a permeable view towards the open sky view is preserved through the wide building separations, the visual impact of the Indicative Scheme is marginal. Therefore, the visual impact on public viewers is **slightly adverse**.

5.1.27 **Effects on Visual Resources –** The key visual resources at this VP are the lush trees in the foreground and the open sky in the background. Although the Indicative Scheme will block some of sky view, only the upper parts of DC3 protrude from the tree crowns. With the wide building separations incorporated in the Indicative Scheme, these visual resources are largely retained. The rooftop gardens in DC3 also resonates with the existing green resources. Hence the effects on visual resources are **slightly adverse**.

5.1.28 Overall speaking, although the Indicative Scheme would reduce portion of the distant sky view at this VP, the incorporation of building separations and a stepped building height profile will reduce the overall visual bulkiness and the open sky view remains as a significant visual component at this VP. Therefore, the visual impact of the Indicative Scheme is considered **slightly adverse** with the mitigation by design measures.

VP 5: Muk Wu Nga Yiu Minibus Stop (Figure 8)

5.1.29 This VP at around 340m to the northwest of the Application Site is a minibus stop on Lin Ma Hang Road. This VP is to access medium-range visual impacts on transient passengers and villagers of Muk Wu Nga Yiu who have a view towards the Application Site when waiting for minibus. Therefore, the visual sensitivity is considered **medium**.

5.1.30 **Effects on Visual Composition –** The visual composition from this VP consists of the paved road surface of Lin Ma Hang Road and temporary structures on the fellow agricultural land opposite to the Muk Wu Nga You in the foreground. Dense trees, a high-voltage power tower and transmission lines on Lo Shue Ling are in the middle ground against the backdrop of the open sky view. The Application Site is in the background of the VP behind Lo Shue Ling. In the Indicative Scheme, a minor upper portion of the R&D2 and R&D3 will be visible from this VP with screening by tree canopies in middle ground. While the major portions of R&D Centres will be screened by the hill and lush trees, the incorporation of rooftop gardens in R&D Centres further enhance the compatibility of

VP 6: Ta Kwu Ling Police Station Bus Stop (Figure 9)

5.1.35 This medium-range VP is at a distance of about 500m to the northeast of the Application Site across Ping Yuen River. This bus stop serves the residents of nearby villagers and is next to the Ta Kwu Ling Police Station which is a Grade 3 historic buildings. It represents the views of transient passengers waiting for bus at this VP and workers of the Police Station who walk past this road junction when commuting. Therefore, the visual sensitivity is considered **medium**.

5.1.36 **Effects on Visual Composition** – The visual composition of this VP consists of paved road surface of Lin Ma Hang Road, a bus shelter on the left, and the Ta Kwu Ling Police Station on the right in the foreground, shrubs and trees in fellow agricultural land of Ta Kwu Ling Village in the middle ground and distant sky view in the background. The Application Site is located at the background of the VP behind the shrubs and trees, which Data Centres, R&D Centres, and two of the Ancillary Dormitories will be screened off by the tree canopies. Only the upper part of AD3 would be visible to the left of the existing trees in the middle. Despite AD3 blocks a small portion of the distant sky view, it will not alter the key visual composition, including the built-up structure in the foreground and the vegetation in the middle ground. The impact of the Indicative Scheme on the visual composition of VP is therefore considered **negligible.**

5.1.37 **Effects on Visual Obstruction** – The proposed AD3 will slightly reduce the distant sky view. Notwithstanding, the lush vegetation in the middle ground and the open sky view in the background are largely maintained. Hence, the impact of the Indicative Scheme on visual obstruction is considered **negligible**.

5.1.38 **Effects on Public Viewers** – At this VP, public viewers either wait for bus under the shelter or drive through this road junction to enter Ping Che Road/ continue on Lin Ma Hang Road. While the upper part of AD3 protruding from the vegetation in the middle ground might be noticed by the transient passengers, the vegetation in the middle ground has screened off the other buildings. The "effect on public viewers" at VP6 generated on transient passengers is therefore considered as **slightly adverse**.

5.1.39 **Effects on Visual Resources** – Although the Indicative Scheme will block a small part of the distant sky view, the extent of open sky view remains largely the same. Others key visual resources of this VP, including the lush shrubs and trees in the middle ground, will remain unchanged. Moreover,

Highway, LT/ HYW BCP, NENT Landfill, and medium- to high-rise development on Shenzhen side constitute the middle ground. The ridgeline of Wutong Mountain with the Shenzhen TV Tower, clusters of high-rises in Shenzhen and the open sky view form the background. The Application Site is located in the central location of the middle ground from this VP. The Indicative Scheme comprises of a mix of uses and developments in a stepped building height profile with incorporation of a number of building separations of 15m- and 30m-width. Looking from this long-range kinetic VP, the Indicative Scheme will not alter the key visual composition, including the vegetated hill slopes and fallow agricultural land in the foreground, as well as mountain ridgelines and open sky view in the background. With the stepped down BH profile descending from the hillside to the river, it is visually compatible with the natural slope gradient. With the high-density urban development in Shenzhen within visible distance, the Indicative Scheme – an International I&T Hub, will become a landmark feature and be compatible with the visual context of the boundary area between Hong Kong and Shenzhen. Therefore, impact of the Indicative Scheme on visual composition is considered **negligible**.

5.1.51 **Effects on Visual Obstruction** – The Indicative Scheme will cause no visual obstruction to the key visual resources of this VP, which include the lush vegetation on the hill slopes and fallow agricultural land in the foreground and middle ground, as well as the ridgeline of Wutong Mountain and open sky view in the background. Although a minor portion of the mountain is blocked, the Indicate Scheme will not add any visual bulkiness given the high-density, high-rise cityscape of Shenzhen in the backdrop. The impact of the Indicative Scheme on visual obstruction is **slightly adverse**.

5.1.52 **Effects on Public Viewers** – Public viewers at this VP are hikers engaging in recreational activities and overlooking the northeast New Territories and the city of Shenzhen. As a long-range VP, the Indicative Scheme will cause no visual change to the ridgelines and open sky view in the background at this distance. Although a minor portion of the greenery will be blocked and the visual openness will be reduced slightly, public viewers can still enjoy an extensive view of green resources on Hong Kong side and Wutong Mountain across the river on Shenzhen side. Moreover, the Indicative Scheme represents an interesting building layout and will form

a landmark feature in the area. Therefore, the visual impact on public viewers is **slightly adverse**.

5.1.53 **Effects on Visual Resources** – Despite that the Indicative Scheme will cause slight changes to the greenery of this VP, key visual resources from this VP, namely the ridgeline of Wutong Mountain, cityscape of Shenzhen and open sky views, in the background are undisturbed by the Indicative Scheme. In particular, the Indicate Scheme will echo with and be blended in the urban developments in Shenzhen which is only a river away from Hong Kong. Therefore, the impact on visual resources from this VP is **slightly adverse.**

5.1.54 In comparison, the Reference Scheme presents the two Logistic Centres with a large building footprint and a featureless layout against the cityscape of the city of Shenzhen in the backdrop. The Indicative Scheme will not cause additional blockage to the cityscape of Shenzhen, ridgelines of Wutong Mountain, and the sky view as compared with the Reference Scheme. What's more, the Indicative Scheme which intends to form a landmark feature at the prominent boundary location will become a visual attractor, enhancing the quality of view from the existing condition.

5.1.55 Overall, the Indicative Scheme presents an interesting visual composition to public viewers from this VP. Various positive visual elements are also added, including a stepped building heigh profile from the hill side to the river side to create a touch of architectural interest, appropriate building separations to avoid wall effect and to function as visual corridors, as well as soft edge and rooftop gardens to better blend in the buildings with the surrounding. As a long-range VP, with a number of mitigation design measures incorporated and the blending in with the visual characters of Shenzhen's cityscape in immediate background, the Indicative Scheme will only bring **slightly adverse** visual impact. Further design measures for enhancing visual compatibility will be explored at detailed design stage in order to further reduce any possible visual impact of the proposed I&T Hub should this Amendment of Plan be approved.

VP 10: Bridge Across Ping Yuen River (Figure 13)

5.1.56 This short-range VP is at a distance of about 200m to the northeast of the Application Site across Ping Yuen River. This bridge is the only road access to Fung Wong Wu, Chow Tin Tsuen and Ta Ku Ling Ling Ying Public School from Lin Ma Hang Road at the north of the river. This VP is to assess the visual impacts on transient passengers who have a view

towards the Application Site from the North when passing the bridge. Therefore, the visual sensitivity is considered **medium.**

5.1.57 **Effects on Visual Composition –** The visual composition from this VP consists of the watercourse of Ping Yuen River which has been channelized and concretized. Lo Shue Leng is visible in the background with open sky view. Notwithstanding the Indicative Scheme will screen off part of the ridgelines and part of the open sky view, the channelized river at the foreground and part of the sky view is maintained. Moreover, building separations of 15m between DC2 and DC3, 30m between AD2 and AD3, as well as 40m between AD2 and DC3 serve as important visual relief and corridors. A soft edge of 9m, rooftop gardens, and plantings will also compensate the screened off green features and offset the potential visual impacts. The existing visual composition is therefore considered as **slightly adverse** from this VP.

5.1.58 **Effects on Visual Obstruction –** While the Indicative Scheme will screen parts of the sky view and ridgeline of Lo Shue Leng at this VP, unobstructed views towards part of the ridgeline and open sky view are still maintained through the wide building separation in the west. Therefore, the impact of the Indicative Scheme on visual obstruction is **moderately adverse.**

5.1.59 **Effects on Public Viewers** – The VP is located at the bridge across Ping Yuen River, connecting the access road to Lin Ma Hang Road at the North and Fung Wong Wu, Chow Tin Tsuen and Ta Ku Ling Ling Ying Public School at the South. Public viewers at this VP are villagers either walking along or driving through this bridge. Despite the close distance to the Application Site, the visual impacts on public views can be mitigated by the proposed tree planting along the soft edges as wide as 9m at this location. While a portion of Lo Shue Ling in the backdrop will be obstructed, direct view to the open sky in the background through the wide building separation and to the blue and green resources of Ping Yuen River in the foreground will be maintained. The impact of the Indicative Scheme on public viewers is therefore identified as **moderately adverse.**

5.1.60 **Effects on Visual Resources –** The lush vegetation covering the Ping Yuen River water course, the slope and ridgeline of Lo Shue Ling, as well as the open sky view in the background are the key visual resources of this VP. In the Indicative Scheme, a portion of the ridgeline of Lo Shue Ling and sky view behind will be screened. However, with the wide building separation, the openness of the sky remains the significant visual

component of the VP. The incorporation of other design measures such as soft edge, rooftop gardens and planting have also helped the Indicative Scheme better blend in. With the key visual resources at the foreground are undisturbed by the Indicative Scheme, the impact on visual resources from this VP is **slightly adverse.**

5.1.61 In comparison with the Reference Scheme, the LC1 and LC2 block a portion of the open sky view in the background, in a similar manner. While the two Logistic Centers present a large and monotonous building footprints, with car ramps also being visible from this VP.

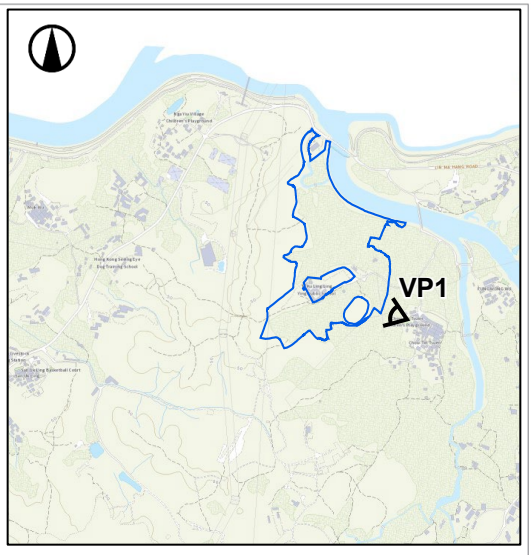
5.1.62 While the Indicative Scheme screens off part of the ridgeline and open sky in the background, the significant visual component of vegetated Ping Yuen River watercourse remains unobstructed. Various positive visual elements are also added, including several appropriate building gaps to allow a permeable view, rooftop gardens and the soft edge along the boundary to soften the building mass. Therefore, the Indicative Scheme will cause **moderately adverse** visual impact from this VP with the incorporation of design mitigation measures in place.

5.1.63 A summarised assessment of the visual impacts when the Indicative Scheme is in place is given in **Table 5.1**.

Table 5.1 Summary of Visual Impact Assessment

VP	Visual Sensitivity	Appraisal Components				Conclusion
		Visual Composition	Visual Obstruction	Effect on Public Viewers	Effect on Visual Resources	
VP 1 Chow Tin Tsuen Playground	High	Slightly Adverse	Slightly Adverse	Slightly Adverse	Slightly Adverse	**Slightly Adverse**
VP 2 Ta Ku Ling Ling Ying Public School	Medium	Moderately Adverse *(mitigated by design measures)*	Moderately Adverse	Moderately Adverse *(mitigated by design measures)*	Moderately Adverse *(mitigated by design measures)*	**Moderately Adverse** *(mitigated by design measures)*
VP 3 Lo Shue Ling	High	Moderately Adverse	Moderately Adverse *(mitigated by design measures)*	Moderately Adverse	Moderately Adverse *(mitigated by design measures)*	**Moderately Adverse** *(mitigated by design measures)*
VP 4 Fung Wong Wu Village Hall	Medium	Slightly Adverse *(mitigated by design measures)*	Slightly Adverse *(mitigated by design measures)*	Slightly Adverse	Slightly Adverse *(mitigated by design measures)*	**Slightly Adverse** *(mitigated by design measures)*
VP 5 Muk Wu Nga Yiu Minibus Stop	Medium	Negligible	Negligible	Negligible	Negligible	**Negligible**
VP 6 Ta Kwu Ling Police Station Bus Stop	Medium	Negligible	Negligible	Slightly Adverse	Negligible	**Negligible**
VP 7 Man Kam To Bus Terminus	Low	Negligible	Negligible	Negligible	Negligible	**Negligible**
VP 8 A Pavilion in Hung Lung Hang	Medium	Negligible	Negligible	Negligible	Negligible	**Negligible**
VP 9 Cham Shan	Medium	Negligible	Slightly Adverse	Slightly Adverse	Slightly Adverse	**Slightly Adverse**
VP 10 Bridge across Ping Yuen River	Medium	Slightly Adverse (*mitigated by design measures)*	Moderately Adverse	Moderately Adverse (*mitigated by design measures)*	Slightly Adverse *(mitigated by design measures)*	**Moderately Adverse** *(mitigated by design measures)*

Existing Condition



Key Plan

Indicative Scheme

LEGEND

Ancillary Dormitory

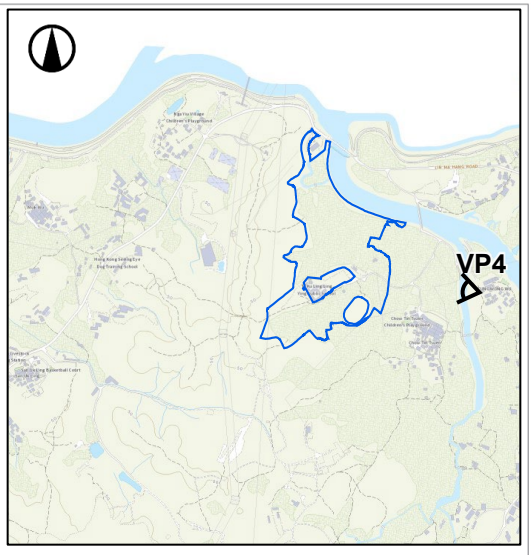
Reference Scheme

LEGEND

Logistics Centre

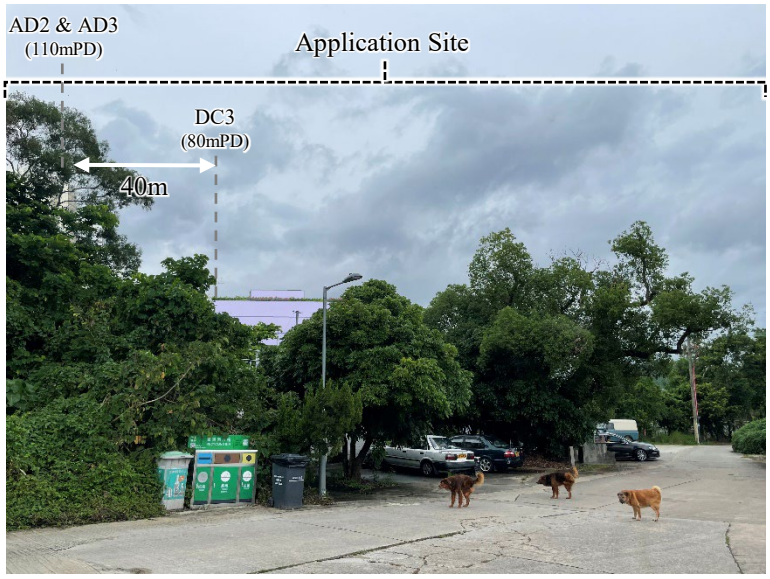
Figure No.	*Scale*	*Figure Title*
4	-	**Viewing Point 1: Chow Tin Tsuen Playground**
ARUP	*Date* July 2022	*Source* -

Existing Condition



Key Plan

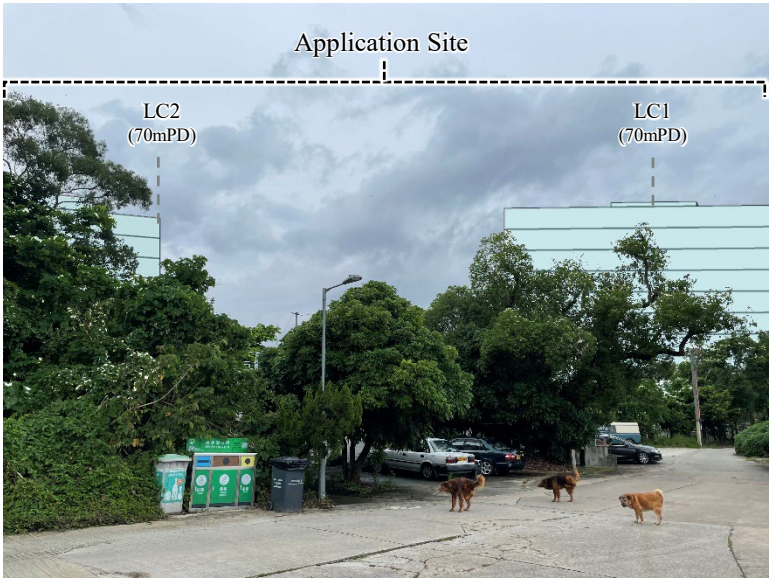
Indicative Scheme



LEGEND

- Ancillary Dormitory
- Data Centre

Reference Scheme

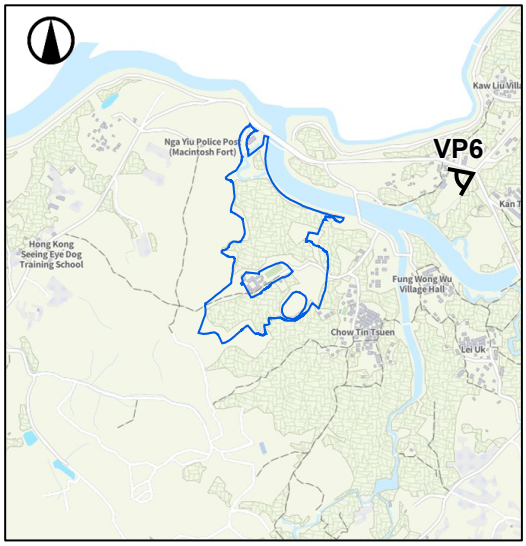


LEGEND

- Logistics Centre

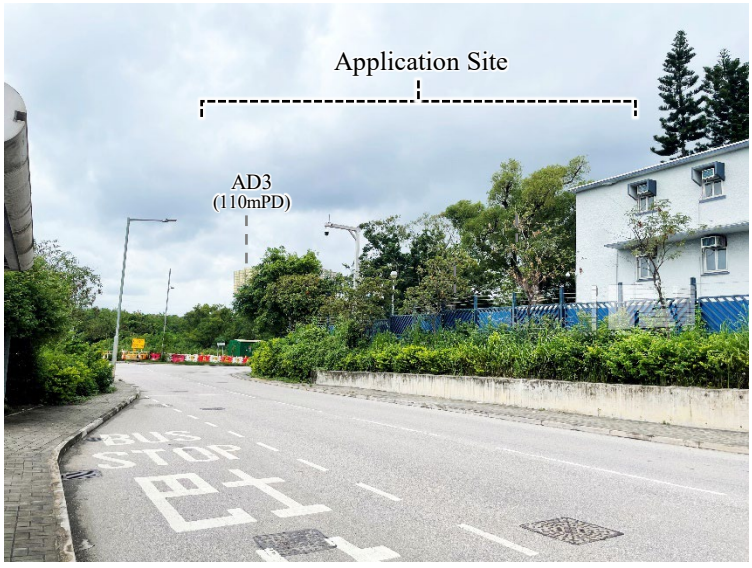
Figure No.	*Scale*	*Figure Title*
7	-	**Viewing Point 4: Fung Wong Wu Village Hall**
ARUP	*Date* July 2022	*Source* -

Existing Condition



Key Plan

Indicative Scheme



Reference Scheme

LEGEND

Ancillary Dormitory

Figure No.	*Scale*	*Figure Title*
9	-	**Viewing Point 6: Ta Kwu Ling Police Station Bus Stop**
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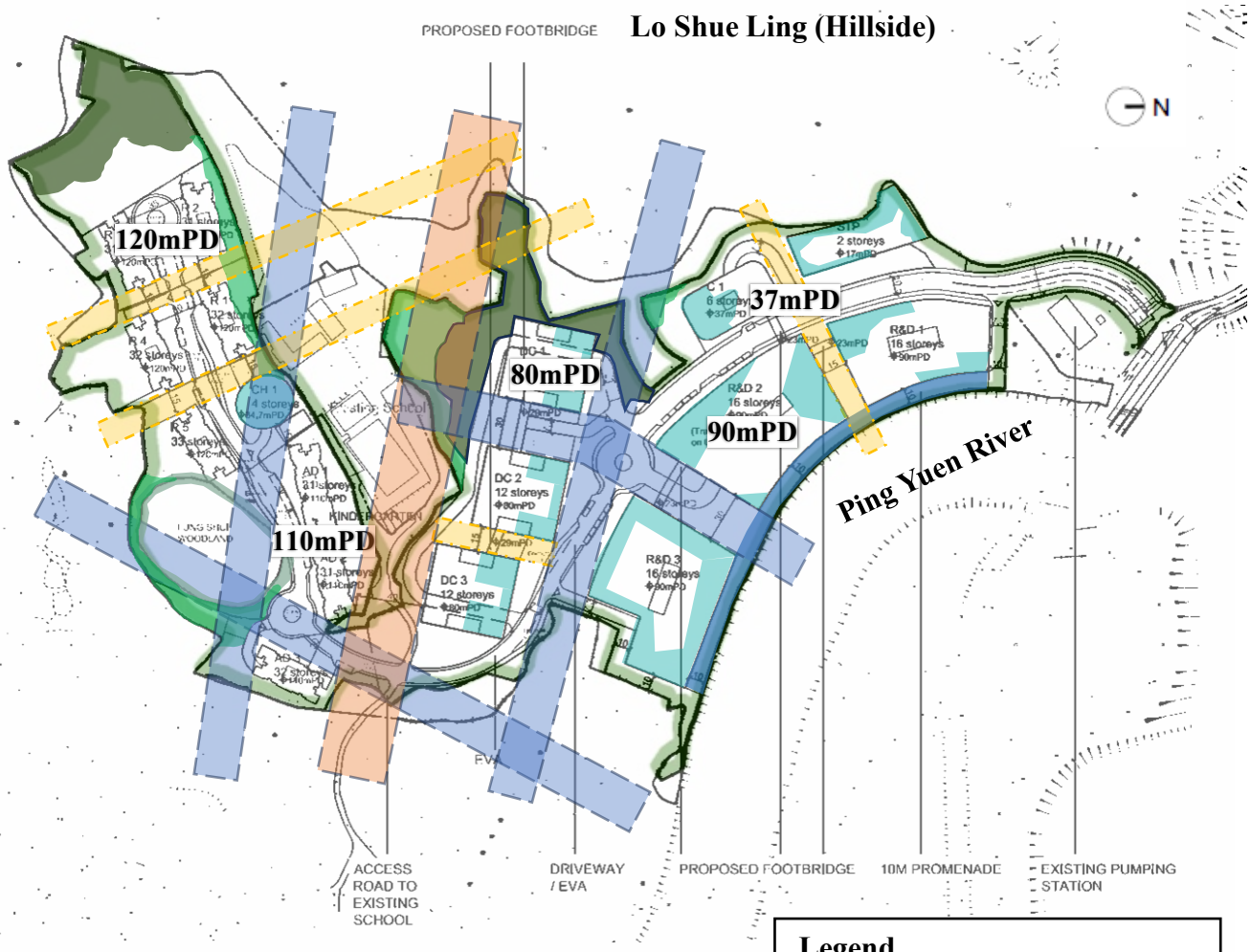

*Indicative only, subject to detailed design at later stage.

Figure No.	*Scale*	*Figure Title*	**Indicative Plan of Proposed Mitigation Measures**
14	-		
ARUP	*Date* Nov 2024	*Source*	-