S12A Application for Amendment of Plan for Proposed Innovation and Technology Hub at Various Lots in D.D. 82 and D.D. 86 and Adjoining Government Land, Man Kam To, New Territories (Application No. Y/NE-MKT/1)
Responses to Departmental Comments – October 2024

Appendix E

Replacement pages of revised Visual Impact Assessment

- Non-Domestic GFA	365,180m ²		
R&D Centre	$268,780m^2$		
Data Centre	86,400m ²		
Commercial Centre	$9,276m^2$		
Kindergarten (3)	$\frac{724m^2}{}$		
- Domestic GFA		170,400m ²	
Ancillary Dormitories		$63,900m^2$	
Other Residential Uses		$\frac{05,500m^2}{106,500m^2}$	
- Clubhouse GFA (4)		3,500m ²	
		3,500m	
Building Height	D '11' II ' 1.	02	
	Building Height	83m	
<i>R&D Centre</i>	mPD	90mPD	
	No. of Storeys (5)	16	
	Building Height	73m	
Data Centre	mPD	80mPD	
	No. of Storeys (5)	12	
	Building Height	30m	
Commercial Centre	mPD	37mPD	
	No. of Storeys (5)	6	
	Building Height	99 <mark>– 102.5m</mark>	
Ancillary Dormitories	mPD	110mPD	
	No. of Storeys (6)	31-32	
	Building Height	99-105.3m	
Other Residential Uses	mPD	120mPD	
	No. of Storeys (6)	31-33	
Anticipated No. of Working Population		6,207	
R&D Centre (7)		5,375	
Data Centre ⁽⁸⁾		432	
Commercial Centre ⁽⁹⁾		400	
No. of Units		3,712	
Ancillary Dormitories		1,392	
Other Residential uses	2,320		
Average Flat Size (10)	37.7m ²		
Anticipated Population (11)	10,022		
No. of Tenants of Ancilla	3,758		
No. of Population of Oth	6,264		
Local Open Space	Not less than 13,126m ²		
For Workers	Not less than $3,104m^2$		
For Residents	Not less than 10,022m ²		
Target Completion Year	2028		

⁽¹⁾ Application Site includes the Development Site and remaining land parcels adjoining the Development Site for better rationalisation of boundary and land use zoning.

⁽²⁾ PR and GFA calculations are based on Development Site. May not add up due to rounding.

⁽³⁾ The kindergarten with 6-classroom of about 724m² GFA fulfils the minimum floor space requirement specified in the EBD's *Operation Manual for Pre-primary Institute*. Indicative only, subject to detailed design.

⁽⁴⁾ According to APP-104, a maximum area of 3,500m² can be applied for GFA concession for a development with domestic GFA of >100,000m² to 125,000m². The clubhouse GFA (intended for use by residents of Other Residential Uses) is proposed to be exempted from GFA calculation.

⁽⁵⁾ The no. of storeys excludes basement carparks.

⁽⁶⁾ The no. of storeys excludes 1-storey lobby and basement carparks.

⁽⁷⁾ An assumption of 50m² per worker is assumed for R&D Centre, with reference to Employment Density Guide (3rd Ed.) in the UK.

⁽⁸⁾ An assumption of 200m² per worker is assumed for Data Centre, with reference to Employment Density Guide (3rd Ed.) in the UK.

 $^{^{(9)}}$ An assumption of 25m^2 per worker is assumed for commercial uses (retail, F&B), with reference to HKPSG Chapter 5.

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 DC3 will be visible behind the village type housing and the vegetation on the left side from this VP. While DC3 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 DC3 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 DC3, 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, DC3 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

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 Indicative Scheme with the building heights varying from 80mPD to 110mPD partly protrudes from the tree canopy and screen off the lower part of the sky view. Nevertheless, the dense trees still screen off large portions of the buildings. AD2 and AD3 are almost fully covered by the tall trees located at the left, while the provision of rooftop gardens on DC3 and R&D2 and 3 also resonate with the existing green resources. Moreover, the clear direct view of the Fung Shui Woodland and open sky view in the background is preserved through the 30m-wide building separation between DC3 and R&D 2 and 3 in the Indicative Scheme. 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 30m-wide visual corridor between DC3 and R&D3 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. While 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.

- 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 the Ancillary Dormitories, Data Centres and R&D Centres will be screened off by the tree canopies and only the upper part of AD3 would be visible to the left of the existing trees in the middle, with a corner of AD2 being almost fully screened off by the existing trees. 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, visual access to the Tak Ku Ling Police Station, which is a Grade 3 Historic Building, will be maintained. Therefore, the impact of the indicative Scheme on visual resources are negligible.

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, 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** 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)

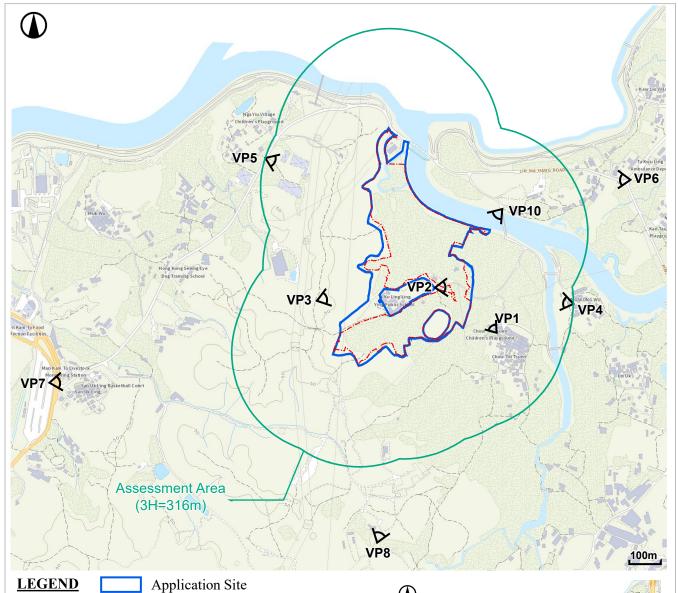
- 5.1.56 This short-range VP is at a distance of about 200m to the northeast of the Application Site across Ping Yuen River. This bridge is the only road access to Fung Wong Wu, Chow Tin Tsuen and Ta Ku Ling Ling Ying Public School from Lin Ma Hang Road at the north of the river. This VP is to assess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

Table 5.1 Summary of Visual Impact Assessment

		Appraisal Components				
	Visual Sensitivity	Visual Composition	Visual Obstruction	Effect on Public Viewers	Effect on Visual Resources	Conclusion
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)	Slightly Adverse (mitigated by design measures)	Moderately Adverse (mitigated by design measures)	Slightly Adverse (mitigated by design measures)	Slightly Adverse (mitigated by design measures)



LEGEND

Development Site

Assessment Area (3H = about 316m)

Viewing Point (VP)

VP1: Chow Tin Tsuen Playground

VP2: Ta Ku Ling Ling Ying Public School

VP3: Lo Shue Ling

VP4: Fung Wong Wu Village Hall

VP5: Muk Wu Nga Yiu Minibus

VP6: Ta Kwu Ling Police Station Bus Stop

VP7: Man Kam To Bus Terminus

VP8: A Pavilion in Hung Lung Hang

VP9: Cham Shan

VP10: Bridge Across Ping Yuen River

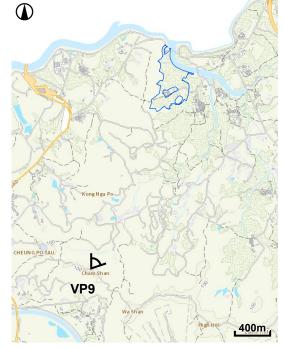
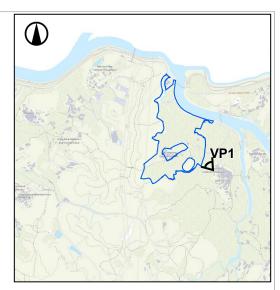


Figure No.	Scale -	Figure Title	Assessment Area and Location of Viewing Points
ARUP	Date July 2024	Source	GeoInfo Map

Existing Condition





Key Plan

Indicative Scheme



LEGEND

Data Centre

Reference Scheme

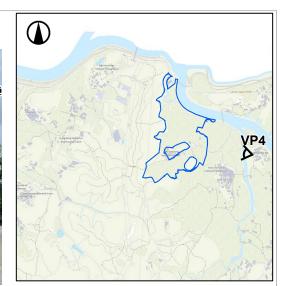


LEGEND

Logistics Centre

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

Application Site



Key Plan

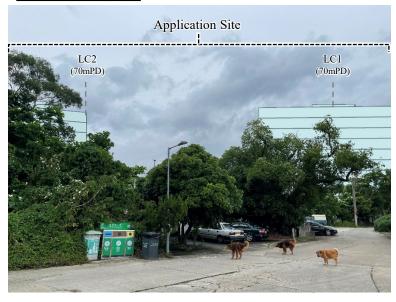
Indicative Scheme



LEGEND

- Ancillary Dormitory
- Data Centre
- R&D Centre

Reference Scheme

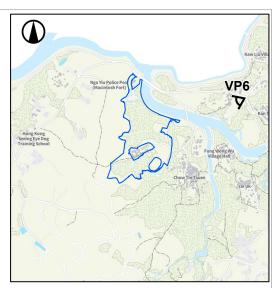


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Logistics Centre

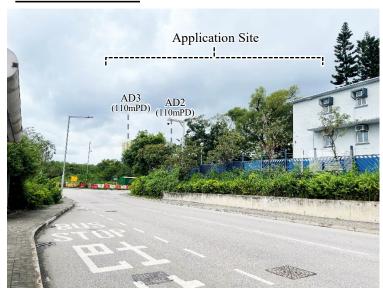
Figure No.	Scale -	Figure Title	Viewing Point 4: Fung Wong Wu Village Hall
ARUP	Date July 2022	Source	-

Application Site



Key Plan

Indicative Scheme



LEGEND

Ancillary Dormitory

Reference Scheme



Figure No.	Scale -	Figure Title	Viewing Point 6: Ta Kwu Ling Police Station Bus Stop
9	_		viewing rount of 1a Kwu Ling rouce Station Bus Stop
ADIID	Date	Source	
ARUP	July 2022		-