

By Email

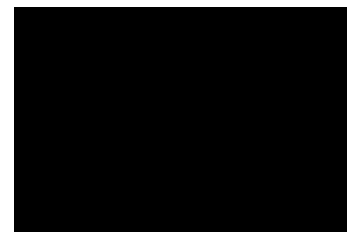
Our Ref: S3066a/DD11_FYR/25/010Lg

6 March 2026

Secretary, Town Planning Board
15/F, North Point Government Offices
333 Java Road
North Point
Hong Kong



PLANNING LIMITED
規 劃 顧 問 有 限 公 司



Dear Sir/Madam,

**Proposed Rezoning of the “Comprehensive Development Area (1)” Site to
“Residential (Group B)13”, “Residential (Group B)14” and “Recreation”
and Amendment to the Building Height Restriction of the “Government,
Institution or Community” Site from 2 storeys to 8 storeys for Residential
Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities
Various Lots in D.D. 11 and Adjoining Government Land,
Fung Yuen, Tai Po, New Territories**

(Section 12A Amendment of Plan Application No. Y/TP/40)

- Further Information No. 3 -

Reference is made to the captioned s.12A Application and the departmental comments conveyed by the Sha Tin, Tai Po and North District Planning Department, Planning Department during the period between December 2025 and March 2026.

We hereby submit this Further Information to address the departmental comments received. This FI submission consists of:

Response-to-Comment Table

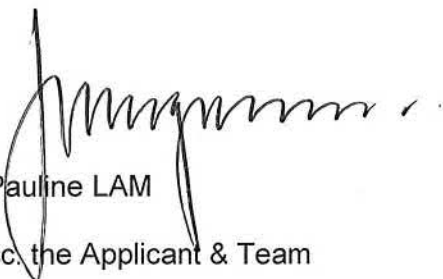
- Annex A – Revised Sensitivity Test for the Proposed “R(B)14” Zone
- Annex B – Supplementary Figures of Traffic Impact Assessment
- Annex C – Replacement Pages of Drainage Impact Assessment
- Annex D – Email Dated 3.2.2026 from Environmental Protection Department
- Annex E – Replacement Pages of Supporting Planning Statement
- Annex F - Fax Dated 14.7.2025 from Transport Department
- Annex G – Replacement Pages of Sewerage Impact Assessment
- Annex H – Replacement Page of Air Quality Impact Assessment
- Annex I – Replacement Page of Visual Impact Assessment
- Annex J – Replacement Pages of Air Ventilation Assessment

Should you have any queries in relation to the above or attached, please do not hesitate to contact Mr. Benjamin TUNG at [REDACTED] or the undersigned.

Thank you for your kind attention.

Our Ref: S3066a/DD11_FYR/25/010Lg
Date: 6 March 2025

Yours faithfully
For and on behalf of
KTA PLANNING LIMITED



Pauline LAM

cc. the Applicant & Team

PL/BT/vy

Proposed Rezoning of the “Comprehensive Development Area (1)” Site to “Residential (Group B)13”, “Residential (Group B)14” and “Recreation” and Amendment to the Building Height Restriction on the “Government, Institution or Community” Site from 2 storeys to 8 storeys for Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities Various Lots in D.D. 11 and Adjoining Government Land, Fung Yuen, Tai Po, New Territories (S12A Amendment of Plan Application No. Y/TP/40)

– Further Information No. 3 –

Item	Comments	Our Responses
1	Comments from Geotechnical Engineering Office, Civil Engineering and Development Department (Responsible Officer: Mr. MOK Sui Chuen; Tel: 2762 5390) Received on 15 December 2025	
1.1	Regarding the response from the Applicant, it is noted that the captioned s12A application is to reflect the existing site condition of the Eastern Portion of the Application Site and no new development is proposed in this portion. However, it is also noted from the Supporting Planning Statement submitted by the Applicant that: 1. the Eastern Portion of the Application Site is proposed to be rezoned as “Recreation” (“REC”) Zone; and 2. some of the land uses under Column 1 are Group 1 to Group 3 Facilities (Table 2.2 of GEO Report No. 138 (2nd Edition) refers) in the Proposed Amendments to the Statutory Notes of “Recreation” (“REC”) Zone. Since the Eastern Portion of the Application Site is overlooked by steep natural terrain and may be affected by potential natural terrain hazards, a natural terrain hazard study and suitable hazard mitigation measures (if found necessary) may be required as part of the future development(s) (which involves Group 1 to Group 3 Facilities) in this portion of the Application Site. The required natural terrain hazard study and necessary hazard mitigation measures may incur significant cost implications to the future development(s). However, if the Proposed Amendments to the Statutory Notes of	Under the proposed amendment to the Statutory Notes of the OZP for “Recreation” (“REC”) Zone, <i>‘No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum GFA of 600m² and a maximum building height in terms of number of storeys as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.’</i> Considering that Agricultural Portion of TPTL 183 and 53C Fung Yuen have used up all the permissible GFA of the proposed “REC” zone, please note that <u>land owners who wish to develop their land will be required to submit separate application(s) under section 16 of the Town Planning Ordinance to the Town Planning Board (“TPB”) for minor relaxation of the GFA restriction, even the proposed use(s) are Column 1 uses.</u> Since owner(s) for all future development(s) in the proposed “REC” zone will have to submit planning application(s) to the TPB for minor relaxation of GFA restriction, please note that this will ensure your office be able to provide geotechnical comment at the planning stage.

Item	Comments	Our Responses
	“Recreation” (“REC”) Zone submitted by the Applicant are adopted in the revised Outline Zoning Plan (OZP), it is envisaged that all future developments in the Eastern Portion of the Application Site with land use(s) under Column 1 and involving Group 1 to Group 3 Facilities would always be permitted and it would not be possible for this Office to provide geotechnical comment at the planning stage on these future developments with respect to potential natural terrain hazards.	
2	Comments from Traffic Engineering (NTE) Division, Transport Department on FI(1) (Responsible Officer: Ms. LI Oi Yin, Yanny; Tel: 2399 6936) Received on 19 December 2025	
2.1	I have the following comments from traffic engineering point of view on the sensitivity test for the proposed “R(B)14” zone of the subject application. The trips generation and attraction from the NTEH developments and the proposed residential development should be different with consideration of their characteristics. The direct estimation by proportion of the proposed development shall be fully justified.	As discussed with TD, trip rates in TPDM with similar flat size are adopted to estimate the trips generation and attraction from the NTEH developments. The trip generation by NTEHs is only 2 to 5 pcu/hr (one-way), which is only 1.5 to 3.1% of our proposed development. The traffic impact by the NTEHs is negligible.
2.2	Para. 4.2 – Without detail assessment of traffic impact due to the additional traffic trips of NTEHs, the applicant shall review the conclusion “It is confirmed that these junctions will have sufficient capacities to cater the additional minimal traffic trips of NTEHs.”	The technical note in Appendix 1 of the Sensitivity Test for the Proposed “R(B)14” Zone (Annex A refers) is updated. As the trips are small when compared with our proposed development, it is confirmed that these junctions will have sufficient capacities to cater the additional minimal traffic trips of NTEHs.
3	Comments from Drainage Services Department on FI(1) (Responsible Officer: Ms. HO Mei Yung, Karen; Tel: 3965 8930) Received on 12 January 2026	
3.1	Para. 3.3 refers. Please advise why 12 New Territories Exempted Houses (NTEHs) is assumed to be developed with the proposed “Residential (Group B) 14” (“R(B)14”) Zone.	Under the proposed amendment to the Statutory Notes of the OZP for the “Residential (Group B)” Zone, <i>‘On land designated “R(B)14”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 87,356m², a maximum non-domestic GFA of 376m² and a maximum building height in</i>

Item	Comments	Our Responses
		<i>terms above Principal Datum as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.'</i> Considering that Mont Vert has used up all the permissible GFA of the proposed "R(B)14" zone, <u>third party lots owners who wish to develop their land will be required to submit separate application(s) under section 16 of the Town Planning Ordinance to the TPB for minor relaxation of the GFA restriction, even the proposed use(s) are Column 1 uses.</u> Application(s) will be considered based on the individual merits of the development or redevelopment proposal. While adverse infrastructural impact created by a single NTEH development shall not be anticipated, the cumulative impact arising from all the potential NTEH developments may need to be assessed. As such, a sensitivity test assuming all available third party lots for NTEH development has been carried out. Based on the review of the location, size, topography and existing use of the third party lots with the proposed "R(B)14" zone, and the adoption of standard land estimation of 250m² per NTEH, it is estimated that 12 NTEHs can be developed in the potential site for NTEH. Please refer to the Section 3 of the Sensitivity Test for the Proposed "R(B)14" zone (Annex A refers) for more details.
3.2	Para. 4.3 and Para. 1.3.1 in Appendix 2 refer. Existing site photos should be included in order to substantiate the Applicant's statement.	Figure 3 is added into Para. 1.3.1 of Appendix 2 for the sensitivity test to show the existing land use of the potential sites of NTEH.
3.3	Para. 1.3.4 in Appendix 2 refer. Please justify your assumption "60% of the remaining areas of the potential sites will be paved by brick and 40% of the remaining area will be unpaved".	Please be clarified that the sensitivity test on the drainage aspect aims to assess the potential drainage impacts from potential developments (i.e. 12 NTEHs) on the available third party lots of northern portion, as requested by PlanD. The development of NTEHs is not part of the development proposal under this planning application. The third party lots owners who wish to develop their land will be required to submit separate planning applications under S16 of the Town Planning Ordinance for minor relaxation of the GFA restriction, even the proposed uses are Column 1 uses, according to the proposed amendment to the Statutory Notes.

Item	Comments	Our Responses
		As mentioned above, since the development of NTENs is not part of the Proposed Development under this planning application, the third party lots owners who wish to develop their land shall determine its own design layout and submit separate planning application under S16 of the Town Planning Ordinance. This sensitivity test is prepared to demonstrate a possible development option for the NTEHs under the hypothetical scenario. For this possible option, there will be 3 NTEHs in Region A and 9 NTEHs in Region B, the building area for Regions A and B is 195m² and 585m² respectively. For the remaining area excluding building area, an assumption “60% of the remaining areas of the potential sites will be paved by brick and 40% of the remaining area will be unpaved” is assumed. In view that small house, similar to rural village house, is assumed in the hypothetical scenario, it is considered that the assumption which has allowed the required building area and reasonable brick pavement is considered acceptable for the sensitivity test. If the design layouts proposed by the third party lots owners in future deviate from the assumption adopted in the sensitivity test, the third party lots owners shall carry his/her own assessment on the drainage impact and proposed necessary mitigation measures such as local onsite stormwater storage tanks if needed.
3.4	Table 1.1 and Table 1.2 in Appendix 2 refer. The forecast runoff generated in Region A and Region B should be incorporated in the Table for comparison/completeness. In addition, it appears that the assumption is made that the site formation levels under the “existing scenario” and proposed development scenario” are identical. If there are variations in the site formation levels, it may affect the time of concentration used to calculate the runoff.	Section 1.3 of Appendix 2 is updated, and Table 1.3 is added to compare the forecast runoff generated from Regions A and B under the hypothetical scenario and the existing condition. It is anticipated that the runoff generated from the potential NTEH development under the hypothetical scenario will be similar or less than that of the existing condition. As mentioned in the response of items No. 3.3, the assumptions adopted in the hypothetical scenario are just for demonstrating a possible development option. For the hypothetical scenario, the assumption that there will be no change in site formation levels in the potential NTEH site as compared with the existing condition has been assumed. Thus, the time of concentration for the development option will be same for both developed and existing condition. If the design layouts proposed by the third party lots owners in future deviate from the assumption adopted in the sensitivity test, the third

Item	Comments	Our Responses
		party lots owners shall carry his/her own assessment on the drainage impact and proposed necessary mitigation measures when they decide to develop their lands.
3.5	Appendix 3 refers. Please be reminded that the sewerage impact for the proposed "R(B)14" Zone needs to meet the full satisfaction of Environmental Protection Department (EPD), the planning authority of sewerage infrastructure.	Sensitivity test related to sewerage aspect has been circulated to EPD for comment.
4	Comments from Water Supplies Department on FI(1) (Responsible Officer: Ms. WONG Sin Yan, Kathy; Tel: 2399 6936) Received on 12 January 2026	
4.1	We have no comments in water supply perspective to the sensitivity analysis. Further to our previous comments conveyed via Planning Department (PlanD)'s email dated 18.11.2025 to the applicant which no sufficient information has been provided to clarify whether the boundary zone intersects with water gathering ground (WGG) and no pipe size optimization proposal has been received, our comments still prevail.	It is clarified that the potential NTEH developments assumed in the sensitivity test would not encroach into the WSD's lower indirect water gathering ground.
5	Comments from Environmental Protection Department on FI(1) (Responsible Officer: Ms. TANG Wing Yee, Winnie; Tel: 2835 1096) Received on 12 January 2026	
5.1	It is noted that this FI1 includes sensitivity tests, such as sewerage sensitivity analysis, to assess the potential infrastructural impacts from potential developments (i.e. 12 NTEHs) on the available third party lots of northern portion. No technical environmental assessment for air quality, noise, water quality, waste management, and land contamination have been included in the sensitivity test. We also understand that the third party lots owners who wish to develop their land will be required to submit separate planning applications under S16 of the Town Planning Ordinance for minor relaxation of the GFA restriction, even the proposed uses are Column 1 uses, according to the proposed amendment to the Statutory Notes. In view of the above, below please find the first batch of comments on FI1 for your consideration. Our remaining comments will be provided shortly.	Noted.

Item	Comments	Our Responses
5.2	It cannot preclude the possibility that the NTEH owners might independently negotiate the agreements to construct the sewerage pipe through others lot boundary. To account for this uncertainty, the sensitivity analysis shall incorporate the worst-case scenario that the total design sewage flow from all proposed NTEHs is received by the public sewerage system, so as to evaluate the impacts to the system and identify any necessary upgrading works.	The total design sewage flow from all proposed NTEHs is discharged to the public sewage system is included in the revised design report. No adverse effect will be induced to the public system.
5.3	Please also note that the potential NTEH sites are in close proximity to watercourses. In case septic tank with soakaway system (STS) is proposed, the future applicants for these NTEHs and their Authorised Persons (APs) are reminded to observe relevant requirements on the design of STS and their clearance distance from sensitive receivers e.g., streams.	Noted
6	Comments from Buildings Department on FI(2) (Responsible Officer: Mr. CHENG Hang On, Colin; Tel: 2626 1477) Received on 12 January 2026	
6.1	We have no further comment on the planning application. Our preceding comments to the same application series provided are still applicable.	Noted with thanks.
7	Comments from Water Supplies Department on FI(2) (Responsible Officer: Ms. WONG Sin Yan, Kathy; Tel: 2399 6936) Received on 12 January 2026	
7.1	No objection to the application.	Noted with thanks.
7.2	Existing water mains inside the proposed site as shown in the MRP may be affected. The applicant is required to either divert or protect the water mains found on site.	Noted.
7.3	If diversion is required, existing water mains inside the proposed site areas are needed to be diverted outside the site boundary of the proposed site to lie in Government land. A strip of land of minimum 1.5m in width should be provided for the diversion of existing water mains. The cost of diversion of existing water mains upon request will have to be borne by the applicant; and the applicant shall submit all the relevant	Noted.

Item	Comments	Our Responses
	proposal to WSD for consideration and agreement before the works commence.	
7.4	If diversion is not required, the following conditions shall apply: (a) Existing water mains are affected as indicated on the site plan and no development which requires resiting of water mains will be allowed. (b) Details of site formation works shall be submitted to the Director of Water Supplies for approval prior to commencement of works. (c) No structures shall be built or materials stored within 1.5 metres from the centre line(s) of water main(s) shown on the plan. Free access shall be made available at all times for staff of the Director of Water Supplies or their contractor to carry out construction, inspection, operation, maintenance and repair works. (d) No trees or shrubs with penetrating roots may be planted within the Water Works Reserve or in the vicinity of the water main(s) shown on the plan. No change of existing site condition may be undertaken within the aforesaid area without the prior agreement of the Director of Water Supplies. Rigid root barriers may be required if the clear distance between the proposed tree and the pipe is 2.5m or less, and the barrier must extend below the invert level of the pipe. (e) No planting or obstruction of any kind except turfing shall be permitted within the space of 1.5 metres around the cover of any valve or within a distance of 1 metre from any hydrant outlet. (f) Tree planting may be prohibited in the event that the Director of Water Supplies considers that there is any likelihood of damage being caused to water mains.	Noted.

Item	Comments	Our Responses
8	Comments from Highways Department on FI(2) (Responsible Officer: Ms. PONG Kei; Tel: 2762 3980) Received on 12 January 2026	
8.1	Our comments conveyed via Planning Department (PlanD)'s email dated 18.11.2025 remain valid and we have no further comments at this stage. We reserve the right to provide our comments on the proposed road works and highway features when the detailed design become available to us.	Noted with thanks.
9	Comments from Social Welfare Department on FI(2) (Responsible Officer: Mr. CHAN Nim Cho, Clinton; Tel: 3791 2806) Received on 12 January 2026	
9.1	<u>Service Perspective (DCU)</u> Given the proposed 30-p DCU attaching to RCHE will be operated on private self-financing basis, subject to RCHE's reply, we have no adverse comment on the planning application from a service perspectives.	Noted with thanks.
9.2	<u>Service Perspective (RCHE)</u> The proposed 150-p RCHE cum 30-p DCU is located in an 8-storey social welfare complex with a BH of 36mPD. As stipulated in Para 5.3.2 of the Code of Practice for Residential Care Homes (Elderly Persons) (June 2024 Revised Edition) (CoP), "...No part of an RCHE shall be situated at a height more than 24m above the ground floor...". In this regard, the applicant should ensure that the 24m height restriction as set out in the CoP is fully complied. While detailed layout plan of the proposed RCHE is not available and it is understood that detailed layout plan would be provided for comment in the later detailed design stage, we are unable to comment on the proposed RCHE design at this moment.	Noted.
9.3	Subject to the consideration of the Town Planning Board and relevant government departments, it is proposed that we from service perspective generally have no objection-in-principle to the proposed RCHEs under the s.12A planning application on the conditions that –	Noted with thanks.

Item	Comments	Our Responses
	(a) The subject RCHEs shall incur no financial implication, both capital and recurrent, to the Government, and (b) The design and construction of the RCHEs shall be in full compliance with relevant prevailing Ordinances, Regulations, and Codes of Practice enforcing in Hong Kong and any licensing requirement issued by the Social Welfare Department (SWD).	
9.4	<u>Licensing Perspective (RCHE)</u> Licensing Office of Residential Care Homes for the Elderly (LORCHE) has no comment on the planning application. However, the applicant is reminded that, for an RCHE licence to be issued, the intended RCHE has to comply with the licensing requirements as stipulated in the Residential Care Homes (Elderly Persons) Ordinance, Cap. 459, its subsidiary legislation and the latest version of the Code of Practice for Residential Care Homes (Elderly Persons).	Noted with thanks.
10	Comments from Landscape Unit, Urban Design & Landscape Section, Planning Department on FI(2) (Responsible Officer: Ms. KWOK Siu Man, Mandy; Tel: 3565 3953) Received on 12 January 2026	
10.1	According to our tele-conversation with the applicant's landscape consultant – ADI Limited (Contact Person: Ms. Kwong) on 2.1.2025, it is confirmed that the tree Lagerstroemia speciosa (A48A) is a cultivated species instead of a wild-growing species. We have no adverse comment to the application from landscape planning perspective.	Noted with thanks.
11	Comments from Agriculture, Fisheries and Conservation Department on FI(2) (Responsible Officer : Mr. SIT Yiu, Season; Tel: 2150 6953) Received on 12 January 2026	
11.1	We have no comment on the further information provided, and our earlier advice remain valid.	Noted with thanks.

Item	Comments	Our Responses
12	Comments from Traffic Engineering (NTE) Division, Transport Department on FI(2) (Responsible Officer: Ms. LI Oi Yin, Yanny; Tel: 2399 6936) Received on 12 January 2026	
12.1	RtoC 8.3 - The sightline assessment shall comply with TPDM Vol 2 Ch 3.6.3.2 and Diagram 3.6.3.4. No objects, including structures, plants, etc. shall be placed obstructing the sightline.	As shown in Figures 2.3 (SL), 2.4 (SL) and 2.5 (SL) in Annex B , sight distance of 60m could be maintained which comply with TPDM requirement. No objects, including structures, plants, etc. will be placed obstructing the sightline.
12.2	Figure 2.3 - The effectiveness of the proposed road markings and traffic signs shall be reviewed. The placement of the traffic signs shall be reviewed to avoid ambiguity. Appropriate measures shall be implemented to prevent vehicles egress straight from the internal access, including but not limited to lane line road marking, "No Entry" traffic sign and/or mechanical gate system, etc..	Noted. Additional traffic signs and road markings are added and amended in Figure 2.3 in Annex B . "No Entry" and "Turn Left" traffic signs were added to prevent vehicles egress straight from the internal access. Lane line and hatched road markings are added to separate the lanes with contraflow.
12.3	Figure 2.3(SL) - The sight distance to the right of the vehicle egress is only 30m. Please demonstrate the sight distance complies with TPDM requirement.	30m is the distance between the development run-out and the Fung Yuen Road. Sightlines of 60m are also added to Figure 2.3 (SL) in Annex B . The sight distance complies with TPDM requirement.
12.4	Figure 2.3(SP) - Please advise whether the internal access is also an EVA to the PVP and commercial building. Please advise whether the access shall allow maneuvering of emergency vehicles.	The internal access shown in Figure 2.3 in Annex B is also an EVA to the PVP/Commercial building. Due to site constraints, HGV cannot egress from the run-out. Therefore, for normal operation, only vehicles not longer than 7m could enter and leave the PVP/Commercial building. However, in case of emergency, emergency vehicles could enter and leave the PVP and commercial building by using the run-in. Emergency vehicles could do turn around inside the PVP/Commercial building. Swept Path Analysis of 12m Fire Engine is provided in Figure 2.3(SP) in Annex B to demonstrate the ingress and egress route. FSD's comment on the EVA arrangement will be sought.

Item	Comments	Our Responses
12.5	Figure 4.2 - The proposed bicycle parking space is at a distance from the cycle track. Please consider to create a bicycle parking space close to the cycle track, e.g. decking over the natural stream.	Noted. The bicycle parking space is relocated closer to the cycle track which will be decked over the natural stream as shown in Figure 4.5 in Annex B .
12.6	RtoC 8.7 - Note (1) of Tables 6.1, 6.3 and 6.5 remark the determination of “Effective Width”, please demonstrate that the “Effective Width” adopted in critical section E aligns with other sections and complies with relevant requirements.	The critical point at section E does not have railings or bollards on the kerbside, therefore, only 0.5m is reduced from actual width. Moreover, the critical point width is only 1m, if both sides of the width are deducted by 0.5m to obtain “Effective Width”, the effective width will become zero which is not reasonable. Therefore, only 0.5m is deducted from the total footpath width in the concerned section for section E. On the other hand, after the proposed widening in Figure 6.5 in Annex B, it is assumed that railings or bollards will be added on the kerbside. Therefore, 1m will be reduced from actual width to obtain the “Effective Width” in assessment.
12.7	RtoC 8.9 - Figure 4.4 - Please review the sharp bends at cycle track near the pedestrian crossing.	The cycle track is revised as shown in Figure 4.4 in Annex B . The connectivity of cycle track could be maintained and the potential conflict between pedestrian and cyclists are minimised.
12.8	We understand the proposed road improvement works layout are preliminary and the detailed design will be further developed in the later stage. We reserve our comments on the detailed design to be submitted by the applicant in the later stage.	Noted.
12.9	The proposed road improvement works involve the resumption of government land allocation and extensive engineering works including the slope works. The applicant shall ascertain the feasibility of the proposed improvement. In addition, the programme may be optimistic. The applicant shall seek relevant departments’ comments on the appended programme to ensure its feasibility.	Noted. Relevant departments’ comments would be sought.
12.10	Comments from our Transport Operation (NT) Division, if any, will be provided separately.	Transport Operation (NT) Division have no further comment. Please refer to Item 19.1.

Item	Comments	Our Responses
13	Comments from Drainage Services Department on FI(2) (Responsible Officer: Ms. HO Mei Yung, Karen; Tel: 3965 8930) Received on 26 January 2026	
13.1	<u>Drainage Impact Assessment (DIA)</u> R to C Item No.4.1 refers. Considering that the predicted water levels are still higher than the bank levels at certain control points under “the proposed condition (with mitigation under 50A and 50B cases)”, I should be grateful if you could consider implementing management measures to warn people to stay away from the concerned area during extreme events in order to ensure public safety.	It is noted that the predicted water levels under the proposed condition are higher than the bank levels at certain control points at the downstream section of the existing watercourse under 50A and 50B cases. Since most of the adjacent areas potentially affected by the concerned downstream section of the existing watercourse are owned by the Applicant. The Applicant-owned lands are currently fenced off to prevent trespassing on the lands and access to the watercourse through the land lots (see photo below). The fence will be kept and maintained in future to prevent trespassing and access on the concerned areas. Besides, flood wall has been proposed for the future Social Welfare Complex (SWC) which will further prevent trespassing and access to the existing watercourse.  In addition, warning signages will be posted within Phase I of the Development, future SWC and along the fencing of the Applicant-owned lands to warn the public staying away from the concerned watercourse

Item	Comments	Our Responses
		during extreme events. A warning system consist of loudspeakers will also be deployed at the boundaries of the Phase I of Development and SWC to provide alerts to the public during extreme events. Sections 4.3.10, 4.4.10 and 5.1.5 of the DIA report (Annex C refers) are revised to include the above management measures. The proposed management measures will be provided and maintained by the owner of the development in Area (A) Phase I and the owner/ operator of the SWC. Table 4.4 also updated to include the maintenance party of the proposed management measures.
13.2	R to C Item No.4.2 and Annex C refer. Please provide a section showing the minimum clearance between the building in Area (A) Phase II and the existing streamcourse.	There will be at least 3m buffer area between building areas and existing streamcourse in the developments in Area (A) Phase II. The minimum clearance between building and the existing stream course has been specified in Sections 4.1.2 and 5.1.1 of the DIA report. A new Section 9-9 is added to Appendix K of the DIA report to show the minimum clearance currently allowed on the development plan.
13.3	It is noted that the DIA only covered part of the application site. Please advise if the captioned application has any drainage impact on the remaining portion of the application site.	The DIA only covers the Development Site where the Proposed Development takes place. The Mont Vert residential development and the Agricultural Portion under TPTL 183 <u>outside the Development Site</u> have been completed for more than 10 years. Opportunity has been grasped to rezone these remaining portions of “CDA(1)” zones to appropriate zonings to reflect their existing “as-built” conditions. <u>No new development is proposed outside the Development Site.</u> Therefore, the application has no drainage impact on the remaining portion of the application site.
13.4	<u>Sewerage Impact Assessment (SIA)</u> R to C Item No. 4.3 refers. Please provide the proof of in-principle	

Item	Comments	Our Responses
	agreement from EPD from our reference.	Please refer to the email dated 3.2.2026 (Annex D refers) stating than EPD has no comment on the SIA.
13.5	It is noted that the SIA only covered part of the application site. Please advise if the captioned application has any sewerage impact on the remaining portion of the application site.	The SIA only covers the Development Site where the Proposed Development takes place. The Mont Vert residential development and the Agricultural Portion under TPTL 183 <u>outside the Development Site</u> have been completed for more than 10 years. Opportunity has been grasped to rezone these remaining portions of “CDA(1)” zones to appropriate zonings to reflect their existing “as-built” conditions. <u>No new development is proposed outside the Development Site.</u> Therefore, the application has no drainage impact on the remaining portion of the application site.
14	Comments from Electrical and Mechanical Services Department on FI(2) (Responsible Officer: Ms. YAN Oi Ying, Yvonne; Tel: 2808 3884) Received on 26 January 2026	
14.1	Please be advised that we have no further comment from our regulatory services perspective.	Noted with thanks.
15	Comments from Environmental Protection Department on FI(2) (Responsible Officer: Ms. TANG Wing Yee, Winnie; Tel: 2835 1096) Received on 26 January 2026	
15.1	<u>EIAO Implications</u> RtC item 12.1: The previous comments have not been addressed. Please include a brief discussion in the submission demonstrating why the junction improvement works are not Designated Project. The consultant may make reference to Section 6 of EIAO-TM.	The discussion has been included in para. 7.9.12 – 7.9.20 of the Supporting Planning Statement (Annex E refers).

Item	Comments	Our Responses
15.2	<u>Noise</u> Transport Department's endorsement of the traffic data is still outstanding.	Please find TD's no comment on traffic forecast on NIA in Annex F .
15.3	<u>Water Quality</u> RtC item 12.19: it is suggested to review the footnote ** under Table 3.5 which does not appear to align with the table content.	Table 3.5 and footnote ** below in the SIA (Annex G refers) have been revised to align with the table content.
15.4	<u>Air Quality</u> Section 3.4, RtC 12.5: EPD Regional Office's reply on odour complaint is still pending. Please provide in the next submission.	Inquiry has been made to EPD Regional Office (North), and it is confirmed that no odour complaint against Tin Sam Sewage Pumping Station was received in the past 3 years. The confirmation from EPD has been provided in Appendix 12 of the Air Quality Impact Assessment (AQIA) (Annex H refers). Section 3.5 of the AQIA has been supplemented.
15.5	Section 10.4, RtC 12.11: TD's endorsement on the traffic data is still pending. Please provide in the next submission.	Please find TD's no comment on traffic forecast on AQIA in Annex F .
15.6	Section 10.6: ATC2024 has been published. Please update accordingly.	Considering that the % calculated by raw data of newly released ATC 2024 (i.e. ~21.7%) is similar to that of 2023, while the predicted cumulative concentrations in Appendix 11 well comply with the relevant AQOs, hence, the % calculated by raw data of ATC 2023 (i.e. 21.8%) is kept adopted in the assessment. Section 10.6 of the AQIA is revised.
15.7	Table 4.1: Please delete Note (iv).	Note (iv) of Table 4.1 of the AQIA has been deleted.
15.8	Appendix 4: Title of the first section under "Calculation of Emission Factor for Existing Chimneys" should read "Towngas Combustion" instead of "Fuel Oil Combustion". Please revise the text.	The text of Appendix 4 of the AQIA has been revised.
16	Comments from Urban Design Unit, Urban Design & Landscape Section, Planning Department on FI(2) (Responsible Officer: Ms. CHEUNG Yeung Mei, Grace; Tel: 3565 3936) Received on 26 January 2026	
16.1	We have no adverse comment on the Further Information (FI) submitted.	Noted with thanks.

Item	Comments	Our Responses
16.2	However, some of our previous comments raised via email dated 18.11.2025 on the Visual Impact Assessment and the Air Ventilation Assessment – Expert Evaluation reports are yet to be addressed/ missing from this round of FI.	Figure 6.3 of the Visual Impact Assessment (Annex I) and Para 1.3.4 and Table 2.2. of the Air Ventilation Assessment – Expert Evaluation (Annex J) have been attached in this FI.
17	Comments from Fire Service Department on FI(2) (Responsible Officer: Mr. QIU Yi; Tel: 2733 5845) Received on 26 January 2026	
17.1	Please be informed that we have no specific comment on the proposal subject to fire service installations and water supplies for firefighting being provided to the satisfaction of the Director of Fire Services.	Noted with thanks.
17.2	Detailed fire safety requirements will be formulated upon receipt of the formal submission of general building plans or referral from the relevant licensing authority.	Noted.
17.3	Furthermore, the provision of emergency vehicular access in the subject work shall comply with the requirements as stipulated in Section 6, Part D of the Code of Practice for Fire Safety in Buildings 2011.	Noted.
18	Comments from Lands Department on FI(2) (Responsible Officer: Ms. SZE Tsz Ping, Christine; Tel: 2654 1107) Received on 12 February 2026	
18.1	The Applicant's Response in Items 15.4 and 15.5 of the R-to-C is noted, ie "...the said Yellow Area had been reserved for Subsequent Phase Development which could only take place when the Applicant has been able to acquire ALL the remaining private lots scattered within the "CDA(1)" zone ..."; but "... the acquisition of ALL remaining private lots within the "CDA(1)" zone in order to exchange land for implementation of Subsequent Phase Development is therefore pessimistic." Therefore, the Applicant put forward the captioned application "to include those land owned and newly acquired by the Applicant together with the Yellow Area to resolve the dilemma ownership". As revealed from the indicative layout plan [i.e. Figure 5.2 of the revised Supporting Planning Statement], three proposed residential blocks would fall wholly or partly on the Yellow Area. In this regard, our previous comments, inter alias, regarding the	Noted.

Item	Comments	Our Responses
	development of Yellow Area remain valid.	
18.2	According to Figure 5.1 of the revised Supporting Planning Statement, there is a stream passing through the Development Site. Comments from relevant departments, e.g. Drainage Services Department, Environmental Protection Department and Tai Po District Office, should be sought (i) for proper diversion of the stream; and (ii) to delineate the future management and maintenance responsibilities of the stream.	Comments from relevant departments have been sought.
18.3	Should the Application be approved by the Town Planning Board, applications for land exchange and lease modification would be required for implementation of the proposed developments. The land owner is reminded that every application submitted to LandsD will be considered on its own merits by LandsD at its absolute discretion acting in its capacity as a landlord and there is no guarantee that the land exchange and lease modification applications will eventually be approved. If the applications for land exchange and lease modification be approved, they will be subject to such terms and conditions as may be imposed by LandsD at its absolute discretion, including payment of premia and administrative fees.	Noted.
19	Comments from Transport Operations (New Territories) Division, Transport Department on FI(2) (Responsible Officer: Mr. WU Chun Fai, Carpe; Tel: 2399 2442) Received on 24 February 2026	
19.1	We have no further comment on item 9 of the Response-to-Comments of FI2.	Noted with thanks.
20	Further Comments from Environmental Protection Department on FI(1) (Responsible Officer: Ms. TANG Wing Yee, Winnie; Tel: 2835 1096) Received on 25 February 2026	
20.1	Please be reminded to highlight changes in any future submissions.	Noted
20.2	The Sewerage Sensitivity Analysis incorporated the scenario that the total design sewage flow from all proposed NTEHs is received by the public sewerage system. Please reflect the above in Section 4.6-4.7. of Sensitivity Test, and Section 1 of Sewerage Sensitivity Analysis.	The Section 4.6-4.7 of the Sensitivity Test and Section 1 of the Sewerage Sensitivity Analysis have been revised.

Item	Comments	Our Responses
20.3	Section 2.1: "Appendix D" is missing from the Sewerage Sensitivity Analysis. Please provide.	The sewerage record plans are enclosed in Appendix B instead of "Appendix D". Section 2.1 of the Sewerage Sensitivity Analysis has been revised.
20.4	Section 2.2: Please briefly mention whether discharging the sewage generated from the proposed NTEHs to existing public sewerage system will cause any adverse sewerage impacts.	Section 2.2 of the Sewerage Sensitivity Analysis has been revised.
20.5	It is mentioned in Section 2.2 that the existing sewerage system is insufficient for connecting to the NTEH development, while it is mentioned in Section 4.1 that no adverse sewerage impact is anticipated. Please clarify.	No adverse impact will be caused if there is sufficient sewerage connection from the proposed NTEHs to the existing public sewerage system. Section 2.2 of the Sewerage Sensitivity Analysis has been revised.
20.6	In the table of Appendix C, please include your own proposed development and its generated sewage flow in the Sewerage Sensitivity Analysis to evaluate the impact to the existing sewerage system.	The proposed development discharged from sewerage treatment plant is included in Appendix C.
20.7	The NTEH owners is advised to establish sewer connections from their premises to the existing public sewers as much as practicable, subject to DSD's advice on the technical feasibility; and any written consent(s) from LandsD and other lot owners for laying and maintaining the said sewers. If these connections are considered impracticable and septic tank systems is proposed, the NTEH owners should strictly follow EPD Guidelines "ProPECC PN 1/23" for design, construction, operation, and maintenance of the septic tank systems. Owners should also make sure the systems have sufficient capacity to handle the generated sewage.	Noted
21	Further Comments from Drainage Services Department on FI(1) and FI(2) (Responsible Officer: Ms. HO Mei Yung, Karen; Tel: 3965 8930) Received on 4 March 2026	
	Sensitivity Test	
21.1	R-t-C Item No. 3.4 and Table 1.3 in Appendix 2 refers. As per Remark (iii), the extreme mean intensity in Region A and Region B should be 334.6mm/hr and 378.1mm/hr respectively. Please update accordingly.	Table 1.3 in Revised Sensitivity Test – Drainage (Annex A refers) is updated accordingly.

Item	Comments	Our Responses
	Drainage Impact Assessment (DIA)	
21.2	R to C Item No. 13.1, Sections 4.3.10, 4.4.10 and 5.1.5 refer. Please indicate the extent of the proposed fencing on a layout plan.	The extent of the proposed fencing that has been erected and will be maintained in future is attached in sheet 3 of the Appendix B2 in the DIA (Annex C refers).
21.3	The proposal must not obstruct overland flow or existing flow paths. All existing flow paths as well as the runoff falling onto and passing through the site will be intercepted and disposed of via proper discharge points. Free flow condition of the adjacent drains, channels and watercourses should be maintained at all time.	Noted. Boundary channels are provided to intercepted runoff from nearby catchments. Free flow condition of the adjacent drains, channels and watercourses will be maintained.
21.4	Please be reminded to comply with “DSD Technical Circular No. 1/2017 Temporary Flow Diversions and Temporary Works Affecting Capacity in Stormwater Drainage Systems” if the proposed works involve the construction of permanent or temporary works within, over or adjacent to DSD’s stormwater drainage systems.	Noted.
21.5	The applicant is required to rectify/modify the drainage system if it is found to be inadequate or ineffective during operation. The applicant shall also be liable for and shall indemnify Government against claims and demands arising out of damage or nuisance caused by failure of the system.	Noted.
21.6	The applicant should take all precautionary measures to prevent any disturbance, damage and pollution from the development to any parts of the existing drainage facilities in the vicinity of the lot. In the event of any damage to the existing drainage facilities, the applicant would be held responsible for the cost of all necessary repair works, compensation and any other consequences arising therefrom.	Noted.
21.7	The applicant is required to ensure that no construction debris, silt and sediments, or cementitious materials will be discharged to or deposited inside the public drains from the site. Any blockage or damage of public drains arising from the construction works shall be made good at the cost of the applicant and to our satisfaction.	Noted.

Item	Comments	Our Responses
	Sewerage impact Assessment (SIA)	
21.8	We have no further comment.	Noted with thanks.
22	Further Comments from Geotechnical Engineering Office, Civil Engineering and Development Department (Responsible Officer: Mr. MOK Sui Chuen; Tel: 2762 5390) Received on 6 March 2026	
22.1	For the repose-to-comments table, please be advised that the response from the Applicant has not addressed our concerns on future developments in the Eastern Portion of the Application Site. There could be a redevelopment with land use(s) under Column 1 and involving Group 1 to Group 3 Facilities (Table 2.2 of GEO Report No. 138 (2nd Edition) refers) with no change in gross floor area (GFA) or building height. Such redevelopment would always be permitted if the Proposed Amendment to the Statutory Notes of "Recreation" ("REC") Zone submitted by the Applicant are adopted in the revised Outline Zoning Plan (OZP). Therefore, our previous comments provided are still valid.	The Eastern Portion of the Application Site is proposed to rezoned as "REC" zone solely to reflected the completed Agricultural Portion under TPTL 183. No new development is proposed in the "REC" zone under this Application. Any proposed development/redevelopment of an existing building, even the proposed use(s) are Column 1 uses, would undergo land administration and/or building plan submission procedures. Your office will be able to provide geotechnical comment through land and building regimes.

Encl.

- Annex A – Revised Sensitivity Test for the Proposed "R(B)14" Zone**
- Annex B – Supplementary Figures of Traffic Impact Assessment**
- Annex C – Replacement Pages of Drainage Impact Assessment**
- Annex D – Email Dated 3.2.2026 from Environmental Protection Department**
- Annex E – Replacement Pages of Supporting Planning Statement**
- Annex F - Fax Dated 14.7.2025 from Transport Department**
- Annex G – Replacement Pages of Sewerage Impact Assessment**
- Annex H – Replacement Pages of Air Quality Impact Assessment**
- Annex I – Replacement Page of Visual Impact Assessment**
- Annex J – Replacement Pages of Air Ventilation Assessment**

Compiled by: KTA

Date: 06 March 2026

File Ref: 20250306_S3066a_FI(3)_R-to-C

Annex A

Revised Sensitivity Test for Proposed “R(B)14” Zone

**S.12A APPLICATION FOR AMENDMENT OF PLAN
DRAFT TAI PO OUTLINE ZONING PLAN NO. S/TP/31**

**Proposed Residential Development(s) with Retail,
Public Vehicle Park and Social Welfare Facilities
Various Lots and Adjoining Government Land at Fung Yuen,
Tai Po, New Territories**

**SENSITIVITY TEST FOR
THE PROPOSED “R(B)14” ZONE**

March 2026

**Applicant:
Fantastic State Limited**

**Consultancy Team:
KTA Planning Limited
CTA Consultants Limited
Greg Wong & Associates Limited
Mott MacDonald Hong Kong Limited**



PLANNING LIMITED
規 劃 顧 問 有 限 公 司



S3066a_ST_V04

TABLE OF CONTENT

1	BACKGROUND
2	LAND STATUS
3	POTENTIAL DEVELOPMENT ASSUMPTION
4	INFRASTRUCTURAL IMPACT
5	CONCLUSION

List of Figures

Figure 1	Location Plan
Figure 2	Proposed Amendments to the OZP
Figure 3	Approved Master Layout Plan under Application No. A/TP/333
Figure 4	Potential Sites for NTEH Development within the Proposed “R(B)14” Zone

List of Tables

Table 3.1	Breakdown of Land Ownership of Northern Portion
-----------	---

List of Appendices

Appendix 1	Technical Note on Traffic Impact Assessment
Appendix 2	Drainage Sensitivity Analysis
Appendix 3	Sewerage Sensitivity Analysis
Appendix 4	Water Supply Sensitivity Analysis

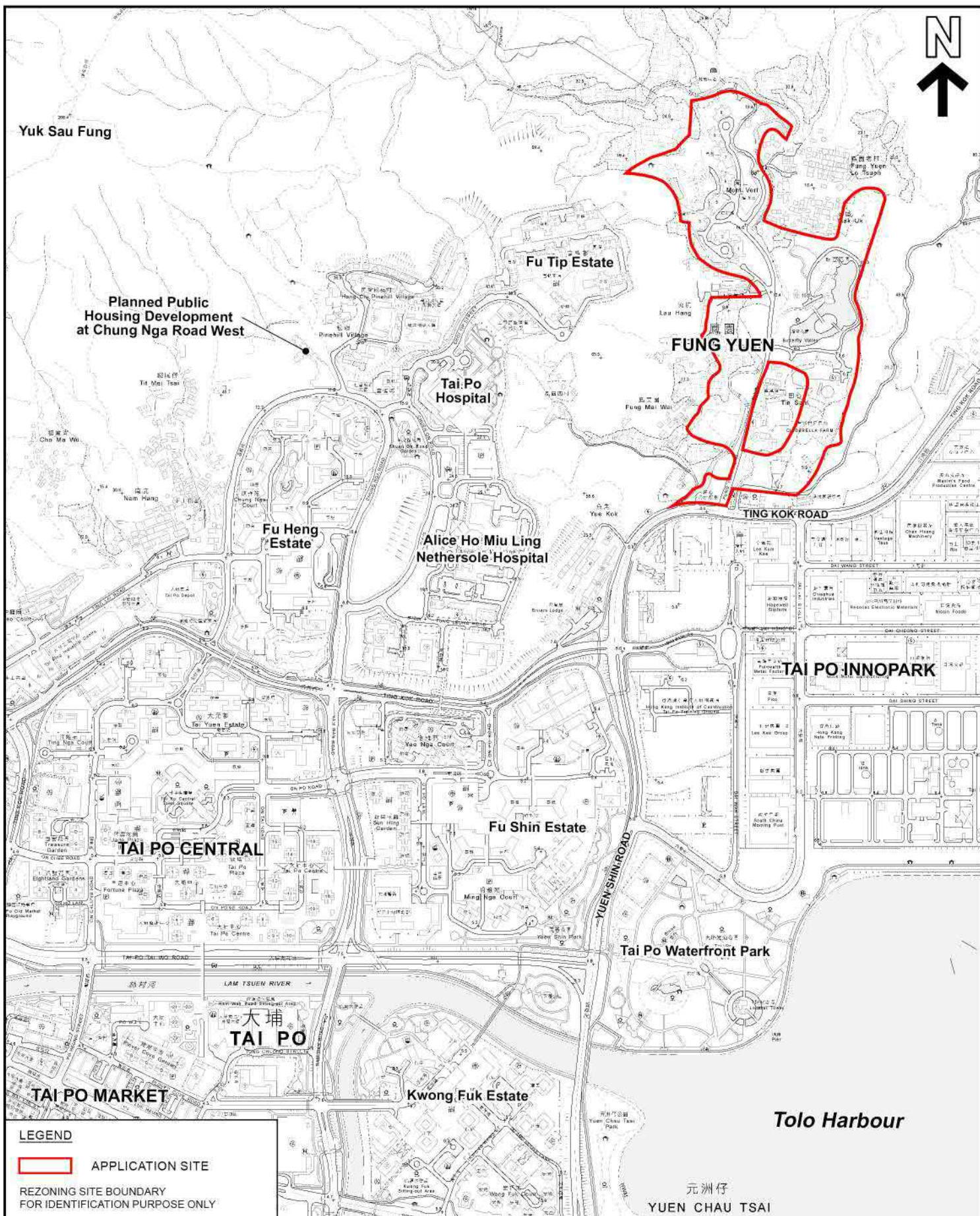
**S.12A APPLICATION FOR AMENDMENT OF PLAN
DRAFT TAI PO OUTLINE ZONING PLAN NO. S/TP/31**

**Proposed Residential Development(s) with Retail, Public
Vehicle Park and Social Welfare Facilities
Various Lots in D.D. 11 and Adjoining Government Land,
Fung Yuen, Tai Po, New Territories**

Sensitivity Test for the Proposed “R(B)14” Zone

1 BACKGROUND

- 1.1 The northern portion of the Application Site under s12A Amendment of Plan Application No. Y/TP/40 (“the Application”) is proposed to be rezoned from “Comprehensive Development Area (1)” to “Residential (Group B) 14” (“R(B)14”) on the Draft Tai Po Outline Zoning Plan No. S/TP/31 (“the OZP”) (**Figures 1 and 2** refer). The northern portion of the Application Site is mainly sat by an existing high-rise residential development, namely Mont Vert. Being the Phase 1 Development under Application No. A/TP/333, the residential development comprises 8 residential towers with a building height of not more than 102mPD. The domestic GFA of the development is about 87,356m². The construction of the development was completed with the Certificate of Compliance obtained in 2015 (**Figure 3** refers)
- 1.2 This Sensitivity Test is prepared and submitted on behalf of Fantastic State Limited (“the Applicant”) to evaluate the infrastructural impact of potential developments of the third party lots within the “R(B)14” zone proposed under the Application.



PLANNING LIMITED
規劃顧問有限公司

LOCATION PLAN

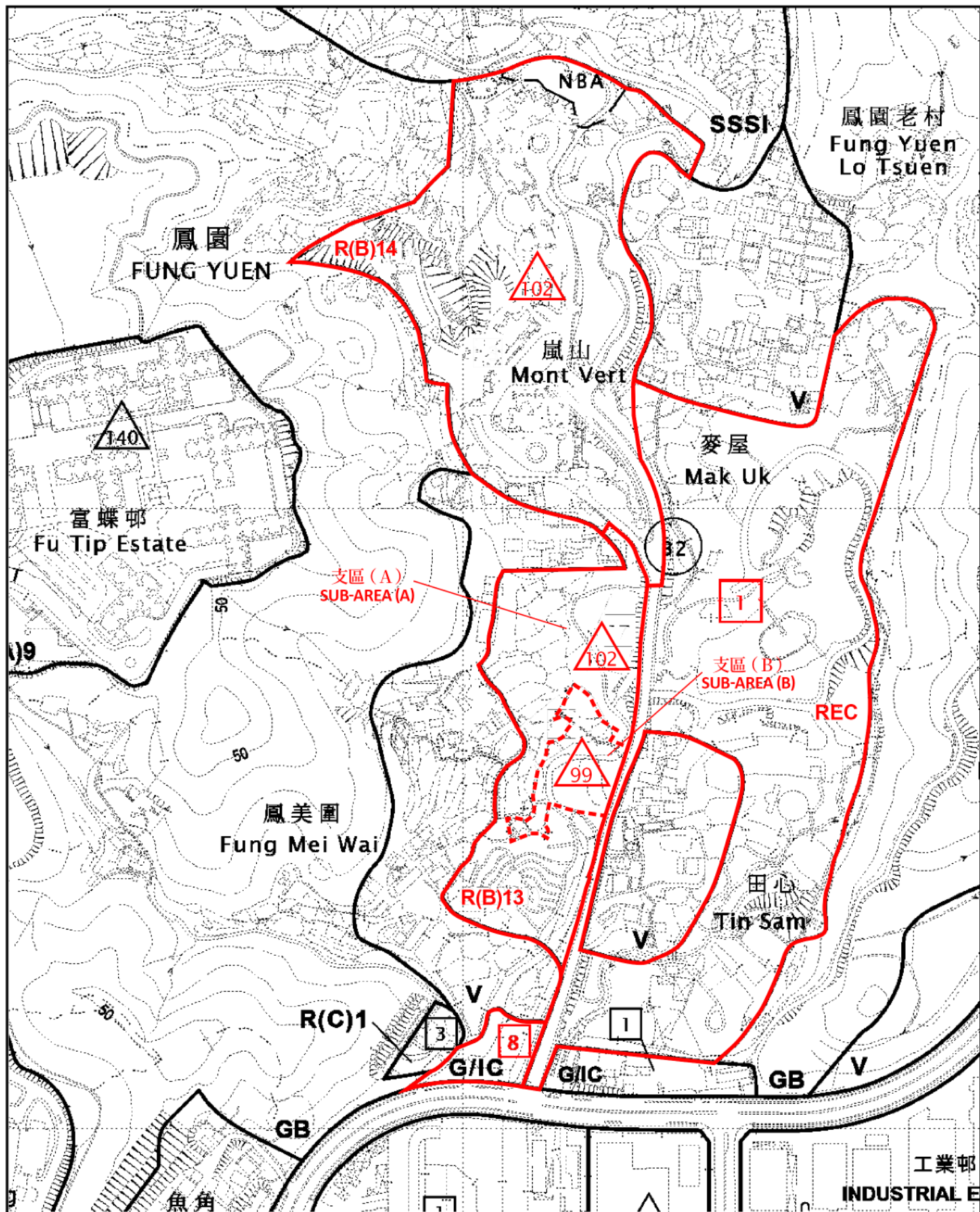
PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

SCALE 1 : 10 000

FIGURE 2

EXTRACT PLAN BASED ON
SURVEY SHEET No. 3-SW-D & 7-NW-B

DATE: 25.9.2025



PLANNING LIMITED
規劃顧問有限公司

PROPOSED AMENDMENTS TO THE OZP

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL,
PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT
LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

SCALE 1:4 000

FIGURE 6.1

MODIFIED PLAN BASED ON
OUTLINE ZONING PLANS No.
S/TP/31 EXHIBITED ON 28.3.2025

DATE: 25.9.2025



PROPOSED DEVELOPMENT AT FUNG YUEN VALLEY, TAI PO - MASTER LAYOUT PLAN

December 2015

Figure 3 Approved Master Layout Plan under Application No. A/TP/333

2 LAND STATUS

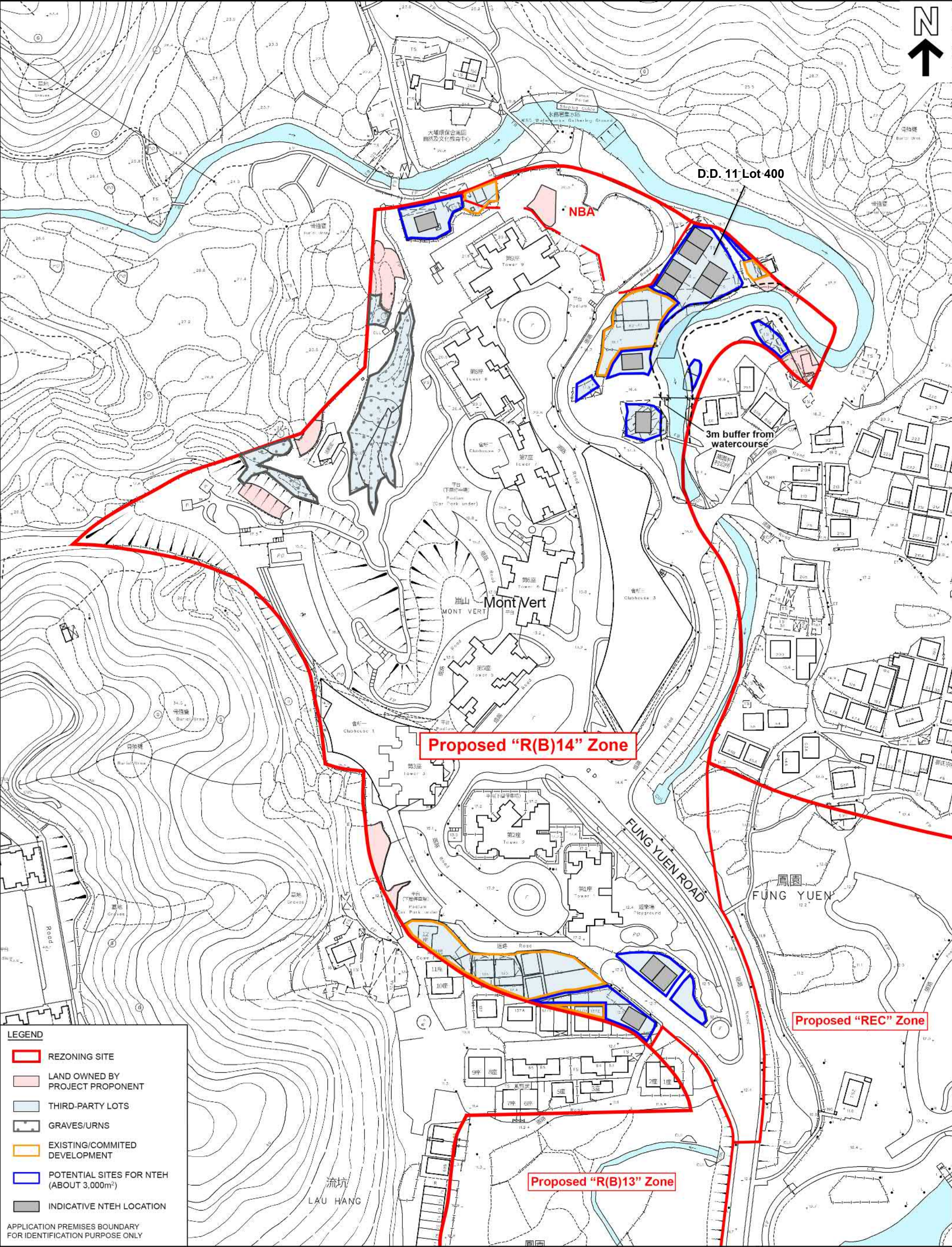
- 2.1 The majority of the northern portion of the Application Site is private land owned or partly owned by the Applicant. The remaining are Government land (9%) and third party lots (11%).

Table 3.1 Breakdown of Land Ownership of Northern Portion

Land Ownership ^[a]	Northern Portion
Private land owned by the Applicant (m ²)	51,404 (80%)
Private land owned by others (m ²)	7,143 (11%)
Government land (m ²)	5,939 (9%)
Total (m ²)	64,486

[a] The areas are measured by using geographic information system software, and subject to detailed on-site survey.

- 2.2 The third party lots are scattered to northeast, northwest and south of Mont Vert. For the lots to the northeast, most of them are small in size and fragmented except Lot 400 in D.D. 11. There is a natural stream course meandering alongside the lots. Land suitable for potential development are limited. For the land to the northwest, most of the lots are sat on slope and/or occupied by graves and urns. For the land to the south, although most lots are third party lots and falling within village environ, they are already occupied by existing or committed development.
- 2.3 Therefore, only a few of the third party lots (about 3,000m²) are available for potential developments. The location of the available land for potential developments is illustrated in **Figure 4**.



LEGEND

- REZONING SITE
- LAND OWNED BY PROJECT PROPONENT
- THIRD-PARTY LOTS
- GRAVES/URNS
- EXISTING/COMMITTED DEVELOPMENT
- POTENTIAL SITES FOR NTEH (ABOUT 3,000m²)
- INDICATIVE NTEH LOCATION

APPLICATION PREMISES BOUNDARY FOR IDENTIFICATION PURPOSE ONLY



PLANNING LIMITED
規劃顧問有限公司

POTENTIAL SITES FOR NTEH DEVELOPMENT WITHIN THE PROPOSED "R(B)14" ZONE

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

SCALE 1:2 000

FIGURE 4

EXTRACT PLAN BASED ON
SURVEY SHEET No.
3-SW-25C & 25D, 7-NW-5A, 5B, 5C & 5D

DATE: 27.11.2025

3 POTENTIAL DEVELOPMENTS ASSUMPTION

- 3.1 Under the proposed amendment to the Statutory Notes of the OZP for “Residential (Group B)” Zone, ‘*On land designated “R(B)14”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 87,356m², a maximum non-domestic GFA of 376m² and a maximum building height in terms above Principal Datum as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.*’ Considering that Mont Vert has used up all the permissible GFA of the proposed “R(B)14” zone, **third party lots owners who wish to develop their land will be required to submit separate application(s) under section 16 of the Town Planning Ordinance to the Town Planning Board for minor relaxation of the GFA restriction, even the proposed uses are Column 1 uses¹. Application(s) will be considered based on the individual merits of the development or redevelopment proposal.**
- 3.2 While adverse infrastructural impact created by a single NTEH development shall not be anticipated, the cumulative impact arising from all the potential NTEH developments may need to be assessed. As such, a sensitivity test assuming all available third party lots for NTEH development has been carried out.
- 3.3 Adopting the standard land estimation of 250m² per NTEH for Small House s16 Planning Applications, with a total available third party lots of 3,000m² (para 2.3 refers). Ultimately, 12 NTEHs is assumed to be developed within the proposed “R(B)14” zone . The estimated population is 95 persons with the assumption of 3 units per NTEH.
- 3.4 By allocating the 12 NTEHs to the more intact third party lots, 8 potential NTEHs to the northeast, 1 NTEH to northwest and 3 NTEHs to the south are expected to be built ultimately. The location of the potential developments is illustrated in **Figure 4**.

¹ New Territories Exempted House (“NTEH”) subsumed under ‘House’ is proposed to be one of the Column 1 uses under the “R(B)14” zone and therefore no planning permission is required. Also, the development of NTEH is exempted from certain provisions of the Buildings Ordinance and its subsidiary regulations, including the need for obtaining prior approval and consent to the commencement of works from the Buildings Department.

4 INFRASTRUCTURE IMPACT

- 4.1 The infrastructural impact of the potential NTEH developments is assessed from traffic, drainage, sewerage and water supply points of view.

Traffic

- 4.2 It is anticipated that the trip generation of potential NTEHs developments is only 2 to 3 pcu/hr (one-way), the traffic impact by the NTEHs is negligible. Moreover, junction improvement schemes have been proposed subject to the Application to improve the junction performance of the studied critical junctions, all junctions will operate with ample junction capacity in the future year. It is confirmed that these junctions will have sufficient capacities to cater the additional minimal traffic trips of NTEHs. Please refer to **Appendix 1** for details.

Drainage

- 4.3 The potential sites for NTEHs development are grouped into two locations, which are Regions A to the south and Region B to the north. Region A is currently occupied by outdoor car parks and Region B consist of temporary structures and some vegetation under existing condition. Under existing condition, the runoff from Region A is discharged to the existing watercourse at the proposed “R(B)13” zone through overland flow, whilst the runoff from Region B is discharged to the existing watercourse next to the Mont Vert via overland flow.
- 4.4 Under the hypothetical scenario, the potential NTEHs will be developed within the available third party lots in the proposed “R(B)14” zone with the presence of the Development in the proposed “R(B)13” zone. The runoff from the potential NTEH developments in Region A will be collected by the proposed boundary channels of the Development in the proposed “R(B)13” zone. The drainage impact assessment of the Development in the proposed “R(B)13” zone has been accounted for collecting runoff from its vicinity via boundary channels, including the runoff from the catchments of the potential NTEH developments in Region A. For the runoff arising from the potential NTEH developments in Region B, it is anticipated to be discharged to the existing watercourse near Mont Vert.
- 4.5 As compared to existing condition, the weighted runoff coefficient taking into account the surface characteristics for the potential NTEH developments in Region A has been reduced under the hypothetical scenario, while that for Region B will be similar to the existing condition. Therefore, it is anticipated that the runoff generated from the potential NTEH development under the hypothetical scenario will be similar or less than that of the existing condition and there will be no adverse impacts arising from the potential NTEH development to the existing drainage system with the presence of the Development in “R(B)13” zone. Please refer to **Appendix 2** for details.

Sewerage

- 4.6 The Application Site is characterised by rural/suburban topography, with limited access to public sewerage infrastructure. Connection to the public system is deemed impractical due to challenges in maintenance, construction responsibilities, and site constraints, such as distance from terminal manholes and potential disruption to existing utilities. However, for conservative consideration, the sewerage sensitivity analysis incorporated the scenario that the total design sewage flow from all proposed NTEH's will be received by the public sewerage system.
- 4.7 The potential NTEH development in the "R(B)14" zone will not cause adverse sewerage impacts to the surroundings. Two schemes (Scheme 1 – Hypothetical Sewerage Tank / Sewerage Treatment Plant and Scheme 2 – Discharge to Public Sewerage) are proposed for the hypothetical development. NTEH owners might propose with private septic tanks or sewerage treatment plant, sewage will be fully managed on-site, complying with EPD/DSD standards and avoiding strain on public infrastructure. The low population density and rural setting further minimise risks. NTEH owners might propose constructing sewerage pipe(s) through others lot boundary and discharged to public sewerage system in Fung Yuen Road. The proposed sewerage pipe(s) should be carried by the owner at his own cost.

Water Supply

- 4.8 Based on the unit water demand and the estimated population, the mean daily fresh water and flushing water demands for the potential NTEH Developments in the proposed "R(B)14" zone are approximately 22m³/day and 7m³/day. As the existing DN150 salt water mains along Fung Yuen Road ends near the entrance of Mont Vert, salt water can only be supplied to the potential NTEH developments in Region A. For the potential NTEH development in Region B, it is assumed the flushing water will be provided by the existing DN200 fresh water main along Fung Yuen Road as there are no existing salt water mains at its adjacency.
- 4.9 Based on the hydraulic calculation, residual heads under hypothetical scenario, which included the potential NTEH development in "R(B)14" zone and the Development in the proposed "R(B)13" and "Government, Institution or Community" ("G/IC") zones, as well as the potential NTEH developments, are estimated. The residual heads for the fresh water supply system under hypothetical scenario range from 63.08m to 28.07m. For the salt water supply system, the residual heads under hypothetical scenario range from 72.26m to 31.12m. The residual heads under hypothetical scenario are well within residual head requirement of 20m and 15m for water supply system.
- 4.10 Based on the assessment findings, it is considered that there is no insurmountable impact due to the additional water demand from the potential NTEH developments in

“R(B)14” zone on the existing water supply system with the presence of the Development in the proposed “R(B)13” zone and “G/IC” zone.

5 CONCLUSION

- 5.1 By assessing the infrastructural capacity for potential NTEH developments on the available third part lots within the proposed “R(B)14” zone, the anticipated impact is minimal and significant adverse impact to the local infrastructure from traffic, drainage, sewerage and water supply points of view is not anticipated.
- 5.2 For potential developments of other nature on the third party lots within the proposed “R(B)14” zone following the approval of the s12A Application, their impact on the local infrastructure shall be discussed in separate planning application(s) submitted by the project proponent.

Appendix 1

Technical Note on Traffic Impact Assessment



**Proposed Residential Development(s) with Retail, Public Vehicle Park and
Social Welfare Facilities at Various Lots in D.D. 11 and Adjoining Government Land,
Fung Yuen, Tai Po, New Territories**

**Technical Note on Traffic Impact by the Remaining Third Party Lots
(February 2026)**

1. Introduction

- 1.1 The planning application of the captioned subject was submitted to the government. Planning Department raised their concerns on the potential traffic impact by remaining third party lots within the proposed “R(B)14” zone
- 1.2 This technical note is prepared to demonstrate that the remaining third party lots will not anticipate adverse traffic impacts on the surroundings.

2. Development Parameters

- 2.1 As given by the KTA Planning Limited, all remaining third party lots within the proposed "R(B)14" zone are assumed to be developed into standard New Territories Exempted Houses (NTEHs). Assume 12 nos. of NTEHs (36 residential units) will be built. The locations of the NTEH developments within the proposed “R(B)14” zone are shown in **Figure Plan 1**.

3. Comparison between NTEH and Our Proposed Development

- 3.1 The comparison between the no. of units of NTEHs and our proposed developments in "R(B)14" Zone is shown in **Table 1** below.

Table 1 Comparison between the no. of units of NTEHs and Our Proposed Developments in “R(B)14” Zone

Use	No. of Residential Units
(A) NTEH	36
(B) Our Proposed Development	1,988
No. of Units of NTEHs / No. of Units of Our Proposed Development = (A) / (B)	1.81%

- 3.2 From **Tables 1**, it is revealed that the no. of unit of NTEHs is only 1.81% of our proposed development, which is minimal.



- 3.3 The roofed-over area of an NTEH is limited to not exceeding 65.03m² (about 700 square feet). Since there is no trip rate for NTEH in TPDM, trip rate of similar flat size has been reference. Upper limit of trip rate of for Private Housing: Low-Density / R(C) (70m²) is adopted to estimate the trip generation by the NTEHs

Table 2 Estimated Trip for the NTEHs Development

Residential Use									
Use	No. of NTEH	Trips Rates (pcu/hr/flat) ⁽¹⁾				Trips (pcu/hr)			
		AM Peak		PM Peak		AM Peak		PM Peak	
		Gen.	Att.	Gen.	Att.	Gen.	Att.	Gen.	Att.
NTEH	36	0.1117	0.0729	0.0454	0.0551	5	3	2	2

(1) Upper limit of trip rate of Private Housing: Low-Density / R(C) (70m²) is adopted

- 3.4 The comparison of the estimated trip generations between NTEHs and proposed developments is shown in **Table 3** below.

Table 3 Trip for the NTEHs and Our Proposed Development

Use	Residential Use			
	Trips (pcu/hr)			
	AM Peak		PM Peak	
	Gen.	Att.	Gen.	Att.
(C) NTEH	5	3	2	2
(D) Our Proposed Development ⁽¹⁾	161	132	136	128
Trips of NTEHs / Trips of Our Proposed Development = (C) / (D)	3.1%	2.3%	1.5%	1.6%

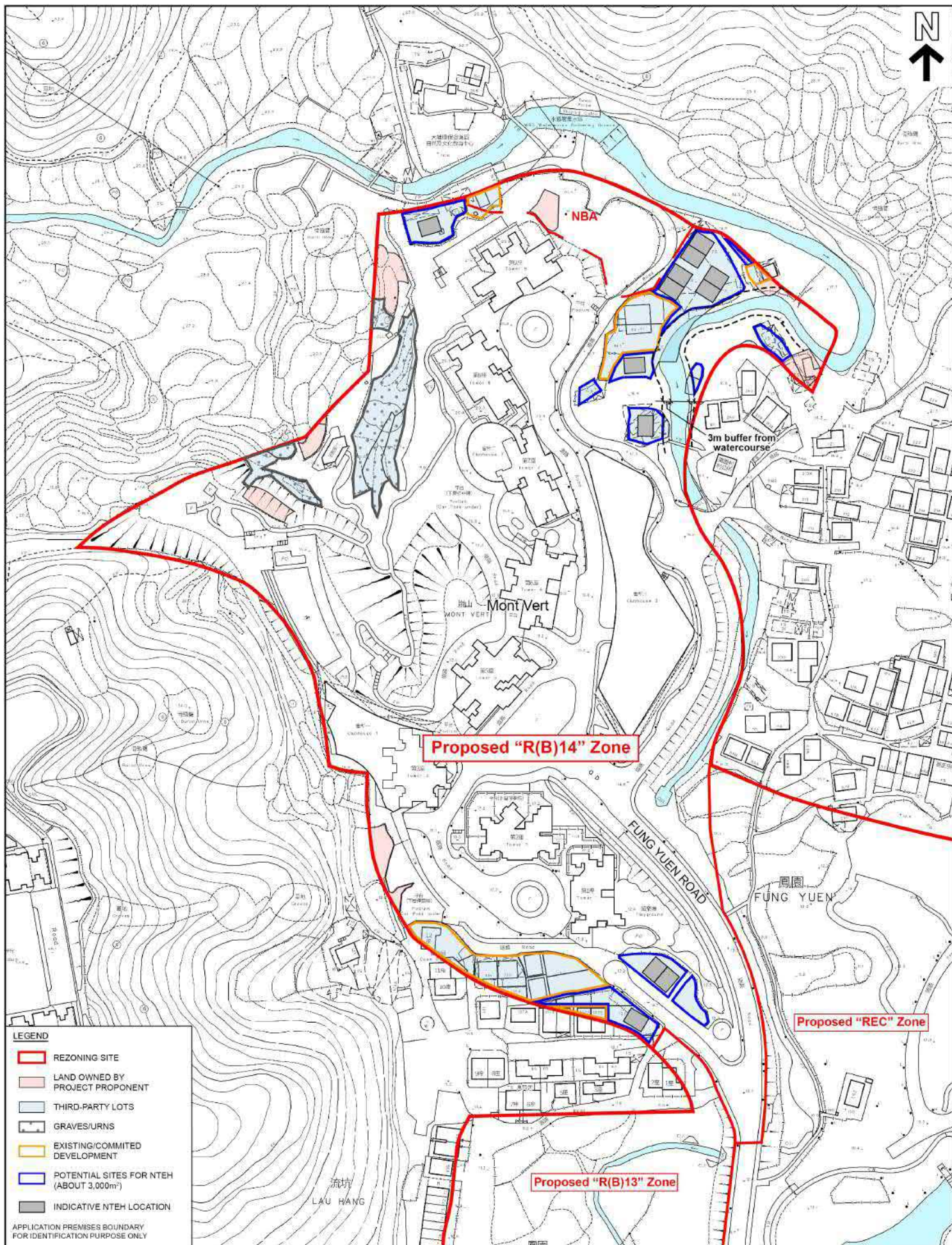
(1) Extracted from the TIA

- 3.5 From **Tables 2** and **3**, it is revealed that the trip generation by NTEHs is only 2 to 5 pcu/hr (one-way), which is only 1.5 to 3.1% of our proposed development. The traffic impact by the NTEHs is negligible.

- 3.6 Moreover, junction improvement schemes have been proposed to improve the junction performance of the studied critical junctions, all junctions will operate with ample junction capacity in the future year. These junctions have sufficient capacities to cater the additional minimal traffic trips of NTEHs.

4. Conclusion

- 4.1 This technical note shows that the trip generation of the NTEHs is small and negligible. Therefore, it would not anticipate adverse impact to the traffic network from traffic engineering point of view.



LEGEND

- REZONING SITE
- LAND OWNED BY PROJECT PROPONENT
- THIRD-PARTY LOTS
- GRAVES/URNS
- EXISTING/COMMITTED DEVELOPMENT
- POTENTIAL SITES FOR NTEH (ABOUT 3,000m²)
- INDICATIVE NTEH LOCATION

APPLICATION PREMISES BOUNDARY FOR IDENTIFICATION PURPOSE ONLY



PLANNING LIMITED
規劃顧問有限公司

POTENTIAL SITES FOR NTEH DEVELOPMENT WITHIN THE PROPOSED "R(B)14" ZONE

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

SCALE 1:2,000

PLAN 1

EXTRACT PLAN BASED ON
SURVEY SHEET No.
3-SW-25C & 25D, 7-NW-5A, 5B, 5C & 5D

DATE: 27.11.2025

Appendix 2

Drainage Sensitivity Analysis

1 Sensitivity Analysis of Potential Development on Third Party Lots in R(B)14 Zone – Drainage

1.1 Background

- 1.1.1 As per the comments of Planning Department on the Planning Application of the proposed development at Fung Yuen, Tai Po (the Development), this sensitivity analysis aims to demonstrate that the existing drainage system is technical feasible to support the hypothetical scenario, which consists of both the potential New Territories Exempted Houses (NTEH) development on third party lots in the proposed R(B)14 zone with the presence of the Development in R(B)13 zone. The location of the R(B)13 and R(B)14 zones is shown in **Figure 1**.

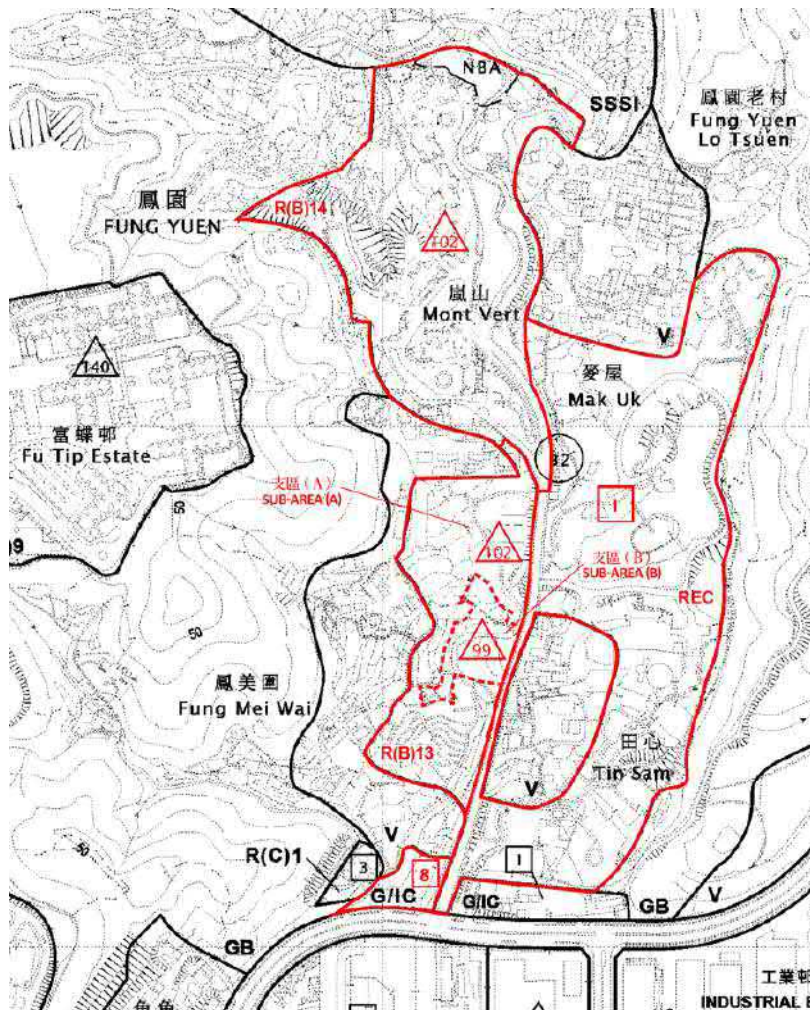


Figure 1 Location plan

1.2 The Remaining Potential Areas for the Potential NTEH Development in R(B)14 Zone

- 1.2.1 There are some remaining potential areas for the potential NTEH development in R(B)14 zone. It is estimated that the maximum no. of NTEH in that potential area is 12 houses which can be accommodated in five different third party lots. The estimated population is 95 persons with the assumption of 3 units per NTEH. The potential site for NTEH development within the proposed R(B)14 zone is enclosed in **Figure 2**.

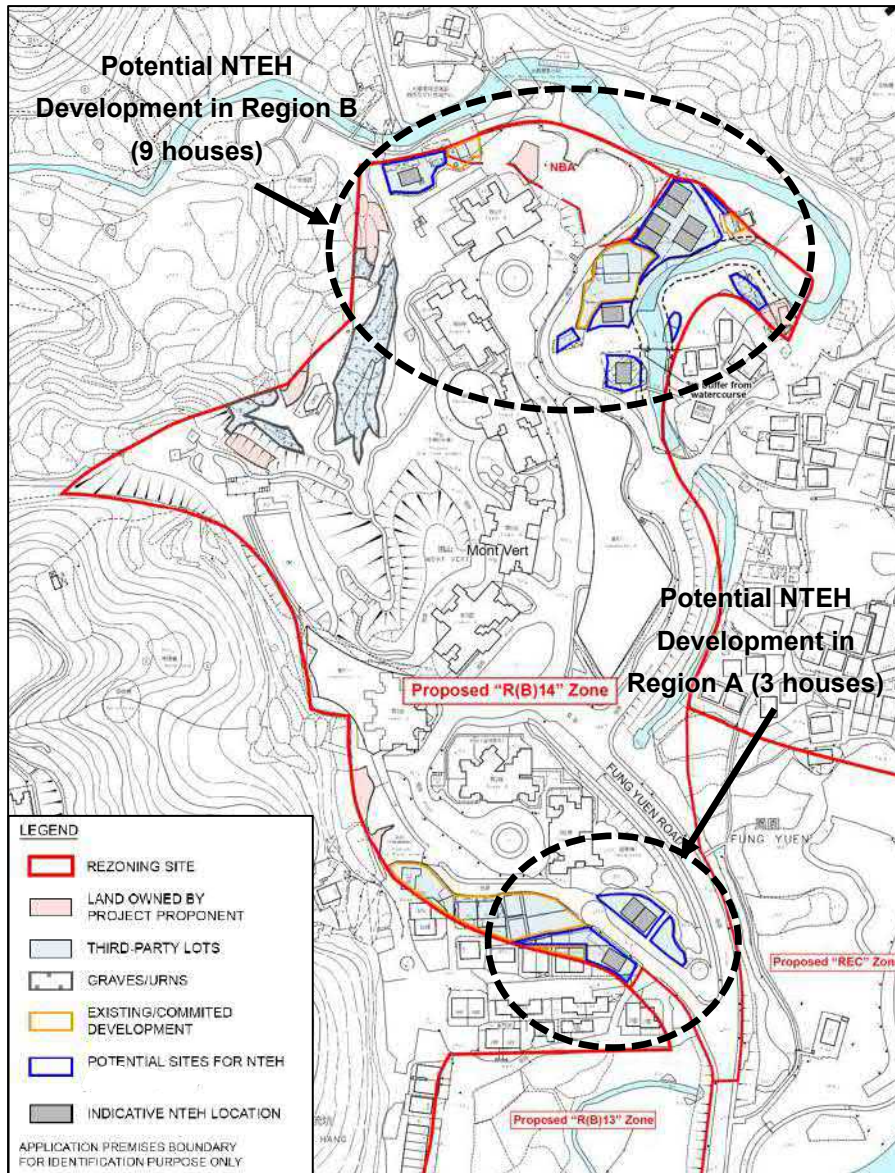


Figure 2 Potential site for NTEH development within the proposed R(B) 14 zone

1.3 Preliminary Drainage Assessment for the potential NTEH development in R(B)14 zone

Existing Surface Characteristics for the potential sites for NTEH development

- 1.3.1 As shown in **Figure 2**, the potential sites for NTEH development are grouped into two locations, which are Regions A and B. Region A is currently occupied by outdoor car parks and Region B consists of temporary structures and some vegetation under existing condition. Aerial photo showing the existing land use of the potential sites for NTEH is shown in **Figure 3**. Under existing condition, the runoff from Region A is discharged to the existing watercourse at the proposed R(B)13 zone through overland flow, whilst the runoff from Region B is discharged to the existing watercourse next to the Mont Vert via overland flow.



Figure 3 Aerial photo showing the potential site for NTEH

1.3.2 Under the condition with the Development of proposed R(B) 13 zone in place, the runoff from Region A will be collected by the proposed boundary channels of the Development for discharging into the existing watercourse at the R(B) 13 zone. For the runoff arising from the potential NTEH development in Region B, it is anticipated to be discharged to the existing watercourse near Mont Vert, as per the existing condition.

1.3.3 The existing surface characteristics for the potential sites for NTEH development in both Regions A and B are present in **Table 1.1**.

Table 1.1: Existing surface characteristics for the potential sites for NTEH development in Regions A and B

Location	Paved Area (m ²)	Unpaved Area (m ²)	Total Area (m ²)	Weighted Runoff Coefficient
Region A	532	0	532	0.95
Region B	1148	572	1720	0.72
Remark:				
(i) It is assumed that the runoff coefficient of paved area and unpaved area are 0.95 and 0.25 respectively.				

Surface Characteristics for the potential sites for NTEH development under hypothetical scenario

1.3.4 Under the hypothetical scenario, the potential NTEH will be developed within the potential sites for NTEH development in R(B)14 zone with the presence of the Development in R(B)13 zone. Since the development of NTENs is not part of the Proposed Development under this planning application, the third party lots owners who wish to develop their land shall determine its own design layout and submit separate planning application under S16 of the Town Planning Ordinance. This sensitivity test only demonstrates a possible option for the NTEHs under the hypothetical scenario.

1.3.5 It is assumed that, under the hypothetical scenario, excluding the plan area for the buildings (i.e. 65m² for each NTEH), 60% of the remaining areas of the potential sites will be paved by brick and 40 % of the remaining area will be unpaved. The surface characteristics for the potential sites for NTEH development in both Regions A and B under hypothetical scenario are present in **Table 1.2**.

Table 1.2: Surface characteristics for the potential sites for NTEH development in Regions A and B under hypothetical scenario

Location	Building Area (m ²)	Brick-paved Area (m ²)	Unpaved Area (m ²)	Total Area (m ²)	Weighted Runoff Coefficient
Region A	195	202	135	532	0.72
Region B	585	681	454	1720	0.71
Remark:					
(i) It is assumed that the runoff coefficient of buildings, brick-paved area and unpaved area are 0.95, 0.8 and 0.25 respectively.					
(ii) It is assumed that, excluding the plan area for the buildings (i.e. 65m ² for each NTEH), 60% of the remaining areas of the potential sites will be paved by brick and 40 % of the remaining area will be unpaved.					

- 1.3.6 Same as the existing condition with the proposed Development, the runoff from the potential NTEH development in Region A will be collected by the proposed boundary channels of the Development in R(B)13 zone for discharging into the existing watercourse. The drainage impact assessment of the Development in R(B)13 zone has been accounted for collecting runoff from its vicinity via boundary channels, including the runoff from the catchments of the potential NTEH development in Region A. For the runoff arising from the potential NTEH development in Region B, it is anticipated to be discharged to the existing watercourse near Mont Vert. The discharge arrangement from the potential NTEH development to those boundary channels (for Region A) or existing watercourse (for Region B) are subject to the detailed design carried by the owners of the potential NTEH development.

Evaluation of Runoff Generated from NTEH under Existing and Hypothetical Scenarios

- 1.3.7 With reference to **Tables 1.1** and **1.2**, as compared to existing condition, the weighted runoff coefficient for the potential NTEH development in Region A has been reduced under the hypothetical scenario, while that for Region B, the weighted runoff coefficient is similar to existing condition. Based on **Table 1.3**, the runoffs generated from the NTEH development from Regions A and B under hypothetical scenario is similar or less than that in the existing scenario. Therefore, it is anticipated that the runoff generated from the potential NTEH development under the hypothetical scenario will be similar or less than that of the existing condition.

Table 1.3: Runoff Generated from NTEH under Existing and Hypothetical Scenarios

Location	Total Area (m ²)	Weighted Runoff Coefficient		Time of Concentration (Min) ^{(iii),(iv)}	200-year Extreme Mean Intensity with Climate Change Effect (mm/hr) ^(v) [C]	Peak Runoff (m ³ /s) $[D] = \frac{[C] * [B] * [A]}{3600 * 1000}$		Change in Peak Runoff (m ³ /s)
		[A]	[B]			Existing Scenario	Hypothetical Scenario	
		(i)	(i),(ii)					
Region A	532	0.95	0.72	4.5	334.6	0.047	0.035	-0.012
Region B	1720	0.72	0.71	2.0	378.1	0.130	0.128	-0.002

Remark:

- (i) It is assumed that the runoff coefficient of buildings, brick-paved area and unpaved area are 0.95, 0.8 and 0.25 respectively.
- (ii) It is assumed that, excluding the plan area for the buildings (i.e. 65m² for each NTEH), 60% of the remaining areas of the potential sites will be paved by brick and 40 % of the remaining area will be unpaved.
- (iii) Time of concentration is determined with Brandsby William's Equation, $t_o = \frac{0.14465L}{H^{0.2}A^{0.1}}$.
Region A: A= 532m², L= 82.8m, Hh= 13.19mPD, Hl= 8.24mPD. tc= 4.5min.
Region B: A=1720m², L=40.1m, Hh= 18.5mPD, Hl= 16.33mPD. tc= 2.0min.
- (iv) It is assumed that there will be no change in site formation levels in the potential NTEH site as compared with the existing condition. Thus, the time of concentration for the development option will be same for both developed and existing condition.
- (v) Extreme mean intensity is calculated with the time of concentration and storm constants given in Table 3a of Stormwater Drainage Manual (SDM) Corrigendum No. 1/2024 and adjusted with a factor of 1.281 for the climate change effect in the end of 21st century.

- 1.3.9 If the design layouts proposed by the third party lots owners in future deviate from the above assumption in **Table 1.2**, the third party lots owners shall carry out his/ her own assessment on the drainage impact caused by their developments and consider providing necessary mitigation measures, such as an on-site stormwater storage tank to temporarily store the additional runoff and discharge the stored runoff after the peak of the storm.
- 1.3.10 In view of the above, there will be no adverse impacts arising from the potential NTEH development to the existing drainage system with the presence of the Development in R(B)13 zone.

1.4 Conclusion

- 1.4.1 As per the comments of Planning Department, this sensitivity analysis aims to demonstrate that the existing drainage system is technical feasible to support the hypothetical scenario with the potential New Territories Exempted Houses (NTEH) development on third party lots in the proposed R(B)14 zone with the presence of the proposed development at Fung Yuen, Tai Po (the Development) in R(B)13 zone.
- 1.4.2 The potential sites for NTEH development are grouped into two locations, which are Regions A and B. Region A is currently occupied by outdoor car parks and Region B consists of temporary structures and some vegetation under existing condition. Under existing condition, the runoff from Region A is discharged to the existing watercourse at the proposed R(B)13 zone through overland flow, whilst the runoff from Region B is discharged to the existing watercourse next to the Mont Vert via overland flow.
- 1.4.3 Under the hypothetical scenario, the potential NTEH will be developed within the potential sites for NTEH development in R(B)14 zone with the presence of the Development in R(B)13 zone. The runoff from the potential NTEH development in Region A will be collected by the proposed boundary channels of the Development in R(B)13 zone. The drainage impact assessment of the Development in R(B)13 zone has been accounted for collecting runoff from its vicinity via boundary channels, including the runoff from the catchments of the potential NTEH development in Region A. For the runoff arising from the potential NTEH development in Region B, it is anticipated to be discharged to the existing watercourse near Mont Vert.
- 1.4.4 As compared to existing condition, the weighted runoff coefficient for the potential NTEH development in Region A has been reduced under the hypothetical scenario, while that for Region B will be similar to the existing condition. Therefore, it is anticipated that the runoff generated from the potential NTEH development under the hypothetical scenario will be similar or less than that of the existing condition and there will be no adverse impacts arising from the potential NTEH development to the existing drainage system with the presence of the Development in R(B)13 zone. If the design layouts proposed by the third party lots owners in future deviate from the assumption adopted in the sensitivity test, the third party lots owners shall consider providing necessary mitigation measures such as on-site storage tank in accordance with its own drainage impact assessment.

Appendix 3

Sewerage Sensitivity Analysis

PROJECT NO. P2319

**SEWERAGE SENSITIVITY TEST
FOR
REMAINING AREAS OF “R(B)14” ZONE,
TAI PO, NEW TERRITORIES**

GREG WONG & ASSOCIATES LTD.

Prepared by:	Kelvin Au Yeung
Checked by:	Kevin Tang
Approved by:	Kevin Tang
Report No.:	2319G003
Revision:	3
Date:	March 2026

INDEX

Section

1.	Introduction.....	3
2.	Existing Sewerage Condition	4
3.	Proposed Sewerage System	5
4.	Conclusion.....	6

Appendices

Appendix A	Potential NTEH Site Location Plan
Appendix B	Sewerage Record Plan (from DSD)
Appendix C	Hypothetical Sewerage Plan

1. Introduction

Greg Wong & Associates was commissioned to carry out a sewerage sensitivity test for Proposed Residential Development in Tai Po.

This Sensitivity Test Report assesses the potential sewerage impacts arising from the proposed development of New Territories Exempted Houses (NTEHs) in the remaining areas of the "R(B)14" zone under the latest rezoning application. The assessment focuses on demonstrating that the development will not cause adverse impacts to the surrounding environment, infrastructure, or public health. It evaluates sewage generation, treatment options.

The report is prepared in accordance with the Town Planning Board's (TPB) guidelines for rezoning applications, which require verification of infrastructure capacity, including sewerage, to ensure no overstrain on existing or planned systems. This sensitivity test simulates a conservative development scenario to confirm environmental acceptability.

The NTEH site location plan of the remaining areas of the proposed "R(B)14" zone are enclosed in [Appendix A](#).

The rezoning application proposes the "R(B)14" zone for low-density residential development, primarily NTEHs, in a suburban area of Hong Kong's New Territories. The site is characterized by rural/suburban topography, with limited access to public sewerage infrastructure. Connection to the public system is deemed impractical due to challenges in maintenance, construction responsibilities, and site constraints, such as distance from terminal manholes and potential disruption to existing utilities.

For conservative consideration, the sewerage sensitivity analysis incorporated the scenario that the total design sewage flow from all proposed NTEH's will be received by the public sewerage system.

2. Existing Sewerage Condition

2.1 Existing Sewerage

The sewerage record plans for the site have been retrieved from Drainage Services. The sewerage system is located underneath the Fung Yuen Road, which serves for the residents uphill and nearby. It is connected to the Tin Sam Sewage Pumping Station at the end of the Fung Yuen road. The sewerage record plans are enclosed in [Appendix B](#).

			<i>Fung Yuen Lo Tsuen A (A1)</i>	<i>Fung Yuen Lo Tsuen B (A2)</i>	<i>Mak Uk (A3)</i>	<i>Tin Sam (C1)</i>	<i>Le Jardin (C2)</i>
No. of Flats			42	210	165	78	-
Occupant per Flats (2024 census)			2.6	2.6	2.6	2.6	-
Population	Residential		109	546	429	203	0
	Employee		0	0	0	0	10**
Unit Flow Factor (UFF)	Domestic	m ³ /day/ person	0.150	0.150	0.270	0.270	-
	Commercial Employee	m ³ /day/ employee	0.080	0.080	0.080	0.080	0.080
	Commercial Activities	m ³ /day/ employee	0.200	0.200	0.200	0.200	0.200
Foul Water Flow (Q)	Domestic	m ³ /s	0.000189	0.000948	0.001341	0.000634	-
	Commercial Employee	m ³ /s	0.000000	0.000000	0.000000	0.000000	0.000009
	Commercial Activities*	m ³ /s	0.000000	0.000000	0.000000	0.000000	0.000023
	Total	m³/s	<i>0.000189</i>	<i>0.000948</i>	<i>0.001341</i>	<i>0.000634</i>	<i>0.000032</i>

Table 2.1 Assumed Populations and Average Foul Flow which catchment covers the existing developments within A1 + A2 + A3 + C1 + C2 to manhole FMH1005471

* J11 – Community, Social & Personal Services are assumed as commercial activities for existing residential A1 to C2 (refer to Table T-2 of "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning")

**2000m²/employee are assumed to manage Le Jardin

2.2 Capacity of Existing Sewerage System

The sewerage record plans for the site have been retrieved from Drainage Services. The sewerage record plans are enclosed in [Appendix B](#).

From the DSD sewerage record plan, 200/225mm diameter pipe is located outside the NTEH development with a minimum 28m. It is anticipated that insufficient existing sewerage pipes are connecting from the NTEH development to public sewerage system. The hypothetical foul water flow from FMH1005858 to FMH1005427 are enclosed in [Appendix C](#). The flowing capacity of pipe until Tin Sum Sewage Pumping Station is sufficient with hypothetical NTEH development.

2.3 Proposed Social Welfare Complex and Phase II Residential Tower

The Proposed Development in Social Welfare Complex and Phase II Residential Tower in application site is proposed to discharge to the public sewerage system. The proposed foul water flow is extracted from Sewerage Impact Assessment and enclosed in [Appendix C](#).

The total foul water flow from Social Welfare Complex and Phase II Residential Tower are summarized as 0.000825m³/s and 0.002226m³/s.

3. Hypothetical Sewerage System

The proposed development in the remaining areas of "R(B)14" zone includes up to 12 NTEHs, in line with the attached plan. Each NTEH is assumed to accommodate up to three residential units, resulting in a total of 36 units. Based on standard occupancy rates for NTEHs (approximately 2.6 persons per unit), the anticipated population is 95 persons.

3.1 Scheme 1 – Hypothetical Sewerage Tank / Sewerage Treatment Plant

The site is located in a rural Hong Kong area, away from public sewerage networks managed by the DSD with a minimum 28m distance. It is not practical to construct the sewerage pipe through others lot boundary due to construction difficulties and maintenance responsibilities. NTEH developers are required to install private sewage disposal systems, such as septic tanks or package sewage treatment plants, to treat and dispose of effluent on-site or via licensed means, ensuring no direct discharge into public sewers or surrounding watercourses. The hypothetical sewerage works are shown in [Appendix C](#).

3.2 Scheme 2 – Discharge to Public Sewerage

			<i>New Territories Exempted Houses (NTEH)</i>
No. of Flats			36
Occupant per Flats (2024 census)			2.6
Population	Residential		95
	Employee		0
Unit Flow Factor (UFF)	Domestic	m ³ /day/ person	0.270
	Commercial Employee	m ³ /day/ employee	0.080
	Commercial Activities	m ³ /day/ employee	0.200
Foul Water Flow (Q)	Domestic	m ³ /s	0.000297
	Commercial Employee	m ³ /s	0.000000
	Commercial Activities*	m ³ /s	0.000000
	Total	m³/s	<i>0.000297</i>

Table 3.1 Assumed Populations and Average Foul Flow which catchment covers the existing developments within NTEH to manhole FMH1005471

	Catchment A (A1 + A2 + A3 + C1 + C2 + D + E + NTEH)
Calculated Total Average Flow (m ³ /s)	0.006493
Peaking Factor	6*
Total Peak Flow (m ³ /s)	0.038958

*Peaking Factor (including stormwater allowance) for facility with existing upstream sewerage is adopted

Table 2.2 Total Peak Flow Calculations from existing developments (Catchment A1 + A2 + A3 + C1 + C2 + D + E + NTEH) to manhole FMH1005471

The calculated peak sewerage flow from proposed development of NTEH is about 0.0017 m³/s. According to the sewerage record plan from DSD, there is no existing sewer for the proposed NTEH. It is recommended that an independently proposed sewerage system be provided to deliver flow to the existing sewerage system **by the lot owner at his own cost and maintenance responsibilities**. The hypothetical sewerage works and calculation are shown in **Appendix C**.

4. Conclusion

- 4.1 This sensitivity test demonstrates that the proposed 12 NTEHs in the "R(B)14" zone will not cause adverse sewerage impacts to the surroundings.
- 4.2 Two schemes are proposed for the hypothetical development.
- 4.3 NTEH owners might propose with private septic tanks or sewerage treatment plant, sewage will be fully managed on-site, complying with EPD/DSD standards and avoiding strain on public infrastructure. The low population density and rural setting further minimize risks.
- 4.4 NTEH owners might propose construction sewerage pipe through others lot boundary and discharged to public sewerage system in Fung Yuen Road. **The proposed sewerage pipe should be carried by the owner at his own cost.**

Appendix A
Potential NTEH Site Location Plan

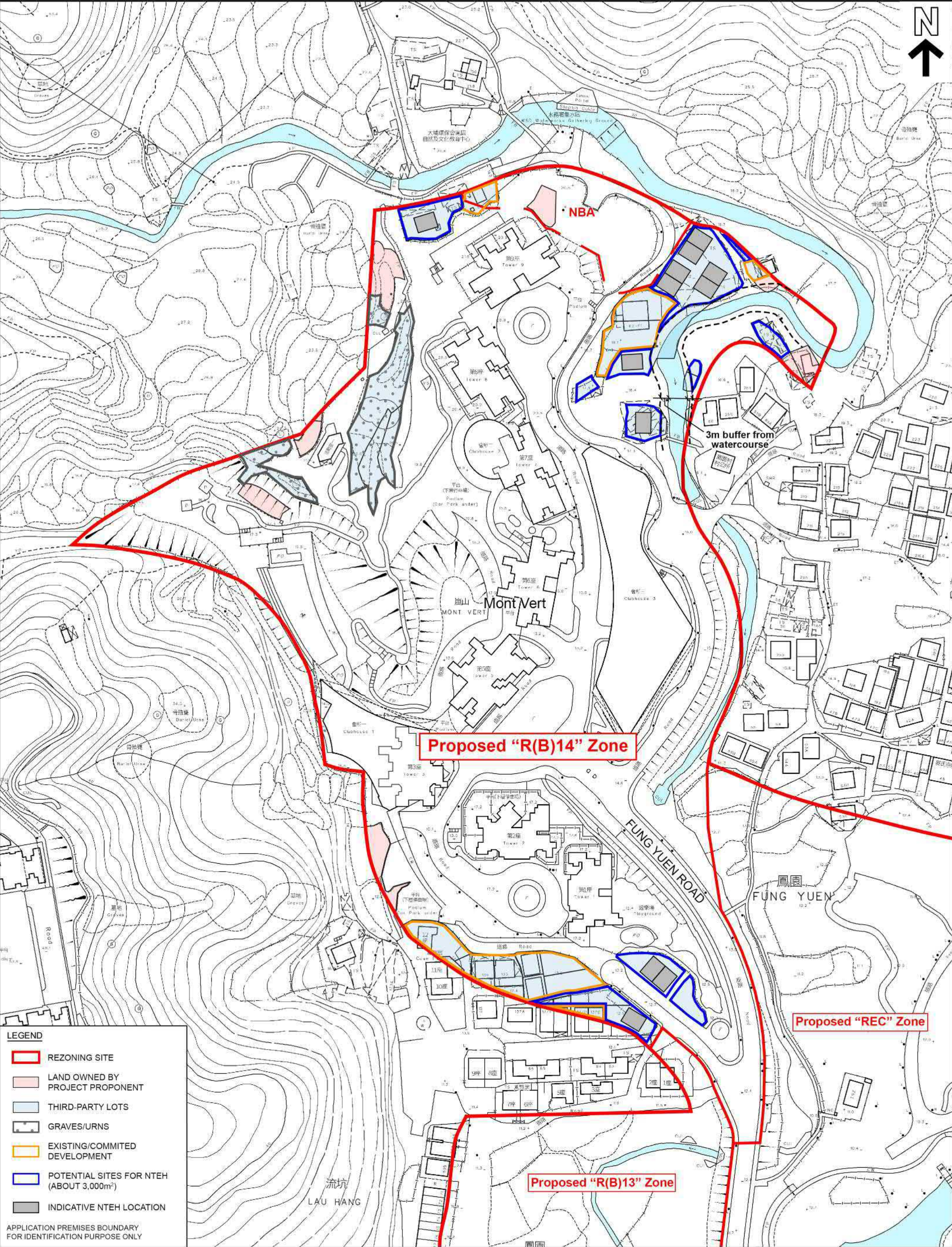
Appendix B
Sewerage Record Plan (from DSD)

Appendix C

Hypothetical Sewerage Plan

Appendix A

Potential NTEH Site Location Plan



LEGEND

- REZONING SITE
- LAND OWNED BY PROJECT PROPONENT
- THIRD-PARTY LOTS
- GRAVES/URNS
- EXISTING/COMMITTED DEVELOPMENT
- POTENTIAL SITES FOR NTEH (ABOUT 3,000m²)
- INDICATIVE NTEH LOCATION

APPLICATION PREMISES BOUNDARY FOR IDENTIFICATION PURPOSE ONLY



PLANNING LIMITED
規劃顧問有限公司

POTENTIAL SITES FOR NTEH DEVELOPMENT WITHIN THE PROPOSED “R(B)14” ZONE

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

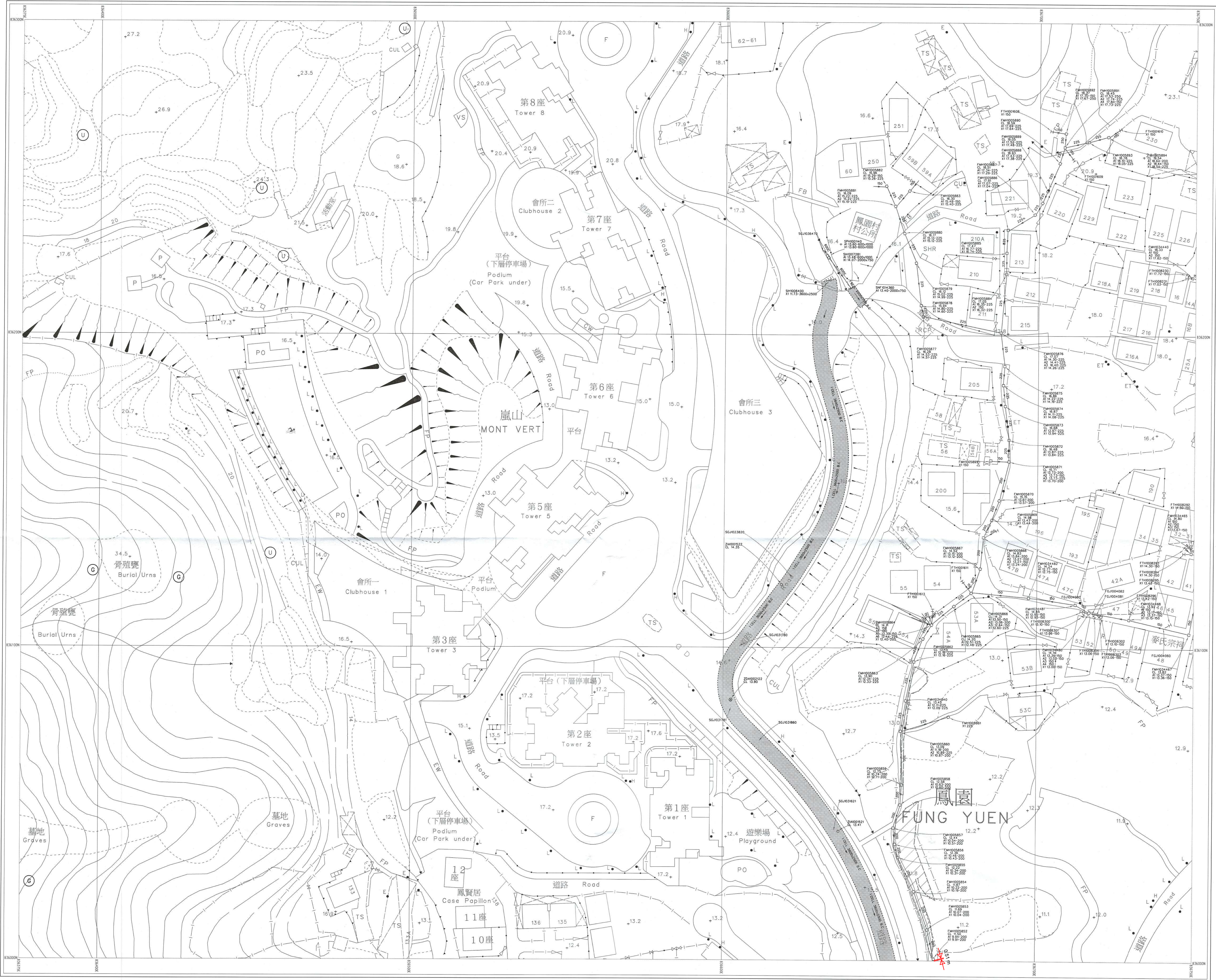
SCALE 1 : 2 000

PLAN 1

EXTRACT PLAN BASED ON
SURVEY SHEET No.
3-SW-25C & 25D, 7-NW-5A, 5B, 5C & 5D

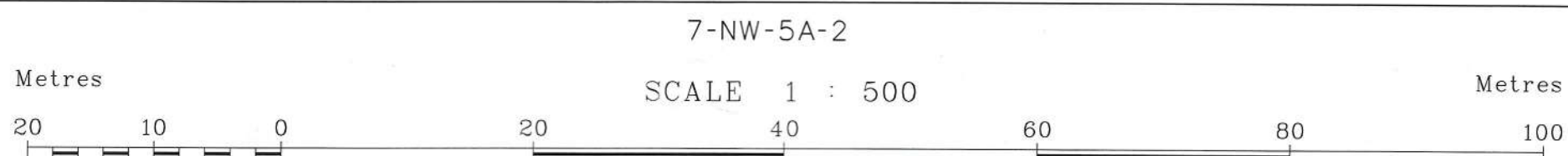
DATE: 27.11.2025

Appendix B
Sewerage Record Plan (from DSD)



Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (<https://www.map.gov.hk/gm/?lg=en>). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)



Mainland North Division
Drainage Services Department

© The Government of the Hong Kong SAR
Map reproduced with permission of the Director of Lands

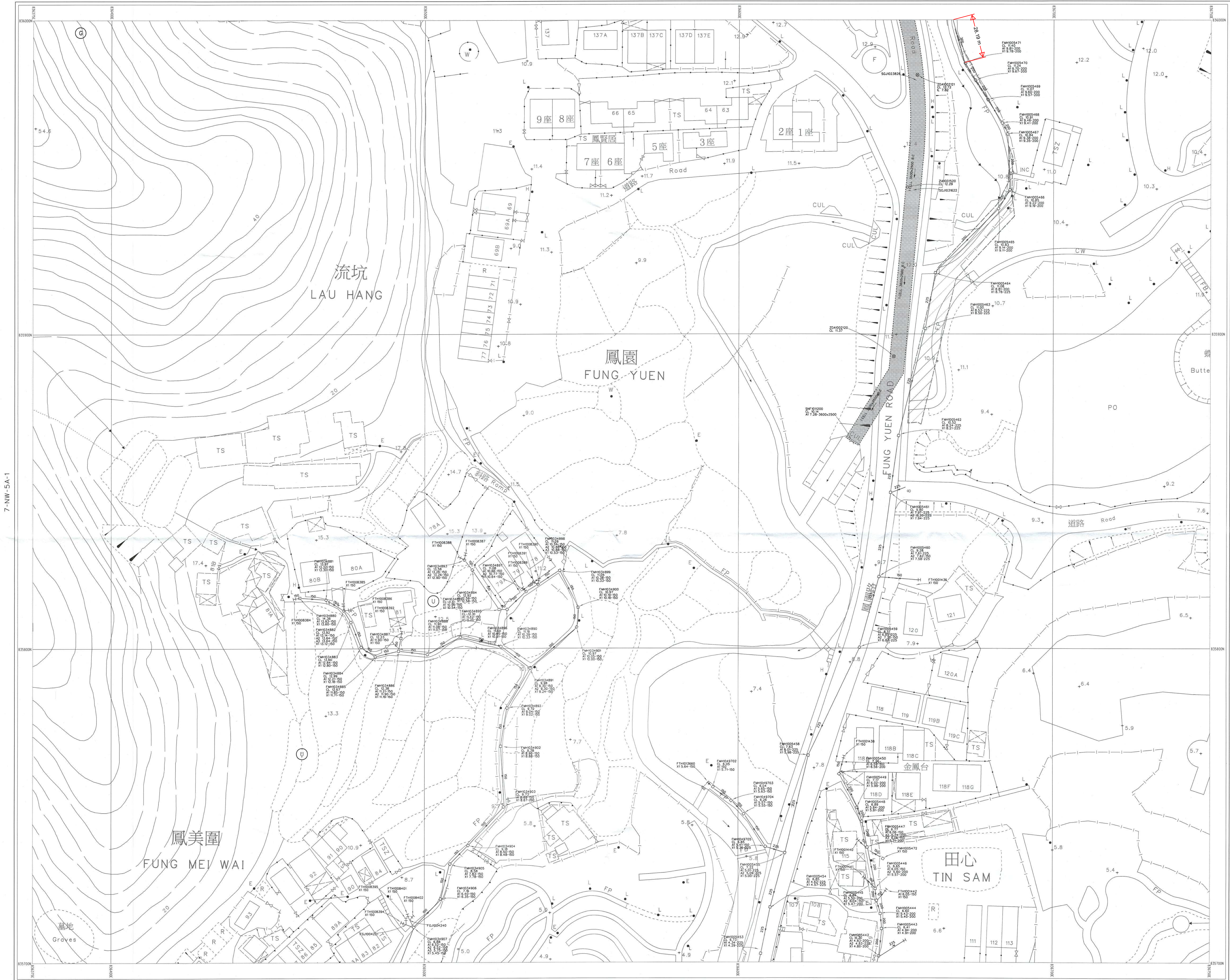
Drainage Record Sheet Number

3-SW-25C-4

Last Updating: 1/4/2025

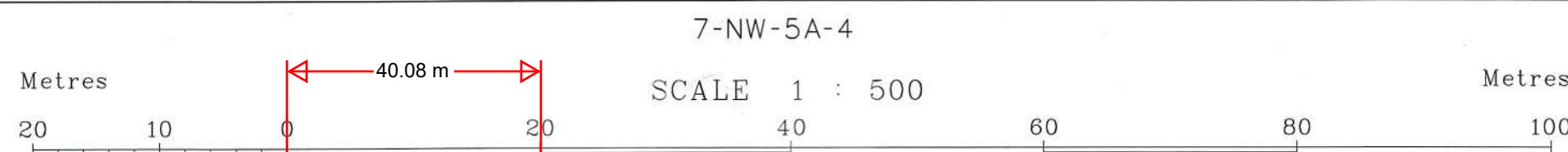
Map data renewed on January 2025

3 JUN 2025



Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (<https://www.map.gov.hk/gm/?lg=en>). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)



D

Mainland North Division
Drainage Services Department

© The Government of the Hong Kong SAR
Map reproduced with permission of the Director of Lands

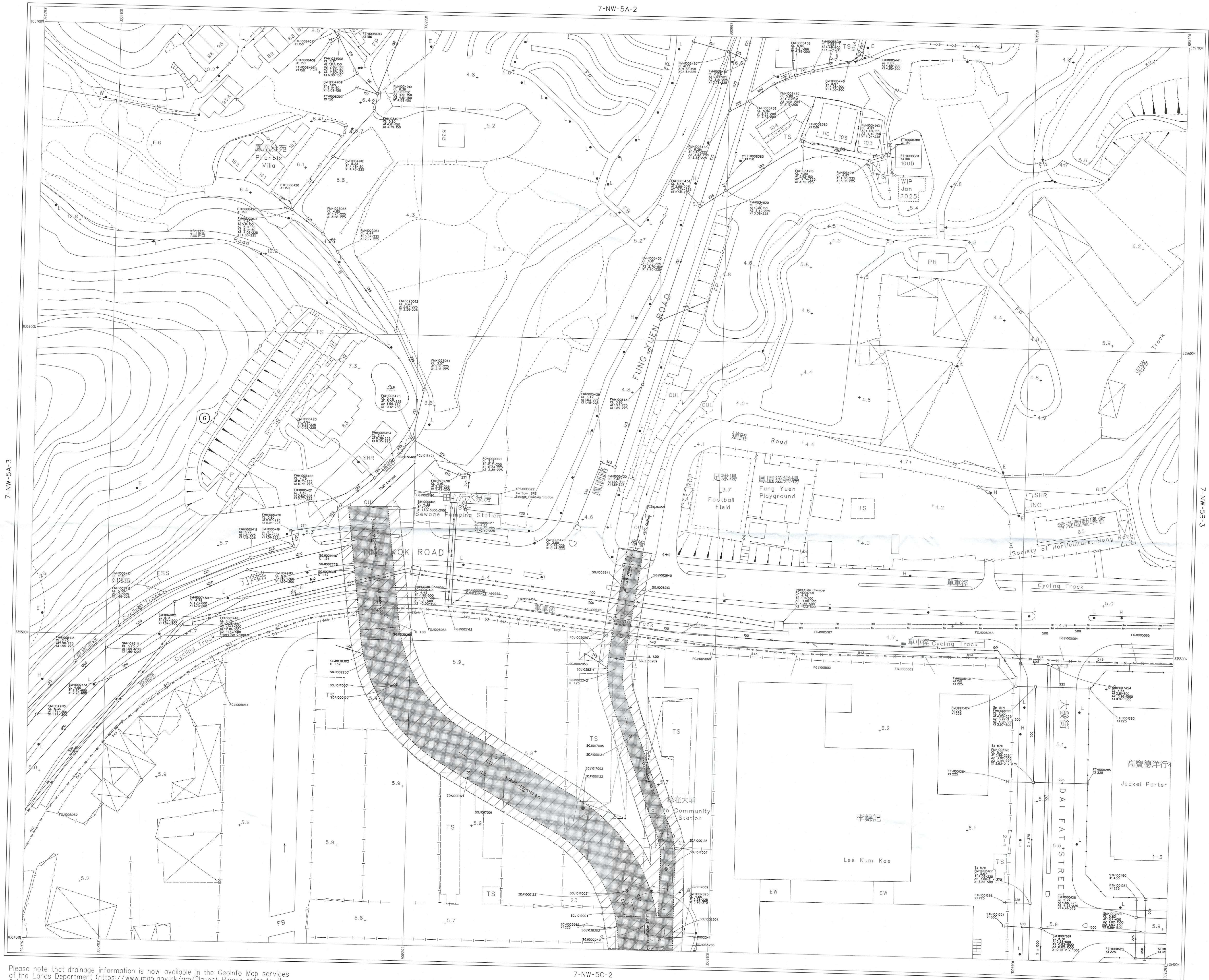
Drainage Record Sheet Number

7-NW-5A-2

Last Updating : 1/4/2025

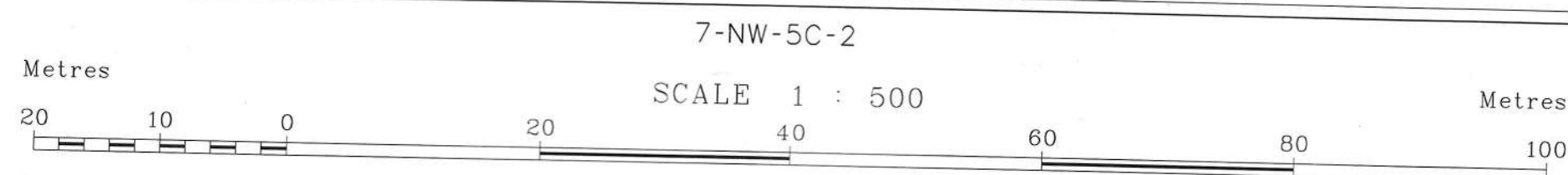
Map data renewed on January 2025

3 JUN 2025



Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (<https://www.map.gov.hk/gm/?lg=en>). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)



7-NW-5C-2
SCALE 1 : 500
Mainland North Division
Drainage Services Department
© The Government of the Hong Kong SAR
Map reproduced with permission of the Director of Lands

Drainage Record Sheet Number

7-NW-5A-4

Last Updating : 1/4/2025

Map data renewed on January 2025

3 JUN 2025

Appendix C

Hypothetical Sewerage Plan

discharge of the untreated raw sewage when there is plant failure before the storage capacity of the sewage treatment plant is exhausted during the maintenance period. It would be the same case for emergency situation such as power failure and plant breakdown. The lot owner will be responsible for the implementation and maintenance of the proposed STP.

3.2 G/IC zone

The proposed G/IC facilities has floor area of about 4,782 s.m. for the provision of a 150-place residential care home for the elderly cum a 30-place day care unit.

			Social Welfare Complex (D1)
No. of Flats			-
Occupant per Flats (2024 census)			-
Population	Residential		150
	Employee		110
Unit Flow Factor (UFF)	Domestic	m ³ /day/person	0.270
	Commercial Employee	m ³ /day/employee	0.080
	Commercial Activities	m ³ /day/employee	0.200
Foul Water Flow (Q)	Domestic	m ³ /s	0.000469
	Commercial Employee	m ³ /s	0.000102
	Commercial Activities	m ³ /s	0.000255
	Total	m³/s	0.000825
Peaking Factor (P)			6*
Peak Foul Water Flow (Qp)	=Q x P	m ³ /s	0.004951

Table 3.6 Assumed Populations and Average Foul Flow which catchment covers the existing developments within D1 to manhole FMH1005429

*Peaking Factor (excluding stormwater allowance) for facility with new upstream sewerage is adopted

The calculated peak sewerage flow from proposed development of Social Welfare Complex is about 0.0050 m³/s. According to the sewerage record plan from DSD, there is no existing sewer for the proposed Social Welfare Complex. It is recommended that an internal sewerage system be provided to deliver flow to the existing sewerage system at FMH1005429. The proposed sewerage works are shown in [Appendix F](#). The calculation is attached in [Appendix G](#).

The alignment of the proposed sewers connecting the proposed buildings and the proposed on-site treatment plant within the Development Site (Area (A) and (B)) are shown in [Appendix E](#) which will be subjected to detail design stage.

5.5 Proposed Development in Area (A) Phase II

According to the Master Layout Plan in [Appendix B](#), there will be 270 units in the proposed Phase II Residential Development while the estimated population is about 702. As it is a new upstream sewerage system in the proposed development, according to the Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning published by EPD, peaking factors (excluding stormwater allowance) has been used to assess and shown in the following table:

Phase II Residential Tower (E)			
No. of Flats			270
Occupant per Flats (2024 census)			2.6
Population	Residential		702
	Employee		10
Unit Flow Factor (UFF)	Domestic	m ³ /day/person	0.270
	Commercial Employee	m ³ /day/employee	0.080
	Commercial Activities	m ³ /day/employee	0.200
Foul Water Flow (Q)	Domestic	m ³ /s	0.002194
	Commercial Employee	m ³ /s	0.000009
	Commercial Activities	m ³ /s	0.000023
	Total	m ³ /s	0.002226
Peaking Factor (P)			6*
Peak Foul Water Flow (Qp)	=Q x P	m ³ /s	0.013357

Table 3.7 Assumed Populations and Average Foul Flow which catchment covers the Area(A) Phase II residential developments to manhole FMH1005458

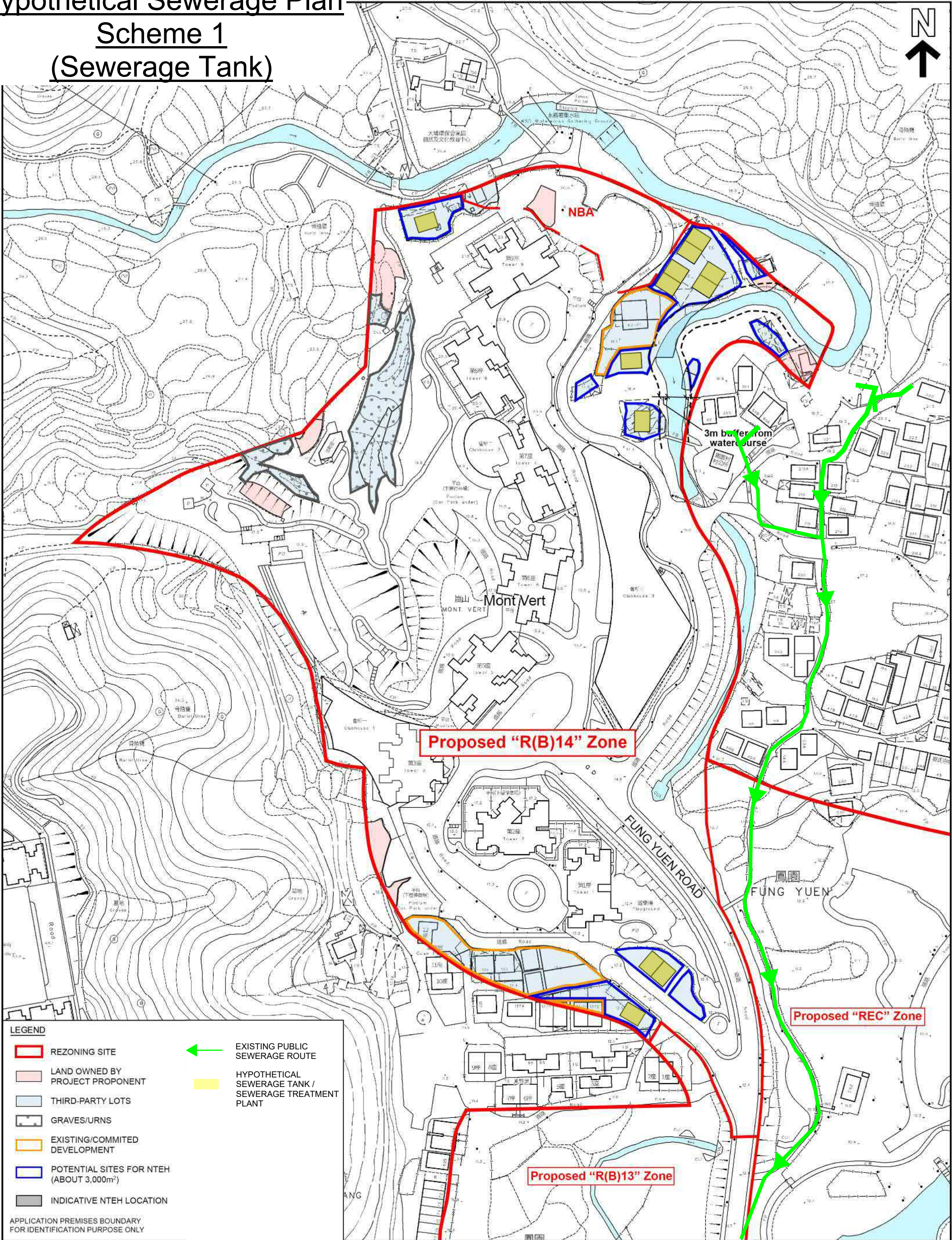
*Peaking Factor (excluding stormwater allowance) for facility with new upstream sewerage is adopted

Assumptions:

1. Unit Flow Factor for Domestic Flows is taken as “Planning for Future Private R2”.
2. The population of employee is assumed to be 10 for each residential tower.

The calculated peak sewerage flow from the proposed Phase II residential tower is about 0.0134 m³/s. An existing sewerage system from nos. FTH1013660 to FWD1065306 are located within the Area(A) Phase II. The sewerage FTH1013660 to FWD1065306 will be demolished and an internal sewerage system will be proposed to deliver flow to the existing sewerage system at FMH1005458 during construction stage. The foul water flow will be discharge to the public sewerage system with no adverse impact. The abandoned pipe shall be removed or filled up to the satisfaction of DSD refer to DSD technical Circular No. 1/2022 – Handling of Abandoned Pipes under DSD’s Purview. The proposed sewerage works are shown in [Appendix F](#). The calculation is attached in [Appendix G](#). The alignment of the proposed sewers connecting the proposed buildings and the public sewerage system are shown in [Appendix E](#) which will be subjected to detail design stage.

Hypothetical Sewerage Plan
Scheme 1
(Sewerage Tank)



PLANNING LIMITED
規劃顧問有限公司

POTENTIAL SITES FOR NTEH DEVELOPMENT WITHIN THE PROPOSED "R(B)14" ZONE

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES
VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

SCALE 1:2 000

PLAN 1

EXTRACT PLAN BASED ON
SURVEY SHEET No.
3-SW-25C & 25D, 7-NW-5A, 5B, 5C & 5D

DATE: 3.9.2025

Hypothetical Sewerage Plan

Scheme 2

(To Public Sewerage)

Fung Yuen
Lo Tsuen A
(A1)

Fung Yuen
Lo Tsuen B
(A2)

Mak Uk
(A3)

Sewerage Discharge
From Upstream
Catchment Area A

FMH1005858
A1 10.63-200
X1 10.60-200

FMH1005857
A1 10.54-200
X1 10.51-200

FMH1005856
A1 10.46-200
X1 10.43-200

FMH1005855
A1 10.34-200
X1 10.31-200

FMH1005854
A1 10.22-200
X1 10.19-200

FMH1005853
A1 10.07-200
X1 10.04-200

FMH1005852
A1 9.94-200
X1 9.91-200

FMH1005471
A1 9.81-200
X1 9.78-200

Sewerage Discharge
To Downstream

Hypothetical Sewerage Plan

Scheme 2

(To Public Sewerage)

Commercial
Complex
(B2)

Phase I
Residential Towers
(B1)

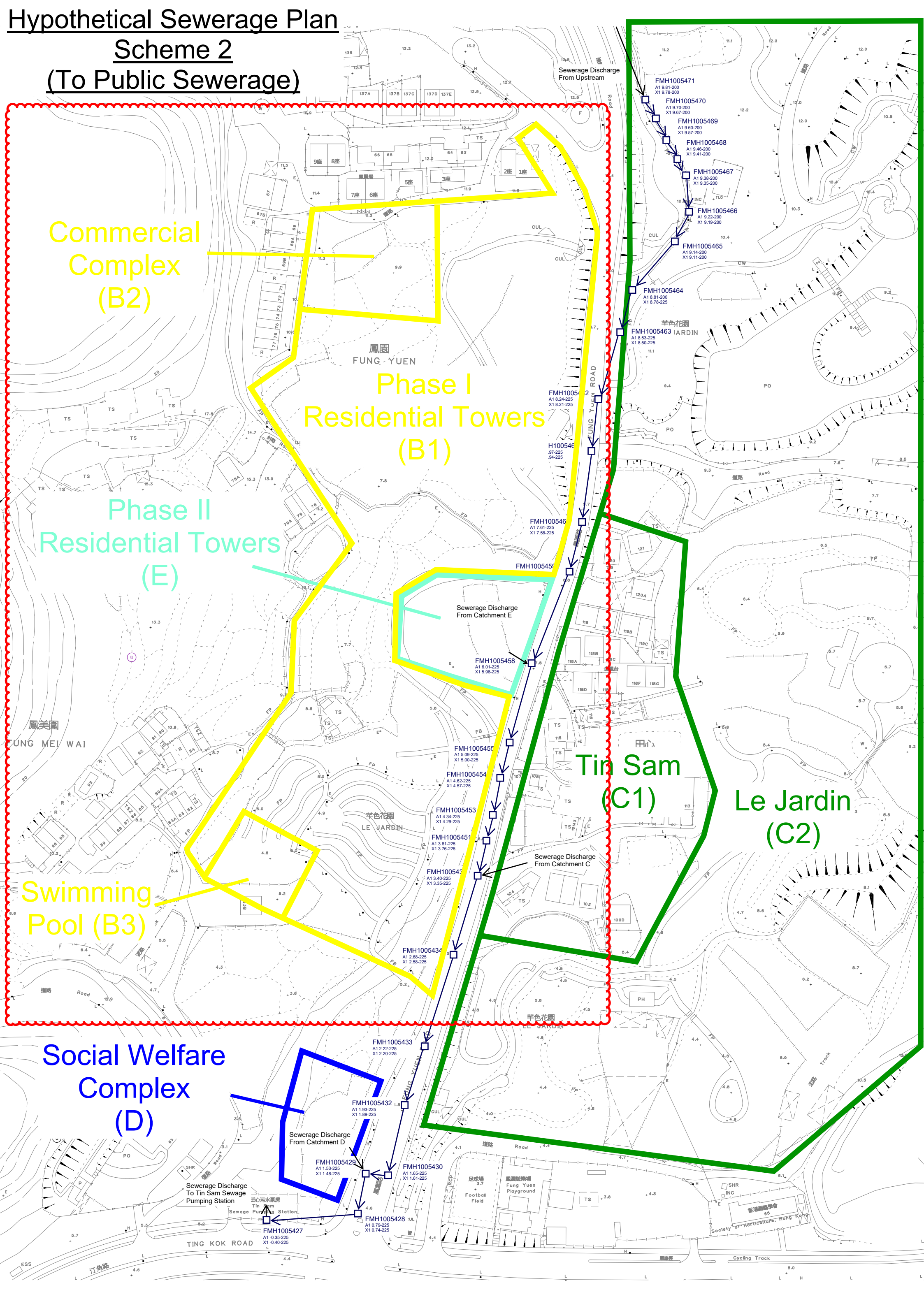
Phase II
Residential Towers
(E)

Swimming
Pool (B3)

Social Welfare
Complex
(D)

Tin Sam
(C1)

Le Jardin
(C2)



Sewerage Drainage Design**Hypothetical Sewerage Scheme**

Catchment Label	Proposed Area A Phase II (Area E)	Proposed Social Welfare Complex (Area D)	Fuen Yuen Lo Tsuen A + Fuen Yuen Lo Tsuen B + Mak Uk (Area A)	Tin Sum + Le Jardin (Area C)	Sewage Treatment Plant (Area B)	Hypothetical NTEH									
Peak Foul Water Flow (m ³ /h)	0.0134	0.0050	0.0149	0.0040	0.0455	0.0003									

From Sewerage Manual Part 1, Third Edition, May 2013:

Colebrook-White Equation for circular pipes flowing full.

Velocity, V =

$$V = \sqrt{\frac{8gDs}{3.7D} \log \left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{f}} \right)}$$

Capacity, Q =

$$Q = V \times \pi \times D^2 / 4$$

Assumptions:

Kinematic Viscosity of fluid, ν =
Hydraulic Pipeline Roughness, ks

0.0000014
3

m²/s
mm

(For Sewerage)
(for slimed sewers - clayware in poor condition; Table 5, Sewerage Manual Part 1, Third Edition, May 2013)

Kinematic Viscosity of fluid, ν =
Hydraulic Pipeline Roughness, ks

0.000001
0.6

m²/s
mm

(For Treated Sewerage)
(Concrete Precast Concrete Pipes with 'O' Ring Joints in poor condition)

From Manhole	To Manhole	Diameter, D (m)	Cross-section (m ²)	Wetted Perimeter (m)	Length (m)	Inlet Invert	Outlet Invert	Slope, s	Hydraulic Radius (m)	Velocity, v (m/s)	Roughness, ks (m)	Velocity, V (m/s)	Capacity, Q (m ³ /s)	Estimated Flow, F (m ³ /h)	Ref. Area	% of Capacity
Fuen Yuen Lo Tsuen A + Fuen Yuen Lo Tsuen B + Mak Uk + Tin Sum + Le Jardin + Hypothetical NTEH																
FMH1005858	FMH1005857	0.200	0.031	0.628	8	10.60	10.54	0.008	0.050	0.00000114	0.003	0.82	0.0257	0.0152	Area A + NTEH	59.0%
FMH1005857	FMH1005856	0.200	0.031	0.628	5.9	10.51	10.46	0.008	0.050	0.00000114	0.003	0.87	0.0273	0.0152	Area A + NTEH	55.5%
FMH1005856	FMH1005855	0.200	0.031	0.628	4.1	10.43	10.34	0.022	0.050	0.00000114	0.003	1.40	0.0440	0.0152	Area A + NTEH	34.4%
FMH1005855	FMH1005854	0.200	0.031	0.628	12.8	10.31	10.22	0.007	0.050	0.00000114	0.003	0.79	0.0249	0.0152	Area A + NTEH	61.0%
FMH1005854	FMH1005853	0.200	0.031	0.628	10.40	10.19	10.07	0.012	0.050	0.00000114	0.003	1.01	0.0319	0.0152	Area A + NTEH	47.6%
FMH1005853	FMH1005852	0.200	0.031	0.628	5.0	10.04	9.94	0.030	0.050	0.00000114	0.003	1.34	0.0430	0.0152	Area A + NTEH	36.1%
FMH1005852	FMH1005471	0.200	0.031	0.628	19.70	9.91	9.81	0.005	0.050	0.00000114	0.003	0.67	0.0211	0.0152	Area A + NTEH	71.8%
FMH1005471	FMH1005470	0.200	0.031	0.628	7.10	9.78	9.70	0.011	0.050	0.00000114	0.003	1.00	0.0315	0.0152	Area A + NTEH	48.1%
FMH1005470	FMH1005469	0.200	0.031	0.628	7.10	9.67	9.60	0.010	0.050	0.00000114	0.003	0.94	0.0295	0.0152	Area A + NTEH	51.5%
FMH1005469	FMH1005468	0.200	0.031	0.628	7.60	9.57	9.46	0.014	0.050	0.00000114	0.003	1.14	0.0357	0.0152	Area A + NTEH	42.4%
FMH1005468	FMH1005467	0.200	0.031	0.628	5.50	9.41	9.38	0.005	0.050	0.00000114	0.003	0.70	0.0219	0.0152	Area A + NTEH	69.3%
FMH1005467	FMH1005466	0.200	0.031	0.628	14.40	9.35	9.22	0.009	0.050	0.00000114	0.003	0.90	0.0282	0.0152	Area A + NTEH	53.8%
FMH1005466	FMH1005465	0.200	0.031	0.628	10.00	9.19	9.14	0.005	0.050	0.00000114	0.003	0.67	0.0210	0.0152	Area A + NTEH	72.4%
FMH1005465	FMH1005464	0.200	0.031	0.628	29.40	9.11	8.81	0.010	0.050	0.00000114	0.003	0.95	0.0300	0.0152	Area A + NTEH	50.6%
FMH1005464	FMH1005463	0.225	0.040	0.707	16.80	8.78	8.53	0.015	0.056	0.00000114	0.003	1.25	0.0497	0.0152	Area A + NTEH	30.5%
FMH1005463	FMH1005462	0.225	0.040	0.707	33.60	8.50	8.24	0.008	0.056	0.00000114	0.003	0.90	0.0358	0.0152	Area A + NTEH	42.4%
FMH1005462	FMH1005461	0.225	0.040	0.707	18.50	8.21	7.97	0.013	0.056	0.00000114	0.003	1.17	0.0464	0.0152	Area A + NTEH	32.7%
FMH1005461	FMH1005460	0.225	0.040	0.707	29.80	7.94	7.61	0.011	0.056	0.00000114	0.003	1.08	0.0428	0.0152	Area A + NTEH	35.4%
FMH1005460	FMH1005459	0.225	0.040	0.707	20.00	7.58	6.85	0.037	0.056	0.00000114	0.003	1.96	0.0779	0.0152	Area A + NTEH	19.5%
FMH1005459	FMH1005458	0.225	0.040	0.707	39.20	6.82	6.01	0.021	0.056	0.00000114	0.003	1.47	0.0586	0.0152	Area A + NTEH	25.9%
FMH1005458	FMH1005455	0.225	0.040	0.707	32.70	5.98	5.09	0.027	0.056	0.00000114	0.003	1.69	0.0672	0.0285	Area A + NTEH + Area E	42.4%
FMH1005455	FMH1005454	0.225	0.040	0.707	16.70	5.00	4.62	0.023	0.056	0.00000114	0.003	1.55	0.0615	0.0285	Area A + NTEH + Area E	46.4%
FMH1005454	FMH1005453	0.225	0.040	0.707	13.30	4.57	4.34	0.017	0.056	0.00000114	0.003	1.35	0.0536	0.0285	Area A + NTEH + Area E	53.2%
FMH1005453	FMH1005451	0.225	0.040	0.707	12.30	4.29	3.81	0.039	0.056	0.00000114	0.003	2.03	0.0805	0.0285	Area A + NTEH + Area E	35.4%
FMH1005451	FMH1005435	0.225	0.040	0.707	17.25	3.76	3.40	0.021	0.056	0.00000114	0.003	1.48	0.0589	0.0285	Area A + NTEH + Area E	48.5%
FMH1005435	FMH1005434	0.225	0.040	0.707	31.40	3.35	2.68	0.021	0.056	0.00000114	0.003	1.50	0.0595	0.0325	Area A + Area C + NTEH + Area E	54.6%
FMH1005434	FMH1005433	0.225	0.040	0.707	38.50	2.58	2.22	0.009	0.056	0.00000114	0.003	0.99	0.0394	0.0325	Area A + Area C + NTEH + Area E	82.6%
FMH1005433	FMH1005432	0.225	0.040	0.707	23.80	2.20	1.93	0.011	0.056	0.00000114	0.003	1.09	0.0434	0.0325	Area A + Area C + NTEH + Area E	75.0%
FMH1005432	FMH1005430	0.225	0.040	0.707	28.30	1.89	1.65	0.008	0.056	0.00000114	0.003	0.94	0.0375	0.0325	Area A + Area C + NTEH + Area E	86.8%
FMH1005430	FMH1005429	0.225	0.040	0.707	5.00	1.61	1.53	0.016	0.056	0.00000114	0.003	1.30	0.0515	0.0325	Area A + Area C + NTEH + Area E	63.1%
FMH1005429	FMH1005428	0.225	0.040	0.707	19.90	1.48	0.79	0.035	0.056	0.00000114	0.003	1.91	0.0759	0.0375	Area A + Area C + NTEH + Area D + Area E	49.4%
FMH1005428	FMH1005427	0.225	0.040	0.707	37.00	0.74	-0.35	0.029	0.056	0.00000114	0.003	1.76	0.0699	0.0375	Area A + Area C + NTEH + Area D + Area E	53.6%
Proposed Area A Phase II to Main																
Terminal manhole 3	FMH1005458	0.225	0.040	0.707	11	6.06	6.01	0.005	0.056	0.00000114	0.003	0.69	0.0274	0.0134	Area E	48.7%
Proposed Area D to Main																
Terminal manhole 2	FMH1005429	0.225	0.040	0.707	12	2.00	1.53	0.029	0.056	0.00000114	0.003	2.03	0.0807	0.0050	Area D	6.1%
STP to Streamcourse*																
Sewage Treatment Plant	Streamcourse	0.225	0.040	0.707	13	7.50	7.10	0.03	0.056	0.000001	0.0006	2.30	0.0916	0.0455	STP	49.6%

**Terminal manhole to public sewerage for the proposed development is indicative

*Sewerage shall be treated by Sewage Treatment Plant to improve effluent quality before discharging to the streamcourse with no adverse impact

Appendix 4

Water Supply Sensitivity Analysis

1 Sensitivity Analysis of Potential Development on Third Party Lots in R(B)14 Zone – Water Supply

1.1 Background

- 1.1.1 As per the comments of Planning Department on the Planning Application of the proposed development at Fung Yuen, Tai Po (the Development), this sensitivity analysis aims to demonstrate that the existing water supply system is technical feasible to support the hypothetical scenario, which consists of both the potential New Territories Exempted Houses (NTEH) development on third party lots in the proposed R(B)14 zone with the presence of the Development in R(B)13 zone. The location of the R(B)13 and R(B)14 zones is shown in **Figure 1**.

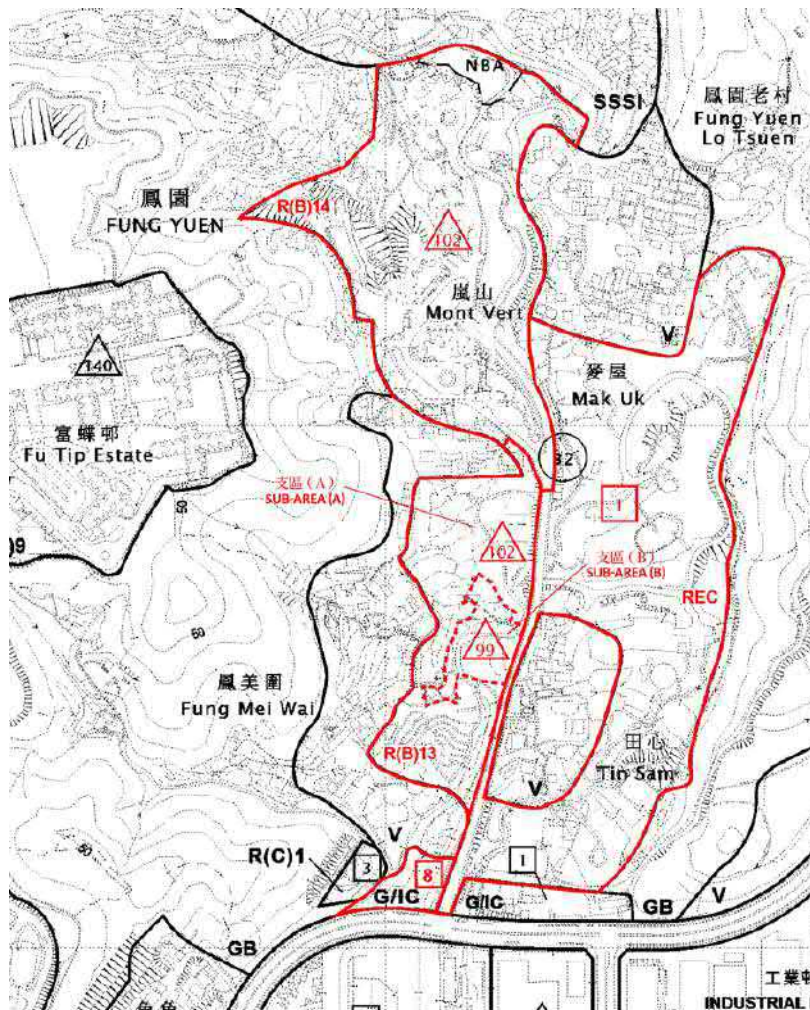


Figure 1 Location plan

1.2 Estimated Water Demand from the Development (R(B)13 and G/IC)

- 1.2.1 With reference to the WSIA, the Development in R(B)13 zone will include the residential development with supporting retail and public vehicle park facilities in sub-area (A) of proposed amendment to the OZP (named as Area (A) Phase I in WSIA); residential development in sub-area (B) (named as Area (A) Phase II in WSIA). The Development also consists of a Social Welfare Complex (SWC) in the G/IC site (named as Area (B) in WSIA). The water demands for the Development were estimated under the WSIA and the information is extracted and given in **Table 1.1** and **Table 1.2** below:-

Table 1.1: Water demand for the Development in R(B)13 zone

Development Type	Population (nos.)	Unit	Fresh Water Demand	Flushing Water Demand	Total Mean Fresh Water Demand (m ³ /d)	Total Mean Flushing Water Demand (m ³ /d)
Area (A) Phase I (sub-area (A) in proposed amendment of OZP)						
Residential Use (R2)	4,467	m ³ /h/d	0.30	0.07	1,340.10	312.69
Service Trade (Residential)	4,467	m ³ /h/d	0.05	-	223.35	-
Staff for Commerce (Service Trade – Type J4)	28	m ³ /h/d	0.35	0.07	9.80	1.96
Landscaping	-	-	-	-	63.76	-
Sub-Total =					1,637.01 (say 1,638)	314.65 (say 315)
Area (A) Phase II (sub-area (B) in proposed amendment of OZP)						
Residential Use (R2)	702	m ³ /h/d	0.30	0.07	210.60	49.14
Service Trade (Residential)	702	m ³ /h/d	0.05	-	35.10	-
Landscaping	-	-	-	-	12.69	-
Sub-Total =					258.39 (say 259)	49.14 (say 50)
Total =					1895.4	363.79

Table 1.2: Water demand estimation for the Social Welfare Complex in G/IC

Development Type	Population (nos.)	Unit	Fresh Water Demand	Flushing Water Demand	Total Mean Fresh Water Demand (m ³ /d)	Total Mean Flushing Water Demand (m ³ /d)
Area (B) (proposed amendment of G/IC in OZP)						
Residential Use (R2)	150	m ³ /h/d	0.24	0.07	36.00	10.50
Staff (Service Trade – Type J11)	110	m ³ /h/d	0.35	0.07	38.50	7.70
Total =					74.50 (say 75)	18.20 (say 19)

1.3 Estimated Water Demand from the Potential NTEH Development on Third Party Lots in R(B) 14 Zone

- 1.3.1 There is about 3,000m² remaining potential area for the potential NTEH development in R(B)14 zone. It is estimated that the maximum no. of NTEH in that potential area is 12 houses and the estimated population is 95 persons with the assumption of 3 units per NTEH. The potential site for NTEH development within the proposed R(B)14 zone is enclosed in **Figure 2**.

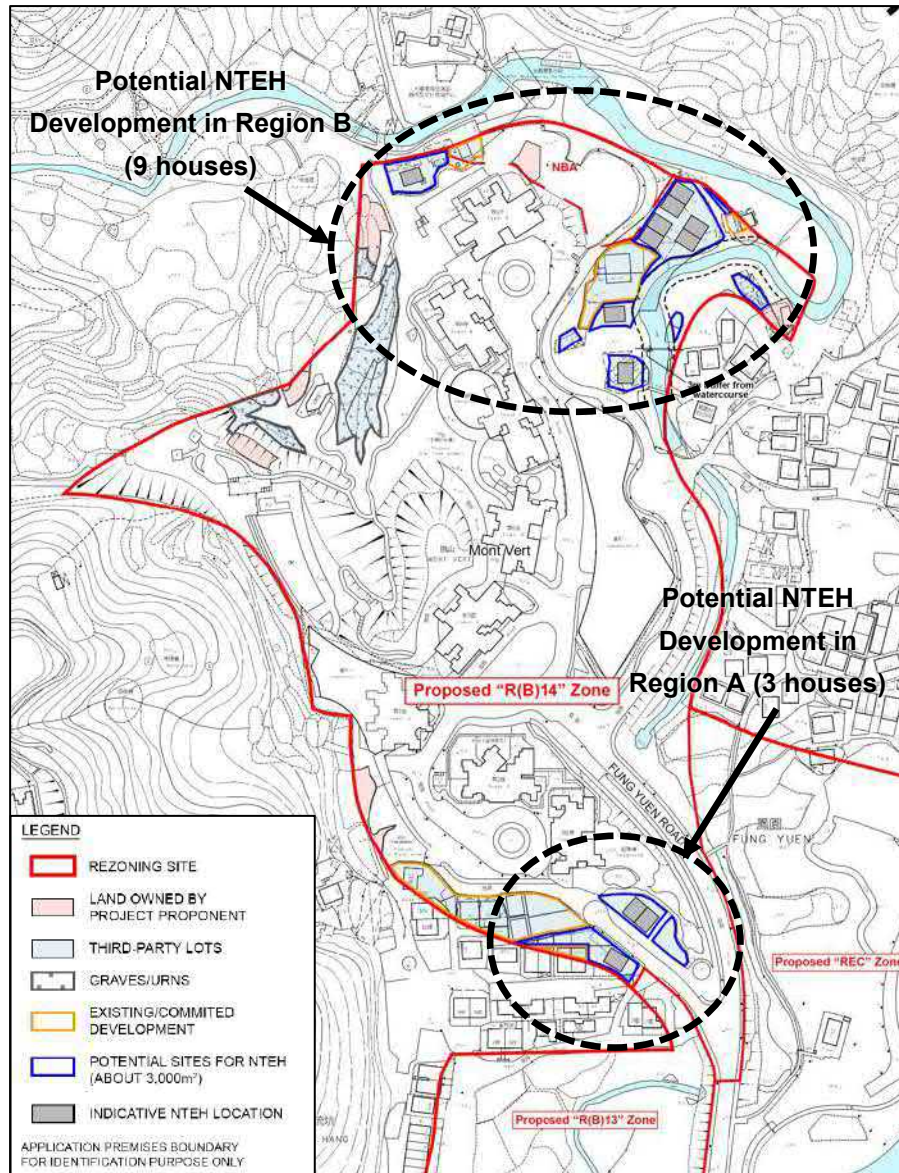


Figure 2 Potential site for NTEH development within the proposed R(B) 14 zone

- 1.3.2 The unit demands used in estimating the fresh water and flushing water consumption for the potential NTEH development in R(B)14 zone are presented in **Table 1.3**. The unit demands for village type development are based on unit water demand in Water Supplies Department Departmental Instruction (WSD DI) 1309.

Table 1.3: Unit demand for the potential NTEH development in remaining area in R(B)14 zone

Development Type	Unit	Fresh Water Demand	Flushing Water Demand
Village Type Development - Modern Type	m ³ /h/d	0.23	0.07

Remarks:-

- The unit water demand has been making reference to the domestic unit flow factor for Village Type Development - Redevelopment/ Modern Type under Table 1 of WSD's DI 1309.

- 1.3.3 Based on the unit water demand and the estimated population for the potential NTEH development in Region A and Region B, the total mean daily fresh water and flushing water demands for the potential NTEH development are approximately 22 m³/day and 7 m³/day. The details of the water demand estimation for the potential NTEH development are shown in **Table 1.4**.

Table 1.4: Water demand estimation for the Potential NTEH Development in R(B)14 zone

Development Type	Population (nos.)	Unit	Fresh Water Demand	Flushing Water Demand	Total Mean Fresh Water Demand (m ³ /d)	Total Mean Flushing Water Demand (m ³ /d)
Potential NTEH Development in Region A						
Village Type Development - Modern Type	24	m ³ /head/d	0.23	0.07	5.52	1.68
Potential NTEH Development in Region B						
Village Type Development - Modern Type	71	m ³ /head/d	0.23	0.07	16.33	4.97
Total =					21.85 (Say 22)	6.65 (Say 7)

Remark:-

- It is assumed 3 units per NTEH and the domestic household size is 2.6 according to latest statistics from Census and Statistics Department.
- There are 3 nos. and 9 nos. of house in Region A and B, thus, the population at Region A and B is 24 and 71.

- 1.3.4 As the existing DN150 salt water mains along Fung Yuen Road ends near the entrance of Mont Vert, salt water can only be supplied to the potential NTEH development in Region A. For the potential NTEH development in Region B, it is assumed the flushing water will be provided by the existing DN200 fresh water main along Fung Yuen Road as there are no existing salt water mains at its adjacency.

1.4 Water Supply Impact Assessment for Potential NTEH Development in R(B)14 Zone

Checking of Residual Pressures for Existing Fresh Water Supply Main

- 1.4.1 For assessing the impact to the existing DN600-DN200 fresh watermain, a few control points (namely Control Points A to F as shown in **Appendix A**), have been established for assessing the residual pressures of the fresh watermain with the potential NTEH development and the proposed Development. As a conservative approach, the fresh water demands for the potential NTEH development in Regions A and B and the flushing water demand for the potential NTEH development in Region B are assumed at the end points of the existing fresh water mains.
- 1.4.2 Based on the hydraulic calculation results shown in **Table 1.5**, with details given in **Appendix A**, the residual head under hypothetical scenario the is well within the requirement of 20 m according to Handbook on Plumbing Installation for Buildings. The residual heads under hypothetical scenario range from 63.09 m to 28.07 m. Thus, it is considered that there is no insurmountable impact arising from the potential NTEH development to the existing fresh water supply system with the presence of the Development.

Table 1.5: Summary of residual head of fresh water along the existing distribution main under hypothetical scenario

Control Point	Approx. Existing Ground Level (mPD)	Residual Head of the Existing Water Distribution Main under Proposed Condition (m)
Control Point A	4.76	63.08
Control Point B	4.57	61.45
Control Point C #	4.49	59.39
Control Point C1 *	5.43	56.16
Control Point C2 ^	7.57	52.20
Control Point D	14.38	40.76
Control Point E	16.65	36.08
Control Point F@	20.67	28.07
Remark: (i) # The control point for the proposed fresh water supply connection point to the Social Welfare Complex (ii) * The control point for the proposed fresh water supply connection point to the residential development of Area (A) Phase I (iii) ^ The control point for the proposed fresh water supply connection point to the residential development of Area (A) Phase II (iv) @ As a conservative approach, the water demands to the potential NTEH development in Region A and B are assumed at the end points of the existing fresh water mains.		

Checking of Residual Pressures for Existing Salt Water for Flushing Water Supply System

- 1.4.3 Similar to fresh water supply system, for assessing the impact to the existing DN450-DN150 salt watermain, a few control points (namely Control Point 1 to 4 as shown in **Appendix A**) have been established for comparing the residual pressures of the salt water main with the potential NTEH development and the proposed Development. As a

conservative approach, the flushing water for the potential NTEH development in Region A is assumed at the end points of the existing salt water mains.

- 1.4.4 Based on the hydraulic calculation results summarised in **Table 1.6**, with details provided in **Appendix A**, the residual head is well within the requirement of 15 m according to Handbook on Plumbing Installation for Buildings. Thus, it is considered that there is no insurmountable impact arising from the Development to the existing salt water supply system.

Table 1.6: Summary of residual head of salt water along the existing distribution main under hypothetical scenario

Control Point	Approx. Existing Ground Level (mPD)	Residual Head of the Existing Water Distribution Main under Proposed Condition (m)
Control Point 1	4.35	72.26
Control Point 2	4.58	65.41
Control Point 2.1 #	4.59	61.80
Control Point 3 *	5.39	56.18
Control Point 3.1 ^	7.22	48.57
Control Point 4	13.41	31.20
Remark: (i) # The control point for the proposed water supply connection point to the Social Welfare Complex (ii) * The control point for the proposed water supply connection point to the residential development of Area (A) Phase I (iii) ^ The control point for the proposed water supply connection point to the residential development of Area (A) Phase II (iv) @ As a conservative approach, the flushing water for the potential NTEH development in Region A are assumed at the end points of the existing salt water mains.		

1.5 Conclusion

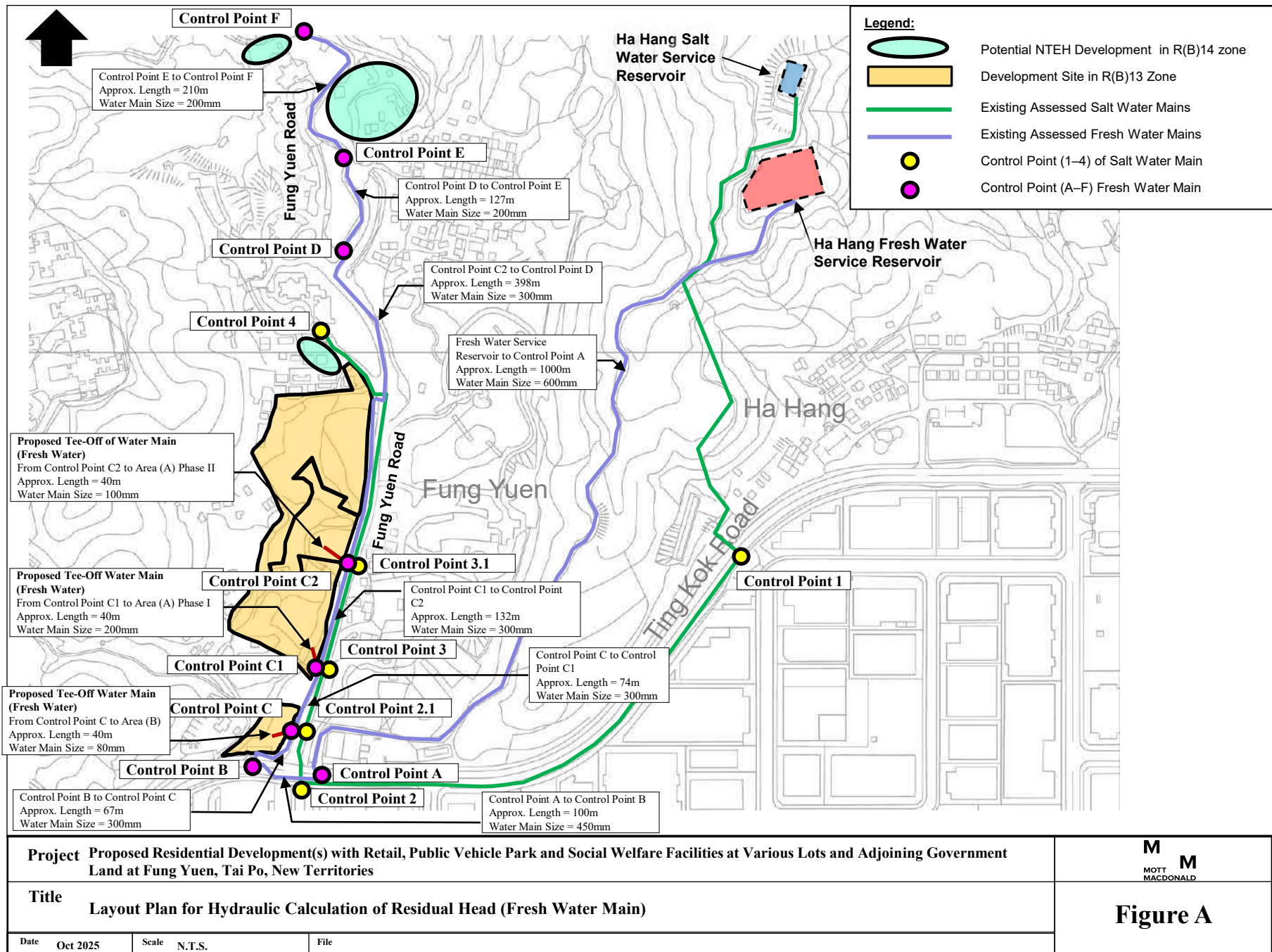
- 1.5.1 As per the comments of Planning Department, this sensitivity analysis aims to demonstrate that the existing water supply system is technical feasible to support the hypothetical scenario with the potential New Territories Exempted Houses (NTEH) development on third party lots in the proposed R(B)14 zone with the presence of the proposed development at Fung Yuen, Tai Po (the Development) in R(B)13 zone.
- 1.5.2 Based on the unit water demand and the estimated population, the mean daily fresh water and flushing water demands for the Potential NTEH Development in R(B)14 zone are approximately 22 m³/day and 7 m³/day. As the existing DN150 salt water mains along Fung Yuen Road ends near the entrance of Mont Vert, salt water can only be supplied to the potential NTEH development in Region A. For the potential NTEH development in Region B, it is assumed the flushing water will be provided by the existing DN200 fresh water main along Fung Yuen Road as there are no existing salt water mains at its adjacency.
- 1.5.3 Based on the hydraulic calculation, residual heads under hypothetical scenario, which included the potential NTEH development in R(B)14 zone and the Development in R(B)13 zone and G/IC, as well as the potential NTEH development, are estimated. The residual heads for the fresh water supply system under hypothetical scenario range from 63.08 m to 28.07 m. For the salt water supply system, the residual heads under

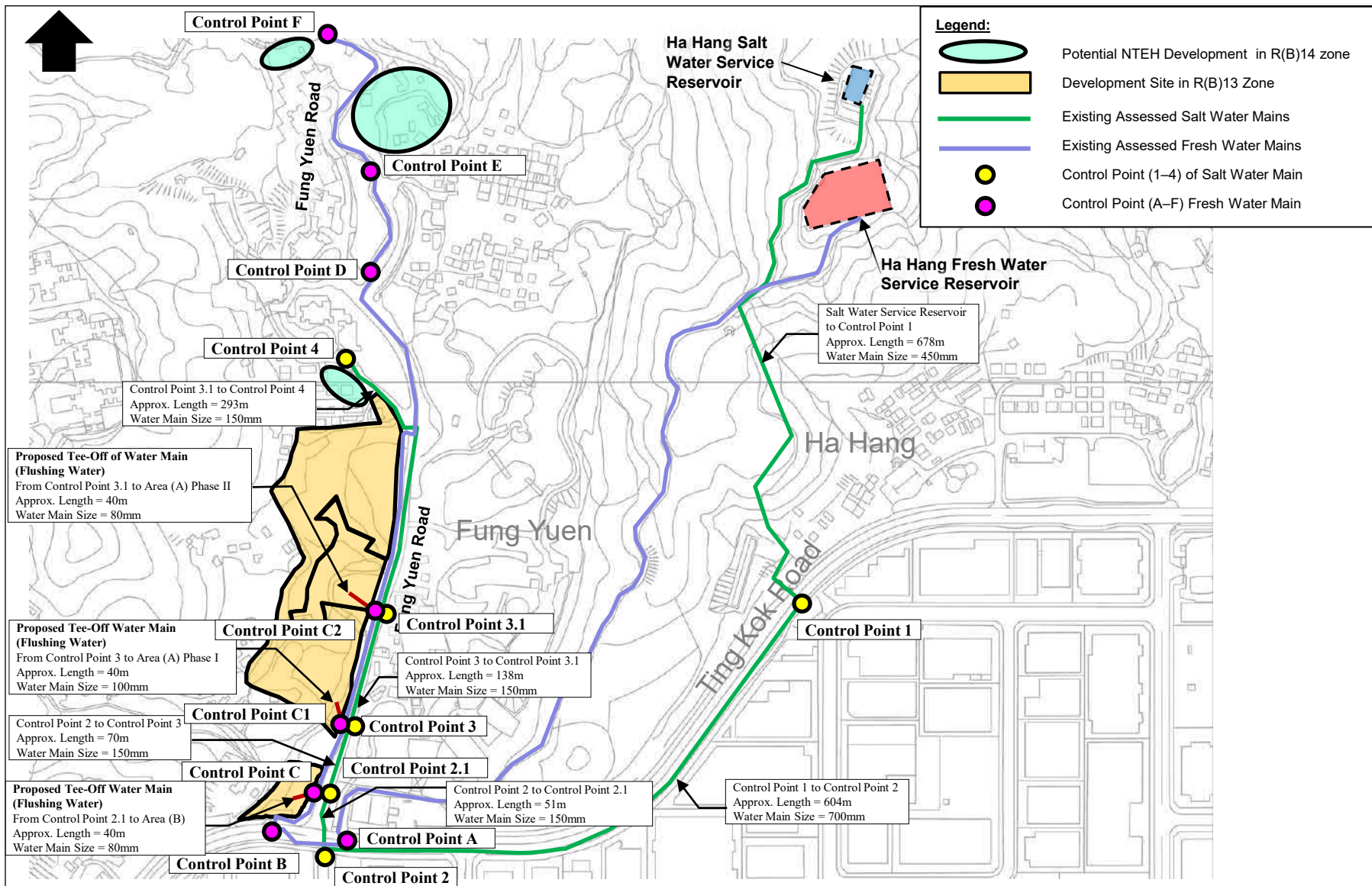
hypothetical scenario range from 72.26 m to 31.12m. The residual heads under hypothetical scenario are well within residual head requirement of 20 m and 15 m for water supply system.

- 1.5.4 Based on the assessment findings, it is considered that there is no insurmountable impact from the additional water demand from the potential NTEH development in R(B)14 zone on the existing water supply system with the presence of the Development in R(B)13 zone and G/IC.

Appendix A

Residual Head Calculation for Fresh and Flushing Water Mains





Project Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories					
Title Layout Plan for Hydraulic Calculation of Residual Head (Salt Water Mains)				Figure B	
Date Oct 2025	Scale N.T.S.	File			

Figure B

Summary table of the residual head at control points

Residual Head (m)			
Fresh Water		Flushing Water	
Control Point	Hypothetical Scenario	Control Point	Hypothetical Scenario
Control Point A	63.08	Control Point 1	72.26
Control Point B	61.45	Control Point 2	65.41
Control Point C #	59.39	Control Point 2.1 #	61.79
Control Point C 1 *	56.16	Control Point 3 *	56.15
Control Point C 2 ^	52.20	Control Point 3.1 ^	48.53
Control Point D	40.76	Control Point 4@	31.12
Control Point E	36.08		
Control Point F@	28.07		
Remark: # The control point for the proposed water supply connection point to the Social Welfare Complex in Area (B) * The control point for the proposed water supply connection point to the residential development of Area (A) Phase I ^ The control point for the proposed water supply connection point to the residential development of Area (A) Phase II @ As a conservative approach, water demand for the potential NTEH development in Region A & B are assumed at the end points of the existing fresh water and salt water mains.			

Part 1 - Hydraulic Calculation for Fresh Water Supply System

Design Criteria and Assumption for Fresh Water Supply System

1. Basic Information

Existing Control Point along the Existing Fresh Water Mains from Ha Hang FWSR to DN200 FW Main

Control Point ID	Control Point A	Control Point B	Control Point C	Control Point C1	Control Point C2	Control Point D	Control Point E	Control Point F
Approx. Ground Level (mPD)	4.76	4.57	4.49	5.43	7.57	14.38	16.65	20.67

Note:

- The locations of Control Point refer to **Figure A**.

Existing Pipe Segment along the Existing Fresh Water Mains from Ha Hang FWSR to DN200 FW Main

Segment Location	from Reservoir to Control Point A	from Control Point A to Control Point B	from Control Point B to Control Point C	from Control Point C to Control Point C1	from Control Point C1 to Control Point C2	from Control Point C2 to Control Point D	from Control Point D to Control Point E	from Control Point E to Control Point F
Approx. Segment Length (m)	1000	100	67	74	132	398	127	210
Size (mm)	600	450	300	300	300	300	200	200
Internal Pipe Diameter (mm)	586	424	282	282	282	282	189	189
Cross Section Area (m2)	0.2697	0.1412	0.0625	0.0625	0.0625	0.0625	0.0281	0.0281

Note:

- The locations of pipe segment refer to **Figure A**.
- The internal pipe diameter is from Table 1 of WSD's Guidelines for Hydraulic Modeling

2. Water Main Velocity Assumption

- With reference to WSD's Guidelines for Hydraulic Modeling, the existing peak velocity along the existing water main is assumed as below;

Segment Location	from Reservoir to Control Point A	from Control Point A to Control Point B	from Control Point B to Control Point C	from Control Point C to Control Point C1	from Control Point C1 to Control Point C2	from Control Point C2 to Control Point D	from Control Point D to Control Point E	from Control Point E to Control Point F
Existing Peak Velocity (m/s)	2.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5

3. Headloss Assumption

- Hazen-Williams equation is adopted in the hydraulic calculation;
- Hazen-Williams Coefficient, C, is adopted as 110 for water main size < 600mm and 120 for water main size >= 600mm according to WSD's Guidelines for Hydraulic Modeling;
- Minor headloss is assumed to be equal to 10% of friction headloss.

4. Water Main Network Assumption

- 1.5 m cover from the ground level is assumed for the water mains.

Approx. Soffit Level for Control Points

Control Point ID	Control Point A	Control Point B	Control Point C	Control Point C1	Control Point C2	Control Point D	Control Point E	Control Point F
Approx. Ground Level (mPD)	4.76	4.57	4.49	5.43	7.57	14.38	16.65	20.67
Approx. Soffit Level (mPD)	3.26	3.07	2.99	3.93	6.07	12.88	15.15	19.17

- According to WSD comments, the invert level and top Water Head Level of Ha Hang Fresh water Service Reservoir are 76.200mPD and 82.075mPD. Hence, it is assumed that in the design the water level at the service reservoir is at half full which will be $(76.200 \text{ mPD} + 82.075 \text{ mPD}) / 2 = 79.138 \text{ mPD}$

Part 1. Residual Head of Fresh Water Main Under Hypothetical Scenario with Potential NTEH Development on Third Party Lots in R(B)14 Zone and the Proposed Development in R(B)13 Zone

(by using Hazen-Williams Equation)

1. Head Loss Equation (Hazen William Equation)

$$V = 0.3564 \times C \times D^{0.63} \times i^{0.54}$$

where

V = Velocity along the pipeline in m/s

C = Hazen-Williams Constant, 110 for D < 600mm, 120 for D ≥ 600mm

D = Internal diameter of the pipeline in meter

i = Hydraulic Gradient

2. Hydraulic Gradient Equation

$$\text{Hydraulic Gradient} = \frac{\text{Headloss}}{\text{Pipe Length}}$$

3. Headloss and Residual Head Calculation

From Ha Hang Fresh Water Service Reservoir to Control Point A

Parameter	Unit	
Nonimal Pipe Diameter	mm	600
Internal Pipe Diameter, D	mm	586
Assumed Velocity under Peak Flow Condition, v	m/s	2.76
Hazen-William Constant	-	120
Hydraulic Gradient, i		0.01164
Travel Distance	m	1000
Estimated Major Headloss	m	11.64
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	1.16
Top Water Level at Water Service Reservoir	mPD	79.14
Water Head Level at Control Point A	mPD	66.34
Approx. Ground Level at Control Point A	mPD	4.76
Approx. Soffit Level at Control Point A	mPD	3.26
Residual Head at Control Point A	m	63.08

From Control Point A to Control Point B

Parameter	Unit	
Nonimal Pipe Diameter	mm	450
Internal Pipe Diameter, D	mm	424
Assumed Velocity under Peak Flow Condition, v	m/s	2.49
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.01653
Travel Distance	m	100
Estimated Major Headloss	m	1.65
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.17
Water Head Level at Control Point A	mPD	66.34
Water Head Level at Control Point B	mPD	64.52
Approx. Ground Level at Control Point B	mPD	4.57
Approx. Soffit Level at Control Point B	mPD	3.07
Residual Head at Control Point B	m	61.45

From Control Point B to Control Point C

Parameter	Unit	
Nonimal Pipe Diameter	mm	300
Internal Pipe Diameter, D	mm	282
Assumed Velocity under Peak Flow Condition, v	m/s	2.61
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.02900
Travel Distance	m	67
Estimated Major Headloss	m	1.94
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.19
Water Head Level at Control Point B	mPD	64.52
Water Head Level at Control Point C	mPD	62.38
Approx. Ground Level at Control Point C	mPD	4.49
Approx. Soffit Level at Control Point C	mPD	2.99
Residual Head at Control Point C	m	59.39

From Control Point C to Control Point C1

Parameter	Unit	
Nonimal Pipe Diameter	mm	300
Internal Pipe Diameter, D	mm	282
Assumed Velocity under Peak Flow Condition, v	m/s	2.57
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.02815
Travel Distance	m	74
Estimated Major Headloss	m	2.08
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.21
Water Head Level at Control Point C	mPD	62.38
Water Head Level at Control Point C1	mPD	60.09
Approx. Ground Level at Control Point C1	mPD	5.43
Approx. Soffit Level at Control Point C1	mPD	3.93
Residual Head at Control Point C1	m	56.16

From Control Point C1 to Control Point C2

Parameter	Unit	
Nonimal Pipe Diameter	mm	300
Internal Pipe Diameter, D	mm	282
Assumed Velocity under Peak Flow Condition, v	m/s	1.66
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.01252
Travel Distance	m	132
Estimated Major Headloss	m	1.65
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.17
Water Head Level at Control Point C1	mPD	60.09
Water Head Level at Control Point C2	mPD	58.27
Approx. Ground Level at Control Point C2	mPD	7.57
Approx. Soffit Level at Control Point C2	mPD	6.07
Residual Head at Control Point C2	m	52.20

From Control Point C2 to Control Point D

Parameter	Unit	
Nonimal Pipe Diameter	mm	300
Internal Pipe Diameter, D	mm	282
Assumed Velocity under Peak Flow Condition, v	m/s	1.51
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.01059
Travel Distance	m	398
Estimated Major Headloss	m	4.21
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.42
Water Head Level at Control Point C2	mPD	58.27
Water Head Level at Control Point D	mPD	53.64
Approx. Ground Level at Control Point D	mPD	14.38
Approx. Soffit Level at Control Point D	mPD	12.88
Residual Head at Control Point D	m	40.76

From Control Point D to Control Point E

Parameter	Unit	
Nonimal Pipe Diameter	mm	200
Internal Pipe Diameter, D	mm	189
Assumed Velocity under Peak Flow Condition, v	m/s	1.53
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.01727
Travel Distance	m	127
Estimated Major Headloss	m	2.19
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.22
Water Head Level at Control Point D	mPD	53.64
Water Head Level at Control Point E	mPD	51.23
Approx. Ground Level at Control Point E	mPD	16.65
Approx. Soffit Level at Control Point E	mPD	15.15
Residual Head at Control Point E	m	36.08

From Control Point E to Control Point F

Parameter	Unit	
Nonimal Pipe Diameter	mm	200
Internal Pipe Diameter, D	mm	189
Assumed Velocity under Peak Flow Condition, v	m/s	1.53
Hazen-William Constant	-	110
Hydraulic Gradient, i		0.01727
Travel Distance	m	210
Estimated Major Headloss	m	3.63
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.36
Water Head Level at Control Point E	mPD	51.23
Water Head Level at Control Point F	mPD	47.24
Approx. Ground Level at Control Point F	mPD	20.67
Approx. Soffit Level at Control Point F	mPD	19.17
Residual Head at Control Point F	m	28.07

Part 2 - Hydraulic Calculation for Salt Water Supply System (Flushing Water)

Design Criteria and Assumption for Salt Water Supply System

1. Basic Information

Existing Control Point along the Existing Salt Water Mains from Ha Hang SWSR to DN150 SW Main

Control Point ID	Control Point 1	Control Point 2	Control Point 2.1	Control Point 3	Control Point 3.1	Control Point 4
Approx. Ground Level (mPD)	4.35	4.58	4.59	5.39	7.22	13.41

Note:

- The locations of Control Point refer to **Figure B**.

Existing Pipe Segment along the Existing Salt Water Mains from Ha Hang SWSR to DN150 SW Main

Segment Location	from Reservoir to Control Point 1	from Control Point 1 to Control Point 2	from Control Point 2 to Control Point 2.1	from Control Point 2.1 to Control Point 3	from Control Point 3 to Control Point 3.1	from Control Point 3.1 to Control Point 4
Approx. Segment Length (m)	678	604	51	70	138	293
Size (mm)	450	700	150	150	150	150
Internal Pipe Diameter	424	648	138	138	138	138
Cross Section Area (m ²)	0.1412	0.3298	0.0150	0.0150	0.0150	0.0150

Note:

- The locations of pipe segment refer to **Figure B**.
- The internal pipe diameter is from Table 1 of WSD's Guidelines for Hydraulic Modeling

2. Water Main Velocity Assumption

- The existing peak velocity along the existing water main is assumed as below;

Segment Location	from Reservoir to Control Point 1	from Control Point 1 to Control Point 2	from Control Point 2 to Control Point 2.1	from Control Point 2.1 to Control Point 3	from Control Point 3 to Control Point 3.1	from Control Point 3.1 to Control Point 4
Existing Peak Velocity (m/s)	1.5	2.0	1.5	1.5	1.5	1.5

3. Headloss Assumption

- Hazen-Williams equation is adopted in the hydraulic calculation;
- Hazen-Williams Coefficient, C, is adopted as 90 for salt water main according to WSD's Guidelines for Hydraulic Modeling;
- Minor headloss is assumed to be equal to 10% of friction headloss.

4. Water Main Network Assumption

- 1.5 m cover from the ground level is assumed for the water mains.

Approx. Soffit Level for Control Points

Control Point ID	Control Point 1	Control Point 2	Control Point 2.1	Control Point 3	Control Point 3.1	Control Point 4
Approx. Ground Level (mPD)	4.35	4.58	4.59	5.39	7.22	13.41
Approx. Soffit Level (mPD)	2.85	3.08	3.09	3.89	5.72	11.91

- According to WSD comments, the invert level and top Water Head Level of Ha Hang Salt Water Service Reservoir are 80.3mPD and 85mPD. Hence, it is assumed that in the design the water level at the service reservoir is at half full which will be $(80.30 \text{ mPD} + 85.00 \text{ mPD}) / 2 = 82.65 \text{ mPD}$

Part 2. Residual Head of Flushing Water Main under Hypothetical Scenario with Potential NTEH Development on Third Party Lots in R(B)14 Zone and the Proposed Development in R(B)13 Zone

(by using Hazen-Williams Equation)

1. Head Loss Equation (Hazen William Equation)

$$V = 0.3564 \times C \times D^{0.63} \times i^{0.54}$$

where

V = Velocity along the pipeline in m/s

C = Hazen-Williams Constant, 90

D = Internal diameter of the pipeline in meter

i = Hydraulic Gradient

2. Hydraulic Gradient Equation

$$\text{Hydraulic Gradient} = \frac{\text{Headloss}}{\text{Pipe Length}}$$

3. Headloss and Residual Head Calculation

From Ha Hang Salt Water Service Reservoir to Control Point 1

Parameter	Unit	
Nonimal Pipe Diameter	mm	450
Internal Pipe Diameter, D	mm	424
Assumed Velocity under Peak Flow Condition, v	m/s	1.56
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.01011
Travel Distance	m	678
Estimated Major Headloss	m	6.85
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.69
Top Water Level at Water Service Reservoir	mPD	82.65
Water Head Level at Control Point 1	mPD	75.11
Approx. Ground Level at Control Point 1	mPD	4.35
Approx. Soffit Level at Control Point 1	mPD	2.85
Residual Head at Control Point 1	m	72.26

From Control Point 1 to Control Point 2

Parameter	Unit	
Nonimal Pipe Diameter	mm	700
Internal Pipe Diameter, D	mm	648
Assumed Velocity under Peak Flow Condition, v	m/s	2.03
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.00997
Travel Distance	m	604
Estimated Major Headloss	m	6.02
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.60
Water Head Level at Control Point 1	mPD	75.11
Water Head Level at Control Point 2	mPD	68.49
Approx. Ground Level at Control Point 2	mPD	4.58
Approx. Soffit Level at Control Point 2	mPD	3.08
Residual Head at Control Point 2	m	65.41

From Control Point 2 to Control Point 2.1

Parameter	Unit	
Nonimal Pipe Diameter	mm	150
Internal Pipe Diameter, D	mm	138
Assumed Velocity under Peak Flow Condition, v	m/s	2.09
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.06435
Travel Distance	m	51
Estimated Major Headloss	m	3.28
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.33
Water Head Level at Control Point 2	mPD	68.49
Water Head Level at Control Point 3	mPD	64.88
Approx. Ground Level at Control Point 3	mPD	4.59
Approx. Soffit Level at Control Point 3	mPD	3.09
Residual Head at Control Point 2.1	m	61.79

From Control Point 2.1 to Control Point 3

Parameter	Unit	
Nonimal Pipe Diameter	mm	150
Internal Pipe Diameter, D	mm	138
Assumed Velocity under Peak Flow Condition, v	m/s	2.07
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.06276
Travel Distance	m	70
Estimated Major Headloss	m	4.39
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.44
Water Head Level at Control Point 2.1	mPD	64.88
Water Head Level at Control Point 3	mPD	60.04
Approx. Ground Level at Control Point 3	mPD	5.39
Approx. Soffit Level at Control Point 3	mPD	3.89
Residual Head at Control Point 3	m	56.15

From Control Point 3 to Control Point 3.1

Parameter	Unit	
Nonimal Pipe Diameter	mm	150
Internal Pipe Diameter, D	mm	138
Assumed Velocity under Peak Flow Condition, v	m/s	1.58
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.03815
Travel Distance	m	138
Estimated Major Headloss	m	5.26
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	0.53
Water Head Level at Control Point 3	mPD	60.04
Water Head Level at Control Point 3.1	mPD	54.25
Approx. Ground Level at Control Point 3.1	mPD	7.22
Approx. Soffit Level at Control Point 3.1	mPD	5.72
Residual Head at Control Point 3.1	m	48.53

From Control Point 3.1 to Control Point 4

Parameter	Unit	
Nonimal Pipe Diameter	mm	150
Internal Pipe Diameter, D	mm	138
Assumed Velocity under Peak Flow Condition, v	m/s	1.50
Hazen-William Constant	-	90
Hydraulic Gradient, i		0.03481
Travel Distance	m	293
Estimated Major Headloss	m	10.20
Minor Headloss (Extra 10% of Estimated Major Headloss)	m	1.02
Water Head Level at Control Point 3.1	mPD	54.25
Water Head Level at Control Point 4	mPD	43.03
Approx. Ground Level at Control Point 4	mPD	13.41
Approx. Soffit Level at Control Point 4	mPD	11.91
Residual Head at Control Point 4	m	31.12

Annex B

Supplementary Figures of Traffic Impact Assessment

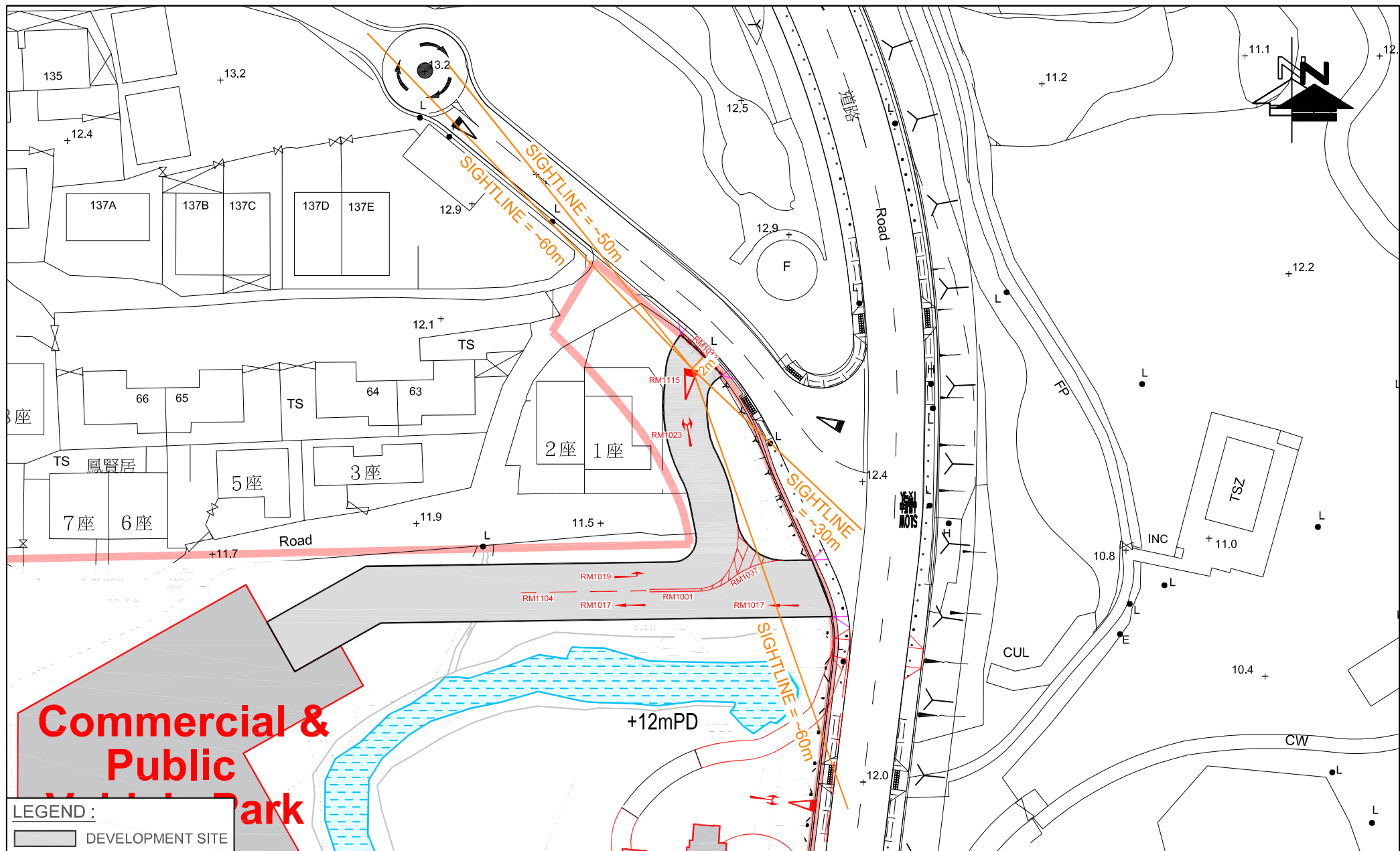
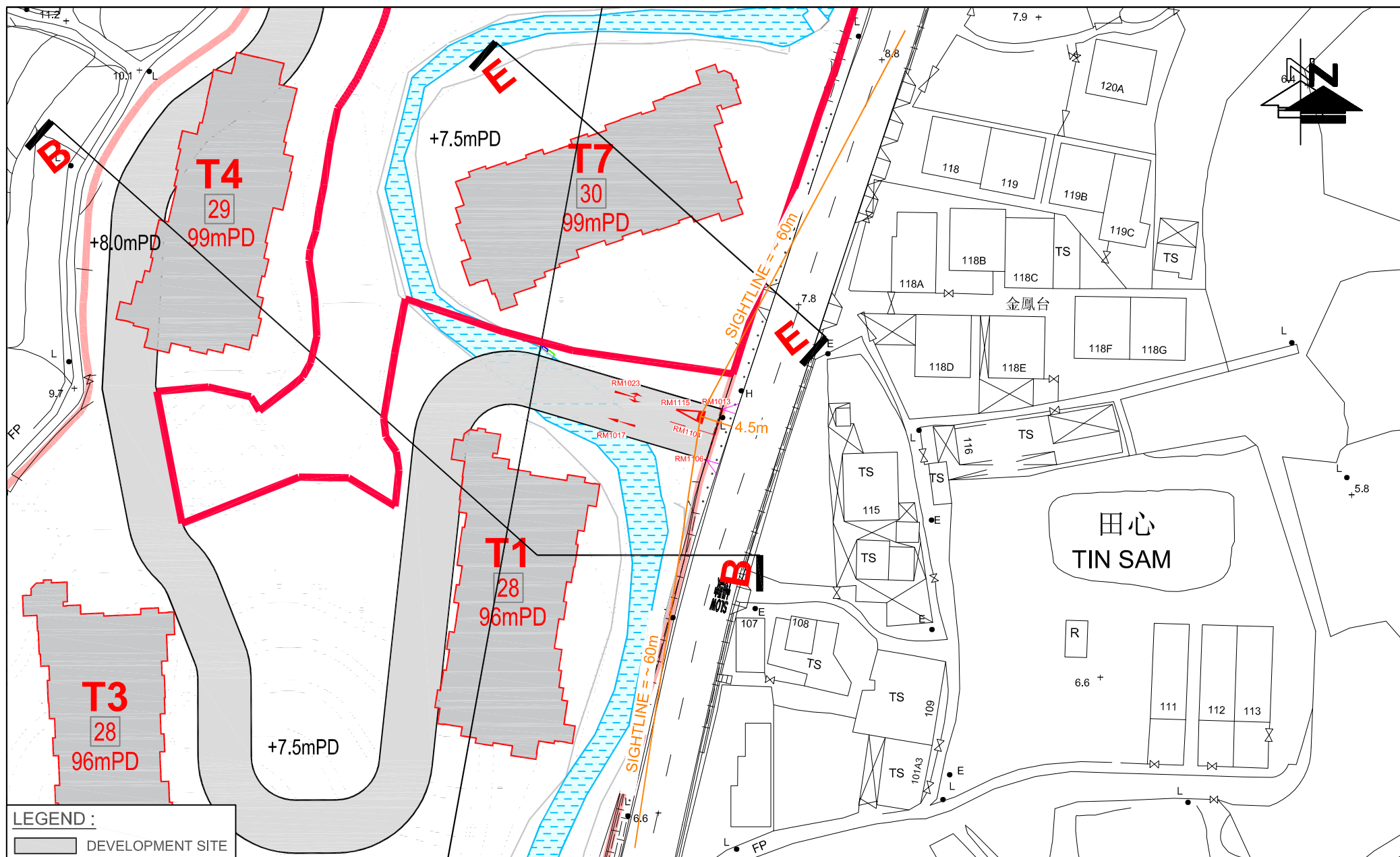


FIGURE NO.: 2.3(SL)	PROJECT TITLE: Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories	 CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 25022HK	DRAWING TITLE: SIGHT LINE ANALYSIS OF PROPOSED ACCESS FOR COMMERCIAL AND PUBLIC VEHICLE PARK	
SCALE: 1 : 650 @A4	DATE: 04 MAR 2026	



LEGEND :

DEVELOPMENT SITE

FIGURE NO.:
2.4(SL)

PROJECT NO.:
25022HK

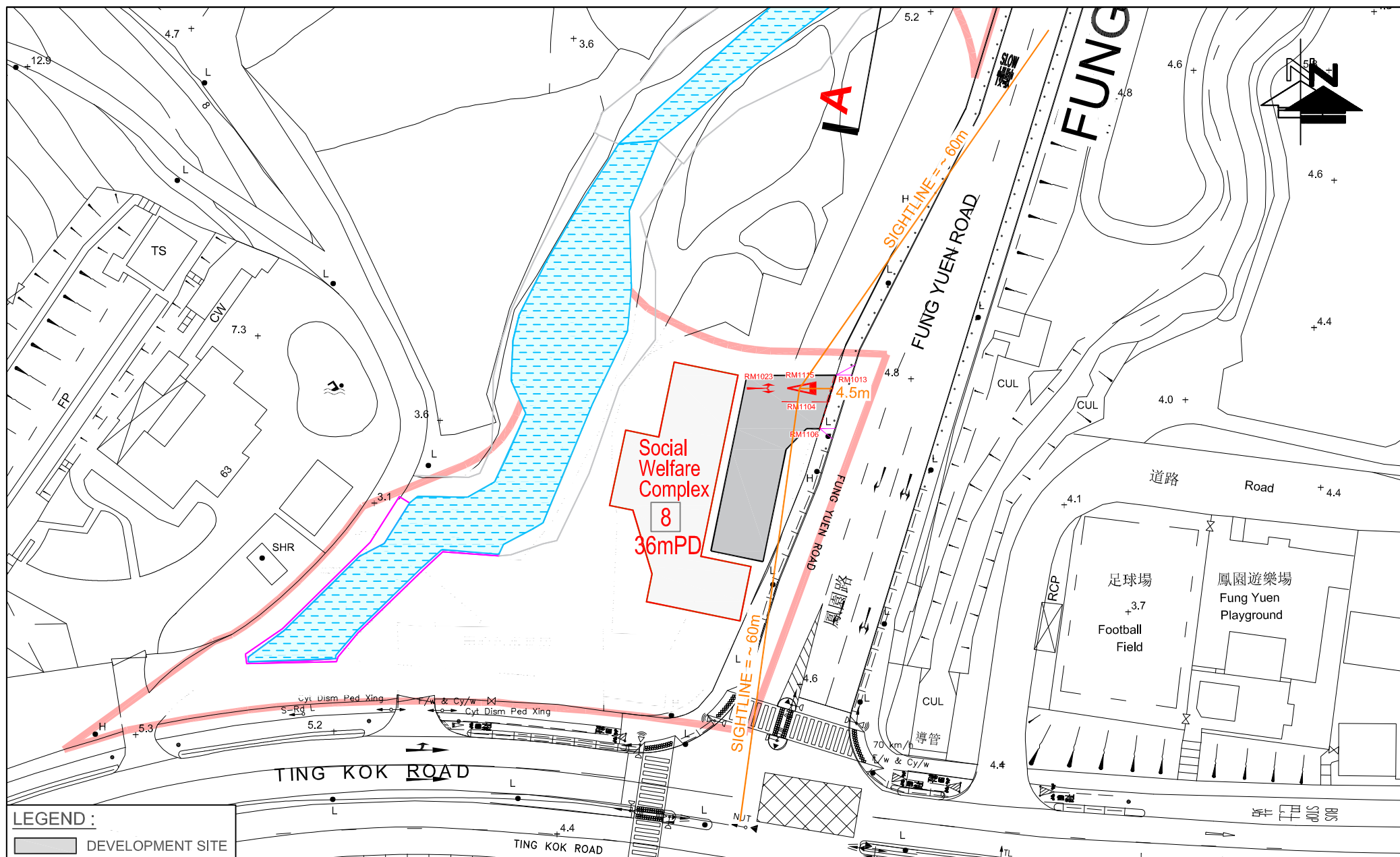
SCALE:
1 : 700 @A4

DATE:
28 JAN 2026

PROJECT TITLE:
Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories

DRAWING TITLE:
**SIGHT LINE ANALYSIS OF
PROPOSED ACCESS FOR RESIDENTIAL DEVELOPMENT**

CTA Consultants Limited
志達顧問有限公司



LEGEND :

DEVELOPMENT SITE

FIGURE NO.:
2.5(SL)

PROJECT NO.:
25022HK

SCALE:
1 : 700 @A4

DATE:
28 JAN 2026

PROJECT TITLE:
Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories

DRAWING TITLE:
SIGHT LINE ANALYSIS OF
PROPOSED ACCESS FOR SOCIAL WELFARE COMPLEX

CTA Consultants Limited
志達顧問有限公司

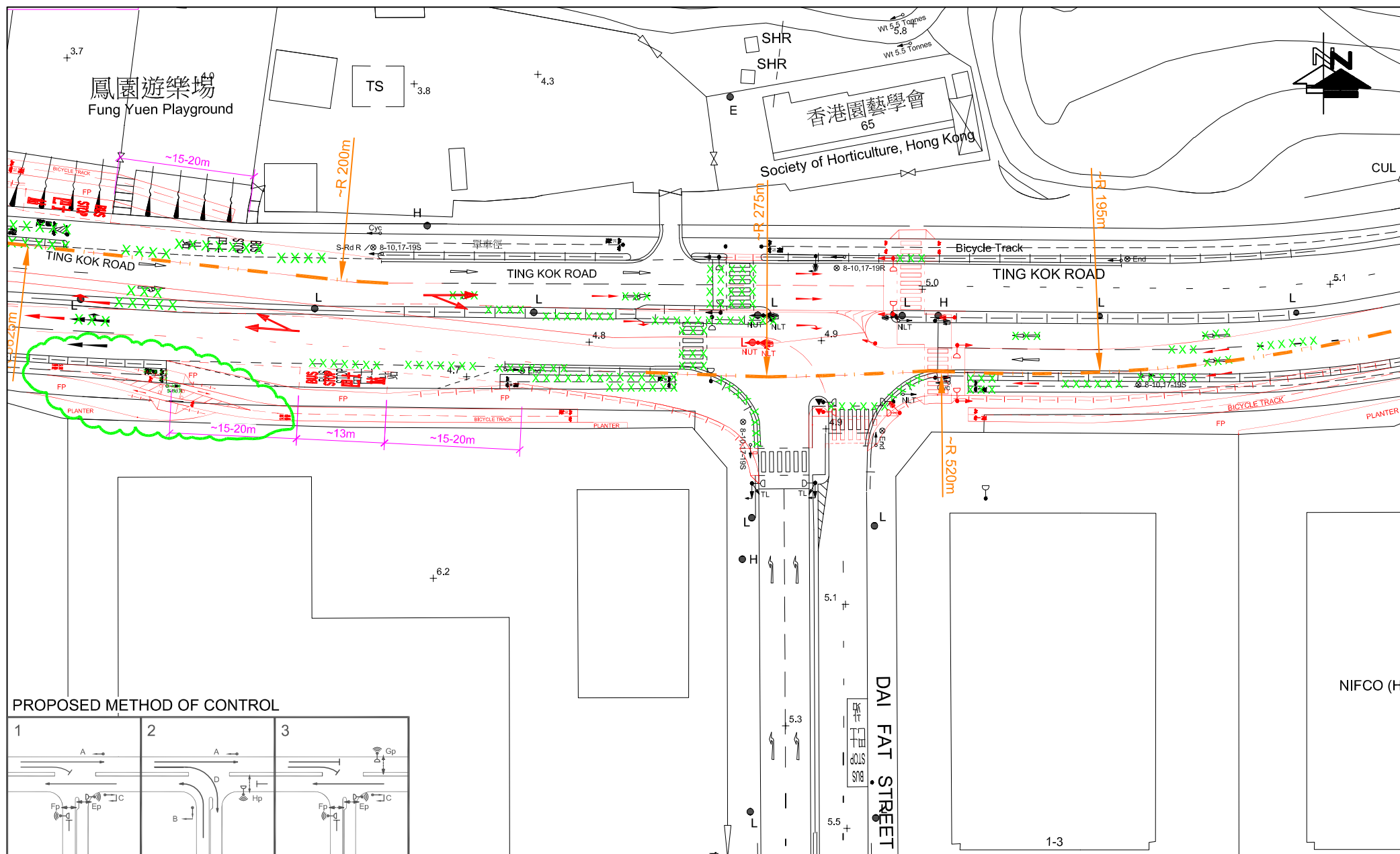


FIGURE NO.: 4.4		PROJECT TITLE: Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories	
PROJECT NO.: 25022HK		DRAWING TITLE: PROPOSED IMPROVEMENT JUNCTION LAYOUT OF TING KOK ROAD / DAI FAT STREET (A)	
SCALE: 1 : 750 @A4	DATE: 05 MAR 2026	 CTA Consultants Limited 志達顧問有限公司	

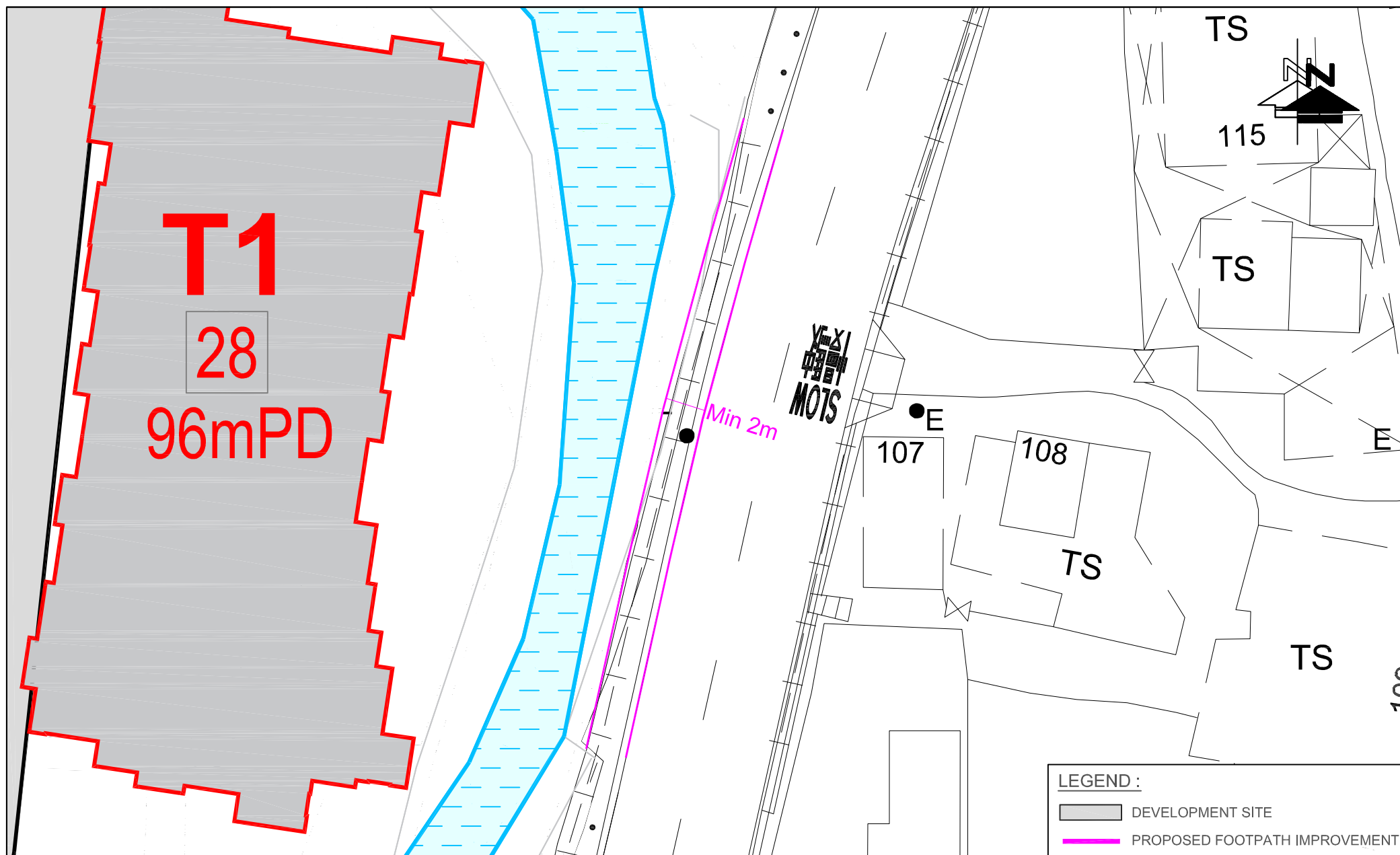


FIGURE NO.: 6.5	PROJECT TITLE: Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories	 CTA Consultants Limited 志達顧問有限公司
PROJECT NO.: 25022HK	DRAWING TITLE: PROPOSED FOOTPATH IMPROVEMENT	
SCALE: 1 : 250 @A4	DATE: 26 NOV 2025	

Annex C

Replacement Pages of Drainage Impact Assessment

condition and proposed conditions. The flood extent at the area is similar under both the existing and proposed conditions.

- 4.3.9 Under the extremely high sea level condition such as 1 in 50 years and 1 in 200 years design sea level, the design sea level of those extreme condition (i.e. 5.42mPD for 50 years and 6.74mPD for 200 years respectively) is higher than the existing ground levels for most of Tai Po area which are between 5mPD and 6mPD, for examples, the village areas, currently vegetation area, near Control Points 4 to 6 (i.e. ground levels from 4.4mPD to 4.6mPD). Sea water is anticipated to be flooded into those areas which have ground levels lower than the design sea level under 1 in 50 years and 1 in 200 years flood events in both existing and proposed conditions. Based on the hydraulic model results, the flooding for these areas is mainly arising from extreme high design sea level and low existing topography of the areas. In view of the flooding is causing by high design sea level, thus, it is considered that no significant adverse impacts will be arising from the proposed Development with the proposed drainage.

- 4.3.10 In view that the downstream portion of the existing stream course will be flooded under extreme event for both existing and proposed conditions, to ensure public safety, management measures including fencing off the Applicant-owned lands near the concerned section of stream course to prevent trespassing and access to the stream course, providing warning signages along the fencing of Applicant-owned lands and erecting warning signages and warning system with loudspeakers in the development of Area (A) Phase I and SWC to warn the public staying away from the watercourse during extreme events will be provided.

- 4.3.11 As the flood extent of the proposed condition are in generally reduced when compared to the existing condition. Thus, there will be no significant adverse impacts arising from the proposed Development upon the provision of proposed mitigation measures.

4.4 Drainage Impact Assessment for only Development in Area (A) Phase I and Area (B)

- 4.4.1 In view of the development in Area (A) Phase II will be implemented later than other parts of the Development, a hydraulic sensitivity analysis for only the development in Area (A) Phase I and Area (B) in place has also been carried out. Under this scenario, all proposed drainage system as mentioned in **Section 4.1** will be provided under the development in Area (A) Phase I and Area (B) except the site condition for the Area (A) Phase II will be maintained as existing condition and its runoff will be discharged to the existing stream course.
- 4.4.2 Same as scenario of the entire Development in **Section 4.3**, control points, as given in **Appendix E**, have been placed to observe changes in predicted water level between existing and proposed conditions for concerned drainage system under this sensitivity analysis. The predicated water levels under the 10 years, 50 years and 200 years flood return period under the existing and proposed conditions for only the development in Area (A) Phase I and Area (B) are presented in **Table 4.2**.
- 4.4.3 The result of the hydraulic model also shows that the proposed 4m x 3m to 4m x 3.5m box culvert will have at least 300mm freeboard under 200-year flood event.

(i.e. ground levels from 4.4mPD to 4.6mPD) is anticipated to be flooded by sea water under 1 in 50 years and 1 in 200 years flood events under both existing and proposed conditions. Based on the hydraulic model results, the flooding for these areas is mainly arising from extreme high design sea level and low existing topography of the areas. In view of the flooding is causing by high design sea level, thus, it is considered that no significant adverse impacts will be arising from the proposed Development with the proposed drainage.

4.4.10 In view that the downstream portion of the existing stream course will be flooded under extreme event for both existing and proposed conditions, to ensure public safety, management measures including fencing off the Applicant-owned lands near the concerned section of stream course to prevent trespassing and access to the stream course, providing warning signages along the fencing of Applicant-owned lands, and erecting warning signages and warning system with loudspeakers in the development of Area (A) Phase I and SWC to warn the public staying away from the watercourse during extreme events will be provided.

4.4.11 As the flood extent of the proposed condition are in generally reduced when compared to the existing condition. Thus, there will be no significant adverse impacts arising from the proposed Development upon the provision of proposed mitigation measures.

4.5 Maintenance Responsibility

4.5.1 **Appendix I** shows the drainage features within and near the Development Site and **Table 4.4** summarises the proposed maintenance parties for the drainage features associated with the proposed development.

4.5.2 In light of that part of the existing stream course falling within the development in Area (A) Phase I and Area (A) Phase II, the owners of the development in Area (A) Phase I and Phase II will be responsible for the maintenance of that part of the existing stream course on government land and private land while HAD will be the maintenance party for the existing stream course located on unleased and unallocated government land. For other existing and proposed drainage features within the development in Area (A) Phase I, the owners of the development in Area (A) Phase I will be responsible for the maintenance of those proposed drainage features including proposed box culvert, 1650mm diameter pipe and 1050mm diameter on both government land and private lands.

4.5.3 The SWC will be managed by the future owner/ operator, the proposed flood wall with a crest level of 7.5 mPD for the SWC and drainage facilities, including flap valve for Pipe B1, will be maintained by the future owner/ operator.

4.5.4 The owners of the development in Area (A) Phase I will be responsible for the maintenance works of the proposed box culvert, the proposed boundary channels and associated pipes, the existing stream course on government land and private lands within the development in Area (A) Phase I and the existing stormwater drainage facilities at the northern part of the development in Area (A) Phase I near Fung Yuen Road, as well as structural maintenance of drainage within the development in Area (A) Phase I. The maintenance works will include routine inspection and desilting works for

the proposed box culvert, the proposed boundary channels and associated pipes and the works will be carried out before wet season, after wet season and after storms.

- 4.5.5 The owners of the development in Area (A) Phase II will be responsible for the maintenance works of the existing stream course on government land and private lands within the development in Area (A) Phase II. The maintenance works will include routine inspection and desilting works for the existing stream course and the works will be carried out before wet season, after wet season and after storms.

Table 4.4: Maintenance matrix

Drainage Features	Maintenance Party
Existing stream course within Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Existing stream course within Area (A) Phase II of the Development Site Boundary	Owners of the development in Area (A) Phase II
Existing stream course outside Area (A) Phase I and Area (A) Phase II of the Development Site Boundary on unleased and unallocated Government land	HAD
Existing box culvert with a size ranged from 3.6m x 2.5m along Fung Yuen Road on Government land	DSD
Existing box culvert with a size ranged from 3.6m x 2.5m within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Existing pipe with diameter of 600mm connecting from the lake in Butterfly Valley ¹ to the existing stream course	The drainage works of the proposed development will not affect this existing pipe, maintenance responsibility will remain unchanged from the current arrangement.
Existing stormwater drainage facilities at the northern part of the Area (A) Phase I near Fung Yuen Road within the Development Site	Owners of the development in Area (A) Phase I
Proposed box culvert within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Proposed pipe with diameter of 1650mm within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Proposed pipe with diameter of 1050mm within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Proposed boundary channels with covers and associated pipes and the proposed flap valve for Pipes 3.1.3, 3.2.2 and 3.3.1 within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I
Proposed internal drainage within the Area (A) Phase I of the Development Site Boundary	Owners of the development in Area (A) Phase I

¹ Previously known as Le Jardin

Drainage Features	Maintenance Party
Proposed internal drainage within the Area (A) Phase II of the Development Site Boundary	Owners of the development in Area (A) Phase II
Proposed flood wall of the social welfare complex (SWC) and drainage facilities in Area (B) including the proposed flap valve for Pipe B1	Owner/ operator of the SWC
Proposed internal drainage, flap valve and emergency pump of SWC	Owner/ operator of the SWC
Proposed management measures including fencing and warning signages at Applicant-owned lands near downstream of existing stream course, warning signages and warning system in the Area (A) Phase I of the Development	Owners of the development in Area (A) Phase I
Proposed management measures including warning signages and warning system in SWC	Owner/ operator of the SWC

4.6 Conceptual Interim Drainage Arrangement for Construction Phases

- 4.6.1 To minimise flood risk in association with the construction phase of the proposed Development, conceptual interim drainage arrangement for construction stage including site formation stage and phasing of works for the proposed Development has been proposed in **Appendix M**. All the information in **Appendix M**, including but not limited to phasing of works and time of works, is tentative and subject to further update, if necessary, based on the future detailed design and Contractor actual construction arrangement for the final development layout.
- 4.6.2 Based on the construction sequence presented in **Appendix M**, the construction period for the proposed Development is a few years, to maintain the flow path of nearby areas mainly for villages and agriculture use near the Site, surface drainage channels as per permanent boundary channels for the development in Area (A) Phase I and interim drainage with discharge capacity for 10 years rainfall for the developments in Area (A) Phase II and Area (B) will be constructed at the beginning of construction stage and will be provided throughout the construction stage. The construction of permanent boundary drainage channels in Area (A) Phase I should be completed in construction stage before commencement of development works in the site. The site runoff will be properly collected and discharged into existing stream course via local temporary site drainage with desilting facilities. Also, the construction activities that will affect / in close vicinity of the existing stream course are all carefully scheduled and will be constructed in dry seasons. Thus, it is considered that there will be no insurmountable drainage impacts during construction stage and the flow path of neighbouring areas can be maintained.

divided into an upper section and a lower section. Under the proposed condition, the upper section of the existing stream course will be connected to the proposed box culvert via a proposed 1650mm diameter pipe whilst the lower section of the existing stream course will serve to receive part of flow from the existing culvert, flow from the existing 1800 drain and runoff from the Site so that the stream habitat can be maintained but the flooding condition at the Site can be improved.

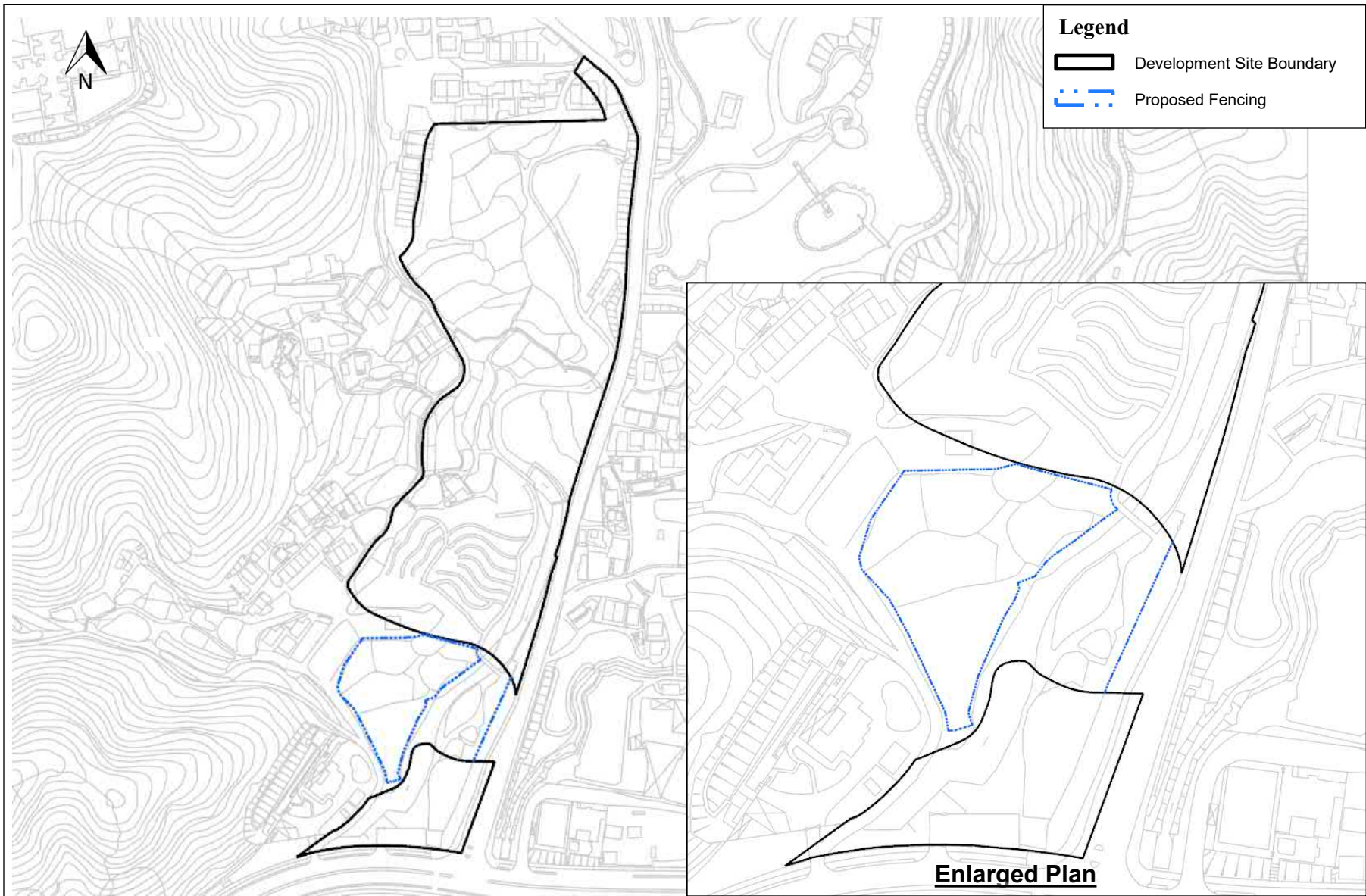
- 5.1.3 Based on the model results, the water levels at the upstream and mid-stream section of the existing stream course are significantly reduced under 1 in 10 years, 1 in 50 years and 1 in 200 years flood event compared with the existing condition. For the upstream section of the existing stream course (i.e. Control points 1 and 2), the water levels are reduced up to 2.6m, 1.5m and 1.4m under 1 in 10 years, 1 in 50 years and 1 in 200 years flood event compared with the existing condition. A significant drop of in water levels (up to -1.5m) is also anticipated at the mid-stream section of the existing stream course (i.e. Control points 3a, 3b and 3c) under 1 in 200 years flood event. With the provision of the proposed box culvert, the drainage condition at upstream and mid-stream of the stream course are greatly improved.
- 5.1.4 In view of that the removal of existing abandoned cross river facilities and provision of a proper drainage system i.e. the proposed box culvert, which collects stormwater including flooded water and part of stream course water under existing drainage condition back to the downstream section of the existing stream course at Control point 4a, under the proposed condition, there will be a slight decrease in the water levels at Control point 4a under 1 in 200 years storm event compared with the existing condition.
- 5.1.5 At the downstream section of the existing stream course (Control Points 5a, 5b and 6) which located at a village zone, the predicated water level is similar to existing condition and flooding only localised at area near to the banks of existing stream course. Since there is no major change in flooding extent under the 1 in 10 years flood event and flood wall with crest level of +7.5mPD (with 0.3m freeboard under the 200 years flood event) has been proposed at the proposed SWC to mitigate the potential flood risk. In view that the downstream portion of the existing stream course will be flooded under extreme event for both existing and proposed conditions, to ensure public safety, management measures including fencing off the Applicant-owned lands near the concerned section of stream course to prevent trespassing and access to the stream course, providing warning signage along the fencing of Applicant-owned lands and erecting warning signages and warning system with loudspeakers in the development in Area (A) Phase I and SWC to warn the public staying away from the watercourse during extreme events will be provided. It is considered that there is no significant drainage impacts to the existing drainage system due to the proposed Development with the provided drainage mitigation measures.
- 5.1.6 As the flood extent of the proposed condition are in generally reduced when compared to the existing condition. Besides, the result of the hydraulic model also shows that the proposed box culvert will have at least 300mm freeboard under the 200-year flood event. Thus, there will be no significant adverse impacts arising from the proposed Development upon the provision of proposed mitigation measures.
- 5.1.7 In view of the development in Area (A) Phase II will be implemented later than other parts of the Development, a hydraulic sensitivity analysis for only the development in Area (A) Phase I and Area (B) in place has also been carried out. Under this scenario, all proposed drainage system as mentioned in **Section 4.1** will be provided under the development in Area (A) Phase I and Area (B) except the site condition for the Area (A)

Phase II will be maintained as existing condition and its runoff will be discharged to the existing stream course.

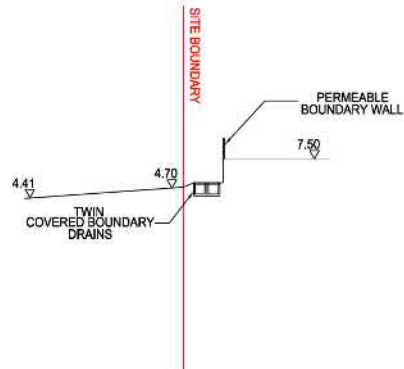
- 5.1.8 The hydraulic results for the sensitivity analysis for condition only the development in Area (A) Phase I and Area (B) is very similar to the results of entire Development except that the section of existing stream course falling within the site of the development in Area (A) Phase II will marginally have a 300mm freeboard under the 200 years storm event upon the runoff from the development in Area (A) Phase I has been discharged to the proposed box culvert due the low ground levels in this local area. In view that the flood extent of the proposed condition under sensitivity analysis are in generally reduced when compared to the existing condition. Besides, the result of the hydraulic model also shows that the proposed box culvert will have at least 300mm freeboard under the 200-year flood event. Thus, there will also be no significant adverse impacts arising from the proposed Development under condition of only Area (A) Phase I and Area (B) in place upon the provision of proposed mitigation measures.
- 5.1.9 In light of that part of the existing stream course falling within the development in Area (A) Phase I and Area (A) Phase II, the owners of the development in Area (A) Phase I and Phase II will be responsible for the maintenance of that part of the existing stream course on government land and private lands within the development site while HAD will be the maintenance party for the existing stream course located on unleased and unallocated government land. For other existing and proposed drainage features within the development in Area (A) Phase I, the owners of the development in Area (A) Phase I will be responsible for the maintenance of those proposed drainage features including proposed box culvert, 1650mm diameter pipe and 1050mm diameter on both government land and private lands.

5.2 Conceptual Interim Drainage Arrangement for Construction Phases

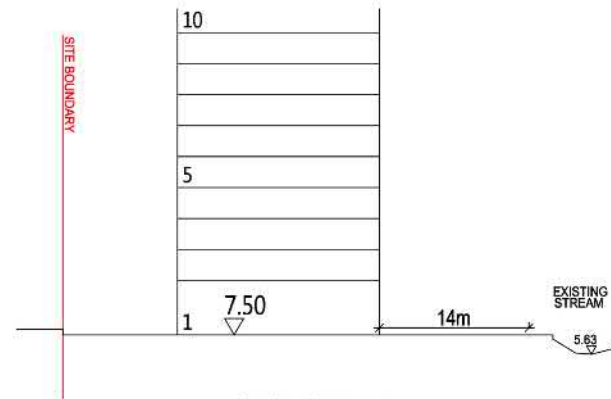
- 5.2.1 To minimise flood risk in association with the construction phase of the proposed Development, conceptual interim drainage arrangement for construction stage including site formation stage and phasing of works for the proposed Development has been proposed. The conceptual interim drainage arrangement, including but not limit to phasing of works and time of works, is tentative and subject to further update, if necessary, based on the future detailed design and Contractor actual construction arrangement for the final development layout.
- 5.2.2 The construction of the proposed Development will take a few years, to maintain the flow path of nearby areas mainly for villages and agriculture use near the Site, surface drainage channels as per permanent boundary channels for the development in Area (A) Phase I and interim drainage with discharge capacity for 10 years rainfall for the developments in Area (A) Phase II and Area (B) will be constructed at the beginning of construction stage and will be provided throughout the construction stage. The site runoff will be properly collected and discharged into existing stream course via local temporary site drainage with desilting facilities. Also, the construction activities that will affect / in close vicinity of the existing stream course are all carefully scheduled and will be constructed in dry seasons. Thus, it is considered that there will be no insurmountable drainage impacts during construction stage and the flow path of neighbouring areas can be maintained.



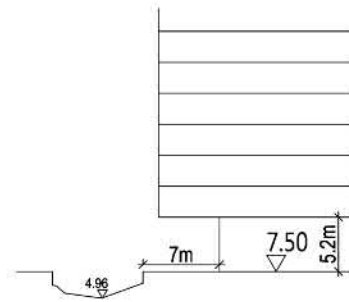
Project Proposed Residential Development(s) with Retail, Public Vehicle Park and Social Welfare Facilities at Various Lots and Adjoining Government Land at Fung Yuen, Tai Po, New Territories				
Title Extent of Proposed Fencing			Appendix B2	
Date March 2026	Scale N.T.S.	File		



SECTION 7 - 7



SECTION 8 - 8



SECTION 9 - 9

Project Proposed Residential Development(s) with Retail, Public Vehicle Park And Social Welfare Facilities at Various Lots and Adjoining Government Land in DD 11, Fung Yuen, Tai Po, New Territories

Title Sectional Views of Proposed Mitigation Measures

Date Feb 2026

Scale N.T.S.

File

M
MOTT
M
MACDONALD

Appendix K

Annex D

Email Dated 3.2.2026 from
Environmental Protection Department

Re: S12A Amendment of Plan Application No. Y/TP/40 - Sewerage Impact Assessment

From wingyeetang@epd.gov.hk <wingyeetang@epd.gov.hk>

Date Tue 03/02/2026 10:13

To Benjamin Tung <benjamintung@ktaplanning.com>

Cc bkclau1@pland.gov.hk <bkclau1@pland.gov.hk>; ctyleung@pland.gov.hk <ctyleung@pland.gov.hk>; felixtai@epd.gov.hk <felixtai@epd.gov.hk>

Dear Benjamin,

I refer to your email below dated 2 February 2026. We have no further comments on the Sewerage Impact Assessment (SIA). For completeness, please be reminded to incorporate the following minor textual comments that we provided in mid-January: "RtC item 12.19: it is suggested to review the footnote ** under Table 3.5 which does not appear to align with the table content."

Thank you.

Best regards,

TANG Wing Yee, Winnie

Assistant Environmental Protection Officer (Territory North)44

Environmental Protection Department

Tel: 2835 1096

From: "Benjamin Tung" <benjamintung@ktaplanning.com>

To: "Wing Yee TANG/EPD" <wingyeetang@epd.gov.hk>

Cc: "Karen Mei Yung HO/MND/DSD" <myho05@dsd.gov.hk>, "Benson Ka Chun LAU/PLAND" <bkclau1@pland.gov.hk>, "Christy Tsui Yan LEUNG/PLAND" <ctyleung@pland.gov.hk>, "Kelvin Au Yeung" <kelvinauyeung.gwal@gmail.com>, "Pauline Lam" <paulinelam@ktaplanning.com>

Date: 02/02/2026 11:59

Subject: S12A Amendment of Plan Application No. Y/TP/40 - Sewerage Impact Assessment

Dear Winnie,

I refer to the captioned application.

Among the departmental comments conveyed by Planning Department on 26.1.2026, we note that DSD commented '*Please provide the proof of in-principle agreement from EPD from our reference.*'

Very grateful if your side could confirm that EPD has no further comment on the Sewerage Impact Assessment for DSD's reference. Thank you very much.

Best Regards,

Benjamin TUNG

Town Planner

KTA Planning Limited

Unit K, 16/F, MG Tower, 133 Hoi Bun Road, Kwun Tong

Tel: 3426 8402 (D) | Fax: 3426 9737

www.ktaplanning.com[attachment "2026126 Y TP 40 FI2 Departmental batch 2.pdf" deleted by Wing Yee TANG/EPD/HKSARG].

Annex E

Replacement Pages of Supporting Planning Statement

7 PLANNING MERITS AND JUSTIFICATIONS

7.1 Remote Prospect for Implementing the Subsequent Phase as Originally Planned for under the Approved Scheme of “CDA(1)” Zone

- 7.1.1 Back in 1980, the Fung Yuen Site (comprising the Application Site) was once infested with car repair workshops, open storage and illegal petrol filling stations. In 1982, the area was zoned “Other Specified Uses” annotated “Comprehensive Redevelopment Area” (“OU(CRA)”) for the intention of harnessing resources of the private sector to get rid of these “black spots”. Pursuant to the then “OU(CRA)” zoning, the Applicant commenced assembling the private lots and committed tremendous time and resources in clearing the environmentally undesirable uses within the area since 1987. In 1999, the Fung Yuen Site was rezoned to “CDA(1)” for comprehensive development/redevelopment in the area.
- 7.1.2 After spending more than **13** years in assembling the land and clearing the black spots within the “CDA(1)” zone by the Applicant, planning approval for the MLP of the entire “CDA(1)” zone was first granted to the Applicant in 2000 (Planning Application No. A/TP/256). Sequent approvals to amend the approved scheme was granted during the period between 2000 and 2004 (Planning Applications No. A/TP/267, 318, 319 and 333). Afterwards, the Phase 1 of Development Portion, containing the Mont Vert, and the Agricultural Portion were successfully accomplished and executed in accordance with the planning approval of Application No. A/TP/333, whilst the Subsequent Phase of the Development Portion was aimed to reserve for future implementation by the Applicant upon the unification of title of the remaining private lots within the “CDA(1)” zone.
- 7.1.3 For the implementation of Subsequent Phase of the “CDA(1)” zone as planned for in the planning approval, the Applicant has made continuous efforts and determination in land acquisition as far as possible. After spending another **25** years since the 1st planning approval, for assembling the remaining piecemeal private lots scattered within the “CDA(1)” zone, it becomes apparent that the possibility for the Applicant to unify the title of the remaining private lots within the “CDA(1)” zone to implement the Subsequent Phase is extremely remote due to absentee ownership, Tso Tong and land title problems, etc.
- 7.1.4 This application which proposes to rezone a portion of the “CDA(1)” zone for more beneficial uses in meeting urgent housing demand while preserving the originally planned development potential reserved for the future realisation by the private lot owners in the remaining “CDA(1)” zone will facilitate timely development of the area for optimal uses without jeopardising the development potential of the unacquired lots within the remaining CDA(1) zone.

7.2 In Line with Government's Policy to Untap the Development Potential of Agricultural Land or Underutilised Land to Sustain the Government's Effort in Land Production.

7.2.1 The need to increase housing land supply to meet the strong demand on residential flats is widely recognised. It has been publicised that the top priority of the Government is to tackle the housing problem; and this can be seen from many of the prevailing policies and revisions to OZPs at various locations to boost housing supply. The Government acts proactively to increase housing land supply by conducting land use reviews and other measures. Government initiatives on housing supply are discussed in **Section 4.1**.

7.2.2 This Rezoning Proposal based on the land consolidated on the south-western portion of the "CDA(1)" zone (which is located closest to the developed areas in the vicinity and is immediately ready for development) and the other landholdings that were assembled outside the "CDA(1)" zone in the south are therefore put forward for reviewing the development potential. Since the implementation of Mont Vert residential development and the Agricultural Portion back in 2004, the Applicant has continually assembled and acquired more agricultural land both within and in the vicinity of the "CDA(1)" zone, some of which have been integrated with the Agricultural Portion of TPTL No. 183 and operated and managed as part of the Agricultural Portion by the Applicant. The Proposed Development would be in line with 2018 Policy Address and Task Force on Land Supply's recommendations to unleash the development potential of private agricultural land for providing residential development with essential community uses and social welfare facilities expeditiously.

7.2.3 This Rezoning Proposal is exactly on the same path as the Government's proposal to make the maximal use of the scarce land resources available and avoid under-utilisation of the Application Site. Furthermore, the Proposed Development which is readily available for development will help hasten housing supply in a much shorter time frame by 2030.

7.3 Provision of Social Welfare Facilities to Meet the Outstanding Demand of RCHE

7.3.1 The Applicant has examined its available private land located in the vicinity of Area (A). A proposed Social Welfare Complex will be provided in Area (B).

7.3.2 The provision of RCHE and DCU in the proposed Social Welfare Complex is in proactive response to meeting the outstanding demand of RCHE and serving the needs of the ageing population in Hong Kong. The Applicant will take up the construction of the proposed social welfare complex and set up a private or self-financing RCHE to alleviate the surging demand for RCHE, thereby serving the needs of the ageing population in Hong Kong.

7.4 Provision of Supporting Retail Facilities, Public Vehicle Park and Open Space for Surrounding Residents to Form a Neighbourhood Activity Node

- 7.4.1 There are generally lack of shops and services serving the local community in Fung Yuen. Whilst there are few small-scale local shops in the vicinity, the choices for local residents for daily necessities are still very limited. Considering the daily necessities and needs of surrounding residents, the Applicant has taken the opportunity to provide floor space for 'Shop and Services' use in northern part of Area (A). In addition, at the request of Transport Department, a public vehicle park will be provided. A landscaped open space on top of/adjoining to the retail facilities will be provided for the enjoyment of public and surrounding residents. These facilities forming a neighbourhood activity node would benefit the whole Fung Yuen community.

7.5 Appropriate Land Use Zoning have been Proposed for Different Portions of the "CDA(1)" Zone to Reflect the Long Established "As-built" Conditions

- 7.5.1 The Mont Vert residential development at the northern portion of the "CDA(1)" zone and the Agricultural Portion under TPTL 183 at the eastern portion of the "CDA(1)" zone has been completed for more than 10 years. Opportunity has been grasped to rezone these remaining portions of "CDA(1)" zones to appropriate zonings to reflect their existing "as-built" conditions. As such, the land falling within these portions could have greater flexibility to utilise their land and avoid planning blight while clear planning intention and development restrictions still apply.

7.6 The Development Site is Suitable to be Rezoned for Residential Use

- 7.6.1 In recent years, the development extent of Tai Po New Town has been expanded towards its north-eastern fringe where the Application Site is located. Two of the recent examples are the Fu Tip Estate with PR of 6.15 and the planned public housing development at Chung Nga Road West with PR of 6.9 which are located only at approximately 172m and 750m respectively to the west of the Application Site (**Figures 3.2 and 3.3** refer). Given the history of the "CDA(1)" zone as stated in **Section 2.1**, together with Mont Vert residential development (completed in December 2015), the Development Site is a logical and appropriate location for the Proposed Development which would be compatible with the surrounding areas.

7.7 The Development Intensity is Considered Appropriate and Compatible with the Neighbourhood and the Planning of Tai Po New Town

- 7.7.1 The surrounding context of the Development Site and its compatibility with the existing development in the area, especially the high-rise residential developments to the north and west of the Application Site, have all been taken into careful consideration when devising the development parameters and the overall building layout of the proposed residential development. The proposed residential towers with building height ranging from about +85mPD to +102mPD are compatible with the maximum building height of Mont Vert (about +102mPD). Besides, the Proposed

Development will have a lower building height than the Fu Tip Estate (about +143mPD) and the planned public housing development at Chung Nga Road West (not more than +172mPD) (**Figures 5.2** refers). The proposed building height are considered appropriate and optimised without compromising the existing sub-urban setting.

7.7.2 A stepped building height profile descending from the Proposed Development to Tai Po Industrial Estate and further to the waterfront promenade will be created to help preserve the views towards the ridgeline of Cloudy Hill. It is in line with the planned building height profile for Tai Po New Town as promulgated in the OZP (Paragraph 5.4.7 refers).

7.7.3 As demonstrated in the appraisal and photomontages in the Visual Impact Assessment ("VIA") in **Appendix 2**, the visual impact associated with the Proposed Development are considered acceptable, and will be fully compatible and largely blend in well with the existing high-rise developments.

7.8 The Proposed Development is Carefully and Comprehensively Designed

7.8.1 Compared with the development proposal submitted under previous s.12A Application No. Y/TP/38, the current development proposal includes all land to the west of Fung Yuen Road within the "CDA(1)" zone. By utilising the Agricultural Portion and Government land within the Western and Southern Portion, the Proposed Development is carefully and comprehensively designed as a single, integrated and coordinated development with self-sustained and supporting facilities to achieve an optimal layout and building disposition.

7.9 The Indicative Development Proposal is Technically Feasible

Ecological

7.9.1 According to the assessment of the potential ecological impacts (**Appendix 3** refers) associated with the proposed residential development during construction and operational phases, impacts on species of conservation importance will be insignificant. The Fung Yuen Stream and its riparian zone will not be disturbed. As *Mucuna championii* will be retained *in situ* and the recorded fauna species are highly mobile, direct impacts on the habitats and flora and fauna species of conservation importance are anticipated to be low even without mitigation measures. Similar habitats can also be found in the close vicinity of the Development Site.

7.9.2 Indirect impacts on Fung Yuen Stream, the surrounding habitats and associated wildlife owing to construction runoff, waste and human activities are assessed. With the implementation of the proposed mitigation measures such as proper control of construction runoff and good construction practices, potential disturbance to the existing habitats will be minimised. No unacceptable residual ecological impacts on the local area due to the Proposed Development are anticipated.

Noise

- 7.9.3 A Noise Impact Assessment has been conducted for the Proposed Development (**Appendix 4** refers). The dominant noise source is attributable to the road traffic noise from the nearby road network, namely Ting Kok Road and Fung Yuen Road. The predicted maximum road traffic noise level of the residential units and RCHE cum DCU facilities will exceed the stipulated 70dB(A) noise criterion. Nonetheless, with the provision of acoustic window (baffle type), all residential units and RCHE cum DCU would comply with the 70dB(A) criterion. The Proposed Development will not be subject to adverse noise impact from surrounding roads and industrial noise sources.

Land Contamination

- 7.9.4 Potential land contamination impacts associated with the Proposed Development have been reviewed (**Appendix 5** refers). Based on the observation from the site inspections and the review of historical aerial photographs, the Application Site was mainly farmland, vegetated and/or abandoned. No activity and equipment resulting in potential land contamination were observed at the Development Site. In addition, the information from Environmental Protection Department indicated that there was no chemical waste producer, chemical spillage and leakage records in the Application Site. Therefore, potential contamination is not anticipated in the Development Site.

Waste Management

- 7.9.5 With the implementation of recommended measures such as on-site sorting, reusing construction and demolition materials proposed in the Waste Management Assessment (**Appendix 6** refers), no adverse waste management implication is anticipated during construction stage. During the operational phase, municipal solid waste would be generated. With the proper treatment and disposal of the waste, no adverse waste management impact is anticipated.

Air Quality

- 7.9.6 As revealed in the Air Quality Impact Assessment in **Appendix 7**, the chimney emissions and the vehicular emissions are identified as the two major air pollution sources in the neighbourhood. The concentration and dispersion of Nitrogen Dioxide ("NO₂"), Respirable Suspended Particulates ("RSP"), Fine Suspended Particulates ("FSP") and Sulphur Dioxide ("SO₂") are the major pollutants which have been predicted by computer models. It is concluded that the cumulative concentration of all air pollutants is within the stipulated Hong Kong Air Quality Objectives ("HKAQO") limits. The Proposed Development would not be affected by chimney emissions and vehicular emissions. In addition, no emission of fluff and odour impact is anticipated.

Air Ventilation

- 7.9.7 An Air Ventilation Assessment - Expert Evaluation has been conducted for the Proposed Development at the Development Site (**Appendix 8** refers). The Proposed Development may inevitably result in wind blockage impact under particular wind directions and the wind availability would be slightly affected; nevertheless, the optimal building disposition and provision of building separations would enhance the air ventilation performance at the pedestrian level and minimise potential air ventilation impacts. It is concluded that the Proposed Development would unlikely impose unacceptable impact on the surrounding areas from air ventilation perspective.

Traffic

- 7.9.8 Since the proposed residential development is tentatively scheduled for completion in 2029 and 2030, a TIA for the design year 2033 has been carried out to assess the possible traffic impacts onto the local road network (**Appendix 9** refers). It was estimated that the Proposed Development would generate and attract trips of 161 and 132 pcu/hr in the AM peak and 136 and 128 pcu/hr in the PM peak. With the proposed traffic improvement schemes, all surveyed key junctions operating under both 2033 reference and design scenarios would continue to have ample capacity to accommodate the future traffic growth and the additional traffic generated by the Proposed Development. Internal transport facilities would be provided in accordance with the requirements as stipulated in the latest HKPSG. The Proposed Development is considered acceptable in the traffic aspect and would not induce adverse traffic impact to the surrounding road network.

Drainage

- 7.9.9 The drainage impact to the existing drainage system due to the Proposed Development has been assessed with hydraulic model (**Appendix 10** refers) under 1 in 10 years, 1 in 50 years and 1 in 200 years flood events. For the Proposed Development at Area (A) Phase I, the runoff generated will be discharged to the new box culvert via connecting pipes; while for developments at Area (A) Phase II and Area (B), it will be discharged to existing stream course. With the provision of the proposed drainage mitigation measures, the drainage condition at upstream and mid-stream of the stream course will be greatly improved. It is concluded that there will be no significant adverse drainage impact arising from the proposed development.

Sewerage

- 7.9.10 The Sewerage Impact Assessment (**Appendix 11**) indicated that the sewage generated from the proposed development in Area (A) Phase II and the social welfare complex in Area (B) will be discharged to the public sewerage system with no adverse impact, whereas the existing public sewerage system has insufficient capacity for the proposed development in Area (A) Phase I. An on-site sewage treatment plant is therefore proposed to treat the sewage arising from the proposed residential

development. The sewage effluents will be sanitised to fulfil all relevant statutory standards before discharge to the existing drainage system. No adverse sewerage impact is anticipated as a result of the Proposed Development.

Water Supply

- 7.9.11 According to the results of the Water Supply Impact Assessment (**Appendix 12** refers), there will be increased fresh water and salt water demands as a result of the Proposed Development. However, it is anticipated that the existing main supply systems will have adequate spare capacity to cater for the expected increases. It is concluded that the proposed development can be implemented without resulting in any insurmountable water supply impact.

EIAO Implication

- 7.9.12 According to the TIA under this Application, improvement schemes are proposed at 5 junctions.

- 7.9.13 According to the Section 6 of EIAO – TM, it defines “material change” shall be used for a material change to a designated project, the material change shall refer to significant changes only. As a general rule, changes of 5 circumstances are regarded as material changes to a designated project, which summarise in **Table 7.1** below.

Table 7.1 Circumstances regard as Material Change

	Circumstances regard as Material Change (Section 6 of EIAO – TM)
(a)	A change to physical alignment, layout or design of the project causing an environmental impact likely to affect existing or planned community, ecologically important areas or sites of cultural heritage;
(b)	A physical change resulting in an increase in the extent of reclamation or dredging affecting water flow or quality likely to affect ecologically important area, or disrupting sites of cultural heritage;
(c)	An increase in pollution emissions or discharges or waste generation likely to violate guidelines or criteria in this technical memorandum without mitigation measure in place;
(d)	An increase in throughput or scale of the project leading to physical additions or alterations that are likely to violate the guidelines or criteria in this technical memorandum without mitigation measures in place; or
(e)	A change resulting in physical works that are likely to affect a rare, endangered or protected species, or an important ecological habitat, or a site of cultural heritage.

- 7.9.14 According to the TIA, improvement schemes are proposed at 5 junctions, the details are listed in **Table 7.2**.

Table 7.2 Details of the Proposed Junction Improvement Works

Ref.	Location of Junction	Road Type	Proposed Improvement Details related to the Physical Alignment Change
A	Ting Kok Road/ Dai Fat Street	Primary distributor/ Local road	Additional lane for right turn movement at Ting Kok Road (Eastbound)
B	Ting Kok Road/ Fung Yuen Road	Primary distributor/ Local road	- Additional lane for left turn movement for Fung Yuen Road (Southbound) - Additional right turn movement in Ting Kok Road (Westbound) - Relocate the bus stop at Ting Kok Road
C	Ting Kok Road/ Dai Fuk Road/ Yuen Shin Road	Primary distributor/ Local road/ Expressway	Additional lane of left turn from Ting Kok Road (Eastbound) to Ting Kok Road (Northbound)
D	Yuen Shin Road/ Dai Fat Street	Expressway/ Local road	- Additional lane on Yuen Shin Road (Southbound) - Additional straight ahead movement lane of
E	Tai Po Tai Wo Road/ Yuen Shin Road	Primary distributor/ Expressway	Additional right turn movement lane of Tai Po Tai Wo Road (Eastbound) by narrowing down the central divider

7.9.15 According to the item A.1, Part I, Schedule 2 of the EIAO, a carriageway for motor vehicles that is an expressway, trunk road, primary distributor road or district distributor road are classified as designated project. According to The Annual Traffic Census 2024, Ting Kok Road, Yuen Shin Road and Tai Po Tai Wo Road are classified as primary distributor/expressway, all these roads are developed before 1998, hence these roads are considered as exempted project under EIAO

7.9.16 For Ting Kok Road, which have total 3.2km long. There are 3 junction improvement schemes related to Ting Kok Road, that cover 9% of Ting Kok Road's total length (i.e. about 295m). The kerb of Ting Kok Road would be widened by 2m due to the proposed additional lane, such that the distance between the road and the nearest existing NSR would have minor change only. The proposed Development will induce about 0.6% – 7% changes for the traffic flow of Ting Kok Road. All these changes to Ting Kok Road are minor, adverse pollution emissions due to the proposed improvement works is not anticipated.

7.9.17 For Yuen Shin Road, which have total 1.2km long. There are 3 junction improvement schemes related to Yuen Shin Road, that cover about 18% of Yuen Shin Road (i.e. 217m). The kerb of Yuen Shin Road would be widened by 2m due to the proposed additional lane, such that the distance between the road and the nearest existing NSR would have minor change only. The proposed Development will induce about 3% – 4% changes for the traffic flow of Yuen Shin Road. All these changes for Yuen Shin Road are minor, adverse pollution emissions due to the proposed improvement works is not anticipated.

7.9.18 For Tai Po Tai Wo Road, which have total 2.7km long. There is 1 junction improvement scheme related to Tai Po Tai Wo Road, that cover 6% of Tai Po Tai Wo Road's total length (i.e. about 150m). The kerb of Tai Po Tai Wo Road would be widened by 1m due to the proposed additional lane, such that the distance between the road and the nearest existing NSR would have minor change only. The proposed Development will induce about 4% changes for the traffic flow of Tai Po Tai Wo Road. All these changes for Tai Po Tai Wo Road are minor, the existing NSRs are far away from the road, adverse pollution emissions due to the proposed improvement work is not anticipated.

7.9.19 According to the EIAO Guidance Note No. 12/2023, the improvement of a road junction or roundabouts would not cause significant changes of noise impact on a nearby NSR as it would not affect the design capacity of the concerned road section and not significantly reduce the distance between the alignment of the main carriageway and the nearby NSR.

7.9.20 With considering the above factors, all the changes to Ting Kok Road, Yuen Shin Road and Tai Po Tai Wo Road are minor in nature. The scale of the proposed junction improvement works is relatively small, do not involve any reclamation or dredging, and also do not have any physical works that will affect a rare, endangered or protected species, or an important ecological habitat or a site of cultural heritage. Therefore, the proposed junction improvement works will not constitute a material change to an existing Designated Project or exempted project of EIAO.

Annex F

Fax Dated 14.7.2025 from Transport Department

電話 Tel. : 2399 2406
圖文傳真 Fax : 2381 3799
電郵 Email :

14 July 2025

CTA Consultants Limited
Unit 2108, 21/F, Westlands Centre,
20 Westlands Road,
Quarry Bay, Hong Kong
(Attn: Mr. Kelvin LEUNG)

Dear Sir,

**Proposed Residential Development(s) with Retail, Public Vehicle Park and
Social Welfare Facilities at Various Lots in D.D. 11 and Adjoining Government
Land, Fung Yuen, Tai Po, New Territories**

**Technical Note on Methodology for Estimating Traffic Forecast for
Traffic Noise Impact Assessment (TNIA) and Air Quality Impact Assessment (AQIA)**

I refer to your above-referenced letter dated 17 June 2025 and received on 7 July 2025.
We have the following comments on the submission:

Please note that the Traffic Noise Impact Assessment (TNIA) and Air Quality Impact Assessment (AQIA) are not under our purview. We are not in a position to provide comments on the traffic figures tailor-made for the environmental assessment study.

Notwithstanding the above, we have no comment on the methodology of the traffic forecast.

Yours faithfully,


(Issac CHAN Ka-fai)

for Commissioner for Transport

新界分區辦事處
NT Regional Office
九龍聯運街三十號旺角政府合署七樓
7th Floor, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO)
網址 Web Site: <http://www.td.gov.hk>

Annex G

Replacement Page of Sewerage Impact Assessment

Average Dry Weather Flow (ADWF) (m ³ /s)	0.014169 + 0.000022 + 9.08E-05 = 0.01428
--	---

Table 3.4 Calculations of the Average Dry Weather Flow of proposed Area (A) Phase I development

	Resident	Employee	Swimming Pool	Total
Calculated Total Average Flow (m ³ /day)	1206.06	26.04	1.88	1233.98
Contributing Population	4467	97	7	4571
Peaking Factor***	3	3	-	3
Overall Design Peak Flow (m ³ /day)	3618.18	78.12	1.88**	3698.18

Table 3.5 Peaking Factor Calculation of Proposed Area (A) Phase I Development to the Sewage Treatment Plant

**According to Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning – T-5(b) for Sewage Treatment Works*

***The Total Average Flow include swimming pool flow without peaking factor as swimming pool sewage generation occur at non-peaking hour (about 00:00-06:00 and will be subjected to detail design stage) and in a constant flow*

****STP can be designed to cater for a peak flow of 3 ADWF, excess flow over 3 ADWF being equalized in an equalization tank. Equalization tanks should be designed to hold the excess flow for a period of two hours, 1 ADWF excess sewerage flow will be equalized in an 110m³ equalization tank. The dimension of equalization tank will be subjected to detail design stage*

The proposed design of the treatment plant is subjected to the detailed design stage. The installed capacity of the proposed sewage treatment plants (STPs) is estimated as 0.0428m³/s (Peaking factor do not adopted for swimming pool sewage), which is 3698m³/day. The design of STP would follow EPD's Guideline for the Design of Small STP, and be duly certified by Authorized Person for compliance of relevant requirements. The responsible party for constructing and maintaining the plant would be the lot owner. The sewage treatment process is briefly discussed in the following. The first process is primary treatment. Physical solids would be settled while the light solid would be floated in the primary sedimentation tank. They will be removed afterwards. Then, the sewage will flow to secondary treatment. Dissolved and suspended biological matters are removed by aerobic biological process. Lastly, tertiary treatment will be done to the wastewater to improve effluent quality before discharging to the receiving environment. According to the information advised by the STP supplier, for the maintenance of the STP, the maintenance frequency would be generally twice a week. The duration of each maintenance would be 1-2 hours. The STP would still operate normally during the regular maintenance. There will be spare parts of the STP on site for maintenance convenience. The location plan of the STP and the proposed discharge point is shown in [Appendix E](#). Discharge licence under WPCO would be obtained prior to operation of the STP. Regular monitoring or audit will be conducted during construction phase (for construction works) and operation phase (for the proposed STP).

Moreover, according to the normal practice advised by the STP supplier, standby equipment (e.g. pumps) of the sewage treatment plant will be stored on site as a contingency plan. When facing any emergency situation, standby equipment will be provided for maintenance. Tankers would be arranged to tanker away raw sewage to avoid

Annex H

Replacement Pages of Air Quality Impact Assessment

3 SITE INSPECTION

Date and Time

- 3.1 Site surveys were conducted on 7 April 2025, 23 June 2022, 8 October 2021, 10 March 2020, 15 October 2019, 6 and 11 July 2018.

Vehicular Emissions in the Vicinity

- 3.2 The vehicular emissions from the roads in the vicinity of the Development Site have been included in the air impact assessment for the proposed Development.

Industrial Emissions in the Vicinity

- 3.3 Site surveys have been conducted covering the whole area within 500m of the proposed Development to identify all the industrial chimneys. As compared with the site survey in 2022, 1 industrial chimney was removed, and no new chimneys were observed. A total of 18 chimneys were identified (with 11 in Tai Po Industrial Estate and 7 in Tai Po Hospital and Alice Ho Miu Ling Nethersole Hospital). The location of industrial chimney is provided in Figure 3. The summary of the chimneys are provided in Appendix 4.
- 3.4 The site inspections have confirmed that odour was not detected at the site boundary and at the Tin Sam Sewage Pumping Station, fluff was not observed from the buildings in the vicinity of the proposed Development. The weather of the recent site surveys were:-
- 7 April 2025: 25°C, 60%RH, generally fine and calm
 - 23 June 2022: 30°C, 70%RH, generally fine and calm
- 3.5 Inquiry has been made to EPD Regional Office (North), and it is confirmed that no odour complaint against Tin Sam Sewage Pumping Station was received in the past 3 years. The confirmation from EPD is provided in Appendix 12.

Table 10.1 Vehicle Classification in EMFAC-HK Model

Vehicle Class	Description	Gross Vehicle Weight
PC	Private Cars	All
Taxi	Taxi	All
LGV3	Light Goods Vehicles ($\leq 2.5t$)	$\leq 2.5t$
LGV4	Light Goods Vehicles (2.5 – 3.5t)	$> 2.5 - 3.5t$
LGV6	Light Goods Vehicles (3.5 – 5.5t)	$> 3.5 - 5.5t$
HGV7	Medium & Heavy Goods Vehicles (5.5 – 15t)	$> 5.5 - 15t$
HGV8	Medium & Heavy Goods Vehicles (15 – 24t)	$> 15-24t$
PLB	Public Light Buses	All
PV4	Private Light Buses ($\leq 3.5t$)	$\leq 3.5t$
PV5	Private Light Buses ($> 3.5t$)	$> 3.5t$
NFB6	Non-franchised Buses ($\leq 6.4t$)	$\leq 6.36t$
NFB7	Non-franchised Buses (6.4 – 15t)	$> 6.36 - 15t$
NFB8	Non-franchised Buses (15 – 24t)	$> 15t-24t$
FBSD	Single Deck Franchised Buses	All
FBDD	Double Deck Franchised Buses	All
MC	Motor Cycles	All
HGV9	Heavy Goods Vehicles ($> 24t$)	$> 24t$
NFB9	Non-franchised Buses ($> 24t$)	$> 24t$

- 10.5 The estimated 18-classes distribution as defined in EMFAC-HK was derived by sectoring the relevant classes in the Transport Department's Annual Traffic Census record or vehicle distribution obtained from manual traffic count surveys, in proportion to the recorded distribution in EPD document: "2018 Vehicle Licensed Number by Age and Technology Group Fraction"^[11].

Road Assumption

- 10.6 Start emissions from all the concerned vehicles classes are assumed at all roads within 500m assessment area by broad-brush approach. For calculations of start emissions by the broad-brush approach, start emissions for each vehicle class are assumed directly proportional to Trips per Vehicle-kilometer-travelled ratio (Trip/VKT) with consideration of the proportion of local and rural roads within Hong Kong based on the Annual Traffic Census (ATC) prepared by the Transport Department (TD). For SAMP v2.1, default trip and VKT values from EMFAC-HK model v4.3 are used in the calculations. In this assessment, the estimated % of VKT for local and rural roads with possible starting emission is ~21.8% of total VKT, which is calculated by raw data of ATC 2023 provided by TD. **Considering that the % calculated by raw data of newly released ATC 2024 (i.e. ~21.7%) is similar to that of 2023, while the predicted cumulative concentrations in Appendix 11 well comply with the relevant AQOs, hence, the % calculated by raw data of ATC 2023 (i.e. 21.8%) is kept adopted in the assessment.** The start profile and calculation of proportion of local and rural roads are provided in Appendix 7.

APPENDIX 12

CONFIRMATION BY EPD FOR ODOUR COMPLAINT RECORD

Samuel Lee

寄件者: John WM LAM/EPD <john_lam@epd.gov.hk>
寄件日期: 2026年1月30日星期五 16:34
收件者: Samuel Lee
副本: Kit Wong; SI[RN]13/EPD; CI[RN]11/EPD
主旨: Fw: Request for Information about Odour Complaint Record for Tin Sam Sewage Pumping Station
附件: Figure 1.pdf; EPD's comments.pdf

Dear Ms Wong & Mr Lee,

According to EPD's record, please note that in the past 3 years, no malodor complaint against Tin Sam Sewage Pumping Station was received.

While we have made a reasonable effort to ensure the completeness and accuracy of the information provided, you should comprehend that the information is provided as is and EPD is not responsible or liable for any claim, loss or damage resulting from the use of this information.

John W M LAM
Regional Office(North)
EPD
30/1/2026

From: HOTLINE_N <hotline_n@epd.gov.hk>
Sent: Thursday, January 29, 2026 1:43 PM
To: CI[RN]11/EPD <ci-rn11@epd.hksarg>
Subject: Fw: Request for Information about Odour Complaint Record for Tin Sam Sewage Pumping Station

----- Forwarded by HOTLINE_N/EPD/HKSARG on 29/01/2026 13:42 -----

From: [REDACTED]
To: "hotline_n@epd.gov.hk" <hotline_n@epd.gov.hk>
Cc: [REDACTED]
Date: 29/01/2026 12:07
Subject: RE: Request for Information about Odour Complaint Record for Tin Sam Sewage Pumping Station

Dear Sir/Madam,

Westwood Hong & Associates Ltd is the consulting firm conducting an environmental study for the proposed Development at Various Lots in D.D. 11 and Adjoining Government Land, Fung Yuen, Tai Po, as indicated in Figure 1 attached.

A request regarding odour complaint record against Tin Sam Sewage Pumping Station have been sent on 2 December 2025. In view that we have recently received EPD's comment on our submitted AQIA regarding the pending odour complaint record (see attached), hence, your earliest reply would be much appreciated.

If you have any queries, please do not hesitate to contact our Ms Kit Wong at [REDACTED]

Best Regards,
Kit Wong / Samuel Lee
Associate / Consultant



From: Samuel Lee
Sent: Tuesday, December 2, 2025 5:49 PM
To: 'hotline_n@epd.gov.hk' <hotline_n@epd.gov.hk>
Cc: 
Subject: Request for Information about Odour Complaint Record for Tin Sam Sewage Pumping Station

Dear Sir/Madam,

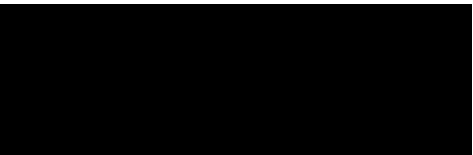
Westwood Hong & Associates Ltd is the consulting firm conducting an environmental study for the proposed Development at Various Lots in D.D. 11 and Adjoining Government Land, Fung Yuen, Tai Po, as indicated in Figure 1 attached.

An Air Quality Impact Assessment report has been submitted under a Planning Application (No. Y/TP/40). EPD has requested to confirm if there is any odour complaint record against Tin Sam Sewage Pumping Station in the recent years.

Grateful if your office can confirm if there is any odour complaint record against Tin Sam Sewage Pumping Station in the recent years.

If you have any queries, please do not hesitate to contact our Ms Kit Wong at 

Best Regards,
Kit Wong / Samuel Lee
Associate / Consultant



*[See attachment "Figure 1.pdf"]**[See attachment "EPD's comments.pdf"]*

Annex I

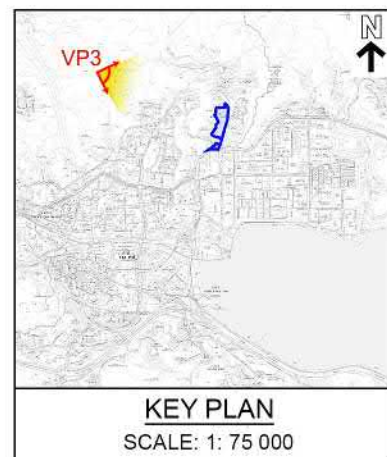
Replacement Page of Visual Impact Assessment



EXISTING VIEW



WITH PROPOSED DEVELOPMENT



KEY PLAN
SCALE: 1: 75 000



PLANNING LIMITED
規劃顧問有限公司

PHOTOMONTAGE

VP3 - WILSON TRAIL SECTION 8

PROPOSED RESIDENTIAL DEVELOPMENT(S) WITH RETAIL, PUBLIC VEHICLE PARK AND SOCIAL WELFARE FACILITIES VARIOUS LOTS IN D.D. 11 AND ADJOINING GOVERNMENT LAND, FUNG YUEN, TAI PO, NEW TERRITORIES

FIGURE 6.3

BASED ON SITE PHOTOS
TAKEN ON 23.5.2025

DATE: 5.2.2026

Annex J

Replacement Pages of Air Ventilation Assessment

- relaxation of the maximum building height restriction of the site falling within "Government, institution or community" ("G/IC") zone from 2 storeys to 8 storeys [Area (B)].

1.1.8 Ramboll Hong Kong Limited is commissioned by the Applicant to prepare the Air Ventilation Assessment (AVA) Study report – Expert Evaluation (EE) based on this rezoning proposal. Architectural drawings and technical information are provided by the Applicant.

1.2 Objective

1.2.1 This AVA-EE report has been prepared to evaluate if the proposed development would have any impact on the overall air ventilation performance of the assessment area by comparing the Proposed Development with the existing condition.

1.3 Development Site and its Environs

1.3.1 **Figure 1** shows the location of the Development Site and its environs. The Development Site (comprising Area (A) and Area (B)) consists of various lots and adjoining Government land at Fung Yuen, Tai Po. It is known as Fung Yuen which is at the northern fringe of Tai Po New Town. The Development Site consists of two separate portions (Area (A) currently zoned "CDA(1)" and Area (B) currently zoned "Government, Institution or Community" ("G/IC")).

1.3.2 There are existing residential development Case Papillon (+20mPD) & Mont Vert (+102mPD) to its north and Fung Yuen Road to its east, Tai Po Industrial Estate (+70mPD) and Ting Kok Road to its further southeast and south.

1.3.3 Village type developments to the immediate east, southwest, west and northwest include Tin Sam (around +8mPD to 17mPD), Yue Kok Tsuen (around +10.9mPD to 33mPD), Fung Mei Wai (formerly Kau Shi Wai) (around +17mPD) and Lau Hang (around +20mPD) respectively.

1.3.4 Tai Po Hospital (+59mPD), Fu Heng Estate (+110mPD), Chung Nga Court (+110mPD), Fu Tip Estate (+25 to 157mPD) and planned public housing developments at Chung Nga Road West (+172mPD), and Alice Ho Miu Ling Nethersole Hospital (around +66.5mPD) are distributed to the further west to southwest of the Development Site. A "Green Belt" ("GB") zone is situated between the village type developments at the immediate west of the Development Site and Tai Po Hospital.

1.3.5 To the southeast, south and further west of the Development Site are areas zoned "G/IC". Fung Yuen Playground and a site occupied by Society of Horticulture are situated within "G/IC" zone to the southeast.

1.4 Existing Site

1.4.1 Area (A) of the Development Site is mostly covered with vegetation with a watercourse running within and mainly along the eastern side of the Development Site adjoining Fung Yuen Road. Area (B) is currently occupied by sewage pumping station (along its southern boundary but without any massive aboveground structure) and has the watercourse running and occupying its western part. Area (A) and Area (B) are separated by at least 40m. the Development Site is readily available for development as it is well-supported by existing infrastructure in terms of drainage, sewerage and roads.

that wind availability from these directions (e.g. N wind) will be lowered due to the existing building morphology.

Table 2.2 Building Height of Surrounding Development

Name of Development	Maximum Building Height mPD	Maximum Building Height m	Location from the Development Site
Mont Vert	~102	~ 80	North
Village type developments including Tin Sam, Yue Kok, Fung Mei Wai, Lau Hang	~8 to 33	~10	Immediate East, Southwest & West
Tai Po Industrial Estate	~70	~65	Southeast
Alice Ho Miu Ling Nethersole Hospital	~66.5	~46	Southwest
Tai Po Hospital	~59	~37	West
Fu Heng Estate	~110	~100	West
Chung Nga Court	~110	~100	West
Fu Tip Estate (Podium)	~25 to 48	~12 to 14	West
Fu Tip Estate (Tower)	~140 to 157	~95 to 103	West

2.5 Summary of Existing Site Wind Availability

- 2.5.1 According to the wind availability data from Tai Po-EE, it is stated that the annual wind of the study area is mainly from the East, with a smaller component of the North. The Summer wind is mainly coming from the East and the Southerly quarters. For the dataset of the Location A, the annual wind directions of the Development Site is from E, while the summer prevailing winds are mainly from E, ESE and SE.
- 2.5.2 According to the wind roses at 200m from RAMS data, the annual prevailing wind directions for the Development Site are E, ESE and SE; whereas the summer prevailing wind direction are E, ESE and SE.
- 2.5.3 Based on both wind data, it is considered that the annual prevailing winds come from E, ESE and SE directions, and with N wind also concerned based on identified valley wind system. While in summer condition, the prevailing winds mainly come from E, ESE and SE directions.
- 2.5.4 It is anticipated that the surrounding traffic network and open space would be the main air corridors, including Fung Yuen Road, Ting Kok Road, open space sandwiched between the Development Site and the village type developments to the immediate north and west and GB zone in further east and west.
- 2.5.5 Under E wind condition, the presence of low-rise developments to the east of the Development Site should not impose any significant obstruction to wind flow. In addition, the section of Ting Kok Road acts as wind corridor for E wind direction.
- 2.5.6 The topography on the northern side is generally higher but separated away. The existing high-rise Mont Vert to the north will reduce the wind availability to the Development Site under N wind.
- 2.5.7 In addition, under ESE and SE wind directions, wind should flow atop Tai Po Industrial Estate towards the Development Site and its surroundings. As a result, the wind availability at pedestrian level is expected to be reduced.
- 2.5.8 **Figure 3 to Figure 5** show the E, ESE/SE and N prevailing wind directions under exiting condition (with no massive aboveground structure onsite).