

**Broad Development Parameters of the Indicative
Development Proposal in Respect of Application No. Y/YL-LFS/14**
關乎申請編號 Y/YL-LFS/14 而只作指示用途的擬議發展計劃的概括發展規範

Revised broad development parameters in view of
the further information received on 21.6.2024
因應於 2024 年 6 月 21 日接獲的進一步資料而修訂的概括發展規範

Application No. 申請編號	Y/YL-LFS/14
Location/address 位置／地址	<p>Lots 3 S.A ss.1, 3 S.B, 4, 5 S.A RP, 9, 10 RP, 12 S.A, 12 RP, 13, 14 S.A ss.1 S.A, 14 S.A ss.1 RP, 14 S.A ss.2, 14 S.A RP, 14 S.B ss.1 S.A, 14 S.B ss.1 RP, 14 S.B RP, 14 RP, 15 S.A ss.1, 15 S.A RP, 15 S.B, 15 RP, 16 S.A, 16 S.B, 16 RP, 17 S.A ss.1, 17 S.A RP, 17 S.B, 17 S.C and 17 RP in D.D. 128, Lots 2128, 2129, 2136 RP, 2138 RP, 2148, 2153 S.A and 2388 S.A ss.2 (Part) in D.D. 129, and adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories</p> <p>新界元朗流浮山丈量約份第 128 約地段第 3 號 A 分段第 1 小分段、第 3 號 B 分段、第 4 號、第 5 號 A 分段餘段、第 9 號、第 10 號餘段、第 12 號 A 分段、第 12 號餘段、第 13 號、第 14 號 A 分段第 1 小分段 A 分段、第 14 號 A 分段第 1 小分段餘段、第 14 號 A 分段第 2 小分段、第 14 號 A 分段餘段、第 14 號 B 分段第 1 小分段 A 分段、第 14 號 B 分段第 1 小分段餘段、第 14 號 B 分段餘段、第 14 號餘段、第 15 號 A 分段第 1 小分段、第 15 號 A 分段餘段、第 15 號 B 分段、第 15 號餘段、第 16 號 A 分段、第 16 號 B 分段、第 16 號餘段、第 17 號 A 分段第 1 小分段、第 17 號 A 分段餘段、第 17 號 B 分段、第 17 號 C 分段及第 17 號餘段、第 129 約地段第 2128 號、第 2129 號、第 2136 號餘段、第 2138 號餘段、第 2148 號、第 2153 號 A 分段及第 2388 號 A 分段第 2 小分段(部分)和毗連政府土地</p>
Site area 地盤面積	<p>About 約 20,455 sq. m 平方米 (Includes Government Land of about 包括政府土地 約 4,594 sq. m 平方米)</p>
Plan 圖則	<p style="text-align: center;"><u>Section 12A application 第 12A 條申請</u></p> <p style="text-align: center;">Draft Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/10 流浮山及尖鼻咀分區計劃大綱草圖編號 S/YL-LFS/10</p> <hr/> <p style="text-align: center;"><u>Further information received 接獲進一步資料</u></p> <p style="text-align: center;">Approved Lau Fau Shan & Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/11 流浮山及尖鼻咀分區計劃大綱核准圖編號 S/YL-LFS/11</p>
Zoning 地帶	<p style="text-align: center;"><u>Section 12A application 第 12A 條申請</u></p> <p style="text-align: center;">"Residential (Group C)" and "Residential (Group D)" 「住宅(丙類)」及「住宅(丁類)」</p> <hr/> <p style="text-align: center;"><u>Further information received 接獲進一步資料</u></p> <p style="text-align: center;">"Residential (Group C)" and "Residential (Group D)" 「住宅(丙類)」及「住宅(丁類)」</p>

Proposed Amendment(s) 擬議修訂	To rezone the application site from "Residential (Group C)" and "Residential (Group D)" to "Residential (Group B)" 把申請地點由「住宅(丙類)」及「住宅(丁類)」地帶改劃為「住宅(乙類)」地帶		
Gross floor area and/or plot ratio 總樓面面積及/或地積比率		sq. m 平方米	Plot ratio 地積比率
	Domestic 住用	About 約 61,365	Not more than 不多於 3
	Non-domestic 非住用	About 約 1,166	About 約 0.057
No. of block 幢數	Domestic 住用	13	
	Non-domestic 非住用	-	
	Composite 綜合用途	1	
Building height/No. of storeys 建築物高度/層數	Domestic 住用	-	m 米
		Not more than 不多於 90	mPD 米(主水平基準上)
		3 - 26	Storey(s) 層
		3	Exclude 不包括 Basement 地庫
	Non-domestic 非住用	-	m 米
		-	mPD 米(主水平基準上)
		-	Storey(s) 層
	Composite 綜合用途	-	m 米
		Not more than 不多於 90	mPD 米(主水平基準上)
		25	Storey(s) 層
		3	Exclude 不包括 Basement 地庫
	Site coverage 上蓋面積	-	
No. of units 單位數目	1,246 Flats 住宅單位		
Open space 休憩用地	Private 私人	Not less than 不少於 3,489	sq. m 平方米
	Public 公眾	-	sq. m 平方米

No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle spaces 停車位總數	595
	Private Car Parking Spaces 私家車車位	417
	Motorcycle Parking Spaces 電單車車位	13
	Bicycle Parking Spaces 單車停泊位	165
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數	7
	Heavy Goods Vehicle Spaces 重型貨車車位	5
	Lay-by (11m x 3.5m) 停車處 (11m x 3.5m)	1
	Lay-by (5m x 2.5m) 停車處 (5m x 2.5m)	1

* 有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件

	<u>Chinese</u> 中文	<u>English</u> 英文
<u>Plans and Drawings 圖則及繪圖</u>		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖／布局設計圖	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Block plan(s) 樓宇位置圖	<input type="checkbox"/>	<input type="checkbox"/>
Floor plan(s) 樓宇平面圖	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sectional plan(s) 截視圖	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Elevation(s) 立視圖	<input type="checkbox"/>	<input type="checkbox"/>
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Master landscape plan(s)/Landscape plan(s) 園境設計總圖／園境設計圖	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（請註明）	<input type="checkbox"/>	<input type="checkbox"/>
<u>Reports 報告書</u>		
Planning Statement / Justifications 規劃綱領 / 理據	<input type="checkbox"/>	<input type="checkbox"/>
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Visual impact assessment 視覺影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Landscape impact assessment 景觀影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Tree Survey 樹木調查	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical impact assessment 土力影響評估	<input type="checkbox"/>	<input type="checkbox"/>
Drainage impact assessment 排水影響評估	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sewerage impact assessment 排污影響評估	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Risk Assessment 風險評估	<input type="checkbox"/>	<input type="checkbox"/>
Others (please specify) 其他（請註明）	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Supplementary information on car parking provision 停車位的補充資料</u>		

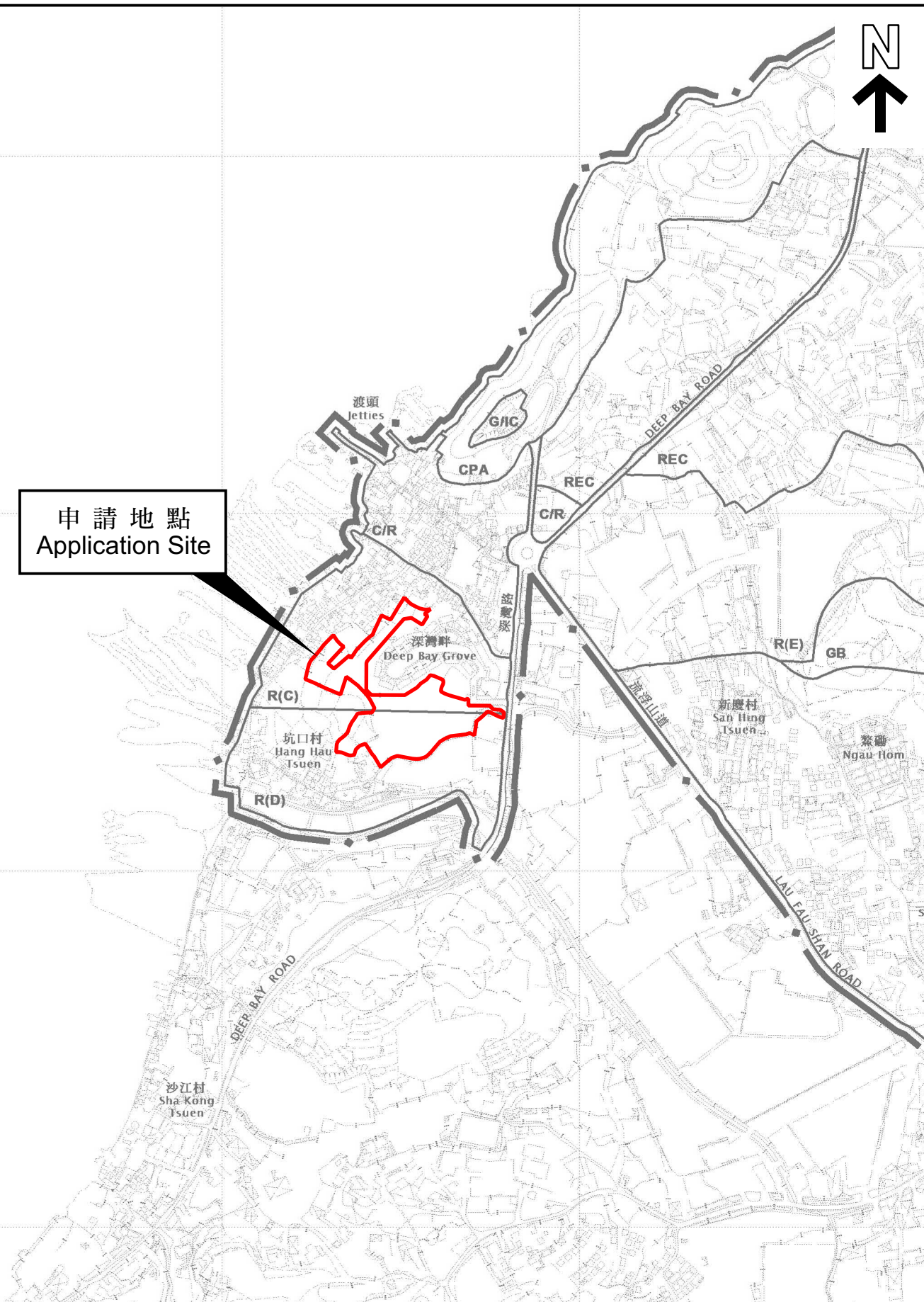
Note: May insert more than one 「✓」. 註：可在多於一個方格內加上「✓」號

Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

註：上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。



申請地點
Application Site

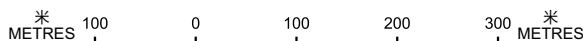


835500N

本摘要圖於2024年7月3日擬備，
所根據的資料為於2022年4月12日
核准的分區計劃大綱圖編號 S/YL-LFS/11
EXTRACT PLAN PREPARED ON 3.7.2024
BASED ON OUTLINE ZONING PLAN No.
S/YL-LFS/11 APPROVED ON 12.4.2022

位置圖 LOCATION PLAN

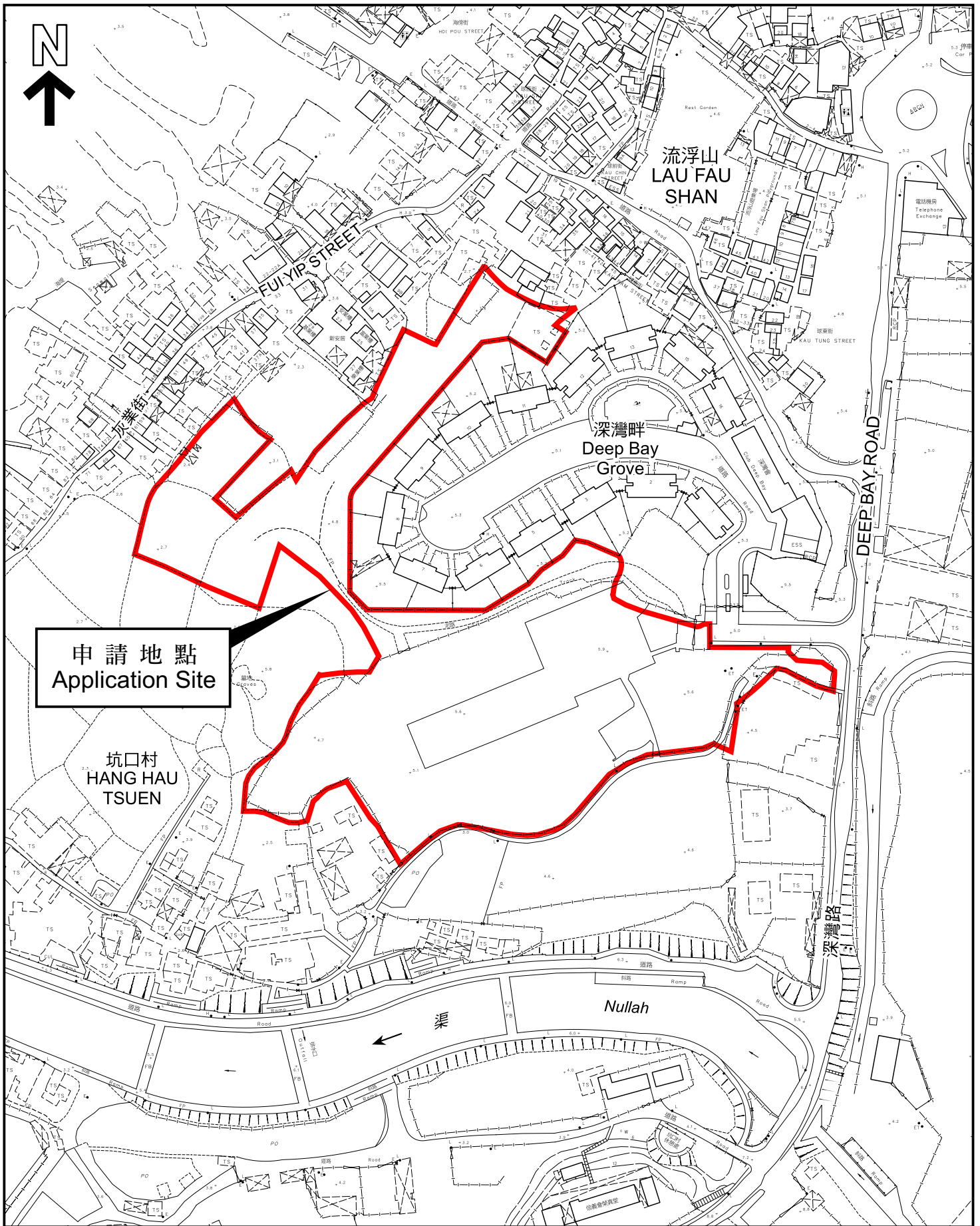
SCALE 1:7 500 比例尺



申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.

Y/YL-LFS/14



申請地點
Application Site

坑口村
HANG HAU
TSUEN

流浮山
LAU FAU
SHAN

深灣畔
Deep Bay
Grove

渠
Nullah

本摘要圖於2024年7月3日擬備，
所根據的資料為測量圖編號
2-SW-21D
EXTRACT PLAN PREPARED ON 3.7.2024
BASED ON SURVEY SHEET No.
2-SW-21D

平面圖 SITE PLAN

申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.
Y/YL-LFS/14

申請編號 Application No. : Y/YL-LFS/14

備註 Remarks

申請人提交進一步資料，以回應部門意見，並附上經修訂的排水影響評估、排污影響評估、環境評估的替換頁、顯示擬議發展的合成照片、停車位的補充資料及指示性停車處位置圖。

The applicant submitted Further Information in response to departmental comments, and enclosed revised drainage impact assessment, sewerage impact assessment, as well as replacement pages of environmental assessment, photomontages showing the proposed development, supplementary information on car parking provision and indicative lay-by location plan.

有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

By Hand and Email (tpbpd@pland.gov.hk)

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

21 June 2024

Dear Sir/Madam,

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories (Planning Application No. Y/YL-LFS/14)

Submission of Further Information

We refer to the comments from various Government departments on the captioned S12A Planning Application received between 11 April 2024 and 12 June 2024.

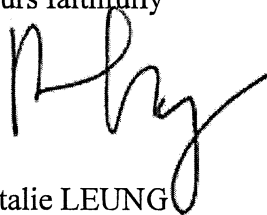
We are pleased to submit our Response to Comment table (**Attachment A**) and relevant supplementary information, including the Revised Sewerage Impact Assessment (**Annex A**), Revised Drainage Impact Assessment (**Annex B**), replacement pages of the Revised Environmental Assessment (**Annex C**), Supplementary Information on Car Parking Provision (**Annex D**), reply email from Highways Department (**Annex E**) and Indicative Hammerhead for the Proposed Layby (**Annex F**) for your kind consideration.

In addition, further to the Revised Indicative Scheme submitted in the previous Further Information dated 5 April 2024, as requested by the Tuen Mun and Yuen Long West District Planning Office of the Planning Department, we are also pleased to submit the Revised Photomontages (**Attachment B**) to reflect the latest Revised Indicative Scheme.

We sincerely seek favourable consideration from the Town Planning Board to approve the captioned S12A Planning Application.

Should you have any queries, please contact the undersigned or our Mr Mark Lim at 2268 3887 or Ms Catherine Kwong at 2908 4836.

Yours faithfully



Natalie LEUNG
Chief Urban Planner

- Encl. - 70 copies of Response to Comment Table (Attachment A), Supplementary Information and Revised Assessments (Annexes A to F) and Revised Photomontages (Attachment B)
- cc - Client
- Tuen Mun and Yuen Long West District Planning Office - Mr WONG Pok Shaan, Keith (kpswong@pland.gov.hk)

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories
 (Planning Application No. Y/YL-LFS/14)
Responses to Comments

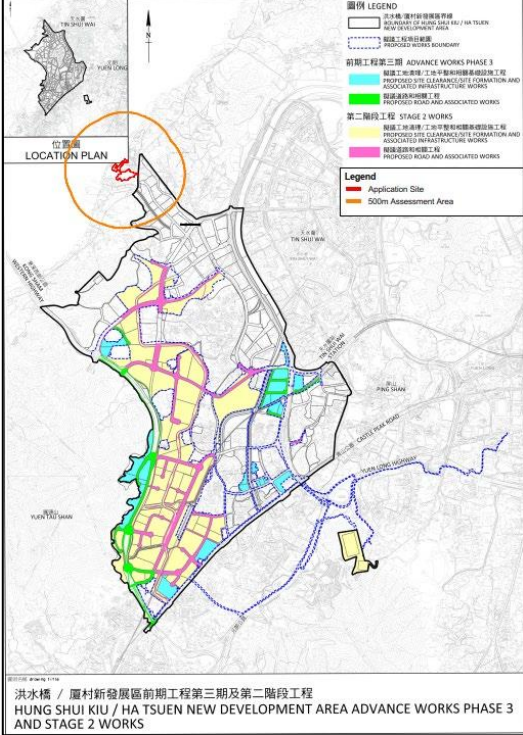
Comments from Related Departments	Page No.
1. Drainage Services Department, Operations & Maintenance Branch, Mainland North Division, Yuen Long Section, dated 11 April 2024	2
2. Environmental Protection Department, Environmental Assessment Division, Territory North Group, Yuen Long, dated 31 May 2024.....	2
3. Environmental Protection Department, Environmental Assessment Division, Territory North Group, Yuen Long, dated 12 June 2024.....	6
4. Highways Department, Northern Metropolis Railways Office, Northern Metropolis Railways Division (2), dated 21 May 2024	7
5. Lands Department, Lands Administration Office, District Lands Office, Yuen Long, dated 3 May 2024	8
6. Transport Department, NT Regional Office, Traffic Engineering (NTW) Division, Yuen Long 1 Section, dated 21 May 2024	10

COMMENTS FROM RELATED DEPARTMENTS

No.	Comments	Responses
1.	<p>Drainage Services Department, Operations & Maintenance Branch, Mainland North Division, Yuen Long Section, dated 11 April 2024</p> <p>I refer to your above referenced memo dated 10.4.2024 regarding the captioned subject. Please find our comment as follows for your consideration:-</p> <p>a) It is noted that a sewage holding tank will be situated in basement (B1), please provide the size of the holding tank to show it can be fulfilled the assumption stated in the applicant previously approved SIA. Please demonstrate that sufficient space is allowed to situate the pump pit/pumping station for sewage pumping.</p> <p>b) It is noted that a stormwater retention tank will be situated in basement (B2), please provide the size of the retention tank to show it can be fulfilled the assumption stated in the applicant previously approved DIA. Please demonstrate that sufficient space is allowed for the pump pit/pumping station to pump out the collected runoff.</p> <p>c) Please provide the greening ratio of the application site to demonstrate that it fulfills the assumption of 30% greenery ratio as per the approved DIA is maintained.</p>	<p>The footprint of the proposed sewage holding tank at basement (B1) is 269m², which can provide detention volume of 1,480m³ to fulfill the SIA required demand. Please note the entire tank footprint is for sewage detention purpose, the associated E&M equipment for sewage pumping will be installed within the CARPARK / E&M zone, subject to detail design. Please refer to Indicative Basement Plan (B1) dated March 2024 in the revised Sewerage Impact Assessment (Annex A).</p> <p>The footprint of the proposed stormwater detention tank at basement (B2) is 1,603m², which can provide detention volume of 5,611m³ to fulfill the DIA required demand. Please note the entire tank footprint is for stormwater detention purpose, the associated E&M equipment for stormwater pumping will be installed within the CARPARK / E&M zone, subject to detail design. Please refer to the revised Indicative Basement Plan (B2) dated June 2024 in the revised Drainage Impact Assessment (Annex B).</p> <p>The Indicative Scheme will maintain its proposed greenery ratio at 30% to fulfil the DIA assumption.</p>
2.	<p>Environmental Protection Department, Environmental Assessment Division, Territory North Group, Yuen Long, dated 31 May 2024</p> <p><u>Air quality</u></p>	

No.	Comments	Responses
	<ol style="list-style-type: none"> 1. Table 2.2 and Figure 2.1: In addition to the residential towers, the club house and the 2 clusters of houses shall also be included as planned ASRs. 2. Section 2.4.2: Please provide the excavation area and the amount of excavated materials to be handled to justify that the scale of work is small. 3. Section 2.4.3: Please provide the number of construction trucks and mechanical equipment to be used per time over the work site to justify that the number of construction plant required on-site is limited. 4. Please clarify whether there are any concurrent projects within the 500 m assessment area and whether cumulative air quality impact shall be assessed. 	<p>Table 2.2 and Figure 2.1 of the replacement pages of the Environmental Assessment (Annex C) have been revised to supplement the club house and the 2 clusters of houses as planned ASRs.</p> <p>It is estimated that the area of excavation is about 8,489 m², and the amount of excavated material to be handled is around 400 m³ per day. Section 2.4.2 of Annex C has been supplemented to provide such information.</p> <p>As the project is still in early planning stage, detailed construction information is not available at this stage. Section 2.4.3 of Annex C has been revised to avoid confusion.</p> <p>No, there are no concurrent projects within the 500m assessment area of the Proposed Development. Although the site formation and engineering infrastructure works of HSK/HT NDA Second Phase development is planned to commence in 2024 for completion by 2030, its works boundary is outside the Proposed Development's 500m assessment area (see extract of LC Paper No. CB(1)48/2024(03)). The programme of the remaining phase development is uncertain yet. Hence, adverse cumulative air quality impact is not anticipated.</p>

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 Responses to Comments

No.	Comments	Responses
	<p>5. Section 2.4.4: The proposed development is primarily residential but it also includes emission sources such as carparks, traffic on the internal access roads, detention tank, and sewage holding tank. The Applicant shall address the potential air quality impact arising from these facilities on the air-sensitive uses of the proposed development or any air-sensitive uses within the 500 m assessment area.</p> <p>6. Sections 2.4.7 and 2.6.2: Please delete "active" in line 4.</p> <p>7. Sections 2.4.9 and 2.4.10: Updated site surveys shall be conducted to verify whether there are any air or odour emission sources in the vicinity which may affect the proposed</p>	 <p>洪水平橋 / 厦村新發展區前期工程第三期及第二階段工程 HUNG SHUI KIU / HA TSUEN NEW DEVELOPMENT AREA ADVANCE WORKS PHASE 3 AND STAGE 2 WORKS</p> <p>Since the proposed residential development is still in early planning stage, the exhaust outlets of the carparks, detention tank, and sewage holding tank, have not yet been determined. The proposed carpark is for parking of private vehicles and will be designed and operated to meet the requirements in EPD's ProPECC PN 2/96 on Control of Air Pollution in Car Parks. The exhaust (if any) of the proposed car park, and sewage-related facilities shall be located away from any nearby ASRs as far as possible, e.g. facing south of the site boundary. As the gated internal access road only serves the Proposed Development, the expected traffic flow is very limited. Thus, the air quality impact arising from vehicular emission from the internal access road is considered minimal.</p> <p>Sections 2.4.7 and 2.6.2 of Annex C have been revised accordingly.</p> <p>An updated site survey was conducted on 12 September 2023 to verify the odour and chimney emission sources. No odour was detected in the vicinity of the Proposed</p>

No.	Comments	Responses
	<p>development including any odour detected at the site boundary of Lau Fau Shan SPS.</p> <p>8. Section 2.4.9: Please obtain an updated complaint record for Lau Fau Shan SPS covering more recent years.</p> <p>9. Site surveys shall be conducted to verify whether any odour nuisance arises from the Deep Bay Grove RCP, which is located approximately 30 m upwind from the proposed development site.</p> <p>10. Section 2.5: - Please consider adding "avoid using exempted NRMMS" as a mitigation measure, given that several ASRs are located within close proximity (less than 10 meters) to the construction site. - Owing to the large project site area and the close proximity of ASRs, phasing of the dusty activities shall be implemented and a dust monitoring program is highly recommended during the construction phase.</p> <p>11. Section 2.5.1: Please remove "dust" in line 8.</p> <p>12. Section 2.6.1: Please revise "dust impact" in line 3 to "air quality impact".</p> <p>13. Section 5.1.2: Please add "nearby ASRs and" before "proposed development" in line 6.</p> <p>14. Please indicate on a map the locations of exhaust outlets for carparks, the sewage-related facilities and the refuse collection points. During the operation phase of the proposed development, the Applicant must adhere to relevant guidelines to ensure that these facilities do not create air and odor nuisances or impacts for the air-sensitive uses of the proposed development, or for any air-sensitive uses within the 500 m assessment area. Any exhaust outlets from these facilities should be situated away from any ASRs in the vicinity.</p>	<p>Development and at the Lau Fau Shan SPS. Survey dates in Sections 2.4.9 and 2.4.10 of Annex C have been updated.</p> <p>DSD's updated record for Lau Fau Shan SPS has been added to Appendix 2.1 of Annex C.</p> <p>An updated site survey was conducted on 12 September 2023. No odour was detected near the Deep Bay Grove RCP.</p> <p>Section 2.5 of Annex C has been supplemented to add "avoid using exempted NRMMS" as a mitigation measure.</p> <p>Section 2.4.2 of Annex C has been supplemented to recommend phasing of dusty activities and a dust monitoring program.</p> <p>Section 2.5.1 of Annex C has been revised accordingly.</p> <p>Section 2.6.1 of Annex C has been revised accordingly.</p> <p>Section 5.1.2 of Annex C has been supplemented accordingly.</p> <p>Figure 2.1 of Annex C has been supplemented to show the indicative locations of exhaust outlets from these facilities to situate away from ASRs in the vicinity as far as possible. As such, the layout of the Indicative Baseline Plan (B2) has been revised.</p>

No.	Comments	Responses
	<p>15. Figure 2.2:</p> <ul style="list-style-type: none"> - Please add a remark to state that "no air sensitive uses, including openable windows, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones". - Please delete "Rural Road/" in the legend. 	<p>Figure 2.2 of Annex C has been supplemented and revised accordingly.</p>
<p>3.</p>	<p>Environmental Protection Department, Environmental Assessment Division, Territory North Group, Yuen Long, dated 12 June 2024</p> <p><u>Noise</u></p> <p>It is noted that the applicant submitted FI involving substantial changes to the indicative development scheme. According to the updated EA, the predicted traffic noise and fixed noise would comply with the noise criteria and requirements under HKPSG and NCO. Given practicable and feasible noise mitigation measures could be available, from noise planning point of view, we shall maintain <u>no objection</u> to this planning application provided that there is a mechanism, e.g. lease condition, to require the applicant to submit a proper NIA report to review, explore, demonstrate and implement noise mitigation measures for full compliance with the relevant noise criteria and requirements under ProPECC PNs, HKPSG and NCO. The following <u>advisory suggestions</u> are provided to the applicant/consultant to facilitate the integrity and appropriateness of their future submission, if any, as appropriate.</p> <ul style="list-style-type: none"> • S.4.3 & S.4.7 - Given fixed noises is controlled under NCO, to prevent NCO implication and also for avoidance of doubt, a new paragraph should be added after S.4.3.4 as "To ensure the fixed plant noise generated by the Proposed Development would not cause excessive impact to nearby noise sensitive receivers, potential fixed noise sources within the Proposed Development shall be properly designed to meet the relevant noise criteria as stipulated in Chapter 9 of the HKPSG and NCO. 	<p>S.4.3.5 of Annex C has been supplemented to avoid confusion.</p>

No.	Comments	Responses
	<p>Provisions shall be made to control the fixed noise sources by suitable at source noise control measures such as quieter plant, silencers and acoustic linings when necessary. As such, it is anticipated that the fixed plant noise impact on the surrounding NSRs due to the operation of the Proposed Development will not exceed the relevant noise criteria under the HKPSG and NCO."</p> <ul style="list-style-type: none"> • S.4.6.3 - The acoustic effectiveness of the 1m architectural fins shall be reviewed and revisited. 	<p>Noted, the acoustic effectiveness of the 1m architectural fins will be reviewed in detailed design stage.</p>
4.	<p>Highways Department, Northern Metropolis Railways Office, Northern Metropolis Railways Division (2), dated 21 May 2024</p> <p>As stated in our previous replies, the strategic value and necessity of the Hong Kong-Shenzhen Western Rail Link (Hung Shui Kiu - Qianhai) (HSWRL) has been established under the First Stage Study of the project. The Second Stage Study jointly commissioned by the HKSAR Government and the Shenzhen Municipal People's Government is expected to be completed in mid-2024. The Governments are finalising the results including the preliminary alignment of the HSWRL.</p> <p>The applicant is reminded that the development will be very close to the planned railway alignment of HSWRL. The HSWRL project is still in its early preliminary stage and the alignment is subject to change. The approval of the captioned application at this stage will pre-empt the development of the HSWRL. As such, our reservation stated previously for the captioned application remains valid.</p>	<p>Noted.</p> <p>Noted. Nonetheless, the revised Indicative Scheme submitted in the previous Further Information dated 5 April 2024 has demonstrated that the development intensity for the Proposed Residential Development and Social Welfare Facility (Child Care Centre (CCC)) (domestic plot ratio (PR) of 3, a non-domestic GFA of not less than 1,166m² for the 100-place CCC (i.e. total PR of about 3.057) and a maximum building height (BH) of 90mPD) could be accommodated with the incorporation of the preliminary railway alignment of HSWRL as shown in the Legislative Council Paper (LC Paper No. CB(1)228/2024(03)) and the Enclosure 1 of the TPB Paper No. 10963.</p> <p>Particularly, the revised Indicative Scheme has made reference to the stringent specifications of XRL and demonstrated that</p>

No.	Comments	Responses
		no foundations or basement structures are planned to be constructed above the assumed 30m-wide tunnel and that all underground structures have a minimum 5m distance away from railway tunnel structures.
5.	<p>Lands Department, Lands Administration Office, District Lands Office, Yuen Long, dated 3 May 2024</p> <p><u>Part A: General Comments</u></p> <p>(i) I refer to your memo and email dated 10 April 2024 with the further information including the response to comment table (the "R to C" Table), revised indicative scheme, revised Environmental Assessment and revised traffic review report ("Further Information 8").</p> <p>(ii) It is noted that Further Information 8 mainly concerns the comments from NMRO, HyD and did not respond to our comments given on 19.4.2022, 22.6.2022 and 16.8.2022 respectively. However, as some of our previous comments have already been overtaken by events, please find our latest comments and the updated land status being affected by the proposed development as follow:-</p> <p>(a) Short Term Waiver ("STW") No. 5398 against Lot Nos. 3 s.A ss. 1, 3 s.B, 4, 5 s.A RP, 9, 10 RP, 12 s.A, 12 RP, 13, 14 s.A ss.1 s.A, 14.s.A ss.1 RP, 14 s.A ss.2, 14 s.A RP, 14 s.B ss.1 s.A, 14 s.B ss.1 RP, 14 s.B RP, 14 RP, 15 s.A ss.1, 15 s.A RP, 15 s.B, 15 RP in D.D. 128 and Lot Nos. 2128 (Part), 2129, 2136 RP, 2138 RP, 2148, 2153 s.A (Part) and 2388 s.A ss.2 (Part) in D.D. 129 and STW No. 5399 against Lot Nos. 16 s.A, 16 s.B, 16 RP, 17 s.A ss.1, 17 s.A RP, 17 s.B, 17 s.C and 17 RP all in D.D. 128 both were granted for residential purposes and provision of such other necessary ancillary services and facilities, as may be approved in writing by the Secretary for Housing for the implementation of transitional housing project for a term commencing from</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p>

No.	Comments	Responses
	<p>16.8.2023 to 24.6.2025 and thereafter quarterly;</p> <p>(b) Short Term Tenancy ("STT") No. STTYL0153 on government land was granted for residential purposes and provision of such other necessary ancillary services and facilities, as may be approved in writing by the Secretary for Housing for the implementation of transitional housing project for a term commencing from 15.11.2023 to 24.6.2025 and thereafter quarterly;</p> <p>(c) Portion of Yellow Area of Deep Bay Grove ("DBG") at Lot No. 3569 in D.D. 129 which is being kept and maintained by the lot owner under New Grant No. 4506 dated 7.10.1999. Re-possession of the concerned portion of Yellow Area from the lot owner of Lot No. 3569 in D.D. 129 is required;</p> <p>(d) Squatter structures on the government land near Lot No. 2141 in D.D. 129 in which land clearance may be required;</p> <p>(e) As for our previous comment on the Yellow Area of DBG, noting that Lau Fau Shan Layout Plan is no longer in force as per PlanD's email dated 26.1.2024, we would defer to PlanD and TD to advise if there is any interface issues between the future road scheme system and the application site;</p> <p>(f) Regarding our previous comment on the green area that would be passed through from Deep Bay Road to the proposed entrance, the green area is currently managed and maintained by the Tenant of STTYL0153 and it shall be re-delivered by the Tenant of STTYL0153 to the Government upon satisfaction of TD and HyD in future. With the management and maintenance of green area being taken up by TD and HyD in future, we have no particular comment from land administration aspect. The applicant should sort out the vehicular access points of the site with TD;</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted. Relevant land administration application on the vehicular access points will be submitted to Government for approval at the later design stage.</p>

No.	Comments	Responses
	<p>(g) There are high voltage overhead lines around the subject site. EMSD and CLP comments should be sought; and</p> <p>(h) Should the planning application be approved by TPB, the lot owner should apply to Lands Department for land exchange / lease modification, if appropriate, for the proposed development. However, there is no guarantee that the said application, including the granting of any Government land (if any), will be approved. Such application will be dealt with by this department acting in the capacity as the landlord at our discretion, and if it is approved will be subject to such terms and conditions including among others, the payment of such appropriate fees and premium as may be imposed by this department.</p> <p><u>Part B: Advisory Comments for the Applicant</u></p> <p>N/A</p>	<p>Noted. Subject to the review on the implication to the development at the Application Site in detailed design stage, the comments from relevant departments and organisations will be sought, if needed.</p> <p>Noted.</p> <p>Noted.</p>
6.	<p>Transport Department, NT Regional Office, Traffic Engineering (NTW) Division, Yuen Long 1 Section, dated 21 May 2024</p> <ul style="list-style-type: none"> - It is noted that this submission involves substantial changes to the indicative development scheme. Please submit full report of the revised traffic impact assessment (e.g. including parking provision) for our consideration. - In Annex C, it is noted that the bicycle parking provision is 42 spaces which is significantly less than the previous agreed number (i.e. 165) developed based on 1:7.5 flats. Similarly, the parking and loading/unloading provision of CCC shall be 2 car parking spaces and 2 laybys (1 no. of 11m x 3.5m and 1 no. of 5m x 2.5m). - In Section 3 of Annex E, please clarify the assumed population and employment adopted in your assessment. For example, 	<p>Please be advised that the development parameters (i.e. flat number and flat size) and parking provision remained unchanged in the submission. There is no change on the parking provision table in the previously submitted TIA report.</p> <p>The proposed parking provision (Annex D) has been corrected according to the TIA report.</p> <p>According to the Legislative Council Paper No. CB(1)230/19-20(03) “Funding Applications for Hung Shui Kiu/Ha Tsuen</p>

No.	Comments	Responses
	<p>please clarify whether the population and employment in the intensified HSK/HT NDA have been taken into account. Furthermore, please clarify if LATM are used in your assessment.</p> <ul style="list-style-type: none"> - In Section 3.2.2 of Annex E, please consult HyD on the latest progress of PWP Item No. 6878th(Part) regarding widening of Deep Bay Road. - Annex F: With reference to the mode hierarchy and the similar arrangement for LFS transitional housing, the nearby GMB services (serving Deep Bay Road) and MTR feeder bus services would be enhanced, subject to passenger demand. In this connection, the proposed layby (12m X 3.5m) within the development should be reserved for the prospective GMB services, with flexibility for operation of other types of services (e.g. shuttle bus) only if no relevant public transport services were available. In any case, the exact plan for the transport services is subject to TD's further assessment and review, with due consideration to the development and planning of the transport system/services in the LFS area near the time. - Annex F: Please indicate the turnaround facility for the proposed layby. 	<p>New Development Area”, the Hung Shui Kiu/Ha Tsuen New Development Area (HSK/HT NDA) will be developed in phases. Phase 1 and Phase 2 developments are scheduled to be completed by 2032 whilst the Phase 3 development is scheduled to be completed in 2037/2038.</p> <p>Phase 1 and Phase 2 developments of HSK/HT NDA would be completed before the design year 2036 and has been considered in the traffic forecast. Nevertheless, taking into consideration that the Phases 1 & 2 developments are not in close proximity to the identified study area, their traffic impact would be limited on the identified study area. Therefore, the 2036 reference traffic flows were derived by adopting appropriate growth rates onto the observed traffic flows, instead of using the LATM.</p> <p>Advice from HyD on the latest progress of PWP Item No. 6878th(Part) - widening of Deep Bay Road has been sought. Please find attached the reply email from HyD in Annex E for your information.</p> <p>Noted. The proposed layby (12m X 3.5m) within the development will be reserved for the prospective GMB services, with flexibility for operation of other types of services (e.g. shuttle bus) only if no relevant public transport services were available.</p> <p>The hammerhead for the proposed layby is illustrated in Annex F. Details of the</p>

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories
(Planning Application No. Y/YL-LFS/14)
Responses to Comments

No.	Comments	Responses
		proposed hammerhead will be developed in the later detailed design.

(Last Updated: 20 June 2024)

Annex A

Revised Sewerage Impact Assessment

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

Sewerage Impact Assessment Report

June 2024

AECOM Asia Company Ltd.

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1. INTRODUCTION

1.1 Background

- 1.1.1 The Application Site is located at Lau Fau Shan, west of Deep Bay Road, neighbouring Deep Bay Grove and Hang Hau Tsuen, a location plan of the development site can refer to **Figure 1**.
- 1.1.2 The site area is approximately 20,455m², currently a temporary hobby farm with barbeque use, and the remaining part is vacant and covered with some vegetation.
- 1.1.3 The Applicant proposes amendments to the Draft Lau Fau Shan and Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/10 (“the OZP”) by rezoning the Application Site from “Residential (Group C)” (“R(C)”) and “Residential (Group D)” (“R(D)”) to a tailor-made “Residential (Group B)” (“R(B)”) with a maximum domestic plot ratio (“PR”) of 3, a non-domestic gross floor area (“GFA”) of not less than 1,166m² for a 100-place child care centre, and maximum building height (“BH”) of 90 metres above principal datum (“mPD”) to facilitate Proposed Residential Development cum Social Welfare Facility (Child Care Centre) at the Application Site (“the Proposed Amendment”). The Master Layout Plan is shown in **Figure 2**.
- 1.1.4 The estimated population intake year of the proposed development is 2030.

1.2 Objective of This Submission

- 1.2.1 The main objectives of this SIA are as follows:
- (i) Estimate the planned sewage discharge according to the development schedule of the proposed development
 - (ii) Compare the sewerage discharge between the existing and proposed development
 - (iii) Assess any potential impact to the sewerage conveyance system due to the development
 - (iv) Propose appropriate sewerage mitigation measures, if required.

2. DEVELOPMENT PROPOSAL

2.1 The Proposed Development

- 2.1.1 The total site area is approximately 20,455m², the domestic GFA is approximately 61,365m². The indicative development schedule is summarized in **Table 2-1** below for technical assessment purpose.

Table 2-1 Indicative Development Schedule

Site Area (m ²)	20,455
Domestic Plot Ratio	3
Domestic GFA (m ²)	61,365
Total Units	1,246
Total Tower Units	1,237
Total House Units	9
PPoF for tower/house units	2.8
Total Residential Population	3,489
Non-domestic GFA for Child Care Centre (100 Place)	
Area (m ²)	Not less than 1,166
Workers per GFA (in 100m ²)	2.3
Employee for Retail ⁽⁴⁾	27
GFA for Clubhouse (m ²)	2,150
Restaurant (F&B) GFA (m ²)	1,075
Workers per GFA (in 100m ²)	5.1
Employee for Restaurant ⁽²⁾	55
Retail (Non-F&B) GFA (m ²)	1,075
Workers per GFA (in 100m ²)	2.1
Employee for Retail ⁽³⁾	23

Remark:

- Person Per Flat Ratio of 2.8 is adopted for tower and house units.
- A density of 5.1 employees per 100 m² (for Restaurants - Private Commercials) GFA is adopted in accordance with the results of the "Commercial and Industrial Floor Space Utilization Survey" conducted by the Planning Department in 2004/2005.
- A density of 2.1 employees per 100 m² (for Retail and Trade - Private Commercials) GFA is adopted in accordance with the results of the "Commercial and Industrial Floor Space Utilization Survey" conducted by the Planning Department in 2004/2005.
- A density of 2.3 employees per 100 m² (for Community, Social & Personal Service - Private Commercials) GFA is adopted in accordance with the results of the "Commercial and Industrial Floor Space Utilization Survey" conducted by the Planning Department in 2004/2005.
- Assume Non-F&B = 50% of Clubhouse Area and F&B = 50% of Clubhouse Area for technical assessment purposes only

3. METHODOLOGY OF SEWERAGE IMPACT ASSESSMENT

3.1 Overview of Methodology and Assumptions

- 3.1.1 Capacity analysis of the sewage pipes was carried out to assess the adequacy of the proposed sewerage system. The design assumption and basis are shown in **Table 3-1**.

Table 3-1 Design Assumption and Basis

Design Standard	DSD Sewerage Design Manual, Part 1 & 2
Flow Formula Used	Colebrook White Formula
Roughness Assumed, Ks	Proposed Gravity Sewer = 1.5mm Existing Gravity Sewer = 3.0mm
Unit Flow Factor	EPD Guideline for Estimating Sewage Flows for Sewage Infrastructure Planning: Table T-2 <u>Proposed Development:</u> 0.19 m ³ /day/head ("Domestic Public Housing (R1)") 0.27 m ³ /day/head ("Domestic Private Housing (R2)") 0.28 m ³ /day/head ("Commercial Employee" plus "Wholesale & Retail" J4) 1.58 m ³ /day/head ("Commercial Employee" plus "Restaurant" J10)
Catchment inflow factor	EPD Guideline for Estimating Sewage Flows for Sewage Infrastructure Planning: Table T-4 1.0 (Yuen Long)
Peaking Factors	EPD Guideline for Estimating Sewage Flows for Sewage Infrastructure Planning: Table T-5
Economic Activity and Planned Usage Type	PlanD Commercial and Industrial Floor Space Utilization Survey (CIFSUS) Table 8 <u>Proposed Development:</u> 2.1 employees per 100 m ² ("Retail and Trade, "Private Commercials") 5.1 employees per 100 m ² ("Restaurant", "Private Commercials")

4. REVIEW OF EXISTING SEWERAGE SYSTEM

4.1 Existing Sewerage System

- 4.1.1 The existing public sewerage system in the vicinity of the proposed development is shown in **Figure 3**. The existing sewerage network consists of 600mm dia. gravity sewers and Lau Fau Shan Sewage Pumping Station on Deep Bay Road.
- 4.1.2 Information of the existing LFS SPS was provided by DSD and was used in the hydraulic assessment of sewage discharge. Please refer to **Annex 4** for the information as provided by DSD.

4.2 Existing Sewage Flow Estimation

4.2.1 The existing site is an amusement centre. It is assumed that there is no sewage discharge to the public sewerage system for the existing site.

5. ESTIMATION OF SEWAGE FLOW FOR PROPOSED DEVELOPMENT

5.1 Proposed Sewage Flow Estimation

5.1.1 The domestic housing type R1 and R2, commercial activities type J4, J10 and J11 have been adopted for the sewage estimation. The estimation of sewage flow discharge from proposed development with reference to the EPD Guideline for Estimating Sewage Flows for Sewerage Infrastructure Planning is shown in **Table 5-1** below. Details of the sewage estimation refers to **Annex 1**.

Table 5-1 Estimated Sewage Flow Discharge from Proposed Development

Type	Items	Figure	Unit
Residential (R2)	Type of Flow	Domestic R2	-
	Unit Flow Factor	0.27	m ³ /d/h
	Population	3,489	people
	Domestic (ADWF) ⁽¹⁾	942.03	m ³ /d
Non-Domestic (F&B)	Type of Flow	Commercial Activities J10	-
	Unit Flow Factor	1.58	m ³ /d/h
	Employee	55	people
	Commercial Sewage (ADWF) ⁽¹⁾	86.62	m ³ /d
Non-Domestic (Non F&B)	Type of Flow	Commercial Activities J4	-
	Unit Flow Factor	0.28	m ³ /d/h
	Employee	23	people
	Commercial Sewage (ADWF) ⁽¹⁾	6.32	m ³ /d
Child Care Centre (100 Places)	Type of Flow	Domestic R1	-
	Unit Flow Factor	0.19	m ³ /d/h
	Tenant Population	100	people
	Domestic Sewage (ADWF) ⁽¹⁾	19.00	m ³ /d
	Type of Flow	Commercial Activities J11	-
	Unit Flow Factor	0.28	m ³ /d/h
	Employee	27	people
	Commercial Sewage (ADWF) ⁽¹⁾	7.51	m ³ /d
Employee (Management Office)	Type of Flow	Commercial Activities J11	-
	Unit Flow Factor	0.28	m ³ /d/h
	Employee	9	people
	Commercial Sewage (ADWF) ⁽¹⁾	2.52	m ³ /d

	Figure	Unit
Sub Total	1,064	m ³ /d
Total ADWF with catchment inflow factor 1.0 considered for Lau Fau Shan, Yuen Long	1,064	m ³ /d
Peaking Factor	6	
Swimming Pool Backwash	0.039	m ³ /s
Total Peak Discharge	0.11	m ³ /s

Notes:

- (1) ADWF stands for average dry weather flow.
- (2) Assume Non-F&B = 50% of Clubhouse Area and F&B = 50% of Clubhouse Area for technical assessment purposes only

5.1.2 The estimation of sewage flow generated from the proposed development is approximately ADWF = 1,064m³/day. The estimated peak sewage flow discharge from the proposed development is approximately 0.11m³/s.

6. PROPOSED SEWERAGE SYSTEM

6.1 Connection to Public Sewerage System

6.1.1 The sewage generated from the proposed development would be discharged to internal sewage network leading to the terminal manhole (FTMH 1) proposed at the eastern site boundary adjacent to Deep Bay Road. The proposed sewerage connection is indicated in **Figure 4**.

6.1.2 Apart from the following existing gravity sewers, there is no other sewerage upgrade work in the project. The existing gravity sewers from the existing sewerage manhole FMH1041506 to FSH1005223 and FSH1005223 to FMH1041508 are 600mm dia. gravity sewers. The capacity of gravity sewer is able to cater for the sewage discharge from the proposed development, therefore no adverse impact on the is envisaged. The detailed calculation refers to **Annex 2**.

6.1.3 The sewage will further convey to the existing Lau Fau Shan Sewage Pumping Station (LFS SPS) at Deep Bay Road. The detailed calculation refers to **Annex 3**.

6.1.4 Proposed sewage holding tank has a footprint of 269m², with a storage volume of 1,480m³. The proposed holding tank is designed to cater for sewage generated from the development under peak flow condition for 4 hours. By controlling the discharge flow rate using pump and rising mains, the holding tank can release the sewage to downstream eliminating peak flow effect while ensuring tank will be emptied everyday. The off-peak discharge schematic diagram refers to **Annex 3**. The proposed holding tank will be constructed, operated, and maintained by the project proponent. Location of the proposed sewage holding tank refers to **Annex 6**.

6.1.5 Upon agreement from EPD and DSD on the proposed off-peak discharge scheme, no adverse impact on the existing sewerage system is envisaged.

6.1.6 The internal sewage network and all relevant fittings will be determined in detailed design stage.

7. CONCLUSIONS

7.1.1 A Sewerage Impact Assessment (SIA) has been carried out to assess the impact on the existing sewerage system due to the proposed redevelopment. The Application Site is currently an amusement centre and proposed to be redeveloped to residential towers and clubhouse with basement.

7.1.2 The ADWF from the proposed development is estimated to be 1,064 m³/d respectively. The discharged sewage will convey from the proposed terminal manholes to existing public sewers in the vicinity.

7.1.3 Proposed sewage holding tank has a footprint of 269m², with a storage volume of 1,480m³. The proposed holding tank is designed to cater for sewage generated from the development under peak flow condition for 4 hours. By controlling the pump flow rate, the holding tank can release the sewage to downstream eliminating peak flow effect while ensuring tank will be emptied everyday.

7.1.4 With the proposed sewerage arrangement, including the proposed off-peak discharge scheme in Section 6, no adverse impact to the existing sewer system is anticipated.

End of Report

Figures



LEGEND:
 --- SITE BOUNDARY



PROJECT
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

CLIENT

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REVISION

NO.	DATE	DESCRIPTION	CHK.	APP.

STATUS

SCALE
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DIMENSION UNIT
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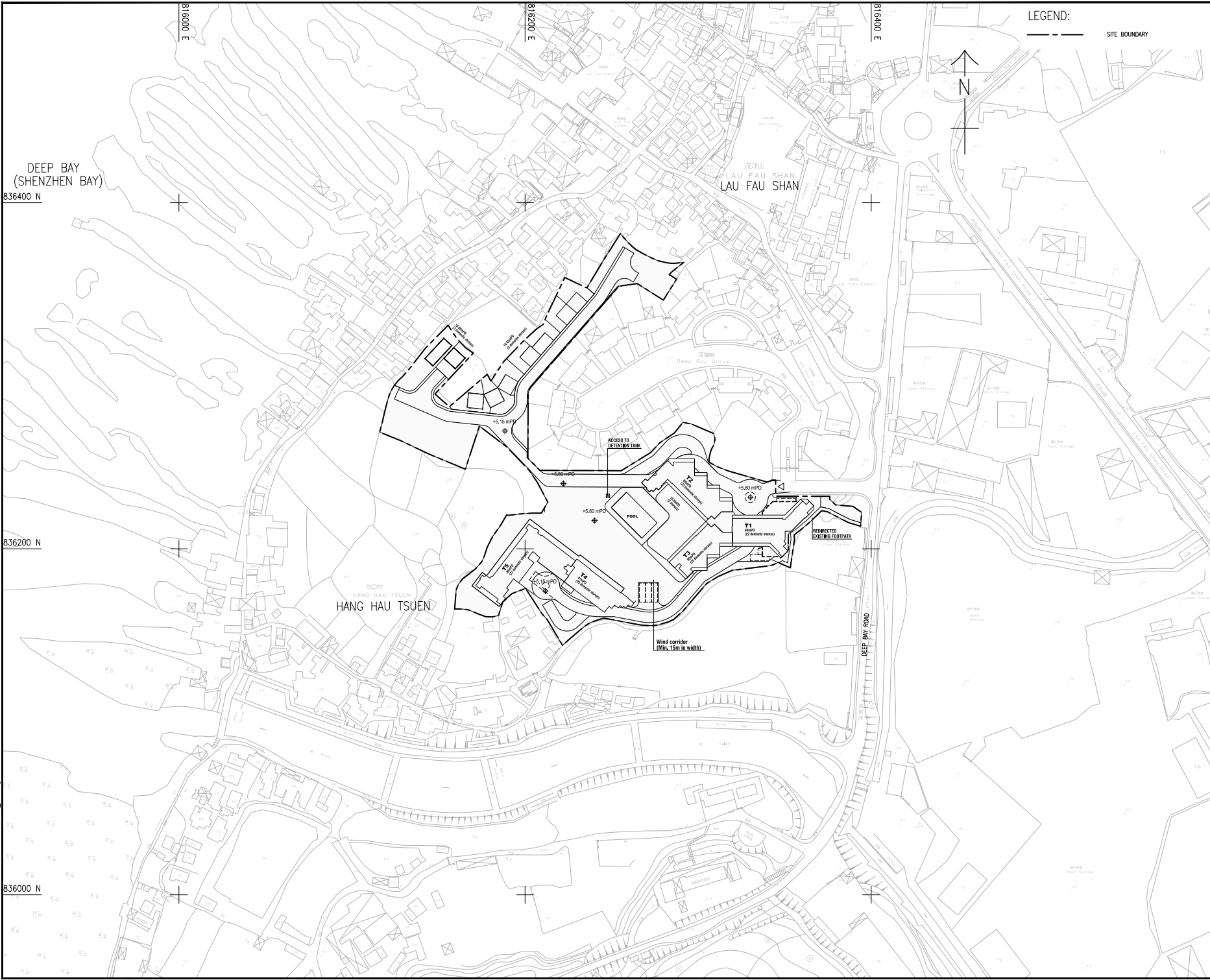
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PROJECT NO.
 6066681
AGREEMENT NO.

SHEET TITLE
 LOCATION PLAN

SHEET NUMBER
 6066681/SIA/FIGURE 1

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 Checked:
 Designer:
 Project Management Initials:
 06/06/2024
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LEGEND:
 --- SITE BOUNDARY



PROJECT
 APPLICATION FOR AMENDMENT OF
 TOWN PLANNING ORDINANCE (CAP.131)
 FOR PROPOSED RESIDENTIAL
 DEVELOPMENT AND SOCIAL WELFARE
 FACILITY (CHILD CARE CENTRE) AT
 VARIOUS LOTS IN D.D. 128 AND D.D.
 129, AND ADJOINING GOVERNMENT
 LAND, LAU FAU SHAN, YUEN LONG,
 NEW TERRITORIES

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REVISION

NO.	DATE	DESCRIPTION	CHK.	APP.

STATUS

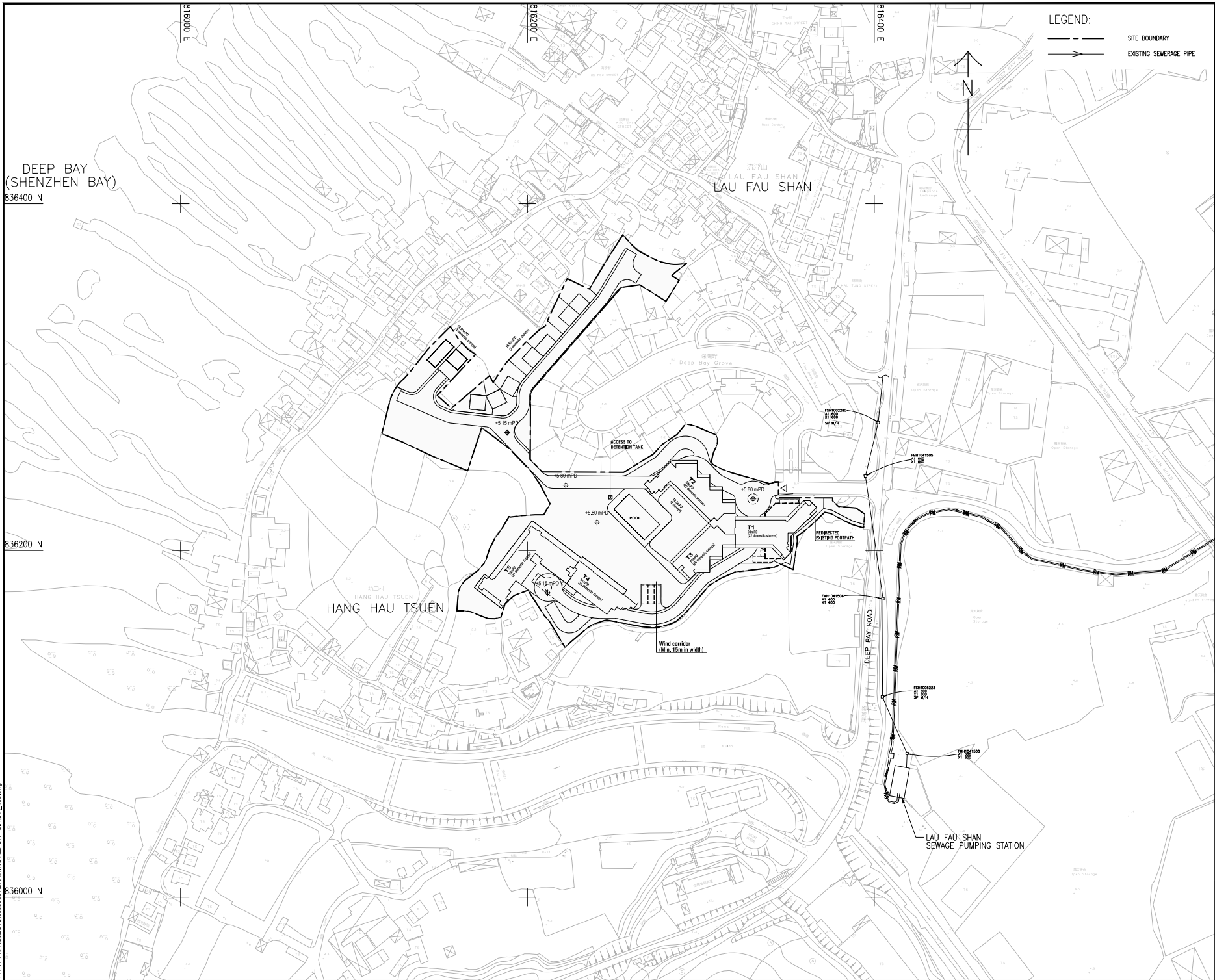
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KEY PLAN

PROJECT NO.
 6066681
AGREEMENT NO.

SHEET TITLE
 MASTER LAYOUT PLAN

SHEET NUMBER
 6066681/SIA/FIGURE 2



PROJECT
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

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REVISION

NO.	DATE	DESCRIPTION	CHKD.

STATUS

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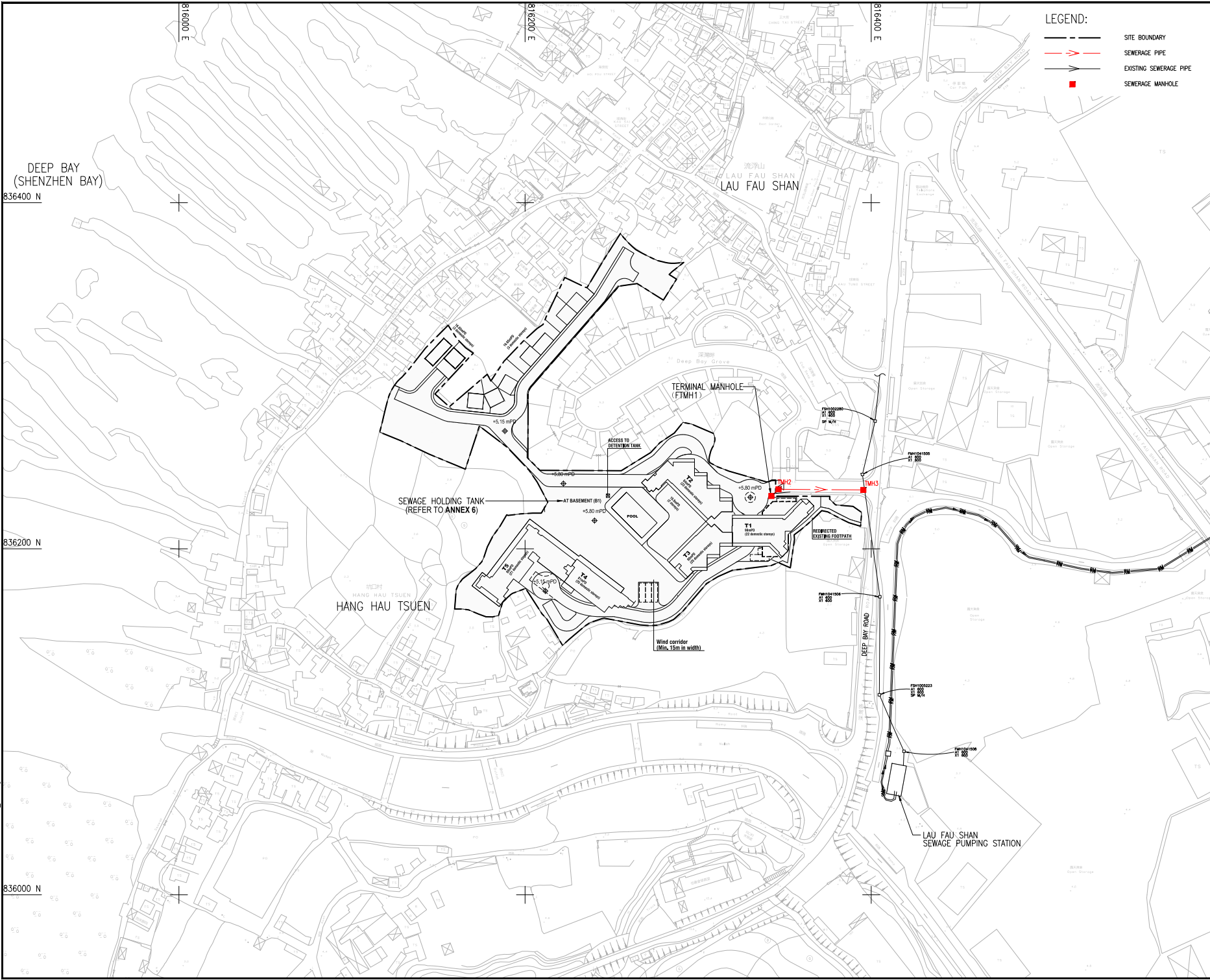
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PROJECT NO.
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AGREEMENT NO.

SHEET TITLE
 EXISTING SEWERAGE LAYOUT PLAN

SHEET NUMBER
 60666681/SIA/FIGURE 3

ISO A1 594mm x 841mm
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 Designer:
 Project Management Initials:
 06/02/2024
 P:\0618\2024\0618\PROJECTS\60666681\DRAWING\REPORTS\SIASHA_001.dwg



- LEGEND:**
- SITE BOUNDARY
 - SEWERAGE PIPE
 - EXISTING SEWERAGE PIPE
 - SEWERAGE MANHOLE

AECOM

PROJECT
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

CLIENT

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS

REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

SCALE
 A3 1:2000 METRES

KEY PLAN

PROJECT NO. 60666681 **AGREEMENT NO.**

SHEET TITLE
 PROPOSED SEWERAGE LAYOUT PLAN

SHEET NUMBER
 60666681/SIA/FIGURE 4

Annex 1

Estimated Sewage Flow Discharge from Proposed Development

Estimated Sewage Flow Discharge from Proposed Development

6/13/2024

Indicative Development Schedule

Site Area (m ²)	20,455.00
Domestic Plot Ratio	3
Domestic GFA (m ²)	61,365.00
PPoF for tower/house units	2.8
Total Flat Units	1,246
Total House Units	9
Non-domestic GFA for Child Care Centre (100 Place) (m ²)	1,166.00
GFA for Clubhouse (m ²)	2,150.00
Non-F&B (50% of Clubhouse GFA)	1,075.00
F&B (50% of Clubhouse GFA)	1,075.00

Design Population (In accordance with Commercial and Industrial Floor Space Utilization Survey published by Planning Department)

From CIFSUS Table 8	Workers per GFA (in 100m ²)
Restaurants (Private Commercials)	5.1
Retail Trade (Private Commercials)	2.1
Community, Social & Personal Service (Private Commercials)	2.3
Management Office*	9

* Assuming 1 Management Officer per House

Sewage Estimation (Proposed)

Population Type	Population	Unit Flow Factor	Sewage	Remarks
Resident Unit (R2)	3,489	0.27	942.03 (m ³ /d)	Residents
Employee (F&B)	55	1.58	86.62 (m ³ /d)	Clubhouse, F&B Employees
Employee (Non-F&B)	23	0.28	6.32 (m ³ /d)	Clubhouse, Non-F&B Employees
Domestic (R1) (100-place CCC)	100	0.19	19.00 (m ³ /d)	Child Care Center, Children
Employee (100-place CCC)	27	0.28	7.51 (m ³ /d)	Child Care Center, Employees
Employee (Management Office)	9	0.28	2.52 (m ³ /d)	Management Office, Employees
Swimming Pool	/	/	0.039 (m ³ /s)	Swimming Pool Backwash
			1,064.00 (m ³ /d)	Total sewage discharge from proposed development
			1,064.00 (m ³ /d)	Total sewage discharge with catchment inflow factor
Contributing Population	3,941		6	Peaking factor
			0.11 (m³/s)	Peak sewage discharge

Note:

- Person Per Flat Ratio of 2.8 is adopted for tower and house units.
- Assume 50% of Clubhouse area is for F&B and 50% of Clubhouse area is for Non-F&B for technical assessment purposes only.
- Catchment inflow factor (CIF) 1.0 (Yuen Long) is adopted for Lau Fau Shan.
- Peaking Factor (including stormwater allowance) of 6 is adopted.
- Total ADFW = $\frac{1,064.00}{24} = 44.33 \text{ m}^3/\text{day}$
- Peak Flow of Backwash = $\frac{0.039}{60} = 0.00065 \text{ m}^3/\text{s}$



Section 12A Planning Application for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

No. /

Swimming Pool - Backwash Calculation

Date 6/13/2024

Backwash:

Plan Area of Pool =	375	m ²	
Assuming Depth of Pool =	1.5	m	
Volume of Pool =	563	m ³	
Turnover Rate =	6	hr	Outdoor Swimming Pool
Assuming Surface Loading Rate of Filter =	20	m ³ /m ² /hr	
Filter Area Required =	562.5/6/20		
=	4.69	m ²	

Per portion:

Assumed Backwash Duration =	3.00	min
Assumed Backwash Flowrate =	30.00	m ³ /m ² /hr
Backwash Volume =	7.04	m ³
Assumed Discharge Duration =	3.00	min
Discharge Flow rate =	2.35	m ³ /min
=	<u>0.0391</u>	<u>m³/s</u>

Reference:

Cap 132CA Swimming Pools Regulation

General Specifications for Swimming Pool Water Treatment Installation (ArchSD, 2012)

Annex 2

Hydraulic Checking of Gravity Sewers

Hydraulic Check of Gravity Sewers for off-peak discharge

Discharge rate from pump 32 L/s
0.032 m³/s

V of water = 0.000001 m²/s 20°C

Manhole No.		Pipe											Capacity Check	Remark
U/S	D/S	Cover Level		Size	Length	Hydraulic Radius	Flow Area	Pipe Gradient	Pipe Velocity	Capacity	Roughness	Discharge		
		U/S	D/S											
FTMH1	TMH 2	mPD	mPD	mm	m	m	m ²	(1 in)	m/s	m ³ /s	mm	m ³ /s	%	
TMH2	TMH 3	5.80	5.00	375	6.9	0.084	0.10	150 ⁽²⁾	1.22	0.12	1.50 ⁽⁵⁾	0.032	26.3	Discharge rate from pump
TMH 3	FMH1041506	5.00	4.80	375	45.8	0.084	0.10	150 ⁽²⁾	1.22	0.12	1.50 ⁽⁵⁾	0.032	26.3	
FMH1041506	FSH1005223	4.80	4.20	600	61.6	0.135	0.25	150 ⁽³⁾	1.66	0.42	1.50 ⁽⁵⁾	0.032	7.6	
FSH1005223	FMH1041508	0.00	4.00	600	54.9	0.135	0.25	150 ⁽³⁾	1.50	0.38	3.00 ⁽⁴⁾	0.032	8.4	
		4.00	3.90	600	34.09	0.135	0.25	150 ⁽³⁾	1.50	0.38	3.00 ⁽⁴⁾	0.032	8.4	

Note

- (1) Assume the pipe flows under full-bored capacity.
- (2) Assume the proposed gravity sewer from proposed development (FTMH1, TMH2 and TMH3) and TMH3 to FMH1041506 is 1 in 150 fall.
- (3) Assume the existing sewerage manhole FMH1041506 to FSH1005223 and FSH1005223 to FMH1041508 are 1 in 150 fall.
- (4) Assume the existing sewerage pipes are concrete cast lined sewers to about half depth; velocity, when flowing half full, approximately 1.2 m/s under poor condition.
- (5) Assume the proposed sewerage pipes to be concrete cast lined sewers to about half depth; velocity, when flowing half full, approximately 1.2 m/s under normal condition.
- (6) Assume Non-F&B = 50% of Clubhouse Area and F&B = 50% of Clubhouse Area for technical assessment purposes only
- (7) Due to lack of available information (e.g. Cover Levels, Invert Levels) of the existing sewer, assumptions of the levels of proposed sewer have been made.

Annex 3

Proposed Sewage Discharge Scheme

Preliminary Estimation of Sewage Discharge

6/13/2024

Existing LFS SPS

Design Capacity = 1,058 m³/day
Existing Flow = 9 m³/day
Available Capacity = 1,049 m³/day
Peak Flow = 44 L/s

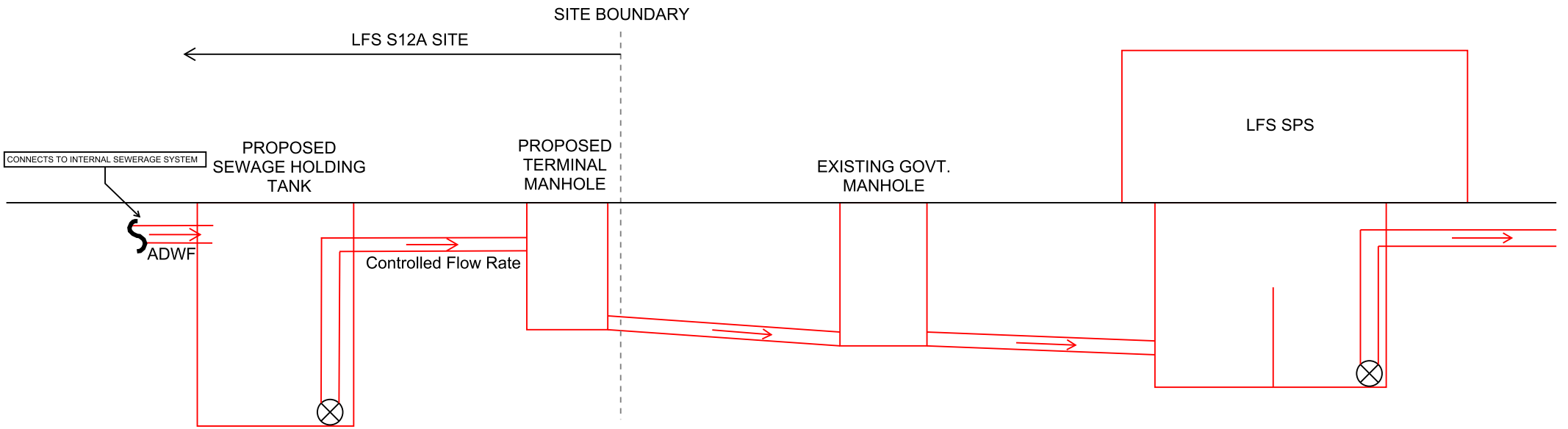
Proposed Development

Total Proposed Sewage ADWF = 1,064 m³/day
Peaking Factor = 6
Maximum Peak Flow = 0.0739 m³/s
ADWF to discharge to LFS SPS = 1064 m³/day
= 0.739 m³/min
= 12.315 L/s

Total ADWF = 1,064 m³/day
Discharge Duration = 4 hours
Volume per hour = 266.00 m³/hour
= 4.433 m³/min
= 73.889 L/s
> LFS SPS Pumping Rate
= 44 L/s
=> not ok

We propose using pump(s) to control the discharge rate to LFS SPS, 1 Duty + 1 Stand-by.

Pick Pumping Rate = 16 L/s
The peak flow rate from 2 pumps = 2 x 16 L/s
= 32 L/s
< LFS SPS Pumping Rate
= 44 L/s
=> ok



DISCHARGE SCHEMATIC UNDER PEAK FLOW CONDITION
(07:00 - 01:00)

Annex 4

LFS SPS Capacity Information (provided by DSD)

From: ssdau@dsd.gov.hk
Sent: Thursday, July 15, 2021 07:59 PM
To: Dai, Yuki
Cc: Wan, Willie
Subject: [EXTERNAL] RE: Re: Request Information for Deep Bay Grove SIA

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Blue Category

Dear Yuki,

Your requested information attached. Please be reminded that the information shall be solely used for this project.

1. Design capacity (m³/day) of San Wai Sewage Treatment Works (SW STW) (新圍污水處理廠)

Designed dry weather flow: 200,000 m³/day

Current average daily flow: approx. 138,000 m³/day

2. Design capacity (m³/day) of Tin Wah Road Sewage Pumping Station (TWR SPS) (天水圍天華路污水泵房)

Designed dry weather flow: 43,545 m³/day

Current average daily flow: approx. 31,200 m³/day

3. Design capacity (m³/day) of Lau Fau Shan Sewage Pumping Station (LFS SPS) (流浮山污水泵房)

Designed dry weather flow: 1,058 m³/day

Current average daily flow: approx. 9 m³/day

4. Is it possible for planning private development to discharge sewage to Lau Fau Shan SPS? (i.e. New sewer from development to LFS SPS to be constructed by applicant)

Common practice is private development construct sewer to connect nearest man-hole of public sewer. If you want to connect to upstream public sewer of Lau Fau Shan SPS, you are advised to propose your sewerage plan to Sewerage Infrastructure Group (SIG) of EPD for approval first.

5. The existing sewerage records of the planning development, TWR SPS and LFS SPS as the information is not available on GEOINFO MAP.

We (DSD/ST1) is responsible for SPS. For sewerage information, please contact our Yuen Long Section of Mainland North Division (DSD/MN - Yuen Long).

Regards,

Samitone Au
EME/ST1/3/2
Drainage Services Department
Tel: 28916269 / 91033179



From: "Dai, Yuki" <yuki.dai@aecom.com>
To: "ssdau@dsd.gov.hk" <ssdau@dsd.gov.hk>
Cc: "Wan, Willie" <Willie.Wan@aecom.com>
Date: 12/07/2021 09:39
Subject: RE: [EXTERNAL] Re: Request Information for Deep Bay Grove SIA
Serial No.:

Dear Mr. Au,

We are the Engineering Consultant to prepare the Sewage Impact Assessment (SIA) for planning development near Deep Bay Grove (深灣畔). The planning application is DD128 & DD129 Lau Fau Shan, which is a private development located west of the existing Deep Bay Grove.

Further to the telephone conversation and email last week, would you please help to provide the following information for our preparation of the SIA?

1. Design capacity (m³/day) of San Wai Sewage Treatment Works (SW STW) (新圍污水處理廠)
2. Design capacity (m³/day) of Tin Wah Road Sewage Pumping Station (TWR SPS) (天水圍天華路污水泵房)
3. Design capacity (m³/day) of Lau Fau Shan Sewage Pumping Station (LFS SPS) (流浮山污水泵房)
4. Is it possible for planning private development to discharge sewage to Lau Fau Shan SPS? (i.e. New sewer from development to LFS SPS to be constructed by applicant)
5. The existing sewerage records of the planning development, TWR SPS and LFS SPS as the information is not available on GEOINFO MAP.

Attached the layout plan and location of SPS are attached for your easy reference.
Please feel to contact me if you require more explanation.

Thank you.

Best Regards,
Yuki Dai
AECOM Land Supply / Municipal
Tel: 3922 9550
yuki.dai@aecom.com

From: ssdau@dsd.gov.hk <ssdau@dsd.gov.hk>
Sent: Friday, July 9, 2021 06:49 PM
To: Dai, Yuki <yuki.dai@aecom.com>
Cc: smau@dsd.gov.hk; Wan, Willie <Willie.Wan@aecom.com>
Subject: [EXTERNAL] Re: Request Information for Deep Bay Grove SIA

Annex S4-2

Departmental Comment provided by the Mainland North, Drainage Services Department
(Dated 28-12-2021; Ms. Vicky SY; Tel: 2300 1347)

- (17) If 100% sewage from the development is proposed. It is noted that the designed ADWF of the development is 1072.55 m³/day and peak flow is 0.09 m³/s (90 L/s). **Designed ADWF and peak flow of LFS SPS are 1058 m³/day and 44 L/s respectively.** Not counting existing flow and approved new flow from other development, the development alone has already exceeded the designed ADWF and designed peak flow of LFS SPS. The developer should demonstrate the discharge flow pattern of the development will not exceed the capability of LFS SPS to prevent overflow or other environmental problem of LFS SPS.

LFS SPS:

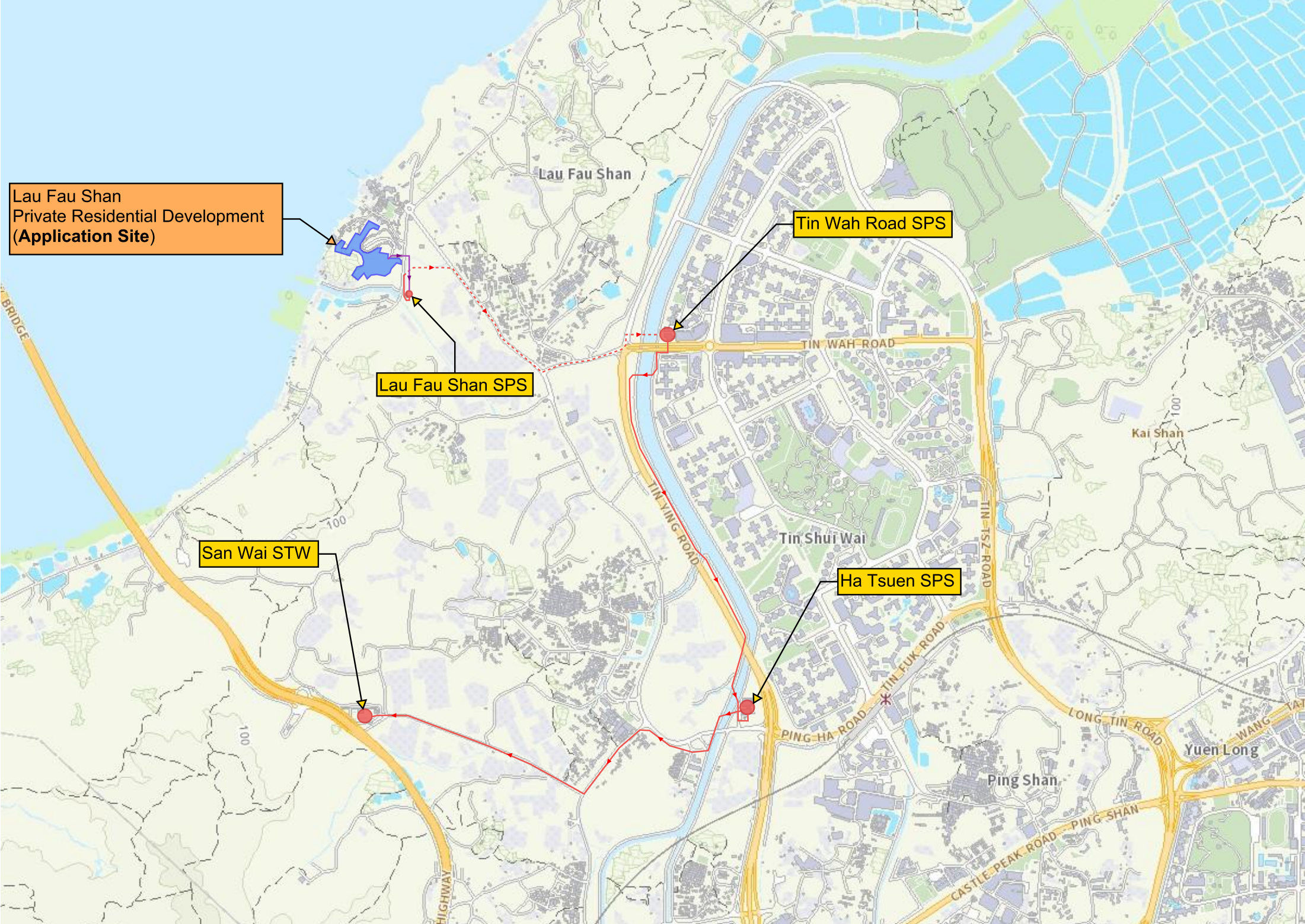
Designed ADWF = 1058 m³/day
Peak Flow = 44 L/s

use the maintenance party of the proposed retention tank and the equipment, pumps, etc. should be the developer.

- (19) Flowmeter is proposed to split flow between man-hole of public sewer and retention tank of the development. Flowmeter is just a sensor, please advise what device is used to split the flow.
- (20) The active control of flow splitting device, flowmeter and retention tank may be complex machines. Please assess the risk of failure / maintenance down time of those machines, and the risk of losing control of flow split, which may eventually overload LFS SPS.
- (21) If resubmission of calculation/design is intended to proceed the sewage storage concept, the calculation shall in general demonstrate sewage inflow of LFS SPS is always within its pumping capability. Here is some points to note for the calculation/design. A sketch (attachment B) is also given for easy understanding.
- What is the peak flow and flow pattern of sewage generation from the development? Including average condition, maximum/minimum condition, and storm condition if applicable.
 - What is the peak flow and flow pattern discharged to public sewer manhole after active storage control?
 - Is the peak daily volume from the development, together with existing flow and flow from other approved development, within the total available pumping volume of LFS SPS?
 - If daily volume is okay, but just overload at peak flow condition. What is the required retention tank capacity to shade the peak?
 - Is the low flow period sufficient to discharge the stored sewage back to public sewer?
 - Minor maintenance of sewerage system as well as LFS SPS often performs in low flow period. Such low flow period will be disappeared in normal operation under the sewage storage concept. Is the retention tank big enough to provide sufficient manual low flow period for the maintenance of sewerage system/SPS?
 - What flow splitting equipment, system layout and control is proposed? What is the control philosophy to achieve the desired flow pattern with reduced peak?

Annex 5

Proposed Routing of the Sewage to SPS and San Wai STW



Lau Fau Shan Private Residential Development (Application Site)

Lau Fau Shan SPS

Tin Wah Road SPS

San Wai STW

Ha Tsuen SPS

Lau Fau Shan

TIN WAH ROAD

Tin Shui Wai

PING HA ROAD

TIN FUK ROAD

Ping Shan

Kai Shan

LONG TIN ROAD

Yuen Long

CASTLE PEAK ROAD

PING SHAN

WANG

BRIDGE

HIGHWAY

TIN TSI ROAD

100

100

100

Annex 6

Location Plan of the Proposed Sewage Holding Tank

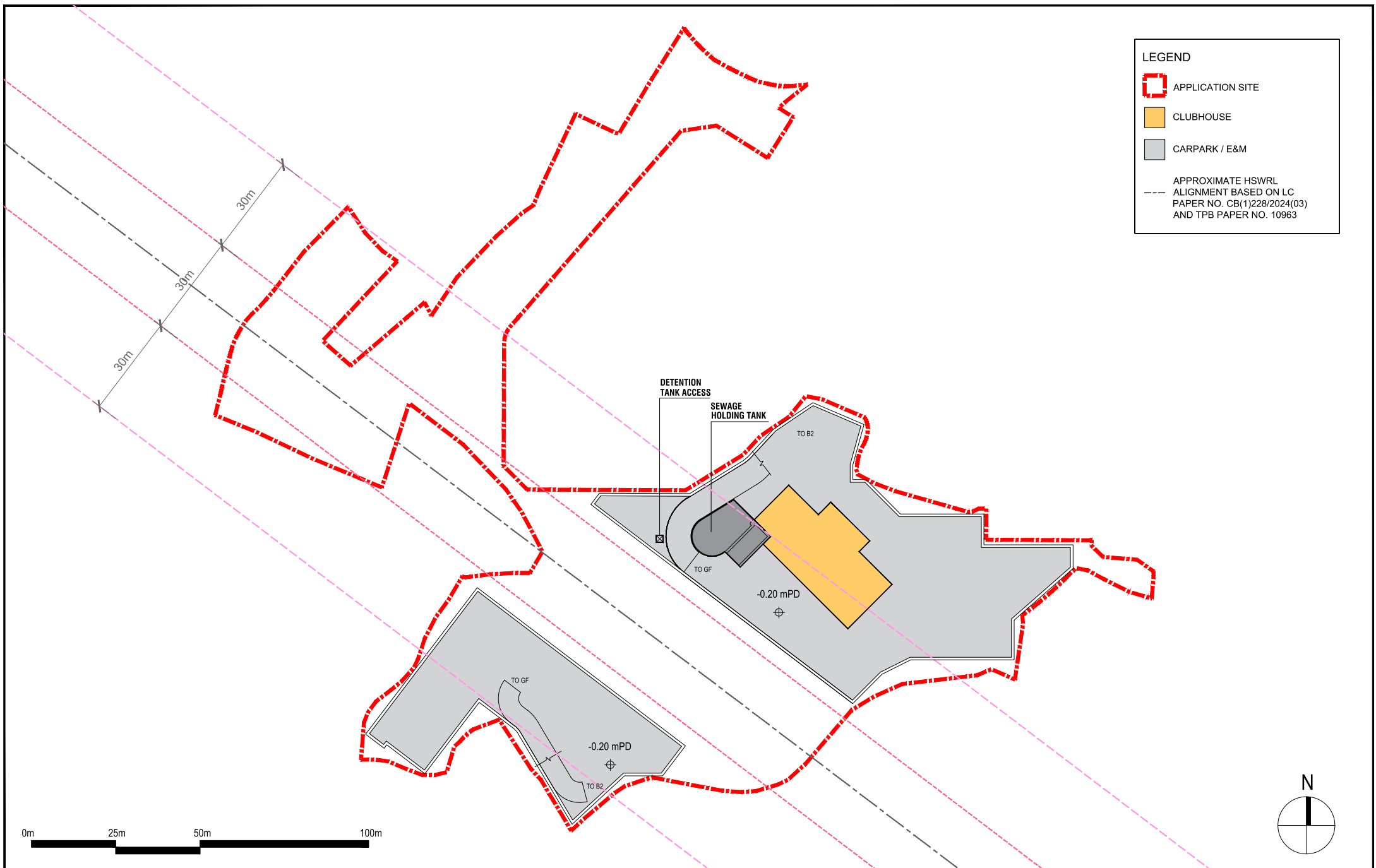
LEGEND

 APPLICATION SITE

 CLUBHOUSE

 CARPARK / E&M

--- APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
AND TPB PAPER NO. 10963



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B1)



MAR 2024
1:1000 (A3)

Annex B

Revised Drainage Impact Assessment

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

Drainage Impact Assessment Report

June 2024

AECOM Asia Company Ltd.

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Annex D5	Boundary Conditions of Existing 4m Width Channel (provided by DSD)
Annex D6	Aerial View of the Existing Site
Annex D7	Design of Proposed Detention Tank
Annex D8	Location Plan of Proposed Detention Tank

1. INTRODUCTION

1.1 Background

- 1.1.1 The Application Site is located at Lau Fau Shan, west of Deep Bay Road, neighbouring Deep Bay Grove and Hang Hau Tsuen, a location plan of the development site can refer to **Figure 1**.
- 1.1.2 The site area is approximately 20,455m², currently a temporary hobby farm with barbeque use, and the remaining part is vacant and covered with some vegetation.
- 1.1.3 The Applicant proposes amendments to the Draft Lau Fau Shan and Tsim Bei Tsui Outline Zoning Plan No. S/YL-LFS/10 (“the OZP”) by rezoning the Application Site from “Residential (Group C)” (“R(C)”) and “Residential (Group D)” (“R(D)”) to a tailor-made “Residential (Group B)” (“R(B)”) with a maximum domestic plot ratio (“PR”) of 3, a non-domestic gross floor area (“GFA”) of not less than 1,166m² for a 100-place child care centre, and maximum building height (“BH”) of 90 metres above principal datum (“mPD”) to facilitate Proposed Residential Development cum Social Welfare Facility (Child Care Centre) at the Application Site (“the Proposed Amendment”). The Master Layout Plan is shown in **Figure 2**.

1.2 Objective of this Submission

- 1.2.1 This report outlines the assessment results of the potential drainage impacts caused by the Proposed Development at the Application Site. The main objectives of this assessment include the followings:
- (i) Review available existing drainage studies in the vicinity of the Application Site.
 - (ii) Review the existing drainage condition and flooding susceptibility of the Application Site.
 - (iii) Outline the methodology adopted in this assessment.
 - (iv) Outline changes to the drainage characteristics and potential drainage impacts which may arise from the Proposed Development, and
 - (v) Propose drainage mitigation measures where appropriate to mitigate the potential drainage impact.

2. DEVELOPMENT PROPOSAL

2.1 The Proposed Development

2.1.1 The Proposed Development is anticipated to be completed by 2030.

2.1.2 The total site area is approximately 20,455m², the domestic GFA is approximately 61,365m². The indicative development schedule is summarized in **Table 2-1** below for technical assessment purpose.

Table 2-1 Indicative Development Schedule

Tentative Project Completion Year	2030
Site Area (m ²)	20,455
Domestic Plot Ratio	3
Domestic GFA (m ²)	61,365
Total Units	1,246
Total Tower Units	1,237
Total House Units	9
PPoF for tower/house units	2.8
Total Residential Population	3,489
Non-domestic GFA for Child Care Centre (100 Place)	
Area (m ²)	Not less than 1,166
Residents	100

1. Person Per Flat ratio of 2.8 is adopted for tower and house units.

3. DRAINAGE SYSTEM OF THE APPLICATION SITE

3.1 Existing Site Description

- 3.1.1 The Development Site area is about 20,455 m². The existing site entrance adjoining the Development Site is at 5.0mPD next to existing Deep Bay Road. The existing site is currently a temporary hobby farm with barbeque use, and the remaining part is vacant and covered with some vegetation. With reference to the aerial view of the existing site, a 70% unpaved and 30% paved area assumption is made for the existing scenario. **Annex D6** refers.
- 3.1.2 The proposed site formation level is at 5.15 – 5.80 mPD, which would be slightly higher than the adjoining Deep Bay Road.
- 3.1.3 An existing 4m width San Hing Tsuen Channel (SHTC) parallel to Deep Bay Road at the east of the Application Site. The surface runoff of the existing Site is currently discharge to SHTC via an existing pipe culvert outside the Application Site, eventually convey to downstream 22m wide open channel and then to Deep Bay. The existing drainage layout refers to **Figure 3**.

4. ASSESSMENT METHODOLOGY AND ASSUMPTION

4.1 Design Approach

- 4.1.1 This DIA is carried out in accordance with the requirements specified in Drainage Services Department (DSD) Advice Note No. 1 – Application of the Drainage Impact Assessment Process to Private Sector Projects, September 2010.
- 4.1.2 The drainage system is designed in accordance with following references:
- DSD’s “Stormwater Drainage Manual” (SDM) 2018 5th Edition
 - DSD’s “Stormwater Drainage Manual” (SDM) Corrigendum No.1/2022
 - DSD’s Technical Circular No. 14/2000 “Temporary Flow Divisions and Temporary Works Affecting Capacity in Stormwater Drainage Systems”
 - Relevant DSD Standard Drawings
 - Environmental Impact Assessment Report (Agreement No. CE 2/2011, (CE) Hung Shui Kiu New Development Area, Planning and Engineering Study – Investigation)

4.2 Design Parameters

4.2.1 The design parameters are summarized in **Table 4-1**.

Table 4-1 Summary of Design Parameters

Item	Design Parameter / Method
Design return period for permanent drainage facilities with freeboard	50 years for capacity checking 10 years for backflow assessment
Runoff Coefficient	0.95 for paved area, 0.35 for unpaved area
Pipe roughness, k_s (mm)	0.15 for precast concrete pipe with "O" ring joints in normal condition
Manning's coefficient	0.016 (Existing Concrete-lined Channel)
Kinematic viscosity of water	$1.003 \times 10^{-6} \text{ m}^2/\text{s}$

4.3 Surface Runoff Estimation

4.3.1 Peak instantaneous runoff is calculated using Rational Method in accordance with Section 7.5.2 of SDM, and assuming uniform intensity rainfall, as expressed by the following equation:

$$Q = 0.278CiA$$

Where

Q = peak runoff (m^3/s);

C = runoff coefficient;

i = rainfall intensity (mm/hr); and

A = catchment area (km^2).

4.4 Rainfall Intensity

4.4.1 Average rainfall intensity (i) is estimated on the basis of design rainfall duration and return period from Intensity-Duration-Frequency Relationship and expressed by the following equation:

$$i = \frac{a}{(t_d + b)^c}$$

Where

i = extreme mean intensity in mm/hr;

t_d = duration in minutes ($t_d \leq 240$); and

a, b, c = storm constants given in Table 3a of the DSD Stormwater Drainage Manual.

4.5 Climate Change

- 4.5.1 Climate change has been considered, with a projection of rainfall increase by 16%, design allowance of 12.1% and sea level rise in accordance with section 6.8 of Stormwater Drainage Manual (SDM).

4.6 Boundary Conditions

- 4.6.1 Boundary Conditions of the existing SHTC were provided by DSD and were used as reference for hydraulic assessment. The Boundary Conditions can be referred to **Annex D5**.

5. POTENTIAL DRAINAGE IMPACTS AND MITIGATION MEASURES

5.1 Impact on Existing Drainage System

- 5.1.1 According to satellite photo, the Application Site is currently operating as a temporary hobby farm with barbeque use, and the remaining part is vacant and covered with some vegetation. As mentioned in **Section 3.1.1**, 70% unpaved and 30% paved area is assumed. Under current master layout plan, minimum 30% greenery ratio is proposed for the proposed development, in terms of stormwater discharge, the site would discharge to SHTC as per existing flow regime. The comparisons of the catchment area between the existing & proposed development scenarios can refer to the calculations in **Annex D1**.

- 5.1.2 According to the current Master Layout Plan, the Application Site will be partially paved for the domestic buildings, clubhouse with basement, child care centre and internal road/walkway. The landscape area is approximately 30%. The MLP drawing has been included under **Figure 2**. The peak discharge from proposed development is about 1.29m³/s. The runoff discharge estimation refers to **Annex D1**.

- 5.1.3 Existing public drainage system downstream of the Application Site is available, the San Hing Tsuen Channel (SHTC) is a 4m wide by 2m high open channel with approximately 1 in 1000 fall, the channel will have flow capacity of about 37m³/s. The runoff from the development discharge to the channel is considered negligible.

5.2 Proposed Drainage Arrangement in the Application Site

- 5.2.1 The surface runoff within the Application Site is properly intercepted and collected by proposed perimeter drains and internal drainage system. The total discharge after proposed development is about 1.29m³/s. Surface runoff of the adjacent area that originally flows towards the Application Site is proposed to be captured by the proposed perimeter drains as well.

- 5.2.2 900mm dia. storm drain with 1 in 200 fall and associated stormwater manholes SMH1 and SMH2 are proposed to convey the surface runoff collected by Terminal Manhole STMH1 to existing SHTC downstream. The hydraulic checking of proposed 900mm dia. storm drain refers to **Annex D2**. The proposed drainage arrangement refers to **Figure 4**.

- 5.2.3 The existing runoff estimation is approx. $0.89\text{m}^3/\text{s}$ while the estimated runoff from proposed development is approx. $1.29\text{m}^3/\text{s}$. The net increase from the proposed development is approx. $0.40\text{m}^3/\text{s}$. The existing SHTC is assumed to be 4m wide by 2m in height at 1 in 1000 fall, the flow capacity is approx. $37\text{m}^3/\text{s}$, further downstream is the existing 22m wide open channel outfall to Deep Bay. Hydraulic calculation has been conducted to estimate the increase in water level due to the development, **Annex D3** refers. The stormwater discharge is negligible compared to the capacity of the existing SHTC and the 22m wide open channel. Therefore, no adverse drainage impact is anticipated.
- 5.2.4 Backflow of the existing SHTC has also been assessed. Boundary Conditions received from DSD were used for the assessment. Please refer to **Annex D4** for the backflow assessment.
- 5.2.5 Due to the low-lying and rural nature of nearby catchment, scenario 10A and 10B, as indicated in the Boundary Conditions, were considered appropriate for backflow assessment. Approximately 481.5mm and 302.6mm freeboard can be achieved at the proposed outfall location, under 10A and 10B scenario respectively.
- 5.2.6 Detailed design of the stormwater outfall pipe, internal drainage system and perimeter drain proposed for the development site will be submitted in detailed design stage.

5.3 Proposed Stormwater Detention Arrangement

- 5.3.1 As advised by CEDD, existing San Hing Tsuen Channel will be modified under remaining phase of Hung Shui Kiu / Ha Tsuen New Development Area (HSK/HT NDA). However, the drainage modification design is currently under review, in view of the uncertainty of the future public drainage arrangement, the Applicant proposes drainage mitigation with on-site detention tank as a conservative scenario. Even if the drainage modification works under HSK/HT NDA did not consider the Application Site runoff, underground stormwater detention tank will still be able to store the runoff during the rainstorm event, and slowly release the water at off-peak hours, such that stormwater runoff would not pose adverse drainage impact due to downstream.
- 5.3.2 As advised by DSD, zero runoff should be kept during rainstorm event, the detention tank volume is designed to accommodate 1 in 50yr storm events with climate change effect up to end of 21st century plus design allowance in accordance with DSD stormwater drainage manual corrigendum No. 1/2022.
- 5.3.3 Proposed stormwater detention tank has a footprint of $1,603\text{m}^2$ and total depth of 3.8m, over $5,611\text{m}^3$ of stormwater can be stored in the underground tank with not less than 300mm non-storage headroom provided for freeboard. After each rainstorm event, the tank will be emptied during off-peak, such that no adverse drainage impact will arise due to the development. Please refer to **Annex D7** for the runoff estimation and design calculation of the proposed detention tank.
- 5.3.4 The proposed detention tank is proposed to be constructed at basement within the Application Site. Please refer to **Annex D8** for the proposed tank location. 2 x 2m access opening and access ramp would be provided for maintenance and desilting purpose, and the design will be further developed in detailed design stage.

- 5.3.5 Notwithstanding this very conservative proposal, a special condition is proposed to be inserted in the Land Grant formulation stage to ascertain the need of such detention tank or any other drainage mitigation measure(s) based on latest conditions, particularly in the context of drainage modification design of HSK/HT NDA being developed concurrently.

6. MAINTENANCE REQUIREMENTS

6.1 Maintenance of Terminal Manhole and Proposed Pipeline

- 6.1.1 The Applicant will be responsible for the maintenance of all the drainage facilities within the site boundary including the proposed terminal manhole.
- 6.1.2 For the proposed pipeline downstream of the terminal manhole, Applicant is responsible for the connection works and cost involved. Upon completion of the outside site drainage works, the pipe will be handed over to Drainage Services Department (DSD) for future maintenance.

7. CONSTRUCTION STAGE DRAINAGE

7.1 Temporary Drainage Arrangements During Construction

- 7.1.2 No major drainage issues during construction stage are anticipated. The temporary drainage arrangement during construction phase will be addressed by the contractor after award of the contract.
- 7.1.3 The temporary drainage arrangement proposed by the contractor will be vetted to the satisfaction of the AP/RSE prior to submitting to DSD for approval.

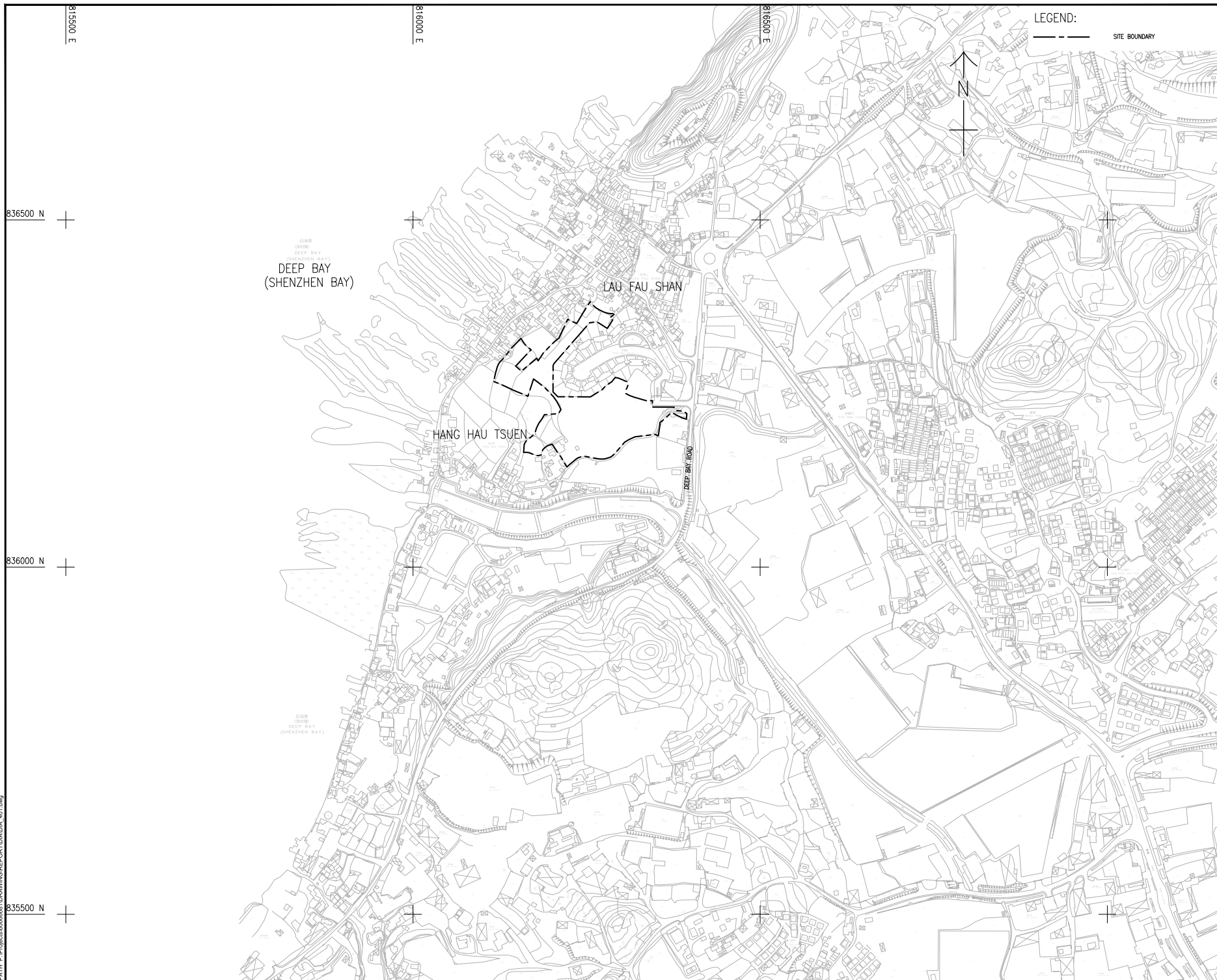
8. CONCLUSIONS

8.1 Discussion on Drainage Impact

- 8.1.1 The surface runoff within the Application Site will be intercepted by proposed perimeter drains and internal drainage system. All the site runoff will be diverted to the underground stormwater detention tank for off-peak discharge, as a very conservative scenario assuming drainage modification work under HSK/HT NDA development did not cater for any runoff from our Application Site. Zero stormwater discharge from the site will take place during rainstorm event.
- 8.1.2 The necessity of complete stormwater detention will be reviewed based on the latest condition of HSK/HT NDA development at the detailed design stage.
- 8.1.3 With the implementation of on-site detention tank with over **5,611 m³** of storage volume, the stormwater will only be released after rainstorm event during off-peak. No adverse drainage to the downstream is anticipated.

End of Report

Figures



LEGEND:
 - - - - - SITE BOUNDARY



PROJECT
 APPLICATION FOR AMENDMENT OF
 PLAN UNDER SECTION 12A OF THE
 TOWN PLANNING ORDINANCE (CAP.131)
 FOR PROPOSED RESIDENTIAL
 DEVELOPMENT AND SOCIAL WELFARE
 FACILITY (CHILD CARE CENTRE) AT
 VARIOUS LOTS IN D.D. 128 AND D.D.
 129, AND ADJOINING GOVERNMENT
 LAND, LAU FAU SHAN, YUEN LONG,
 NEW TERRITORIES

CLIENT

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS

REVISION

NO.	DATE	DESCRIPTION	CHK.	APP.

STATUS

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 METRES

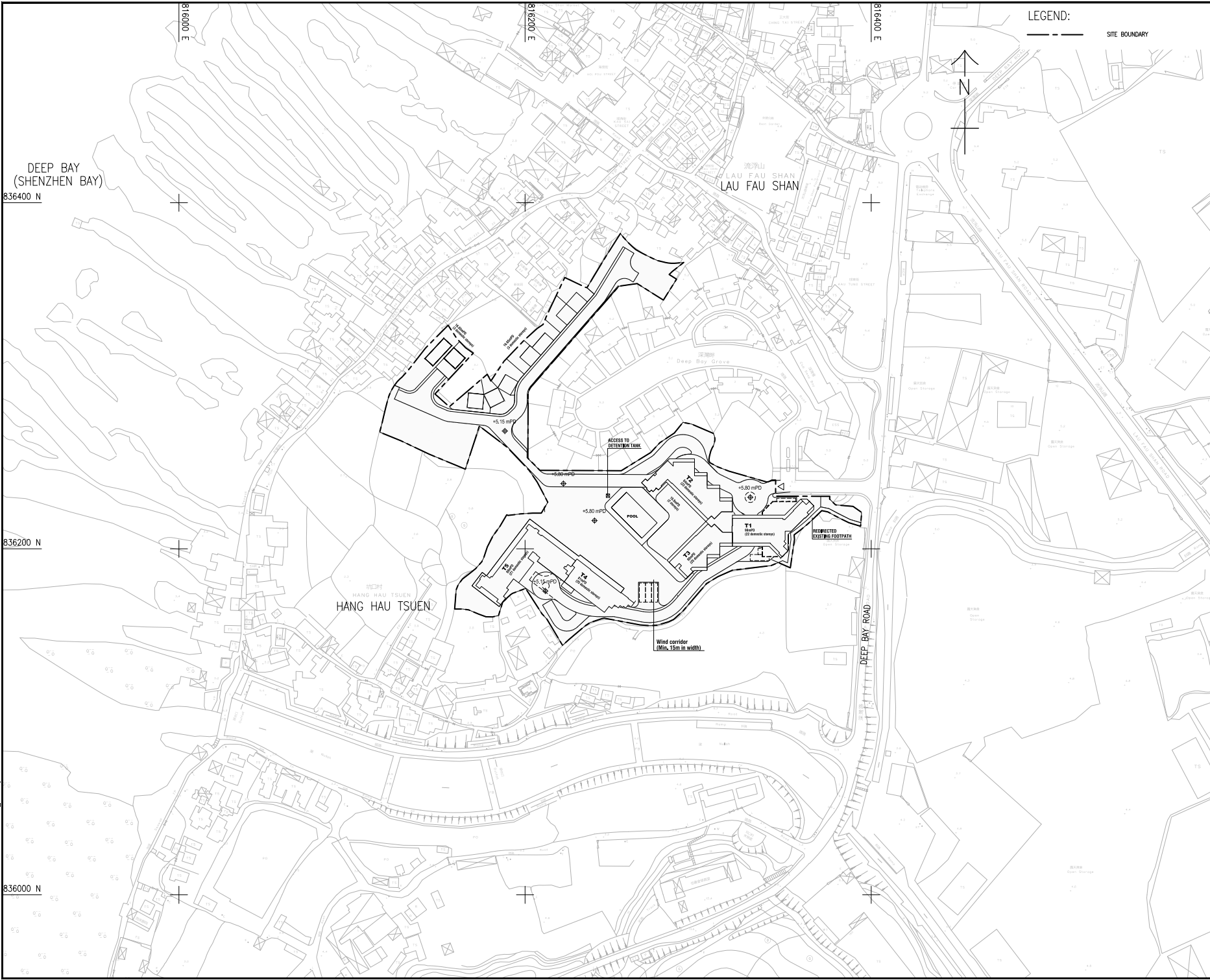
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PROJECT NO.
 6066681
AGREEMENT NO.

SHEET TITLE
 LOCATION PLAN

SHEET NUMBER
 6066681/DIA/FIGURE 1

ISO A1 594mm x 841mm
 Approved:
 Checked:
 Designer:
 Project Management Initials:
 06/06/2024
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LEGEND:
 --- SITE BOUNDARY



PROJECT
 APPLICATION FOR AMENDMENT OF
 PLAN UNDER SECTION 12A OF THE
 TOWN PLANNING ORDINANCE (CAP.131)
 FOR PROPOSED RESIDENTIAL
 DEVELOPMENT AND SOCIAL WELFARE
 FACILITY (CHILD CARE CENTRE) AT
 VARIOUS LOTS IN D.D. 128 AND D.D.
 129, AND ADJOINING GOVERNMENT
 LAND, LAU FAU SHAN, YUEN LONG,
 NEW TERRITORIES

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REVISION

NO.	DATE	DESCRIPTION	BY	CHECK

STATUS

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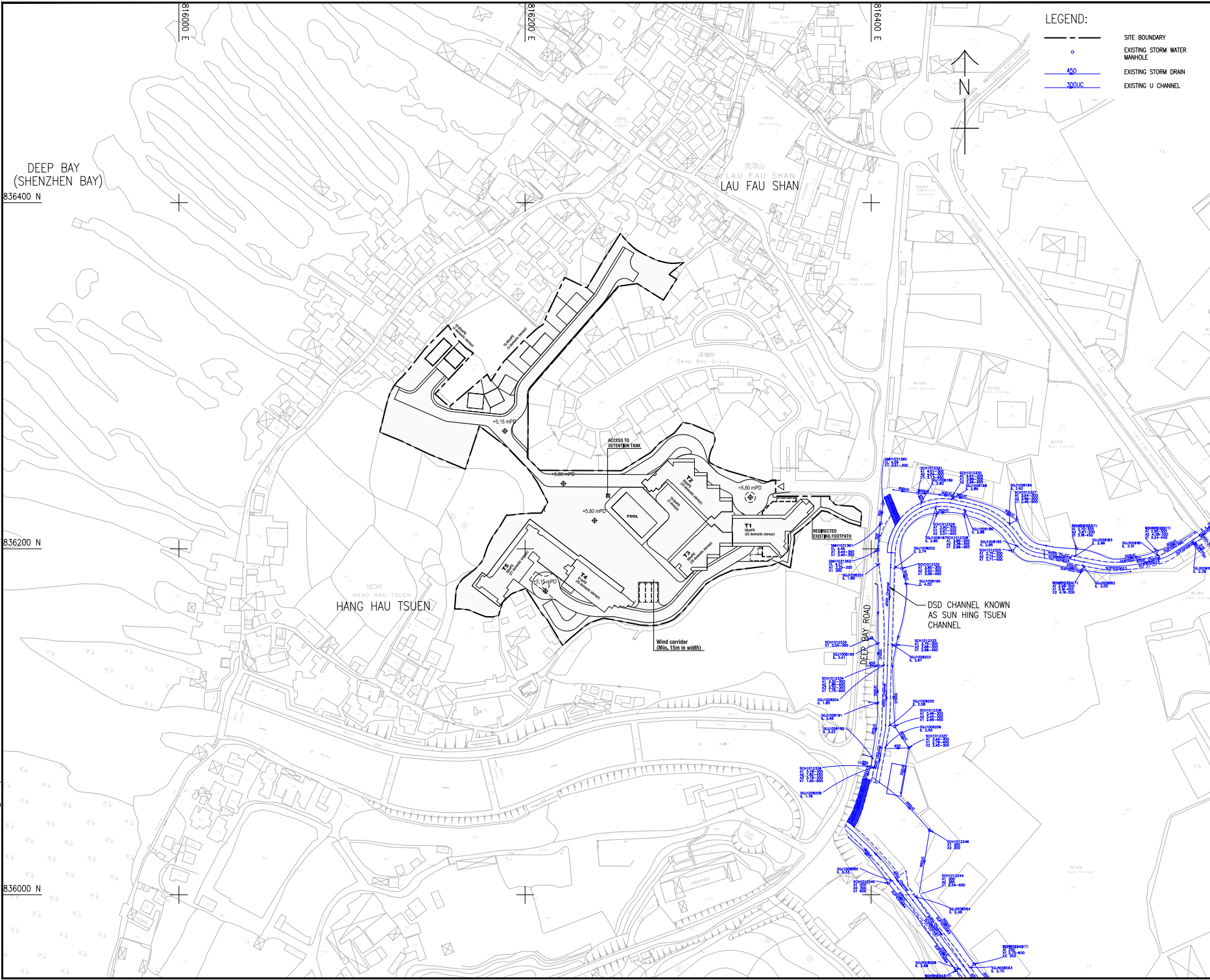
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PROJECT NO.
 60666681
AGREEMENT NO.

SHEET TITLE
 MASTER LAYOUT PLAN

SHEET NUMBER
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ISO A1 594mm x 841mm
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 06/06/2024
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PROJECT

APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

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DIMENSION UNIT

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KEY PLAN

PROJECT NO.

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AGREEMENT NO.

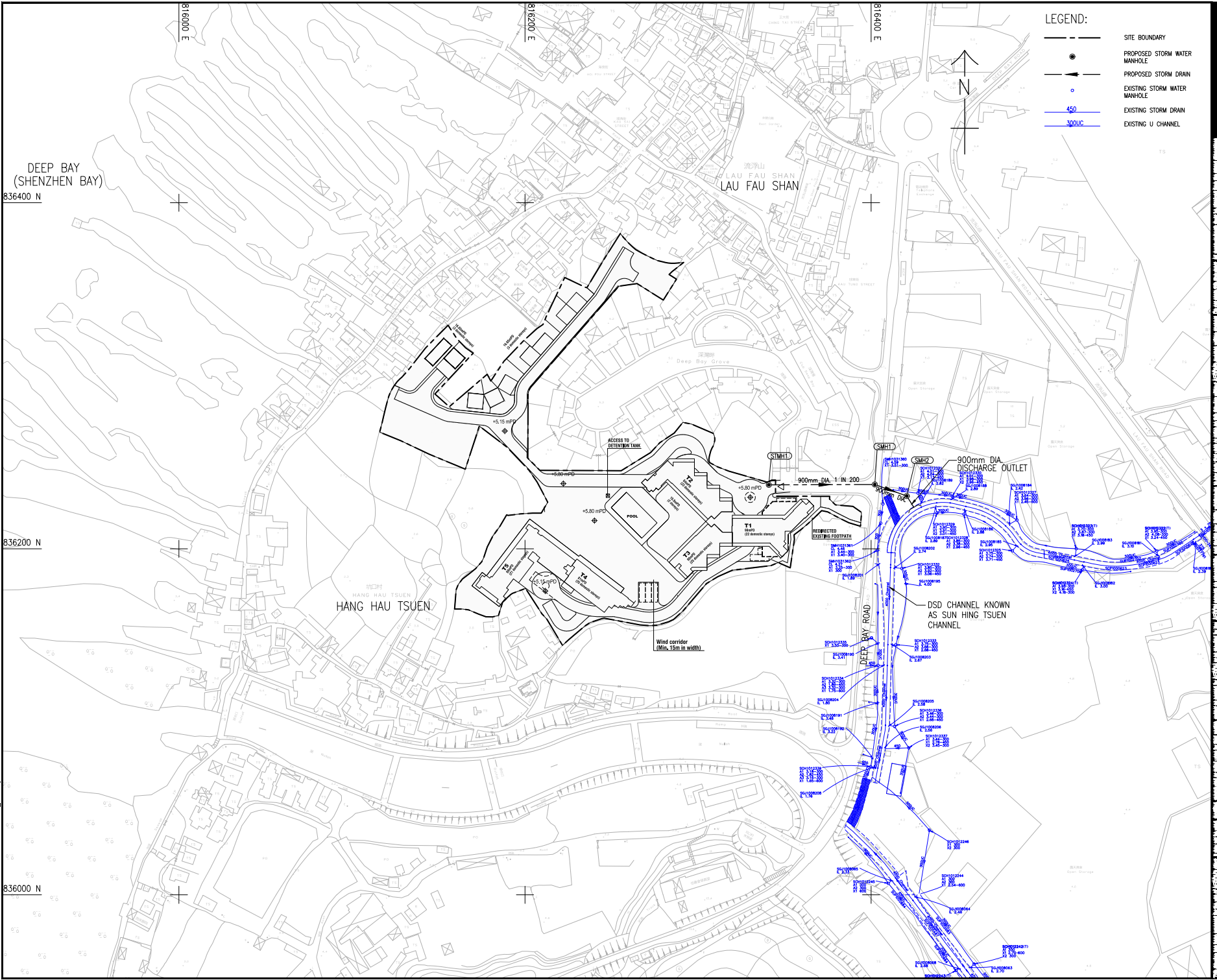
SHEET TITLE

EXISTING DRAINAGE LAYOUT PLAN

SHEET NUMBER

60666881/DIA/FIGURE 3

ISO A1 594mm x 841mm
 Approved:
 Checked:
 Designer:
 Project Management Initials:
 06/06/2024
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LEGEND:

- SITE BOUNDARY
- PROPOSED STORM WATER MANHOLE
- PROPOSED STORM DRAIN
- EXISTING STORM WATER MANHOLE
- 450 EXISTING STORM DRAIN
- 300UC EXISTING U CHANNEL

AECOM

PROJECT
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D. 128 AND D.D. 129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

CLIENT

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS

REVISION

NO.	DATE	DESCRIPTION	BY

STATUS

SCALE
 A3 1:2000
DIMENSION UNIT
 METRES

KEY PLAN

PROJECT NO.
 6066681
AGREEMENT NO.

SHEET TITLE
 PROPOSED DRAINAGE LAYOUT PLAN

SHEET NUMBER
 6066681/DIA/FIGURE 4

Annex D1

Comparison of Surface Runoff Estimation

Annex D1 - Comparison of the catchment area between the existing & proposed development scenarios

6/30/2023

Surface Runoff Estimation - Rational Method

Rainfall Return Period : 1 in 50

Return Period 50-year

$$\text{Rainfall Intensity } i = \frac{a}{(t_d + b)^c}$$

SDM Table 3a

a = 451.3

b = 2.46

c = 0.337

(HKO Headquarters)

t_d = Duration in minutes

= 5

Assumed

i = 229.3

Rainfall increase due to climate change = 16.0%

SDM Table 28

Design Allowance = 12.1%

SDM Table 31

Rational Method $Q_p = 0.278CiA$

C = runoff coefficient

i = rainfall intensity in mm/hr

A = catchment area in km^2

Existing

	Development Site		Total Runoff (m ³ /s)
	Paved	Unpaved	
Site Area (m ²)	6,137	14,319	
Runoff coefficient (c)	0.95	0.35	
Rainfall intensity (i)	229.27	229.27	
Rainfall intensity after climate change	293.70	293.70	
Runoff (Q)	0.48	0.41	0.89

Proposed

	Development Site		Total Runoff (m ³ /s)
	Paved	Unpaved	
Site Area (m ²)	14,319	6,137	
Runoff coefficient (c)	0.95	0.35	
Rainfall intensity (i)	229.27	229.27	
Rainfall intensity after climate change	293.70	293.70	
Runoff (Q)	1.11	0.18	1.29

Total Runoff from Existing Site = 0.89 m³/s

Total Runoff from Proposed Development = 1.29 m³/s

Net Increase = 0.40 m³/s

Annex D2

Hydraulic Checking of Proposed Storm Drain

Hydraulic Calculation of Proposed 900mm Pipe

Post-development

The full-bore capacity of the pipe is calculated by Colebrook White Equation:

$$V = -\sqrt{32gRS_f} \log \left[\frac{k_s}{14.8R} + \frac{1.255\nu}{R\sqrt{32gRS_f}} \right]$$

where	V =	velocity of the pipe flow	
	s =	proposed pipe gradient	
	=	0.006666667	(1 in 150)
	k _s =	pipe roughness value	SDM Table 14
	=	0.15	Precast concrete pipe with 'O' joints
	ν =	kinematic viscosity of fluid	
	=	0.000001	
	D =	Diameter of Proposed Pipe	
	=	900	
	=	0.9	
	P =	Wetted Parameter	
		2.83	
		Assume 10% reduction in pipe area for siltation effect	
	A =	0.57	
	R =	Hydraulic Radius	
		0.203	
	V =	2.75	
Available Pipe capacity Q _a =		V x A	
	=	1.57	
		Peak runoff generated from the proposed development,	50-year
Q _p =		1.29	
>		Q _p	
Capacity Check =		81.7%	
=>		OK	

Annex D3

Hydraulic Checking of Existing 4m Width Channel

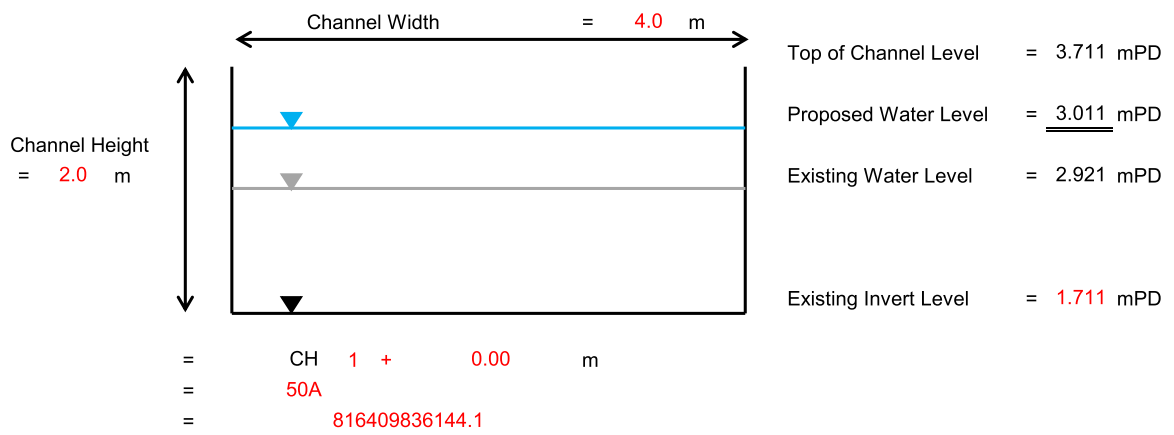
Hydraulic Check for 4m×2m Channel

Post-development

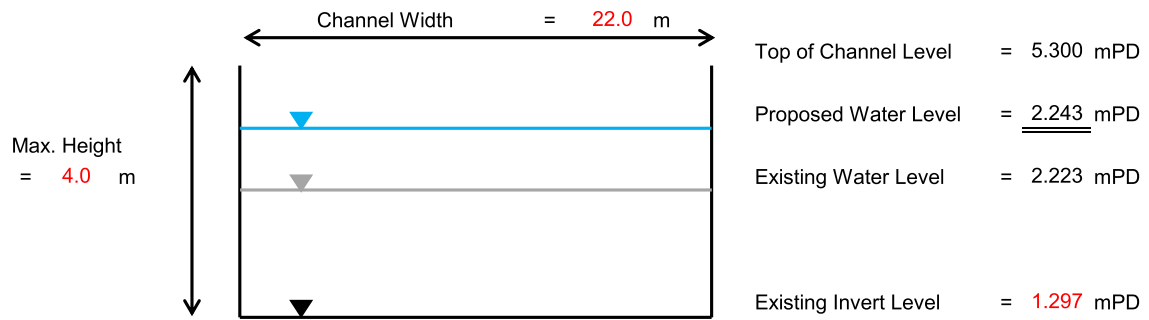
The capacity of the channel is calculated by Manning Equation:

$$V = \frac{R^{1/6}}{n} \times \sqrt{RS_f}$$

where	V =	velocity of the pipe flow	
	S _f =	Channel gradient	
	=	0.001	(1 in 1000)
	n =	Manning coefficient	SDM Table 13
	=	0.018	Concrete-lined Channel
	D =	Channel width	
	=	4000	
	=	4	
	H =	Channel height	
	=	2000	
	=	2	
	P =	Wetted Parameter	
	=	8	
	A =	14.4	
	R =	Hydraulic Radius	
	=	$\frac{A}{P}$	
	=	1.8	
	V =	2.60	
Available Channel Capacity Q _a =	=	V x A	
	=	37.43	
	Q _p =	1.29	50-year
	>	Q _p	
	=>	OK	



- = 10.47173 m³/sec (from DSD Boundary Condition)
- = 1 in 573 (from DSD As-built Drawing)
- = 0.175%
- = 2.0 m (from DSD As-built Drawing)
- = 4.0 m (from DSD As-built Drawing)
- = 2m x 4m
- = 8.0 m²
- = Concrete
- = 0.016 (Assumed Fair Condition)
- = 2.921312 mPD
- = 1.210312 m
- = 4.84 m²
- = 6.420623 m
- = 0.7540 m
- = 2.1630 m/sec (SDM 2018, DSD)
- = $A_1 \times V_{1,mann}$
- = 10.4716 m³/sec
- => ok
- = 3.711mPD - 2.921mPD
- = 0.790 m
- > 500 mm (SDM 2018, DSD)
- = 1.29 m³/sec
- = 11.76 m³/sec
- = 3.010843 mPD
- = 1.299843 m
- = 5.20 m²
- = 6.599686 m
- = 0.7878 m
- = 2.2272 m/sec (SDM 2018, DSD)
- = $A_2 \times V_{2,mann}$
- = 11.5799 m³/sec
- = 3.711mPD - 3.011mPD
- = 0.700 m
- > 500 mm (SDM 2018, DSD)
- => ok



Scenario = 50A
 Boundary Condition ID = 816072836083.1

Existing Channel

Existing Flow Rate, Q_1	=	30.58041 m ³ /sec	(from DSD Boundary Condition)
Existing Gradient, S_1	=	1 in 1403	(from DSD Boundary Condition)
	=	0.071%	
Existing Channel Width, W_1	=	22.0 m	(from Geo-info Map)
Existing Channel Cross Sectional Area	=	4.003m x 22m	
	=	88.1 m ²	
Channel Lining Material	=	Concrete	
Manning's Roughness Coefficient	=	0.016	
Existing Water Level	=	2.222629 mPD	
Existing Water Depth, D_1	=	0.925629 m	
Existing Flow Area, A_1	=	20.36 m ²	
Existing Wetted Perimeter, P_1	=	23.85126 m	
Existing Hydraulic Radius, R_1	=	0.8538 m	
Existing Manning's Velocity, $V_{1,mann}$	=	1.5017 m/sec	(SDM 2018, DSD)
Existing Manning's Flow Rate, $Q_{1,mann}$	=	$A_1 \times V_{1,mann}$	
	=	30.5804 m ³ /sec	
	=>	ok	
Freeboard before Proposed Discharge	=	5.3mPD - 2.223mPD	
	=	3.077 m	
	>	500 mm	(SDM 2018, DSD)

Proposed Discharge

Proposed Discharge Flowrate, ΔQ	=	1.29 m ³ /sec	
Total Flow Rate, Q_2	=	31.8664 m ³ /sec	
Proposed Water Level	=	2.243268 mPD	
Proposed Water Depth, D_2	=	0.946268 m	
Proposed Flow Area, A_2	=	20.82 m ²	
Proposed Wetted Perimeter, P_2	=	23.89254 m	
Proposed Hydraulic Radius, R_2	=	0.8713 m	
Proposed Manning's Velocity, $V_{2,mann}$	=	1.5222 m/sec	(SDM 2018, DSD)
Proposed Manning's Flow Rate, $Q_{2,mann}$	=	$A_2 \times V_{2,mann}$	
	=	31.6887 m ³ /sec	
Freeboard after Proposed Discharge	=	5.3mPD - 2.243mPD	
	=	3.057 m	
	>	500 mm	(SDM 2018, DSD)
	=>	ok	

Annex D4

Backflow Assessment of Existing 4m Width Channel

Proposed S12A Planning Application at Various Lots in DD128 and DD129 and Adjoining Government Land, Lau Fau Shan, Yuen Long

**San Hing Tsuen Channel (SHTC) & Downstream Channel- Backflow Assessment
Existing Discharge
Scenario 10A**

Manhle No. / ID No.		Ground Level		Water Level ^(Note 1)		Freeboard	Invert Level		Channel														Minor Loss Coefficient K	Max. Discharge ^(Note 2) ref Q _{ref} m ³ /s
		U/S	D/S	U/S	D/S		U/S	D/S	U/S	D/S	Channel Width W	Channel Height H	Length L	Hydraulic Radius R	Flow Area A	Wetted Perimeter P	Channel Gradient S ₀	Channel Gradient S ₀	Hydraulic Gradient S _f	Normal Flow Water Depth y ₀	Velocity v	Discharge Q		
		mPD	mPD	mPD	mPD	m	mPD	mPD	m	m	m	m	m ²	m	1 in	m/m	m/m	m	m/s	m ³ /s	min			m ³ /s
Proposed Outfall	816403836063	4.40	4.10	3.9087	3.58	0.4913	1.89	1.60	4.0	2.0	165.0	0.670	4.029	6.015	573	0.001745	0.001992	1.0073	1.9990	8.0544	1.38	0.0160	0.20	8.054
816403836063	816072836083	4.10	5.30	3.58	3.14	0.5200	1.60	1.30	22.0	NA	425.0	0.759	17.933	23.630	1403	0.000713	0.001047	0.8151	1.3884	24.8989	5.10	0.0160	0.20	24.899

Note 1 Max water level retrieved from DSD/LD provided Boundary Condition except proposed outfall

Note 2 Max existing downstream flow retrieved from DSD/LD provided Boundary Condition.

Proposed S12A Planning Application at Various Lots in DD128 and DD129 and Adjoining Government Land, Lau Fau Shan, Yuen Long

**San Hing Tsuen Channel (SHTC) & Downstream Channel- Backflow Assessment
Existing Discharge
Scenario 10B**

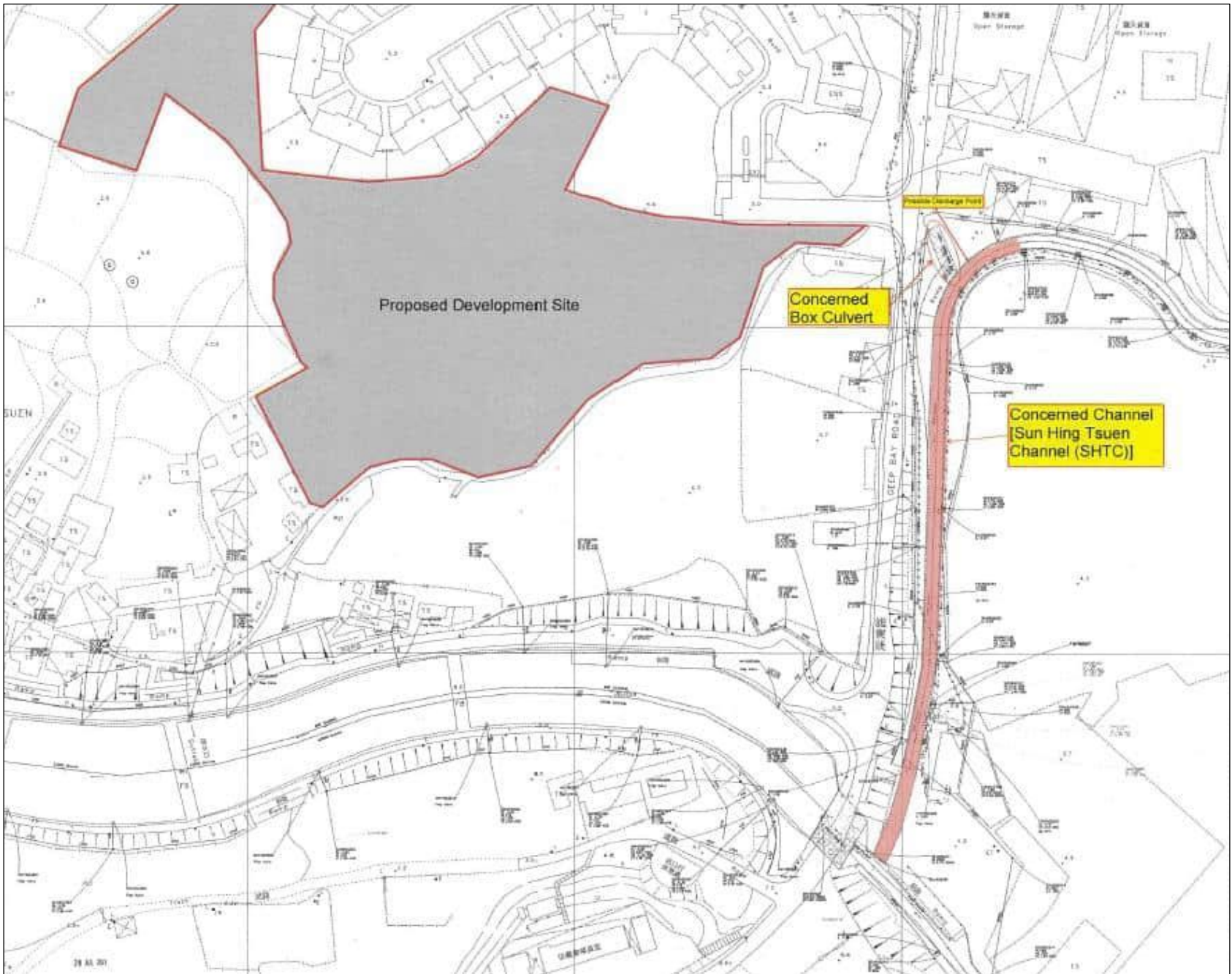
Manhle No. / ID No.		Ground Level		Water Level ^(Note 1)		Freeboard	Invert Level		Channel														Minor Loss Coefficient K	Max. Discharge ^(Note 2) ref Q _{ref} m ³ /s
		U/S	D/S	U/S	D/S		U/S	D/S	U/S	D/S	Channel Width W	Channel Height H	Length L	Hydraulic Radius R	Flow Area A	Wetted Perimeter P	Channel Gradient S ₀	Channel Gradient S ₀	Hydraulic Gradient S _f	Normal Flow Water Depth y ₀	Velocity v	Discharge Q		
		mPD	mPD	mPD	mPD	m	mPD	mPD	m	m	m	m	m ²	m	1 in	m/m	m/m	m	m/s	m ³ /s	min			
Proposed Outfall	816403836063	4.40	4.10	3.9960	3.68	0.4040	1.89	1.60	4.0	2.0	165.0	0.534	2.912	5.456	573	0.001745	0.001928	0.7279	1.7178	5.0015	1.60	0.0160	0.20	5.001
816403836063	816072836083	4.10	5.30	3.68	3.54	0.4220	1.60	1.30	22.0	NA	425.0	0.638	14.893	23.354	1403	0.000713	0.000334	0.6769	1.2364	18.4129	5.73	0.0160	0.20	18.413

Note 1 Max water level retrieved from DSD/LD provided Boundary Condition except proposed outfall

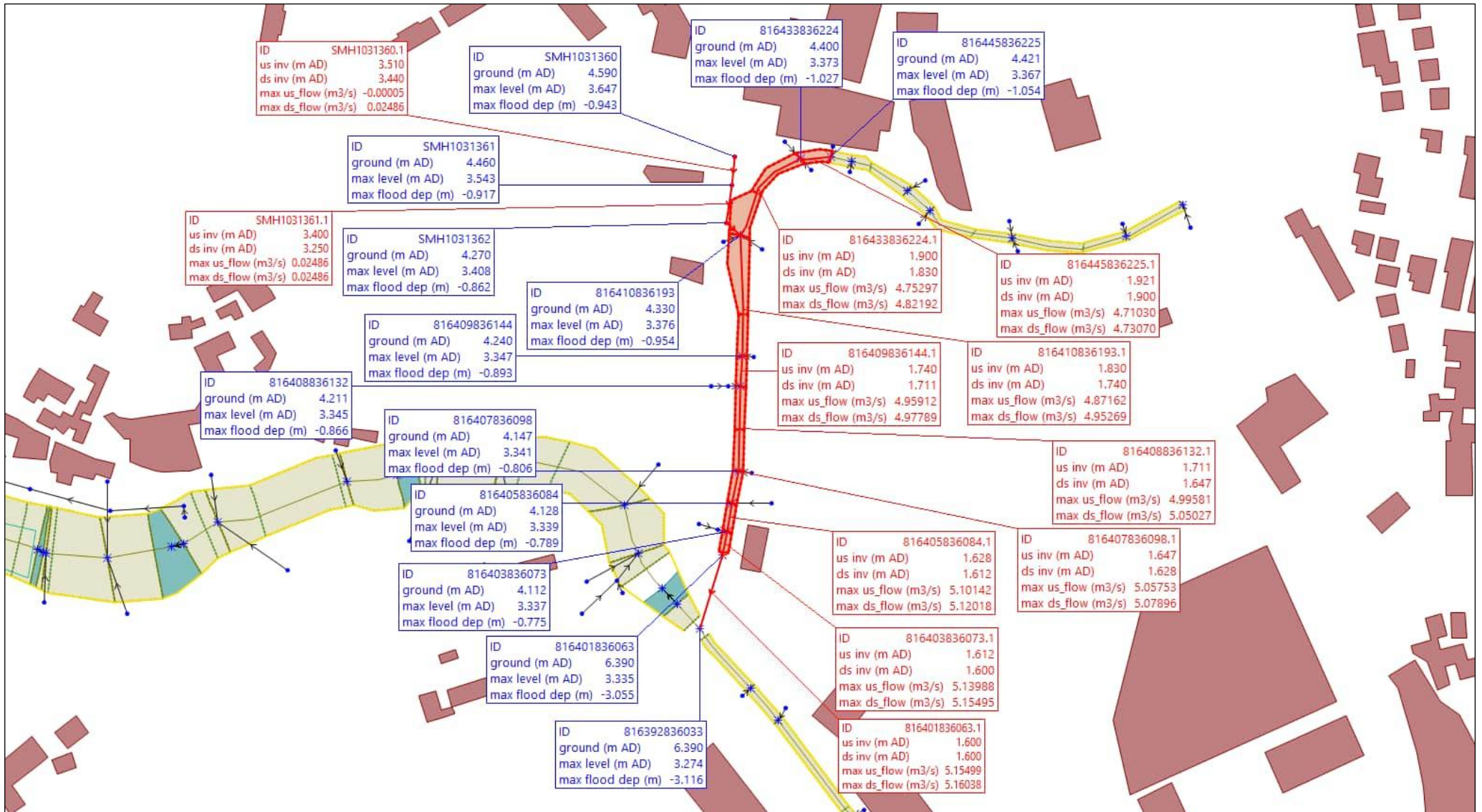
Note 2 Max existing downstream flow retrieved from DSD/LD provided Boundary Condition.

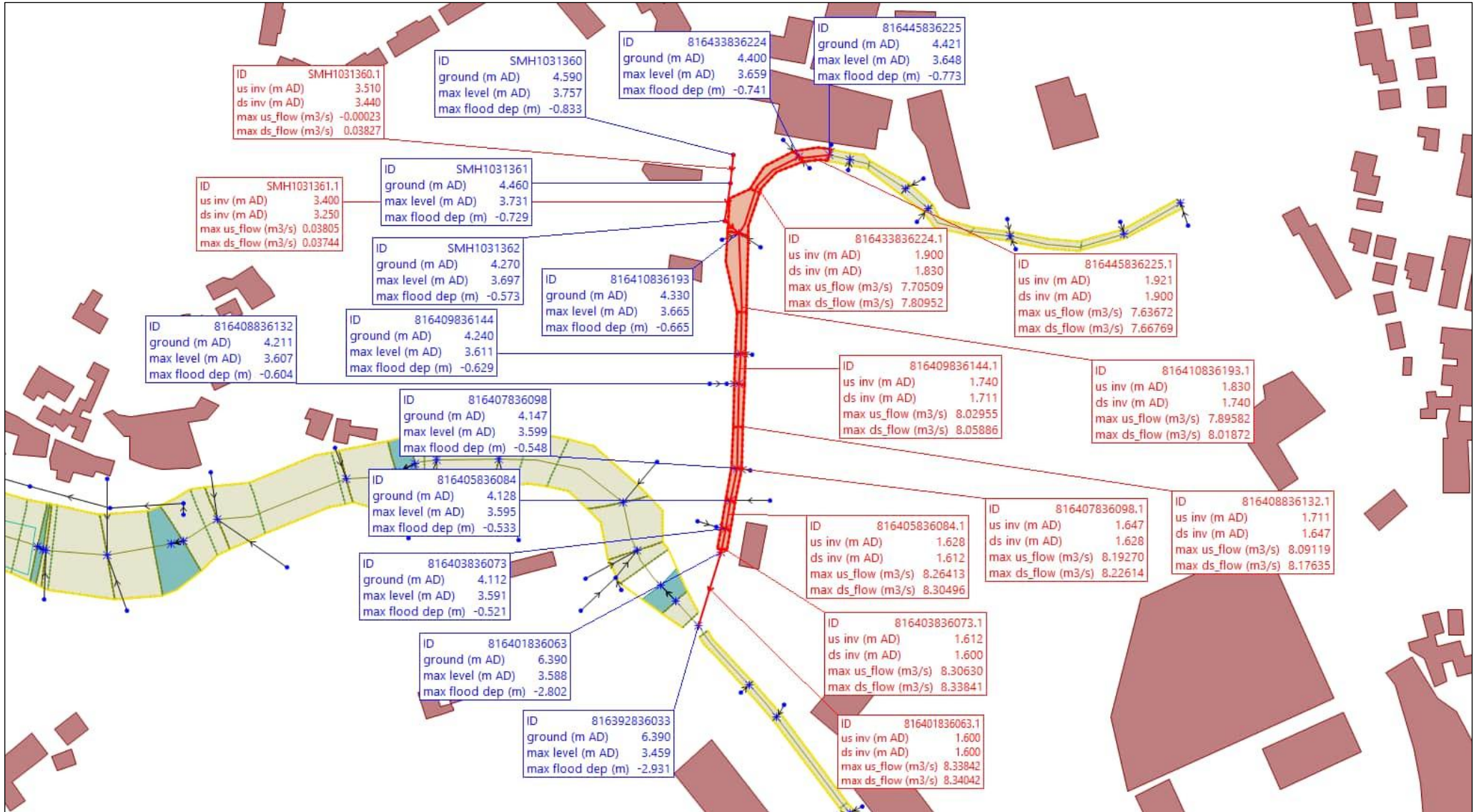
Annex D5

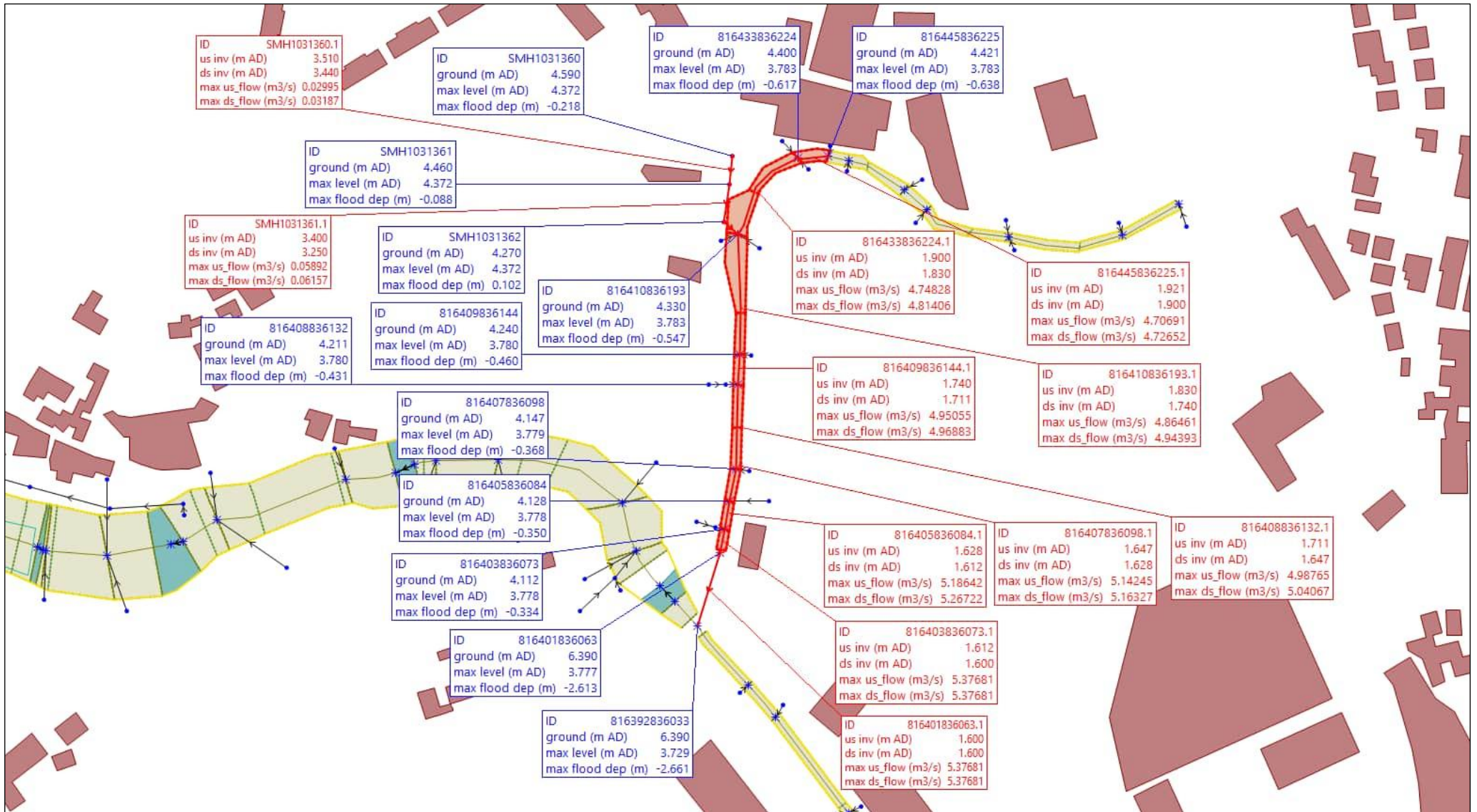
Boundary Conditions of Existing 4m Width Channel (provided by DSD)



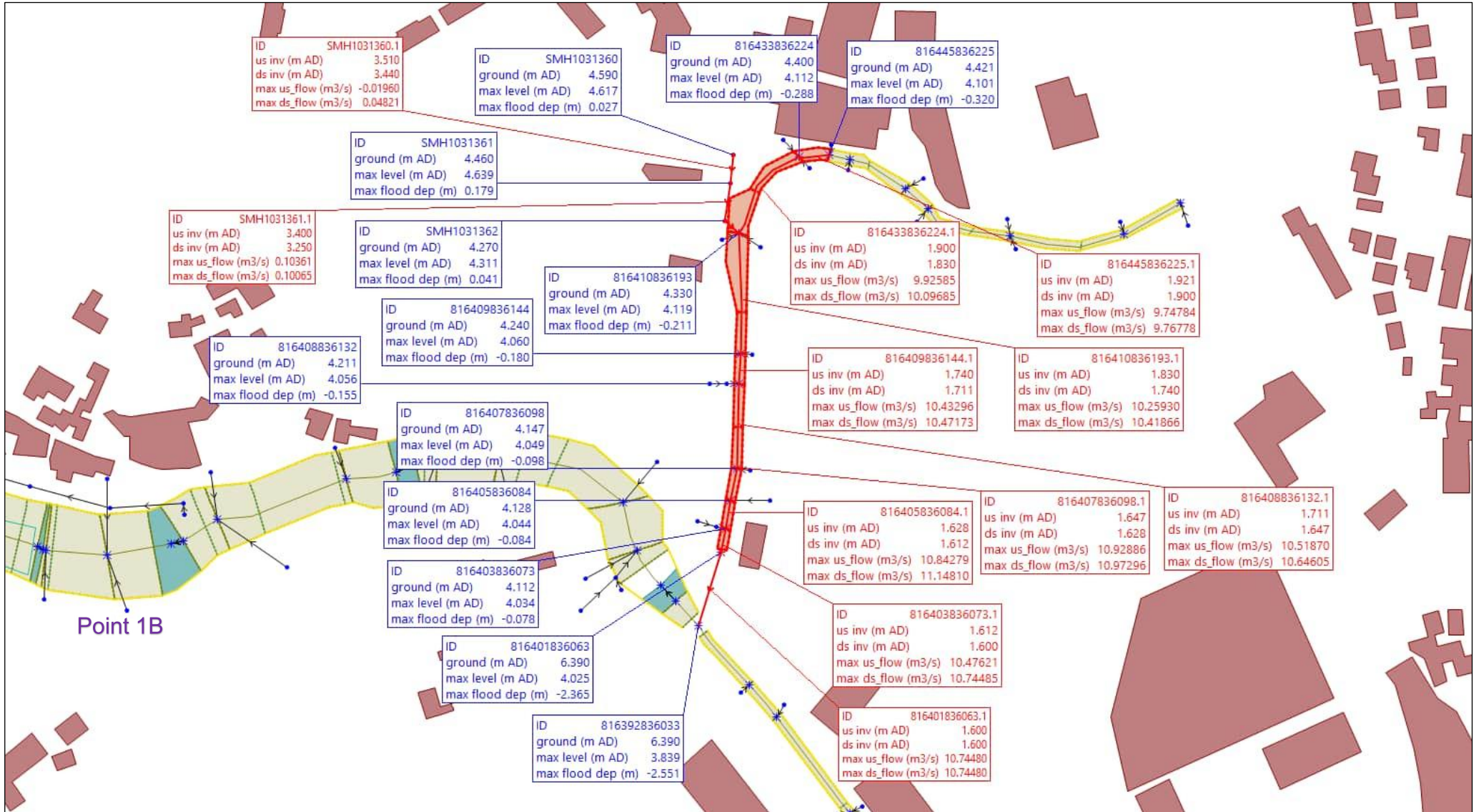
Location of Request



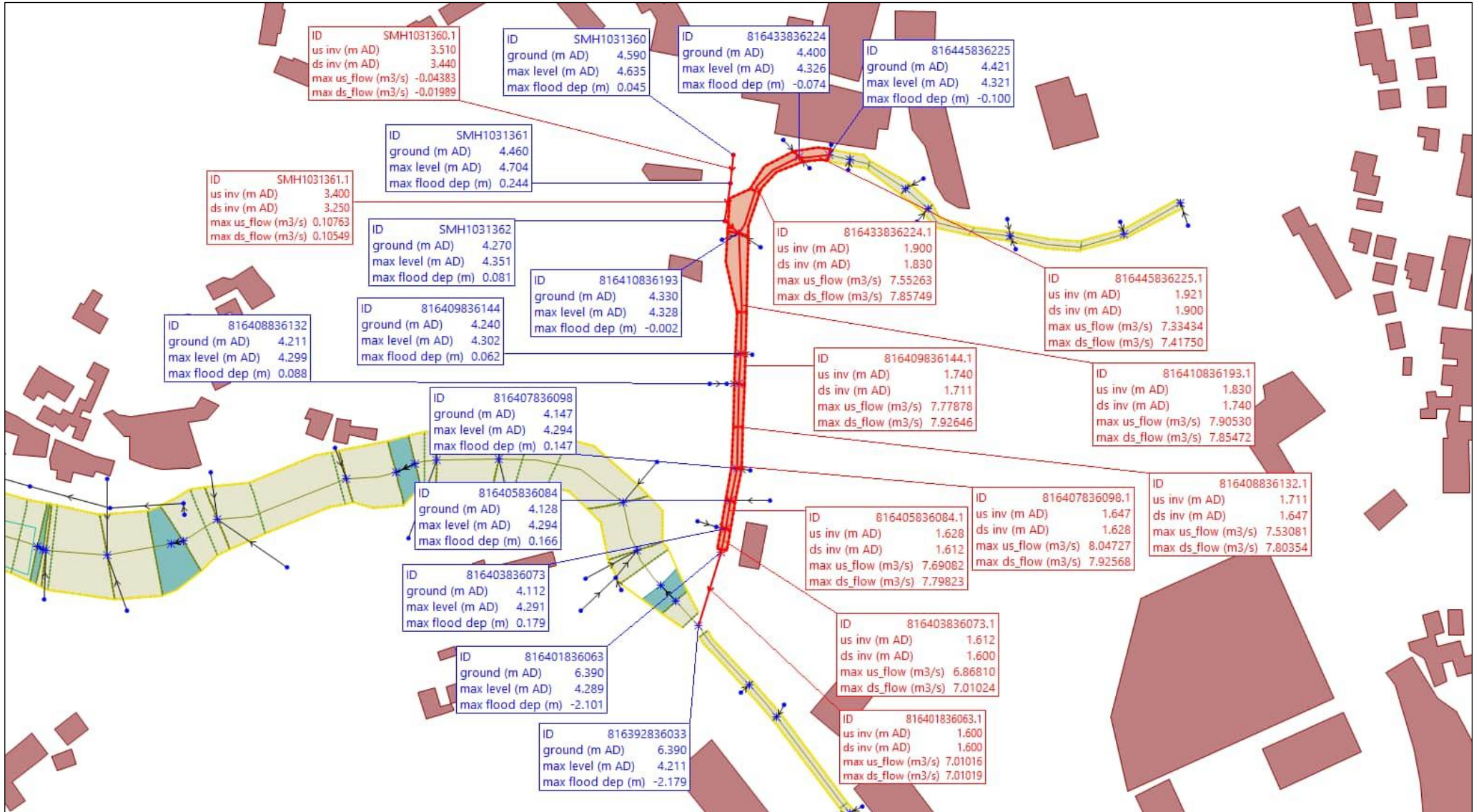




10B



50A



50B

DRAINAGE PIPES AND MANHOLES

Concerned Channel

(SWD4048196)

to display the Drainage Pipes facilities

Legend

SOF1002581

SEARCH

SCP1011140

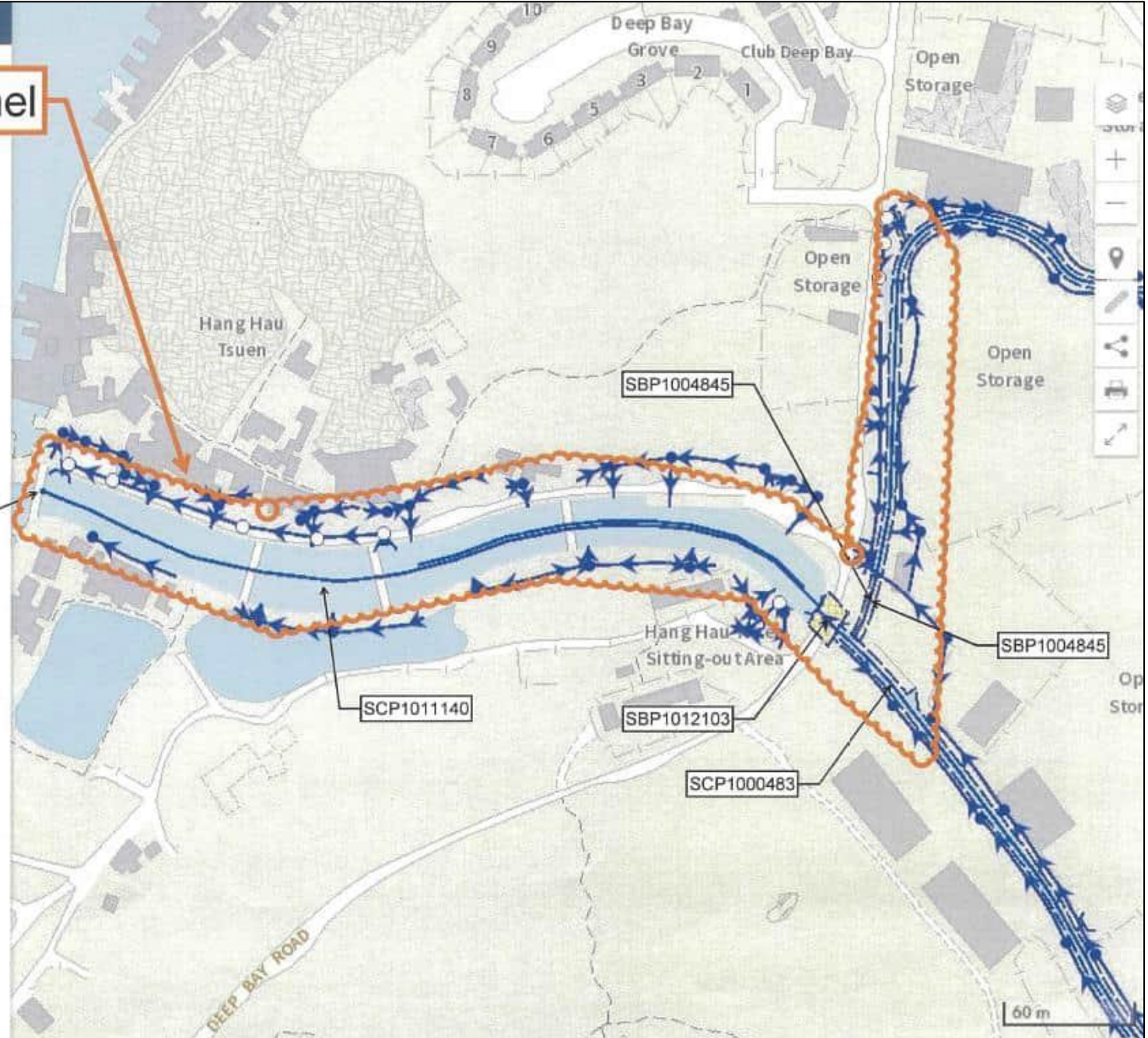
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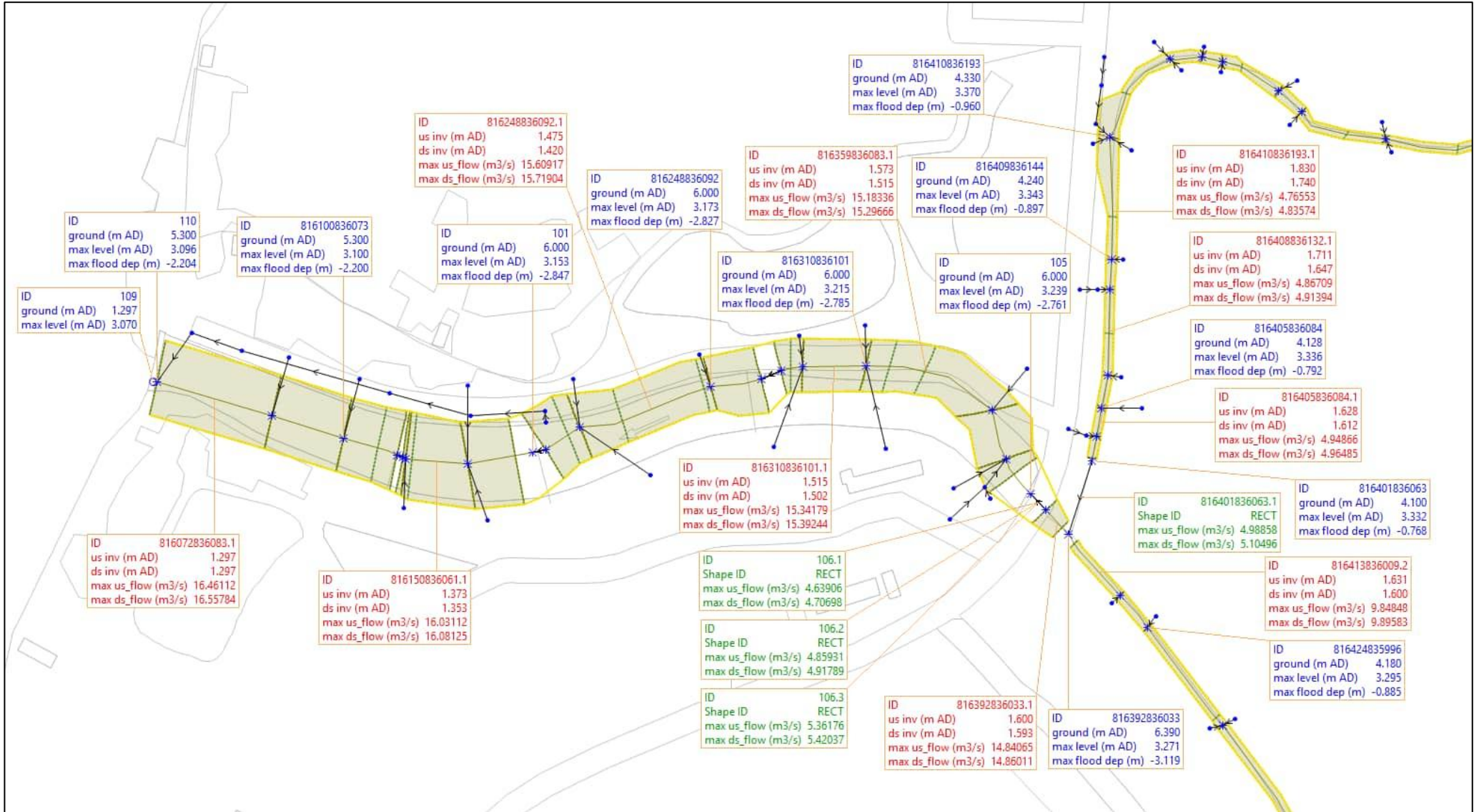
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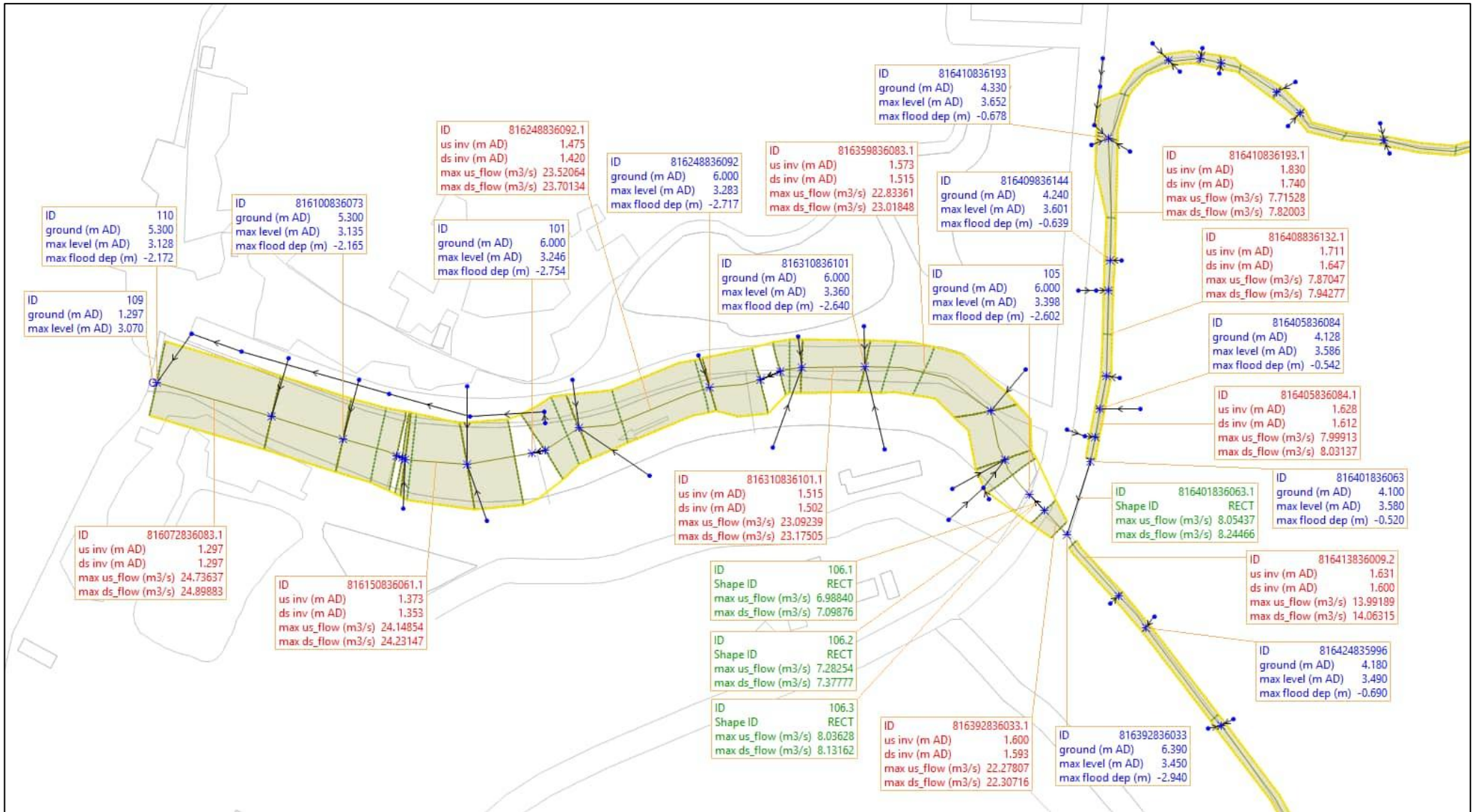
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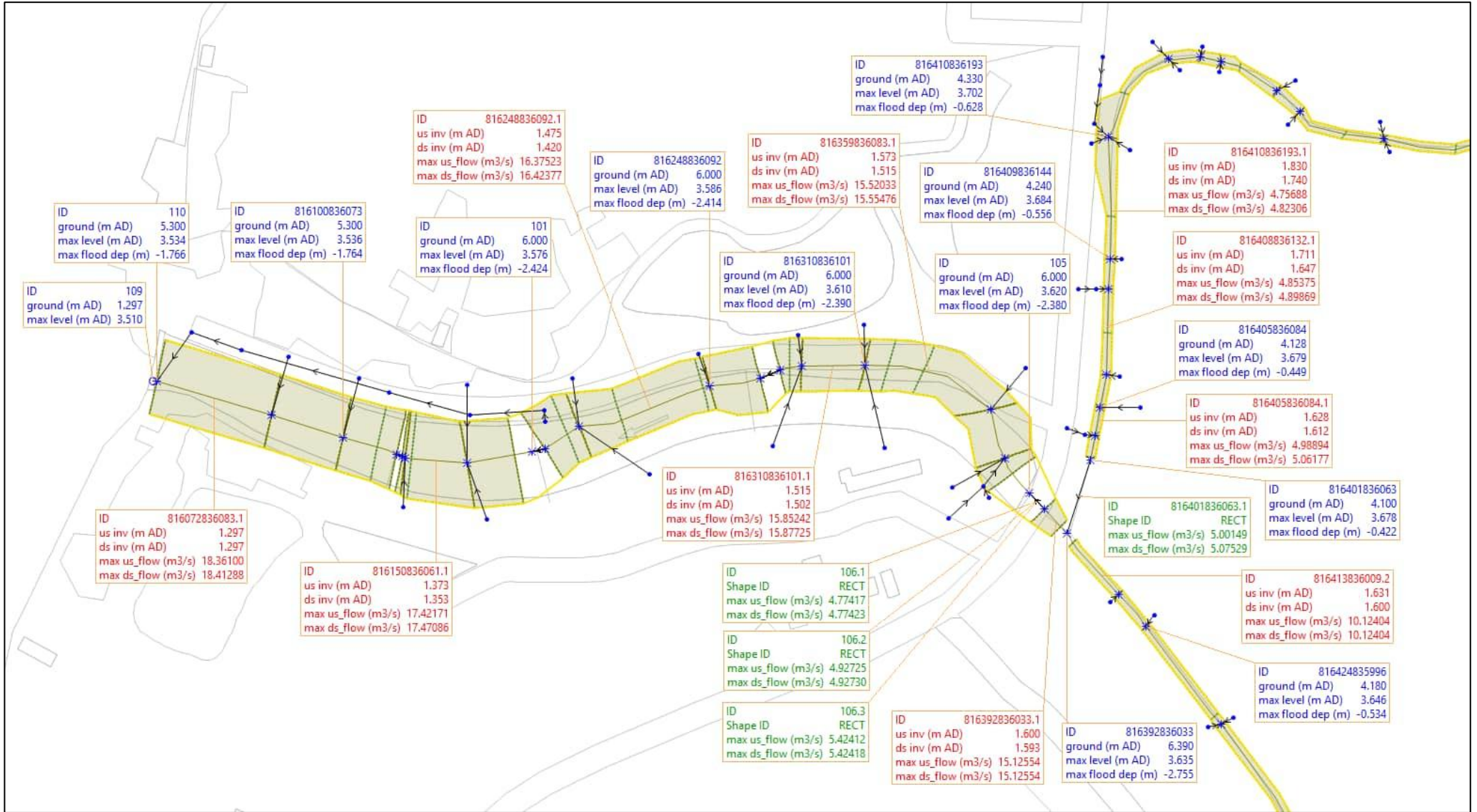
60 m

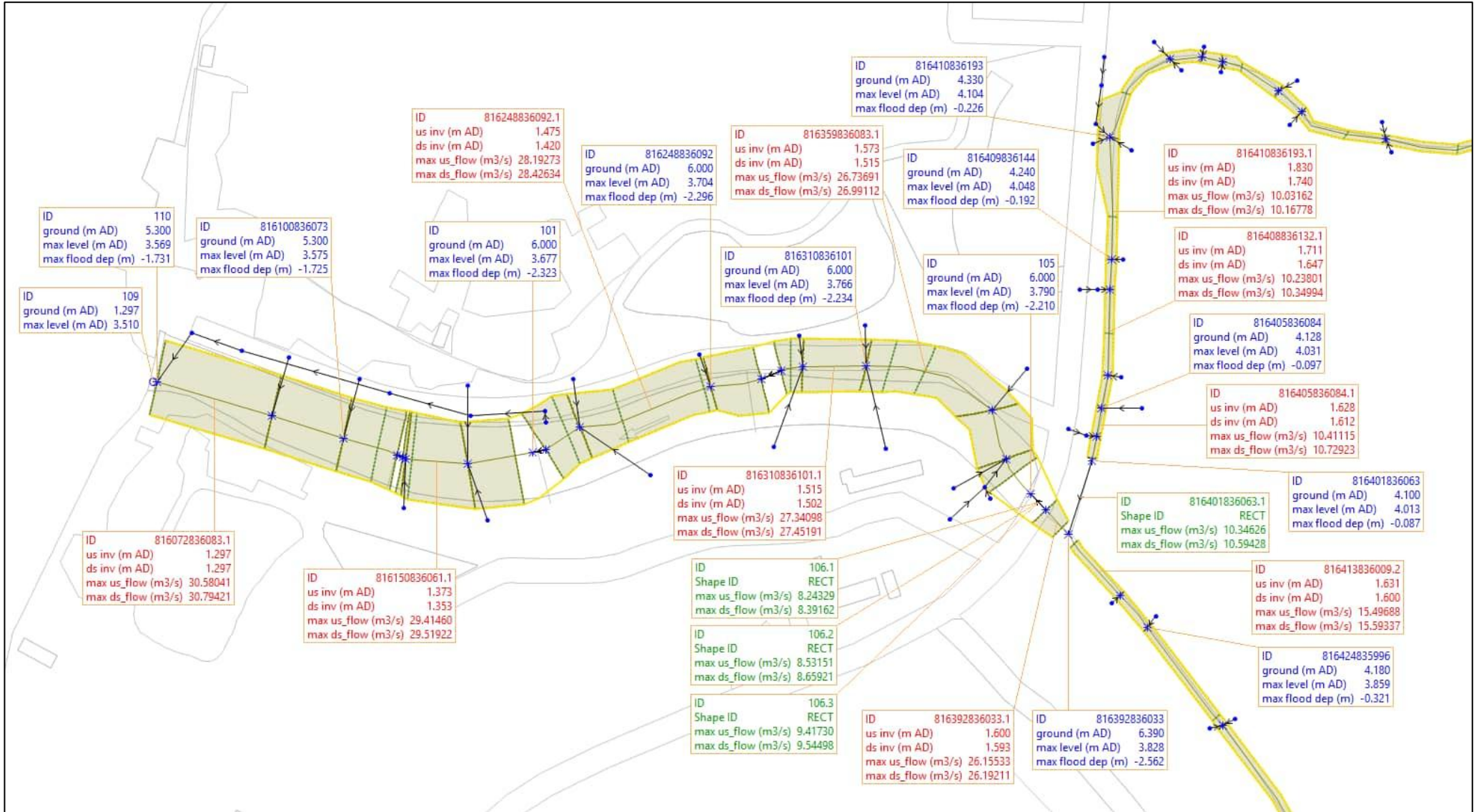


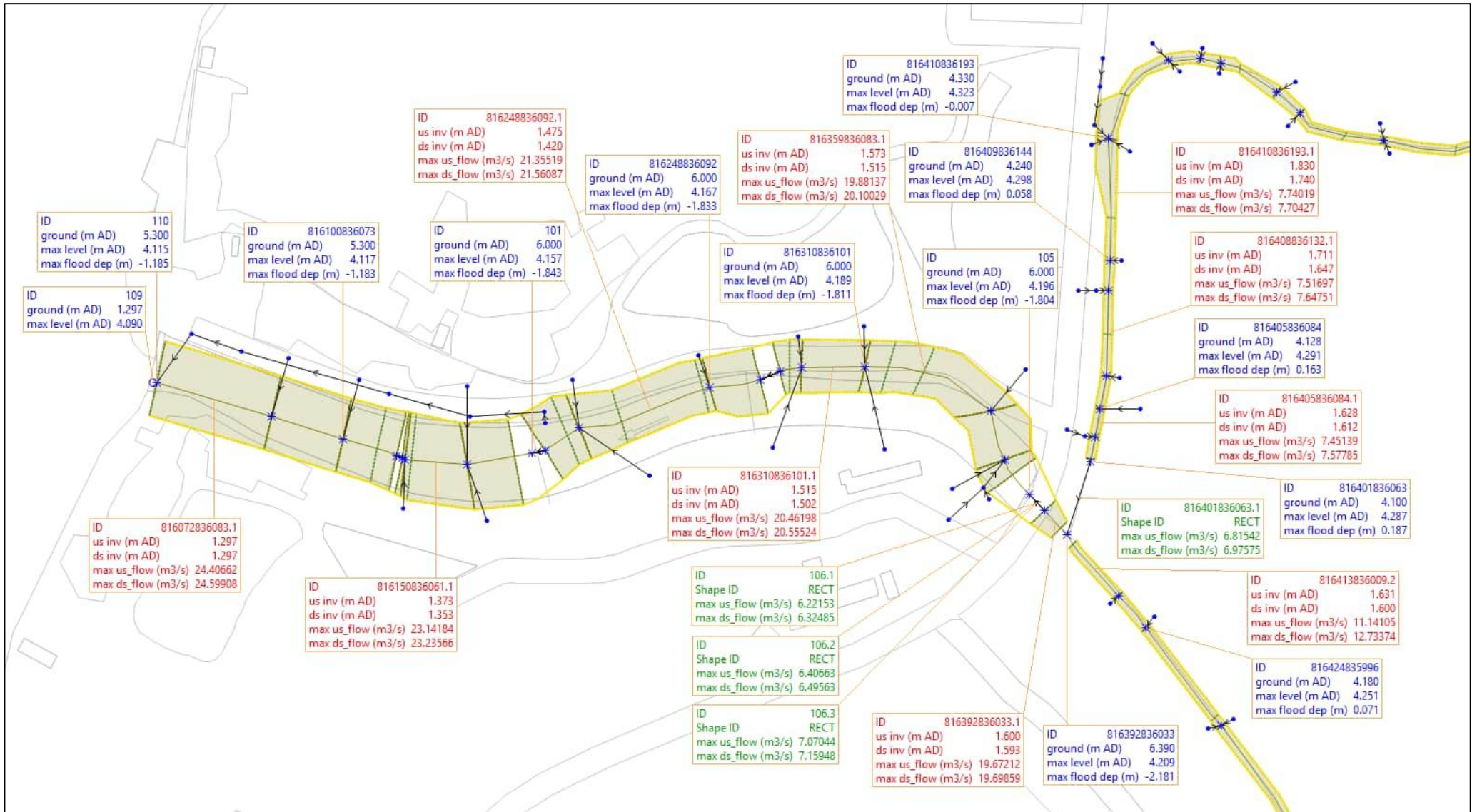
Location of Request











Annex D6

Aerial View of the Existing Site



LEGEND:
--- SITE BOUNDARY

Paved Area 1 = 129 m²

Paved Area 2 = 284 m²

Paved Area 3 = 3901 m²

Paved Area 4 = 800 m²

Paved Area 5 = 263 m²

Pre-Development:
Total Paved Area
= 129 + 284 + 3901 + 800 + 263
= 5377 m²

Paved %
= 5377/18981
= 28%
= Approximately 30%

Annex D7

Design of Proposed Detention Tank

Estimation of Runoff from the Proposed Development

6/18/2024

For Design Return Period of 1 in 50 year

Rainfall Intensity $i =$	62.9	mm/hr	(With Reference to Table 2a of SDM 2018)	(HKO Headquarters)
Rainfall Increase due to Climate Change =	16	%	(With Reference to Table 28 of SDM 2018)	(End of 21st century)
Design Allowance =	12.1	%	(With Reference to Table 31 of SDM 2018)	(Design Allowance in End of 21st century)
Rainfall Intensity $i =$	80.6	mm/hr		
Duration of Rainfall =	4	hr		

Full Site Detention

Site	Total Catchment Area A (m ²)	Unpaved Area					Paved Area					Runoff from the Catchment (Q_p+Q_n) (m ³ /s)	Total Runoff from the Proposed Development (m ³ /s)
		Percentage of Unpaved Catchment Area to Total Catchment Area (%)	Unpaved Catchment Area A_n (m ²)	Runoff Coefficient at Unpaved Area C_n	Rainfall Intensity i (mm/hr)	Runoff from Unpaved Area Q_n (m ³ /s)	Percentage of Paved Catchment Area to Total Catchment Area (%)	Paved Catchment Area A_c (m ²)	Runoff Coefficient at Paved Area C_p	Rainfall Intensity i (mm/hr)	Runoff from Paved Area Q_p (m ³ /s)		
	20,455	30	6136.5	0.35	80.6	0.05	70	14318.5	0.95	80.6	0.30	0.35	0.35

Remarks:

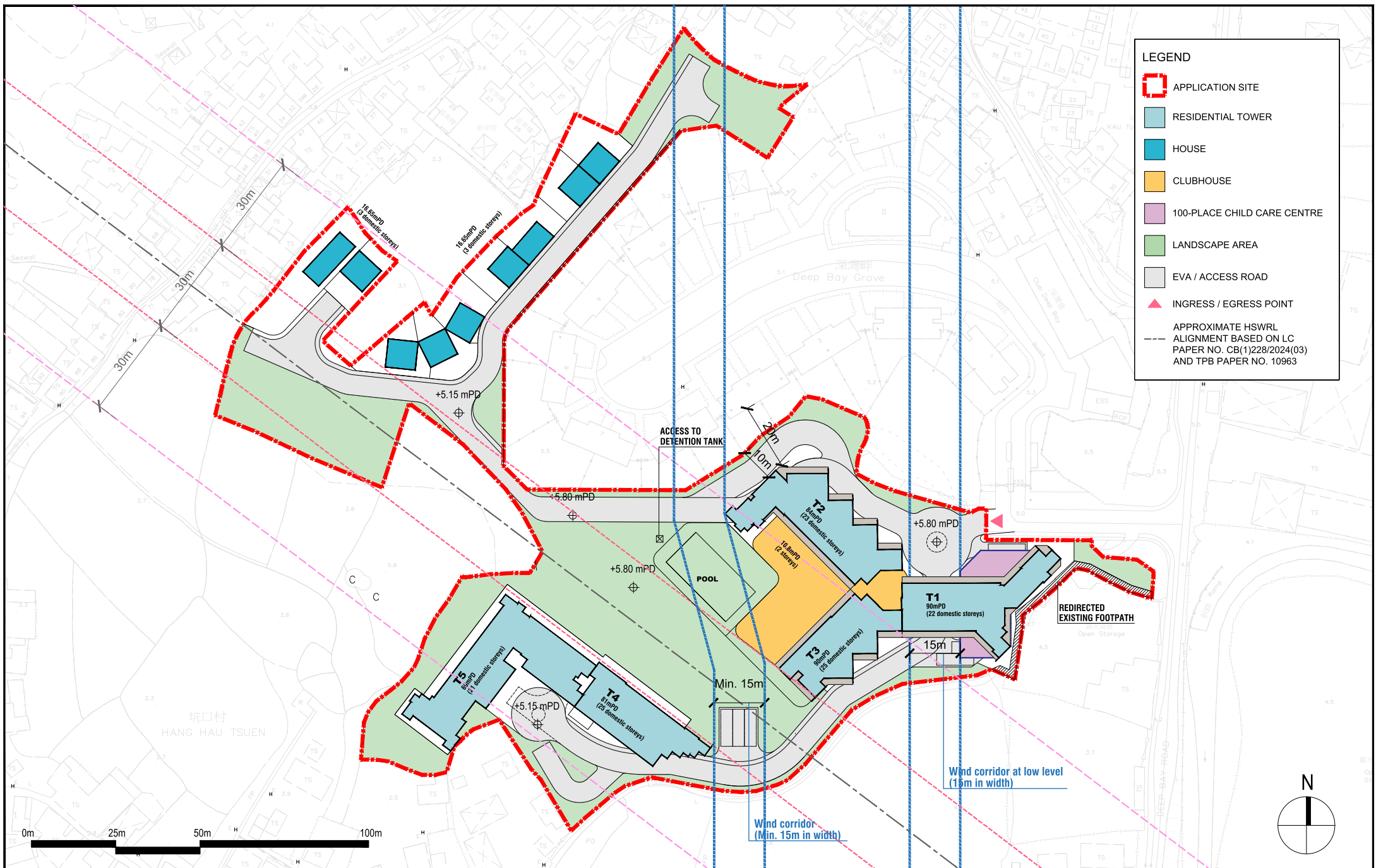
- (1) Design rainfall intensity follows Table 2d of SDM 2018.
- (2) 4-hr (240 min) rainfall duration is adopted.
- (3) Runoff $Q = 0.278 \times C \times i \times A$
- (4) Runoff coefficient for unpaved and paved area are 0.35 and 0.95 respectively.
- (5) The proposed development should have minimum 30% greenery area (70% unpaved) in accordance to Section 18, APP-152 (Practical Notes for AP/RSE/RGE), Buildings Department.

Storage Tank for Proposed Development

Runoff from the Proposed Development =	0.35	m ³ /s		
Volume Required for Additional Runoff =	5080	m ³		
Stormwater Storage Tank Volume Required =	5080	m ³		
Depth of Tank =	3.8	m		(with 200mm slab thickness)
Area of Tank Required =	1603	m ²		
Proposed Dimension of Tank =	1603	m ²	x	3.5 m (D) (With minimum 300mm freeboard included)
Stormwater Storage Tank Volume Provided =	5611	m ³	>	5080 m ³ (OK)
Discharge rate =	0.07	m ³ /s		

Annex D8

Location Plan of Proposed Detention Tank



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

REVISED SCHEMATIC DESIGN




MAR 2024
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LEGEND

 APPLICATION SITE

 CARPARK / E&M

 APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
AND TPB PAPER NO. 10963



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B3)




MAR 2024
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LEGEND

 APPLICATION SITE

 CARPARK / E&M

 APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
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Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B2)



JUN 2024
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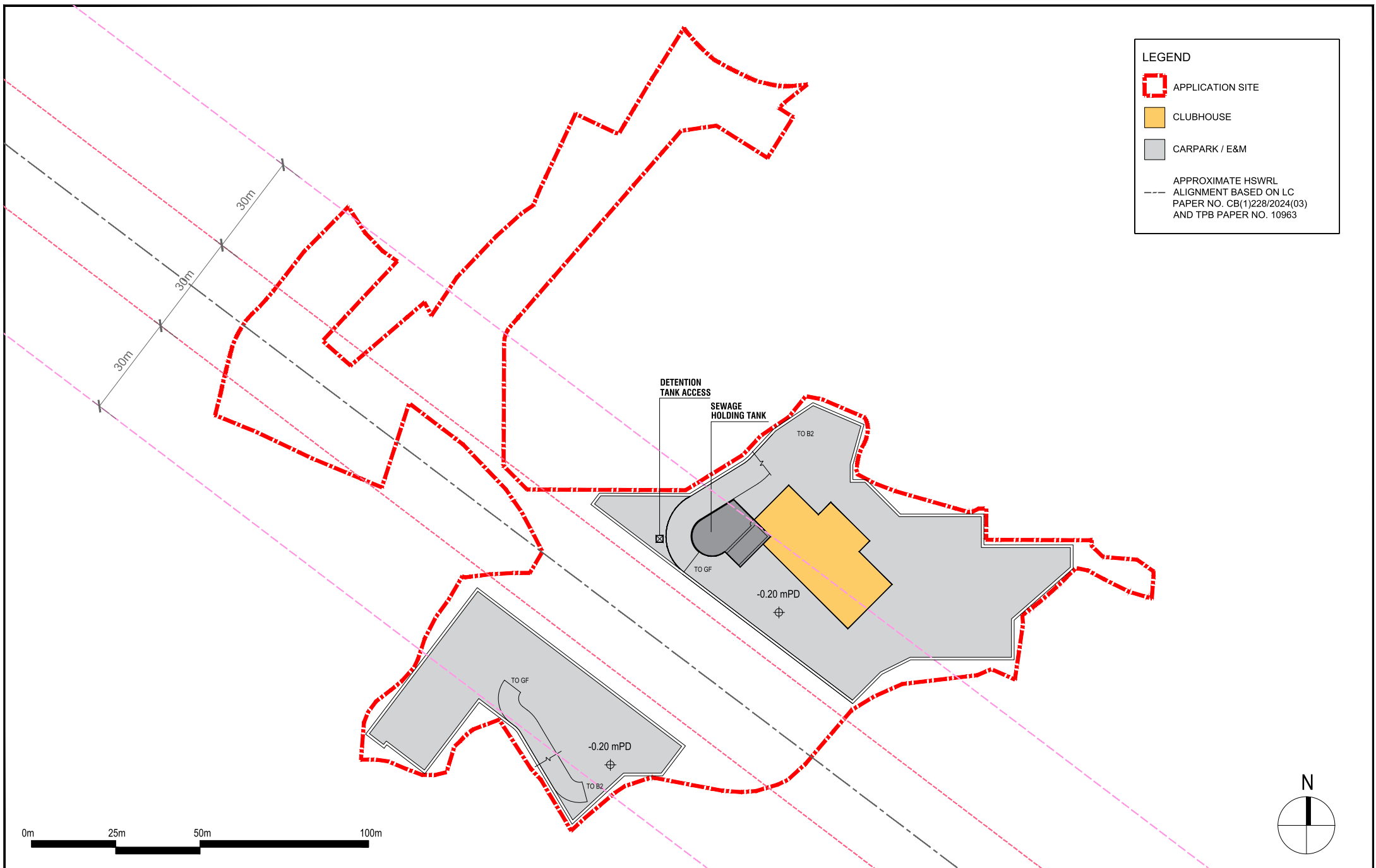
LEGEND

 APPLICATION SITE

 CLUBHOUSE

 CARPARK / E&M

--- APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
AND TPB PAPER NO. 10963



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B1)



MAR 2024
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Annex C

Replacement Pages of Environmental Assessment

FIGURES

- Figure 1.1 Application Site and Its Environ
- Figure 1.2 Master Layout Plan of Indicative Scheme
- Figure 2.1 Location of Representative Air Sensitive Receivers**
- Figure 2.2 Buffer Distance between Application Site and the nearby Road Network**
- Figure 2.3 Location of Lau Fau Shan Sewage Pumping Station
- Figure 3.1 Traffic Noise Impact Assessment Area
- Figure 3.2 Representative Noise Sensitive Receivers for Traffic Noise Impact Assessment
- Figure 4.1 Location of Industrial Noise Sources and Representative NSRs
- Figure 4.2 Recommended Noise Mitigation Measures (Architectural Fins)

APPENDICES

- Appendix 1.1 Detailed Layout of the Proposed Development**
- Appendix 1.2 Aerial Photos Description
- Appendix 2.1 DSD confirmation of no odour complaint record**
- Appendix 2.2 Junction Improvement at J3
- Appendix 2.3 TD Endorsement Letter for Road Type Classification and Traffic Forecast
- Appendix 3.1 Traffic Forecast
- Appendix 3.2 Road Traffic Noise Impact Assessment Results
- Appendix 4.1 Inventory of Potential Industrial Noise Sources
- Appendix 4.2 Industrial Noise Impact Assessment Results

ASR ID	Descriptions	Use	No. of Storeys	Approximate Minimum Horizontal Distance to Project Site (m)
A3	Village Houses and Temporary Structures near Hang Hau Tsuen	Residential	1-3	<5
A4	Factory of 浩華	Industrial	N/A	<5
Planned ASR				
A-P1	Proposed Development	Residential/ Recreational	2 - 26	N/A

2.3.3 The proposed development is an air sensitive receiver. The potential air quality impacts affecting the proposed development are identified and discussed below.

2.4 Air Quality Impact Assessment

Construction Phase

2.4.1 During the construction of the proposed residential development, potential air quality impact on the nearby existing ASRs is related to dust nuisance from material handling, wind erosion of exposed area, gaseous emissions (sulphur dioxide (SO₂) and nitrogen dioxide (NO₂)) and PM emissions (respirable suspended particulates (PM₁₀) and fine suspended particulates (PM_{2.5})) from construction equipment and vehicles.

2.4.2 The total area of the Application Site is about 20,455 m². Construction works will be divided into phases and hence the size of active workforce at one time will be reduced. It is estimated that the area of excavation is about 8,489 m², and the amount of excavated material to be handled is around 400 m³ per day. As the project is still in early planning stage, detailed construction information is not available at this stage. However, considering the scale of excavation work required and with the implementation of dust control measures recommended in Section 2.5, fugitive dust emissions would be controlled and no adverse dust impact onto the nearby existing ASRs is expected. A dust monitoring and audit programme will be implemented during the construction stage to ensure that the nearby ASRs will not be subject to adverse construction phase air quality impact. The monitoring location will be chosen at representative ASRs, such as Deep Bay Grove (A1) and will be confirmed during the detailed design stage.

2.4.3 For construction plants to be used on site, requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation will be followed to control potential emissions from non-road mobile machinery during construction phase. Therefore, the air quality impact arising from gaseous and PM emissions by construction plants is considered minimal.

Operation Phase

2.4.4 Since the proposed development is for residential use, there will be no particular air pollution sources anticipated during operation of the proposed development. Proper refuse collection points will be provided and away from any existing and planned ASRs as far as possible, and collection by licensed contractor on regular basis. Since the proposed residential development is still in early planning stage, the exhaust outlets of the carparks, detention tank, and sewage holding tank, have not yet been determined. The proposed carpark is for parking of private vehicles and will be designed and operated to meet the requirements in EPD's ProPECC PN 2/96 on Control of Air Pollution in Car Parks. The exhaust (if any) of the proposed car park, and sewage-related facilities shall be located away from any nearby ASRs as far as possible, e.g.

facing south of the site boundary. The indicative location of exhaust outlets for carparks and the sewage-related facilities, subject to review during detailed design stage, are shown in **Figure 2.1**. The potential air quality impacts on the proposed development are discussed below.

Vehicular Emissions

- 2.4.5 Vehicular emissions from the adjacent roads could be a potential source of air pollution affecting the proposed development.
- 2.4.6 Deep Bay Road and the access road in the immediate vicinity of the Application Site are categorised as Local Distributors (LD). Endorsement record from Transport Department on the road category is appended in **Appendix 2.3**. According to **Table 2.1**, a buffer distance of >5m is required between the kerb side of a LD and the air sensitive uses.
- 2.4.7 Building setback of more than 5m from road kerb of the access road and Deep Bay Road has been incorporated into the design of the proposed development (**Figure 2.2** refers). No air sensitive uses, including openable windows, fresh air intake of mechanical ventilation and recreational uses in the open area, shall be located within the 5m buffer zone. As the Application Site has incorporated adequate setback distance and can satisfy the above-mentioned buffer distance requirement in HKPSG, no adverse air quality impact is therefore anticipated.
- 2.4.8 According to the recommendation of Traffic Impact Assessment of this Application, junction improvement at the junction of Tin Ying Road and Tin Wah Road is proposed (see **Appendix 2.2**). The proposed improvement will modify the turning lanes at the junction and will lead to minor setback of road kerb of westbound Tin Wah Road. According to the approved EIA Report for Hung Shui Kiu Development Area (Register No.: AEIAR-203/2016), Tin Wah Road is categorised as a District Distributor. As the scale of improvement work is small and there are no air sensitive receivers identified within 10m of the road kerb modification location, no adverse air quality impact is anticipated. It should be noted that the junction improvement works is a recommendation and should be subject to further review in view of the ongoing studies Q:\Projects\NWDLFSRDEI00\04 Deliverables\01 EA Report\04 PDF\R8266_v7.0 for the HSK/HT NDA development and the Tin Wah Road Public Housing Site development carried out by CEDD. The design and responsible party for the improvement work is subject to the findings of the ongoing development studies in the area.

Odour from Sewage Pumping Station

- 2.4.9 Lau Fau Shan Sewage Pumping Station (LFS SPS), which is located at approximately 130m to the southeast of the Application Site as shown in **Figure 2.3**, is a source of potential odour impact. Based on the site visits conducted in **July 2021 and September 2023**, odour was not detected near the LFS SPS or along Deep Bay Road. Odour or air nuisances arising from the nearby brownfield operations, godown, workshops or BBQ site were not identified. As advised by the Drainage Services Department (DSD) (see **Appendix 2.1**), LFS SPS has been installed and operated with a deodorising system at the exhaust outlet with odour removal efficiency of 99.5%. No odour complaint record has been received. Therefore, adverse odour impact on the proposed development is not anticipated.

Industrial Emissions

- 2.4.10 A chimney survey was conducted in **September 2023**. No active chimneys were identified within 200m of the Application Site. Air quality impact related to chimney emissions is not anticipated.

2.5 Mitigation Measure and Recommendations

Construction Phase

- 2.5.1 Dust control measures stipulated under the Air Pollution Control (Construction Dust) Regulation, together with proper site management/practice and good housekeeping are required to mitigate the potential dust impacts on the nearby ASRs. Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation will also be followed to control potential emissions from non-road mobile machinery during construction phase. "Recommended Pollution Control Clauses for Construction Contracts" available on EPD website also contains the recommended control measures to be implemented during construction. The control measures detailed below shall also be incorporated into the Contract Specification where practicable as an integral part of good construction practices:
- All demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles shall be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition;
 - Where a site boundary adjoins a road, streets or other accesses to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit;
 - The working area of any excavation or earth moving operation shall be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet;
 - Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather;
 - Use of frequent watering for particularly dusty construction areas and areas close to ASRs;
 - Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines;
 - Open stockpiles (if any) shall be avoided or covered. Prevent placing dusty material storage piles near ASRs;
 - Any stockpile of dusty materials shall be either covered entirely by impervious sheeting; placed in an area sheltered on the top and the 3 sides; or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet.
 - Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations;
 - Establishment and use of vehicle wheel and body washing facilities at the exit points of the Site;
 - Imposition of speed controls for vehicles on unpaved site roads, 8 km per hour is the recommended limit;

- Routing of vehicles and position of construction plant should be at the maximum possible distance from ASRs;
- Every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;
- Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed;
- Cement, PFA or any other dusty materials collected by fabric filters or other air pollution control system or equipment shall be disposed of in totally enclosed containers;
- Silos used for the storage of cement or dry pulverized fuel ash shall not be overfilled;
- Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system;
- The electric power supply shall be provided for on-site machinery as far as practicable and diesel generators shall be avoided to minimize the gaseous and PM emissions;
- Avoid using exempted NRMMS as far as practicable;
- Locate all the dusty activities away from any nearby ASRs as far as practicable; and
- Erection of higher hoarding at the locations with ASRs in immediate proximity to the project site boundary.

2.6 Conclusion

- 2.6.1 With the implementation of mitigation measures as defined in the Air Pollution Control (Construction Dust) regulation and good site practices as stated in **Section 2.5.1**, no adverse construction **air quality** impact is anticipated.
- 2.6.2 Adequate building setback from the road kerb of the access road and Deep Bay Road in accordance with the buffer distance requirements stated in the HKPSG has been incorporated into the design of the proposed development. No air sensitive uses, including openable windows, fresh air intake of mechanical ventilation and recreational uses in the open area, shall be located within the 5m buffer zone. No unacceptable air quality impact due to vehicular emissions is expected.
- 2.6.3 Considering the separation distance between the Application Site and the LFS SPS, the deodouring system installed and operated at the LFS SPS and no odour complaint record of LFS SPS received by DSD, potential odour impact on the proposed development is not anticipated.

Noise Source	Description	Operation Hours		Sound power levels, dB(A)
		Daytime/ Evening	Night-time	
S12a	Forklift at 全逸	Y	N	91
S12b	Welding at 浩華	Y	N	78
S13a	Forklift at 浩華	Y	Y	91
S13b	Forklift at Open Storage for Goods	Y	Y	91

- 4.3.2 Noise was not detected outside Lau Fau Shan Sewage Pumping Station and thus it is not identified as a source for assessment.
- 4.3.3 As the area bounded by Lau Fau Shan Road and Deep Bay Road falls within the HSK/HT NDA, some of the current industrial operations will be replaced by planned commercial and residential uses in future. Hence, impact from some industrial noise sources identified for assessment in this EA will no longer exist in future following land resumption and development under Hung Shui Kiu/Ha Tsuen NDA Development.

Planned Fixed Noise Sources

- 4.3.4 Central fresh air supply system together with split type air conditioning system would be adopted for the Child Care Centre. Any fresh air supply/exhaust would be designed to face away from noise sensitive receivers at nearby premises (i.e., Deep Bay Grove). The design of any fixed noise source will comply with the noise standards stipulated in Chapter 9 of the HKPSG and the Noise Control Ordinance. However, as the Proposed Development is still at an early stage, the proposed location and design of any planned fixed noise source as well as the required mitigation measures (if any) are subject to further study during the detailed design stage.
- 4.3.5 To ensure the fixed plant noise generated by the Proposed Development would not cause excessive impact to nearby noise sensitive receivers, potential fixed noise sources within the Proposed Development shall be properly designed to meet the relevant noise criteria as stipulated in Chapter 9 of the HKPSG and NCO. Provisions shall be made to control the fixed noise sources by suitable at source noise control measures such as quieter plant, silencers and acoustic linings when necessary. As such, it is anticipated that the fixed plant noise impact on the surrounding NSRs due to the operation of the Proposed Development will not exceed the relevant noise criteria under the HKPSG and NCO.

4.4 Noise Sensitive Receivers for Industrial Noise Assessment

- 4.4.1 The planned residential towers within the Application Site are NSRs of potential industrial noise impact. Representative assessment points have been assigned to the residential units overlooking the industrial premises. The NSRs are selected at 1m away from the façade of openable window for ventilation purpose. As the Child Care Centre will be provided with central fresh air supply system together with split type air conditioning system and do not rely on openable windows for ventilation, it is not considered an NSR for industrial noise impact assessment. The locations and details of the representative NSRs selected for assessment are provided in **Figures 4.1b** and **Table 4.3** below, respectively.

5. OVERALL CONCLUSION

- 5.1.1 The potential air quality and noise impacts that may arise from the proposed development have been assessed.
- 5.1.2 For air quality impact, construction phase impact, vehicular emission impact, odour from the proposed SPS, and industrial emission impact have been reviewed. With mitigation measures, such as dust control measures, proper site management/practice and good housekeeping, peripheral setback from the site boundaries and provision of adequate buffer distances, incorporated into the design of the development, no adverse air quality impact to the nearby ASRs and proposed development is anticipated.
- 5.1.3 For noise impact, road traffic noise and industrial noise impacts have been reviewed. With the adoption of the proposed noise mitigation measures including single aspect design and provision of architectural fins, the predicted noise levels at the proposed development due to the road traffic and industrial noise can fully comply with the relevant noise criteria, and no unacceptable impact is therefore anticipated. With conformed design and provision of adequate mitigation measures for any planned fixed noise sources, no adverse noise impact is anticipated from the planned fixed noise sources.

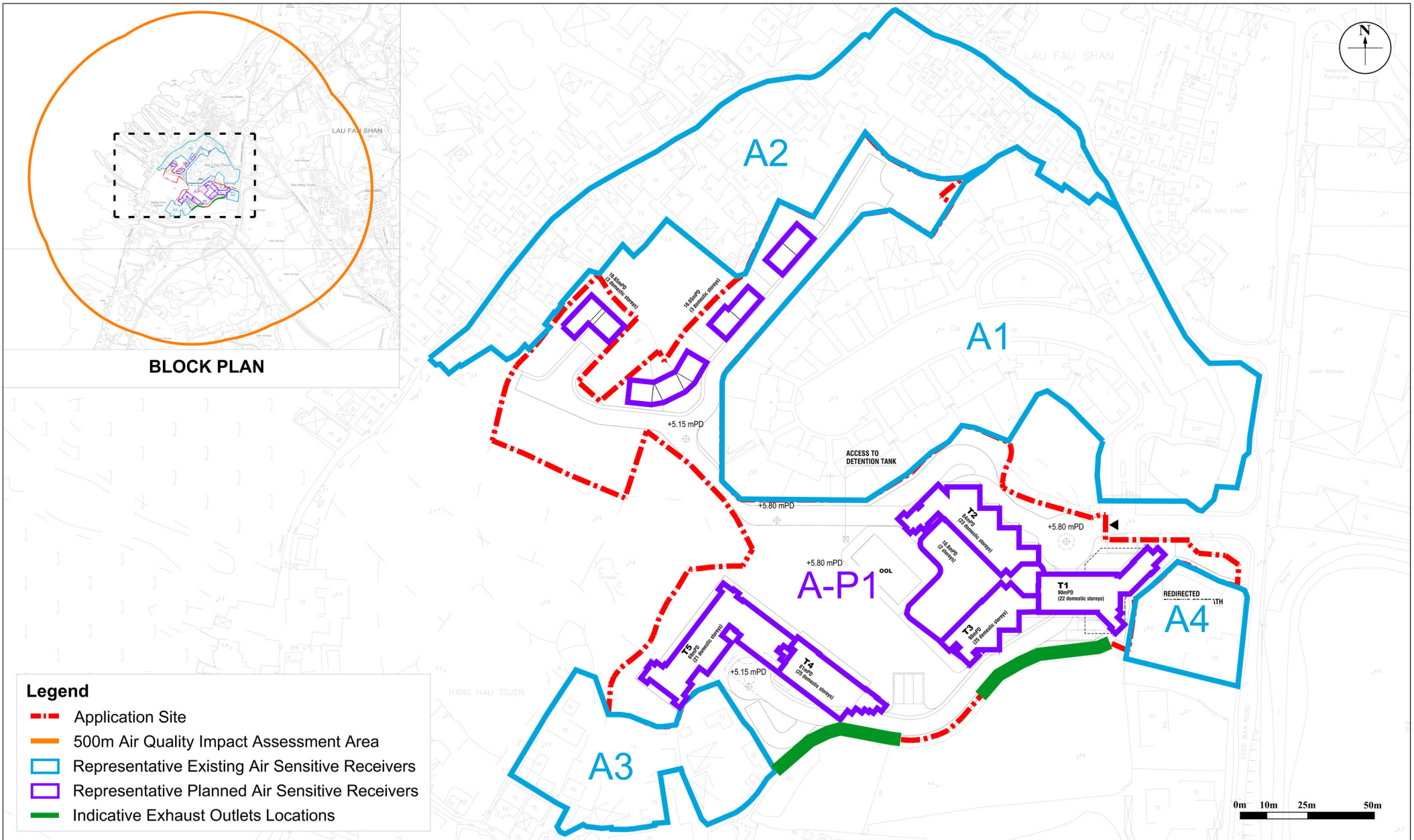


Figure: 2.1	RAMBOLL
Title: Location of Representative Air Sensitive Receivers	Drawn by: YM
	Checked by: KY
Project: Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories	Rev.: 7.0
	Date: Jun 2024

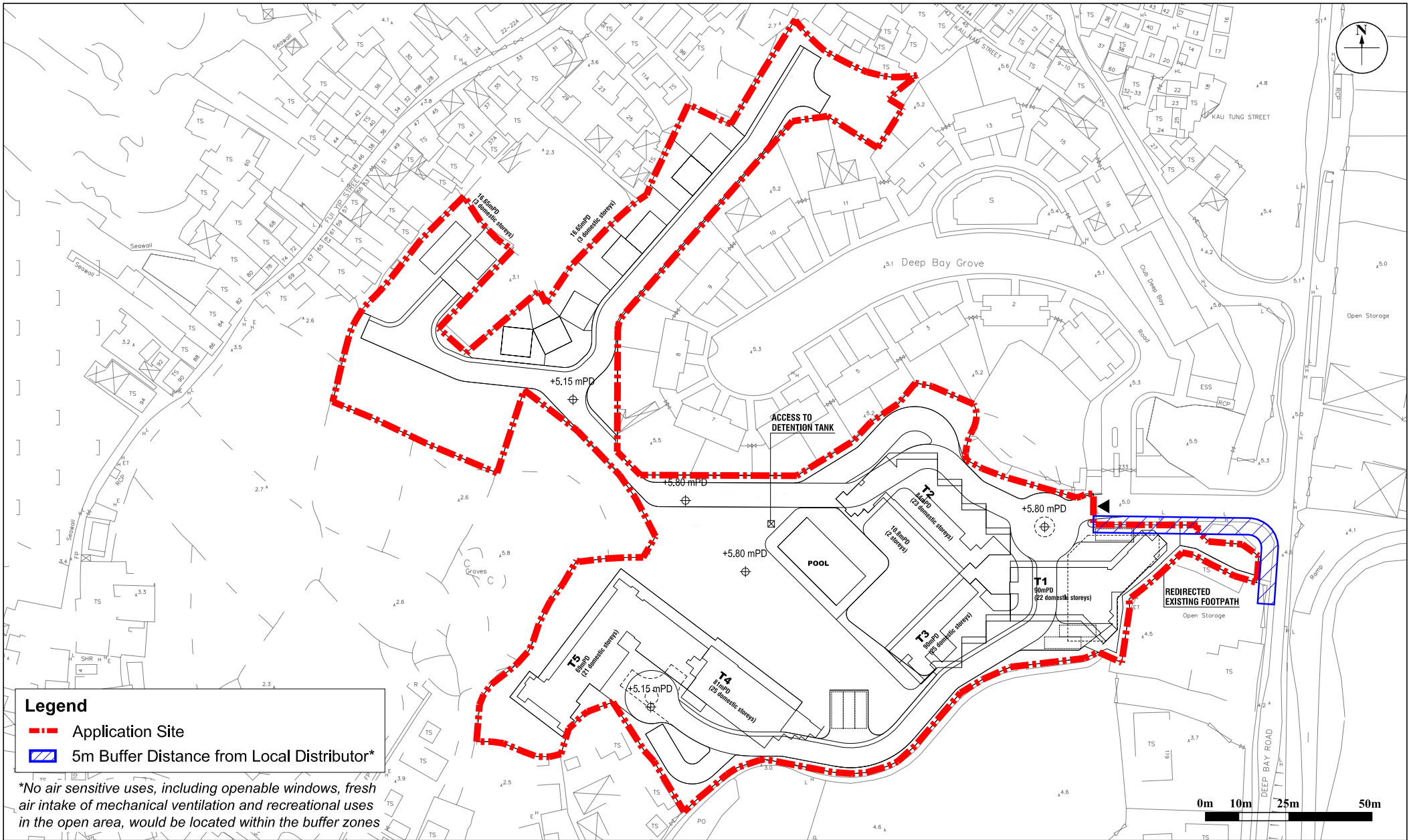


Figure: 2.2

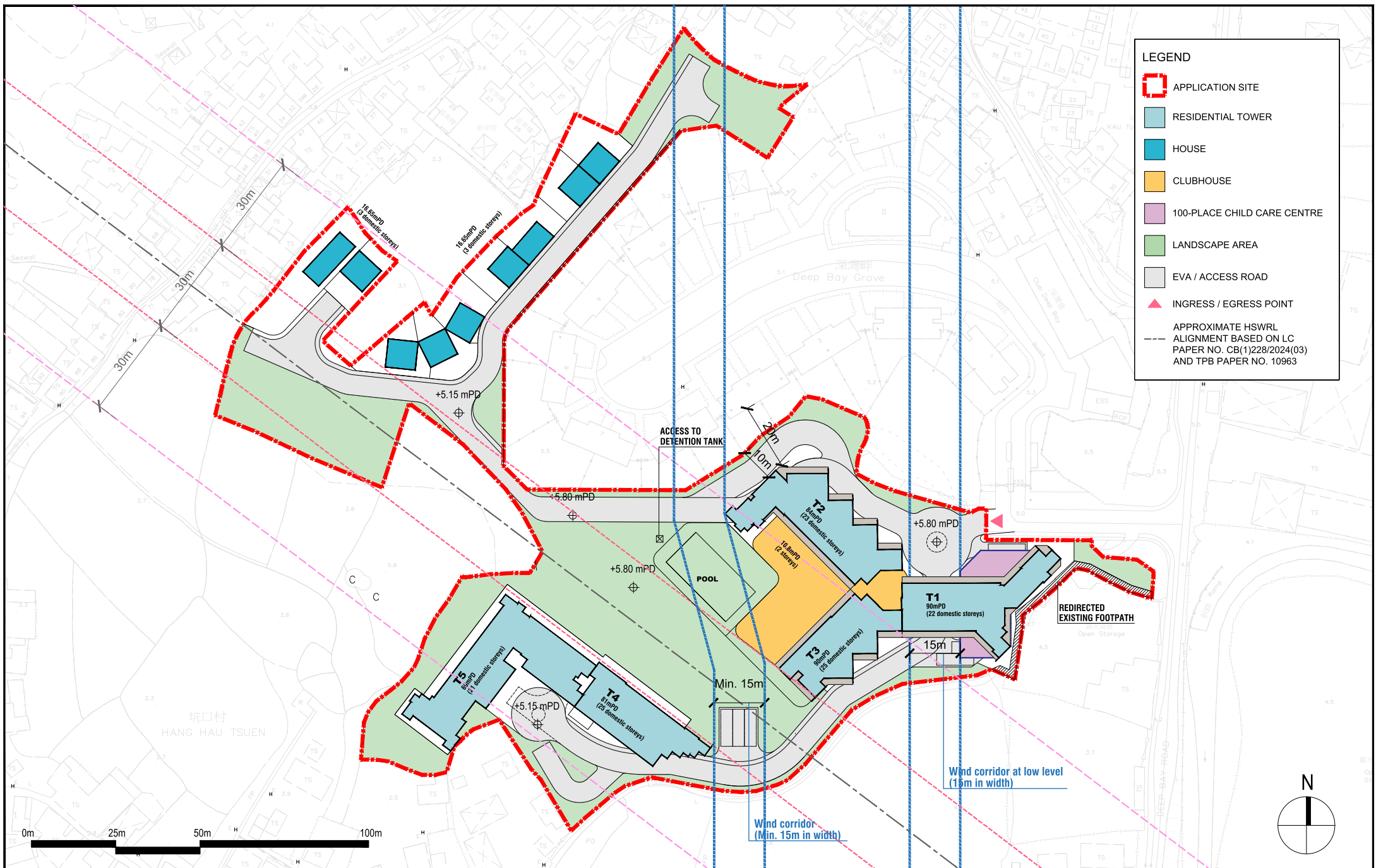
Title: Buffer Distance from Surrounding Road Networks

Project: Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

RAMBOLL	
Drawn by:	YM
Checked by:	KY
Rev.:	7.0
Date:	Jun 2024

Appendix 1.1

Detailed Layout of the Proposed Development



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories


REVISED SCHEMATIC DESIGN



LEGEND

 APPLICATION SITE

 CARPARK / E&M

 APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
AND TPB PAPER NO. 10963



Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B3)



MAR 2024
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LEGEND

 APPLICATION SITE

 CARPARK / E&M

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INDICATIVE BASEMENT PLAN (B2)



JUN 2024
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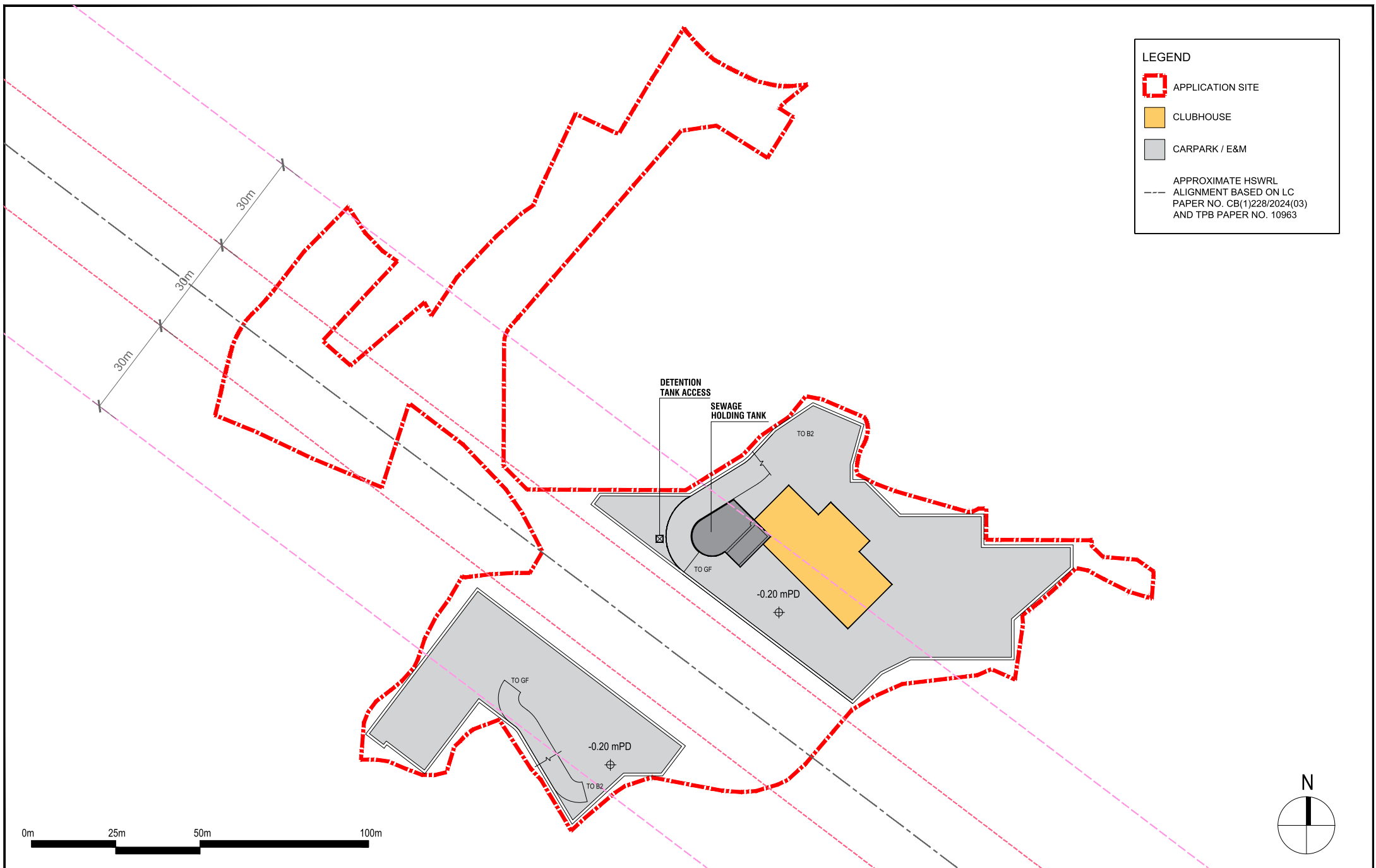
LEGEND

 APPLICATION SITE

 CLUBHOUSE

 CARPARK / E&M

--- APPROXIMATE HSWRL
ALIGNMENT BASED ON LC
PAPER NO. CB(1)228/2024(03)
AND TPB PAPER NO. 10963

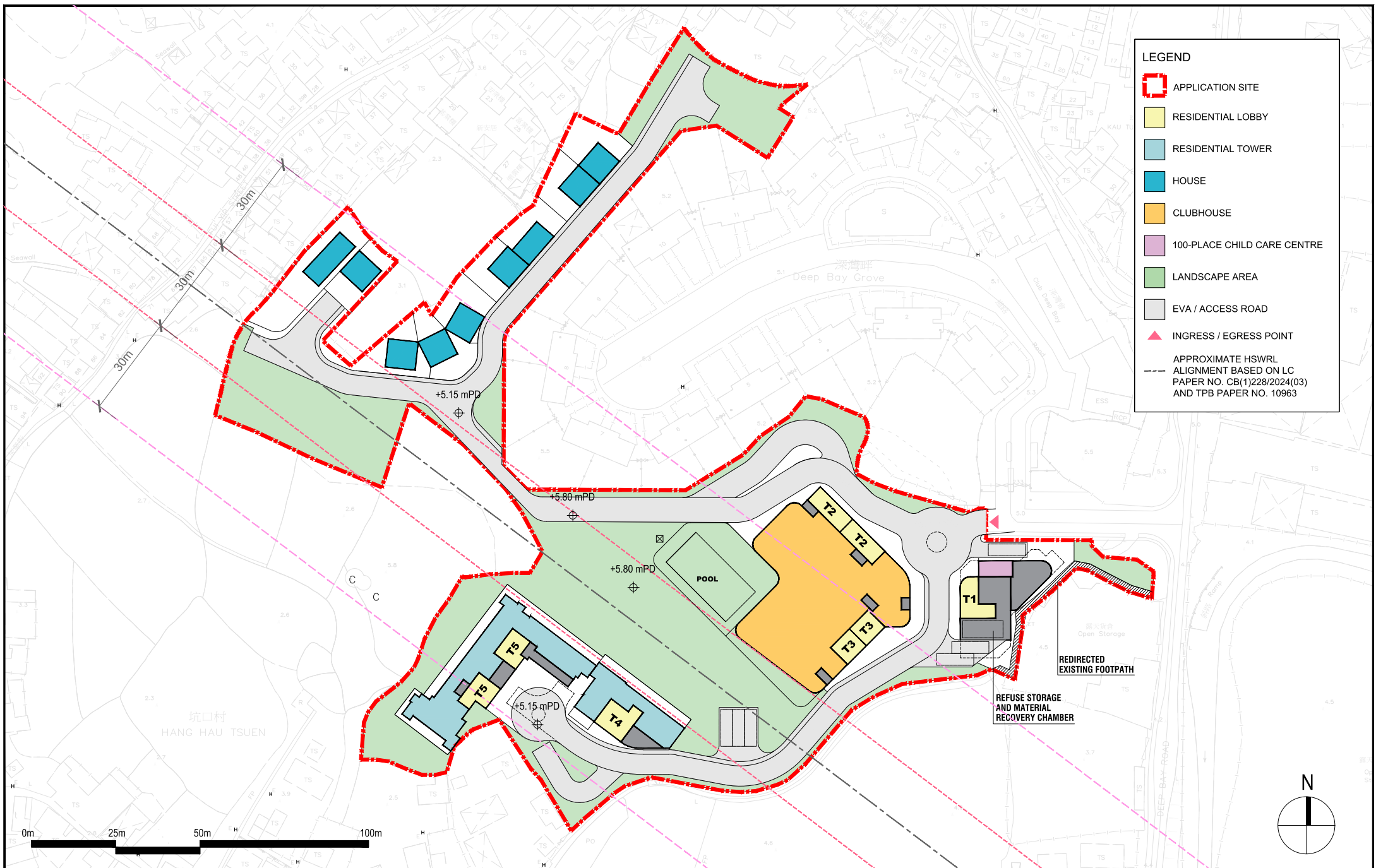


Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE BASEMENT PLAN (B1)



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LEGEND

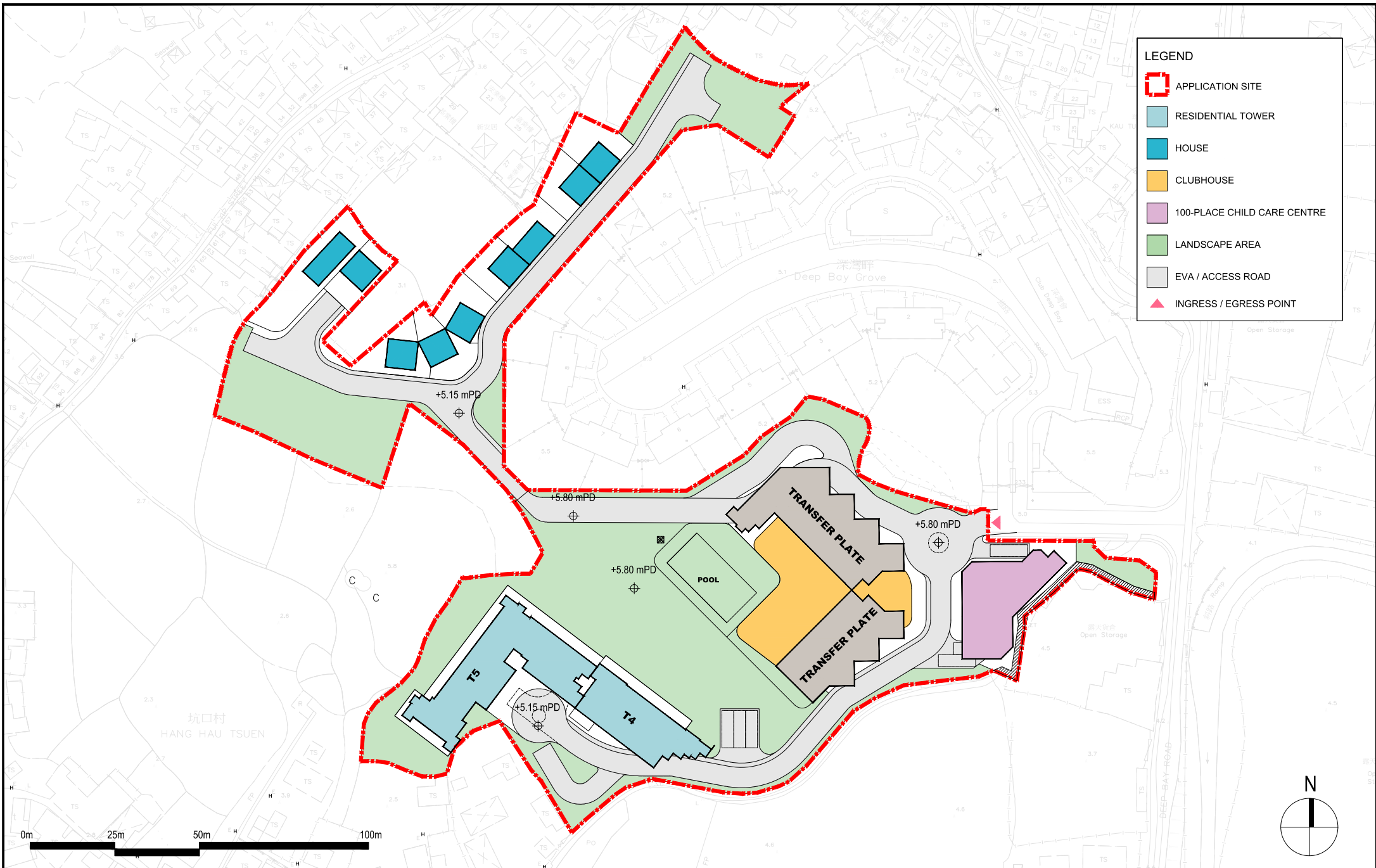
- APPLICATION SITE
- RESIDENTIAL LOBBY
- RESIDENTIAL TOWER
- HOUSE
- CLUBHOUSE
- 100-PLACE CHILD CARE CENTRE
- LANDSCAPE AREA
- EVA / ACCESS ROAD
- INGRESS / EGRESS POINT
- APPROXIMATE HSWRL ALIGNMENT BASED ON LC PAPER NO. CB(1)228/2024(03) AND TPB PAPER NO. 10963

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE GROUND FLOOR PLAN

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LEGEND

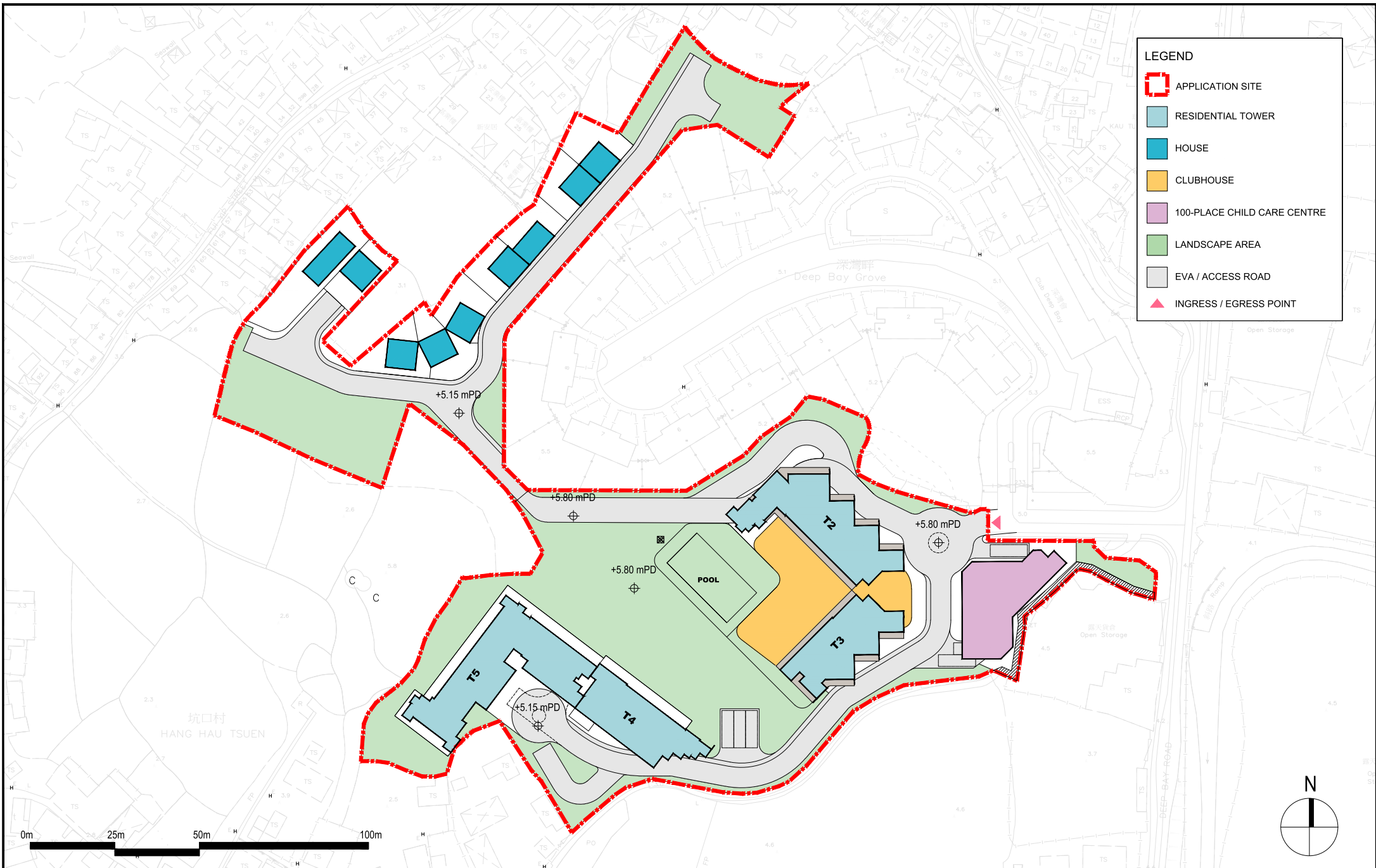
- APPLICATION SITE
- RESIDENTIAL TOWER
- HOUSE
- CLUBHOUSE
- 100-PLACE CHILD CARE CENTRE
- LANDSCAPE AREA
- EVA / ACCESS ROAD
- INGRESS / EGRESS POINT

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE FIRST FLOOR PLAN

MAR 2024
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LWK
+PARTNERS

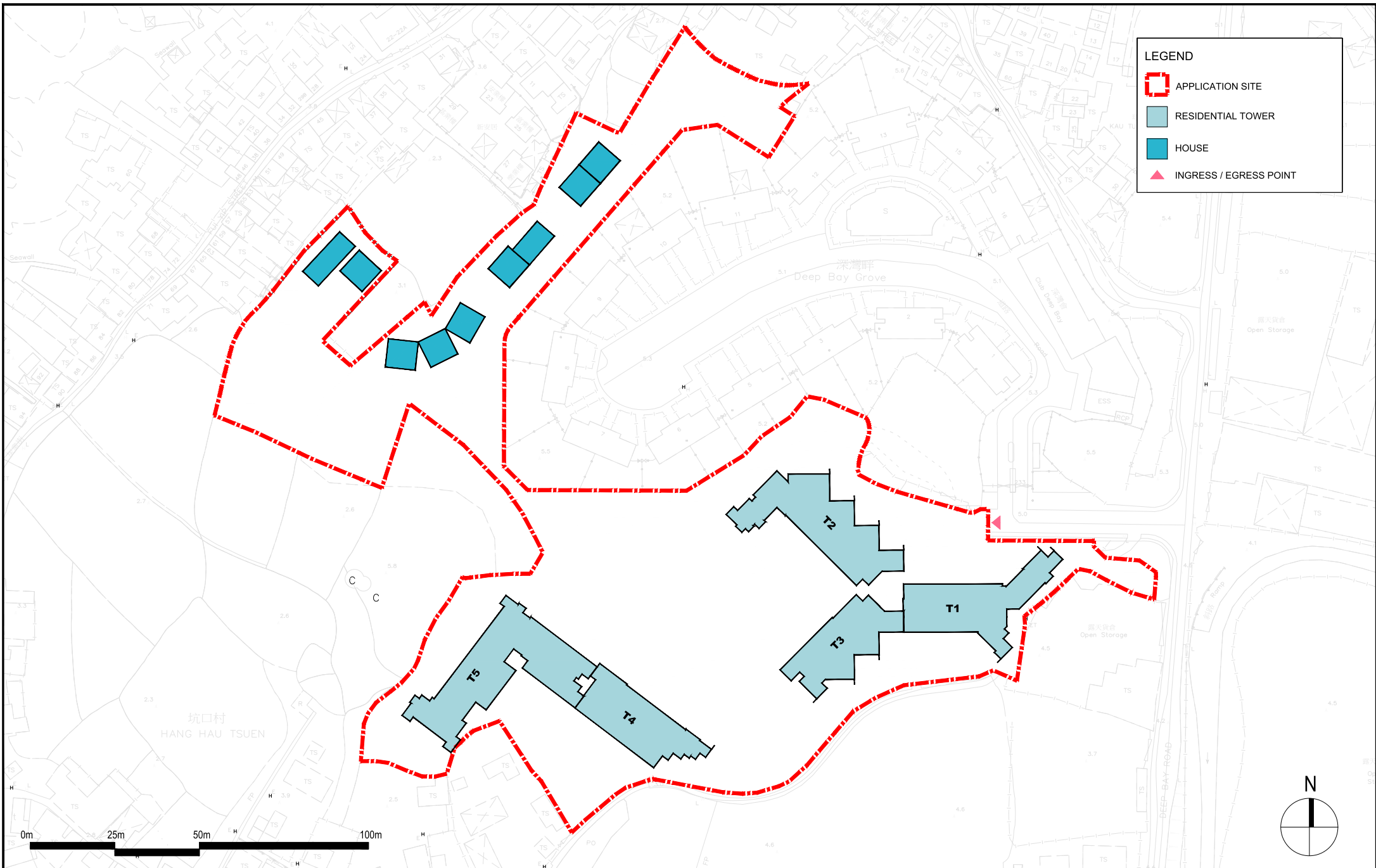


Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories





INDICATIVE SECOND FLOOR PLAN

MAR 2024
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LWK
+PARTNERS



LEGEND

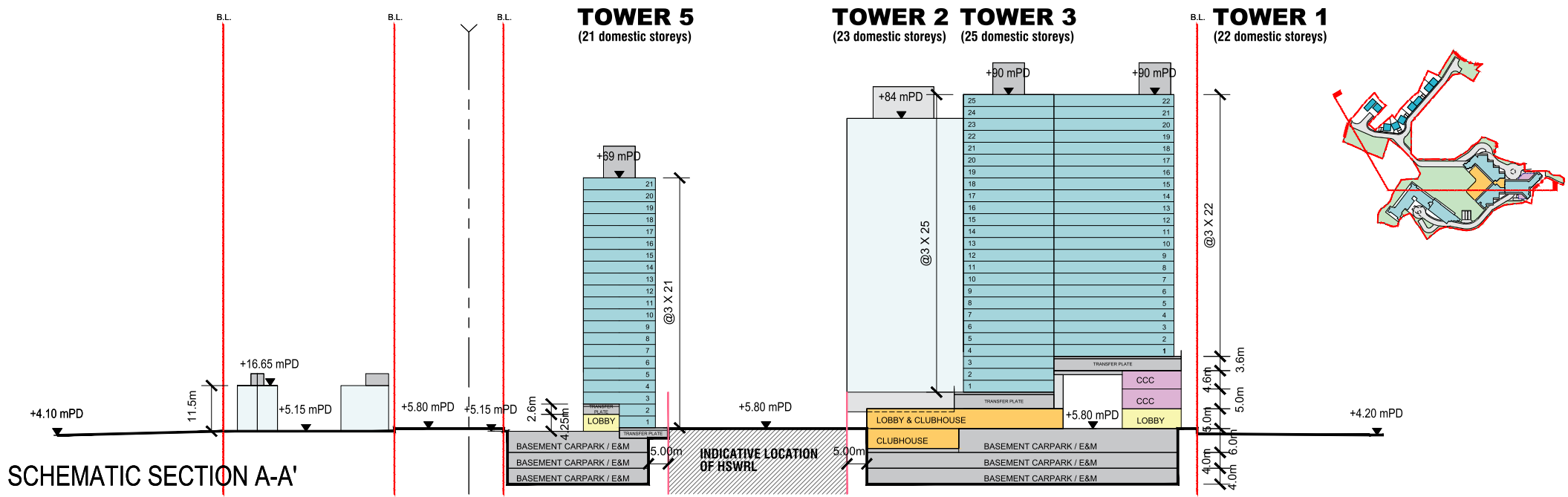
-  APPLICATION SITE
-  RESIDENTIAL TOWER
-  HOUSE
-  INGRESS / EGRESS POINT

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

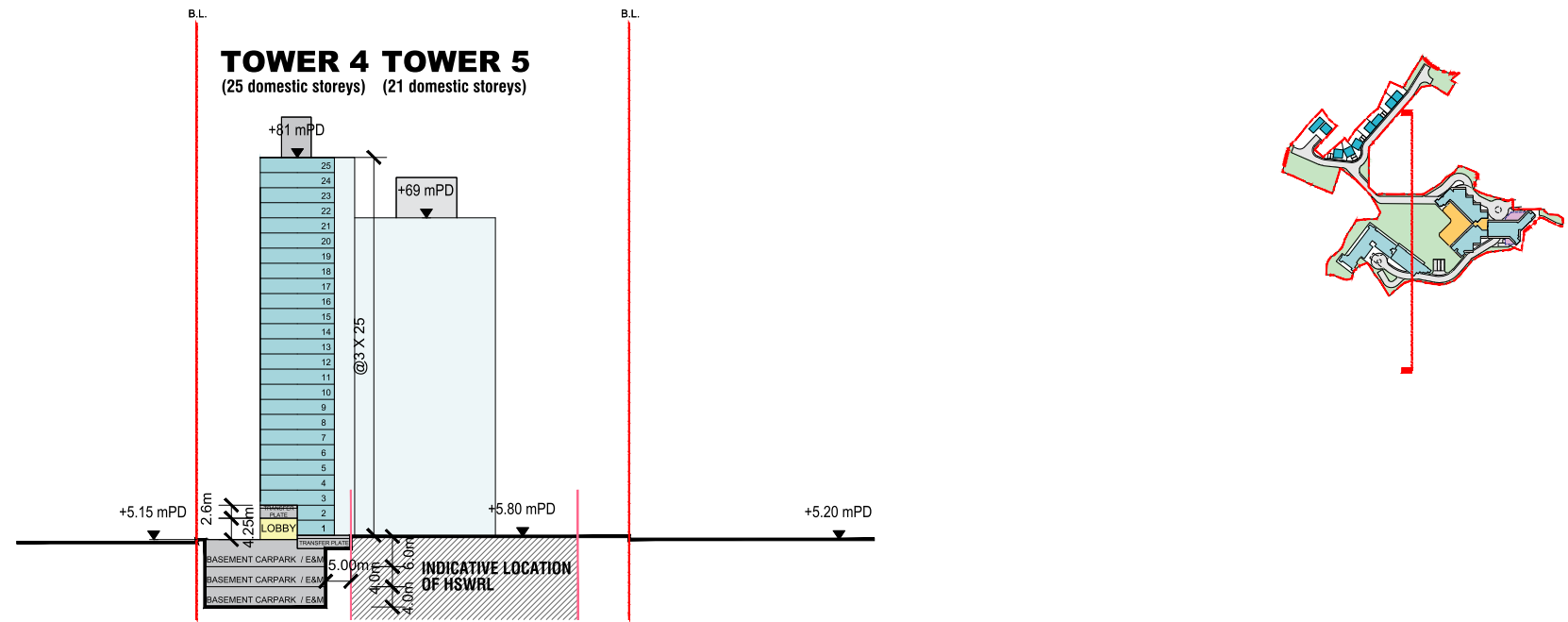
INDICATIVE TYPICAL FLOOR PLAN



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SCHMATIC SECTION A-A'



SCHMATIC SECTION B-B'

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

SCHMATIC SECTIONS

MAR 2024
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Appendix 2.1

DSD confirmation of no odour complaint record

Katie Yu

From: tkchan05@dsd.gov.hk
Sent: 14 June 2024 14:33
To: Yoyo Mok
Cc: Katie Yu
Subject: Re: Request for Update Information of Lau Fau Shan Sewage Pumping Station

Dear Yoyo,

Please find below the reply to your queries in [blue](#) for your information:-

1. Odour control measures installed/implemented for Lau Fau Shan Sewage Pumping Station. In particular, we would like to know the odour removal efficiency of the odour removal equipment installed in the ventilation system and the ventilation outlet location.

[No modification work on DO systems was carried out since the date of our previous reply \(i.e. 17.9.2021\). The information provided in the reply is still valid.](#)

2. Record of complaints related to noise and odour nuisance from Lau Fau Shan Sewage Pumping Station in the past five years.

[No complaint recorded in 2020-2024.](#)

Should you have any queries, please feel free to contact me. Thank you.

Regards,
Ken CHAN
EME/ST1/3/5
Drainage Services Department
Tel : 2891 6591 / 6316 8663



From: Yoyo Mok <YOYOMOK@ramboll.com>
To: "tkchan05@dsd.gov.hk" <tkchan05@dsd.gov.hk>
Cc: Katie Yu <KYU@ramboll.com>
Date: 03/06/2024 15:19
Subject: [Internet]Request for Update Information of Lau Fau Shan Sewage Pumping Station
Serial No.:

=====
This email was delivered via the Internet, which may not be trustworthy as it
You are advised not to click the URLs or open the attachment unless you know it

This email has been verified against its claimed domain and passed. The identity
email domain may be true, but it doesn't mean it is from the claimed sender and
=====

Dear Ken,

We are the environmental consultant appointed by Onfill Company Limited to carry out an Environmental Assessment (EA) for the Development Project at Lau Fau Shan, as part of the planning application Y/YL-LFS/14.

Lau Fau Shan Sewage Pumping Station (LFS SPS) is located close to the Application Site (please refer to the attached figure). We had previously enquired information of LFS SPS in 2021 (see attached email record).

To provide latest information in the EA, it would be grateful if you can provide the following update information of the SPS:

1. Odour control measures installed/implemented for Lau Fau Shan Sewage Pumping Station. In particular, we would like to know the odour removal efficiency of the odour removal equipment installed in the ventilation system and the ventilation outlet location.
2. Record of complaints related to noise and odour nuisance from Lau Fau Shan Sewage Pumping Station in the past five years.

Thanks!

Kind regards

Yoyo Mok

Environmental Consultant

D +852 3465 2864

yoyomok@ramboll.com

Annex D

Supplementary Information on Car Parking Provision

Development Parameters Table of the Revised Indicative Scheme (parking provision)

Proposed Development Parameters		Revised Indicative Scheme
Parking Spaces	• Private Car	390 (including 5 disabled parking spaces) (Towers: 372; Houses: 18)
	• Visitor	25
	• Motorcycle	13
	• Bicycle	165
	• CCC	2
Loading/ Unloading Bays	• Residential	5
Lay-by	• CCC	2 (1 no. of 11m x 3.5m and 1 no. of 5m x 2.5m).

Annex E

Reply Email from Highways Department

CHAN Karen PT

From: e1db.mw@hyd.gov.hk
Sent: Tuesday, June 18, 2024 11:22 AM
To: CHAN Karen PT
Cc: PUN Alan; adeylw.nt@hyd.gov.hk
Subject: Re: (@@Suspected Spam@@) Section 12A Application for Development in Lau Fau Shan (Y/YL-LFS/14) - Latest Progress of Widening of Deep Bay Road.
Attachments: Section 3.2.2 of Traffic Note (Annex E).pdf; TD's comments.pdf; Drawing No. 1-Site Location.pdf

Dear Karen,

The latest status of PWP Item No. 6878TH(Part) described in your attached TIA regarding upgrading of Deep Bay Road remain the same at this moment.

Best Regards,
Wilson LEUNG
E1/DB
MWPMO,
Highways Department

2762 3634

From: Belinda Patricia CHAN/HYD/HKSARG
To: "CHAN Karen PT" <kchan1@systra.com>
Cc: "PUN Alan" <apun@systra.com>, e1db.mw@hyd.gov.hk
Date: 11/06/2024 10:55
Subject: Re: (@@Suspected Spam@@) Section 12A Application for Development in Lau Fau Shan (Y/YL-LFS/14) - Latest Progress of Widening of Deep Bay Road.

Dear Karen,

Please contact Mr. LEUNG Chi Hung, Wilson who is involved in the project. He was been cc'ed within this email.

Kind Regards,
Belinda P CHAN
ADE/YL(W), NT Region
Highways Department
Tel: 2762 3523



 www.hyd.gov.hk

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From: "CHAN Karen PT" <kchan1@systra.com>
To: "adeylw.nt@hyd.gov.hk" <adeylw.nt@hyd.gov.hk>
Cc: "PUN Alan" <apun@systra.com>
Date: 11/06/2024 10:41
Subject: (@@Suspected Spam@@) Section 12A Application for Development in Lau Fau Shan (Y/YL-LFS/14) - Latest Progress of Widening of Deep Bay Road.

Dear Ms. Chan,

We refer to our tel-conversation this morning regarding the captioned S12A rezoning application (Application No. Y/YL-LFS/14) for the proposed private residential development in Lau Fau Shan. Site location is shown in Drawing No. 1.

During the application, we received comments from TD/TE with regards to TIA(attached). Referring to one of the comments, TD requested us to consult your office on the latest progress of PWP Item No. 6878th(Part) regarding widening of Deep Bay Road. In this regard, we would be grateful if you could provide us with the latest project information of widening of Deep Bay Road for our update of Para. 3.2.2 in TIA (attached).

Should you have any queries, please do not hesitate to contact me at 2864 6433. Thank you for your kind assistance.

Karen Chan

Tel: +852 2864 6433 (Direct Line) • Gen: +852 2529 7037 • Fax: +852 2527 8490



22nd Floor • Genesis • 33-35 Wong Chuk Hang Road • Hong Kong

www.mvaasia.com

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Please consider the environment before printing.

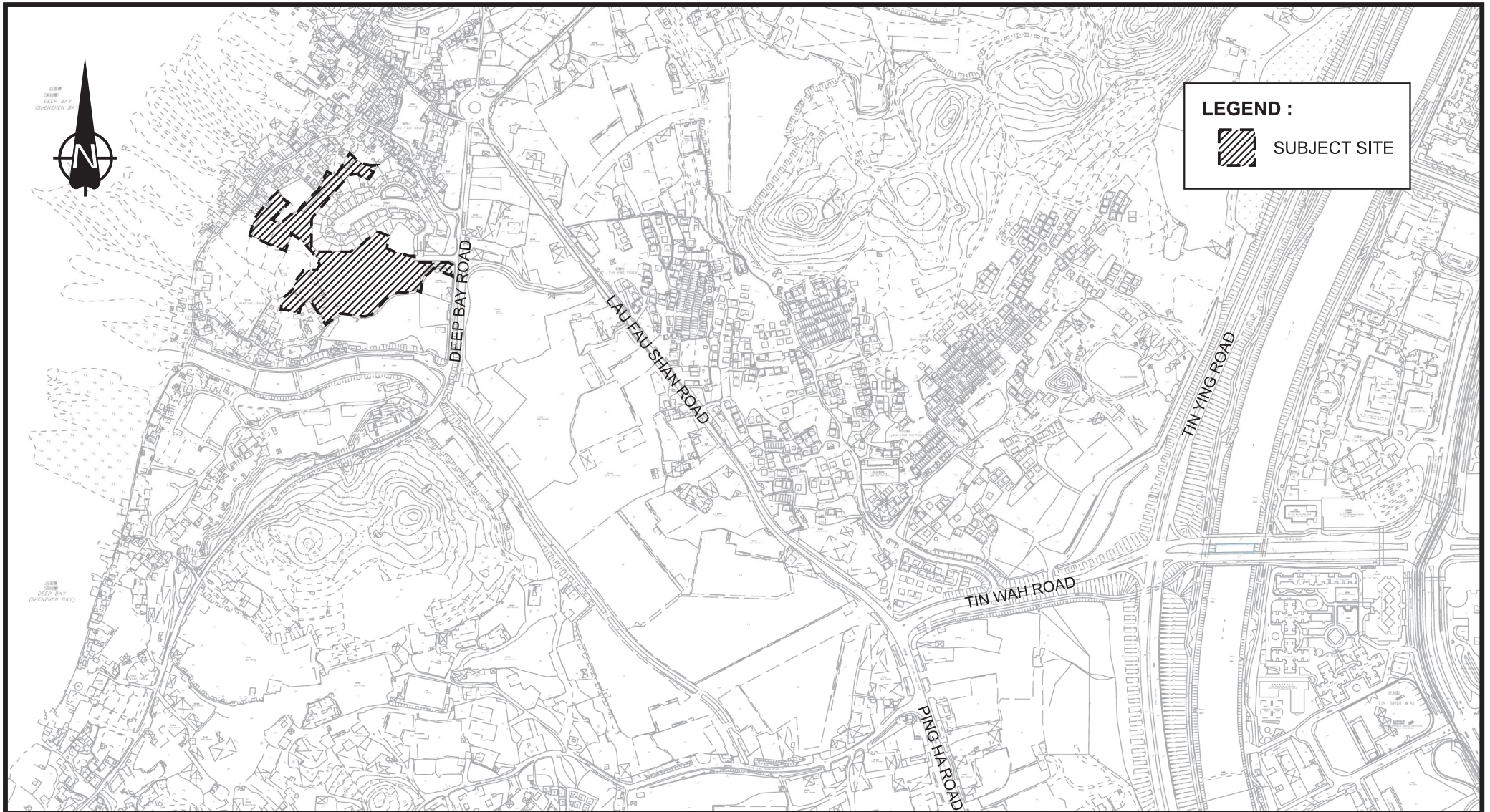
=====
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Comments of the Commissioner for Transport (Contact Officer: Victor MA; Tel: 2399 2422)

- It is noted that this submission involves substantial changes to the indicative development scheme. Please submit full report of the revised traffic impact assessment (e.g. including parking provision) for our consideration.
- In Annex C, it is noted that the bicycle parking provision is 42 spaces which is significantly less than the previous agreed number (i.e. 165) developed based on 1:7.5 flats. Similarly, the parking and loading/unloading provision of CCC shall be 2 car parking spaces and 2 laybys (1 no. of 11m x 3.5m and 1 no. of 5m x 2.5m).
- In Section 3 of Annex E, please clarify the assumed population and employment adopted in your assessment. For example, please clarify whether the population and employment in the intensified HSK/HT NDA have been taken into account. Furthermore, please clarify if LATM are used in your assessment.
- In Section 3.2.2 of Annex E, please consult HyD on the latest progress of PWP Item No. 6878th(Part) regarding widening of Deep Bay Road.
- Annex F: With reference to the mode hierarchy and the similar arrangement for LFS transitional housing, the nearby GMB services (serving Deep Bay Road) and MTR feeder bus services would be enhanced, subject to passenger demand. In this connection, the proposed layby (12m X 3.5m) within the development should be reserved for the prospective GMB services, with flexibility for operation of other types of services (e.g. shuttle bus) only if no relevant public transport services were available. In any case, the exact plan for the transport services is subject to TD's further assessment and review, with due consideration to the development and planning of the transport system/services in the LFS area near the time.
- Annex F: Please indicate the turnaround facility for the proposed layby.



LEGEND :

 SUBJECT SITE

Rev.	Description	Checked	Date	Rev.	Description	Checked	Date	Rev.	Description	Checked	Date
-	-	-	-	-	-	-	-	-	-	-	-
Project Title				Drawing Title				SITE LOCATION			
APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES											
Designed	LIB	Checked	PTC	Scale	NTS	Date	OCT 2021	Drawing No.	1.1	Rev.	-



3.1.4 The assessment results in **Table 3.1** revealed that among the identified key junctions, the planned junction Tin Wah Road/Ting Ying Road (J3) would be operated with over-capacity under both reference and design cases. That is, the planned junction would be operated with over-capacity even without the proposed development.

3.2 Road Link Assessment

3.2.1 Apart from junction capacity assessment, the road link operation performance was also undertaken for both reference and design scenarios.

PWP Item No. 6878th (Part)- Government's Planned Upgrading Works at Deep Bay Road

3.2.2 The Government gazetted on 10 December 2021 the widening works at a section of Deep Bay between Lau Fau Shan Roundabout and Nim Wan Road from a single track access road to a single two-lane carriageway to serve the traffic demand in the area. Under the Gazette Plan, a section of Deep Bay Road abutting the subject site will be widened to around 7m with footpath as illustrated in **Drawing No. 3.3**. The road widening works is anticipated to be completed in phases by around 2029 according to the LegCo Paper (No. CB(1)177/2022(05)). This road layout was adopted for assessment.

Link Operational Performance

3.2.3 Based on the existing/planned layouts with traffic forecast, the results of the assessment are summarized in **Table 3.2**.

Table 3.2 Year 2036 Road Link Operational Performance

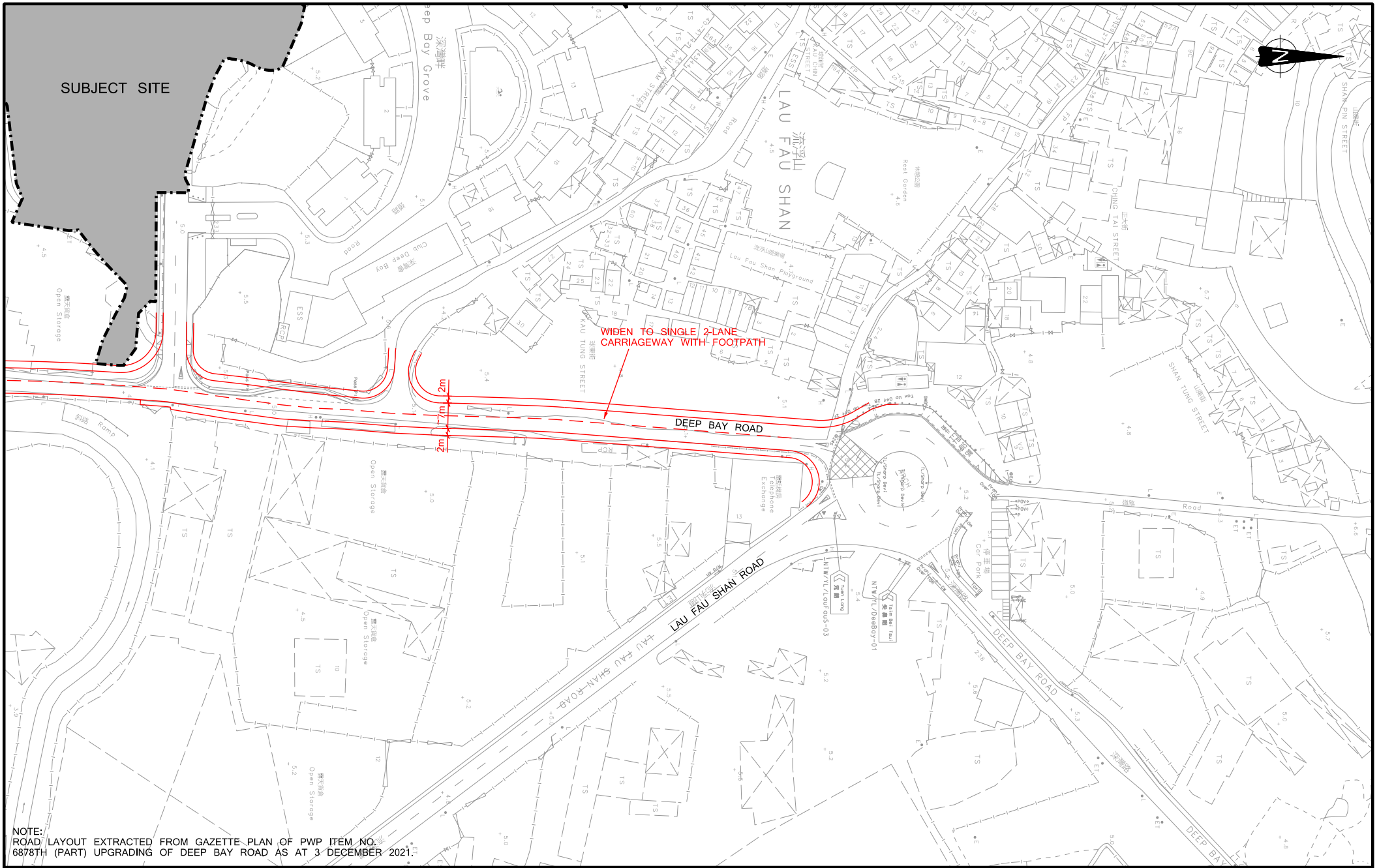
Ref. (1)	Road Link	Capacity (veh/hr)	Reference Case				Design Case			
			Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)		Two-way Traffic Flows (veh/hr)		Volume to Capacity Ratio (V/C)	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
L1	Upgraded Deep Bay Road ⁽²⁾	1400 ⁽³⁾	205	320	0.15	0.23	375	435	0.27	0.31
L2	Lau Fau Shan Road	1400 ⁽³⁾	390	525	0.28	0.38	565	640	0.40	0.46

Remarks: (1) Refer to **Drawing 2.1** for locations.

(2) Based on the planned road layout as shown in **Drawing No. 3.3**.

(3) According to TPDM Volume 2 Section.2.4.1, road capacity of single 2-lane carriageway with the road width of 6.75m, the peak hourly flow of 1400 veh/hr for both directions under district distributor.

3.2.4 The assessment result in **Table 3.2** revealed that all the identified key road links will operate with ample capacity under both reference and design cases.



NOTE:
ROAD LAYOUT EXTRACTED FROM GAZETTE PLAN OF PWP ITEM NO. 6878TH (PART) UPGRADING OF DEEP BAY ROAD AS AT 3 DECEMBER 2021.

Rev.	Description	Checked	Date
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

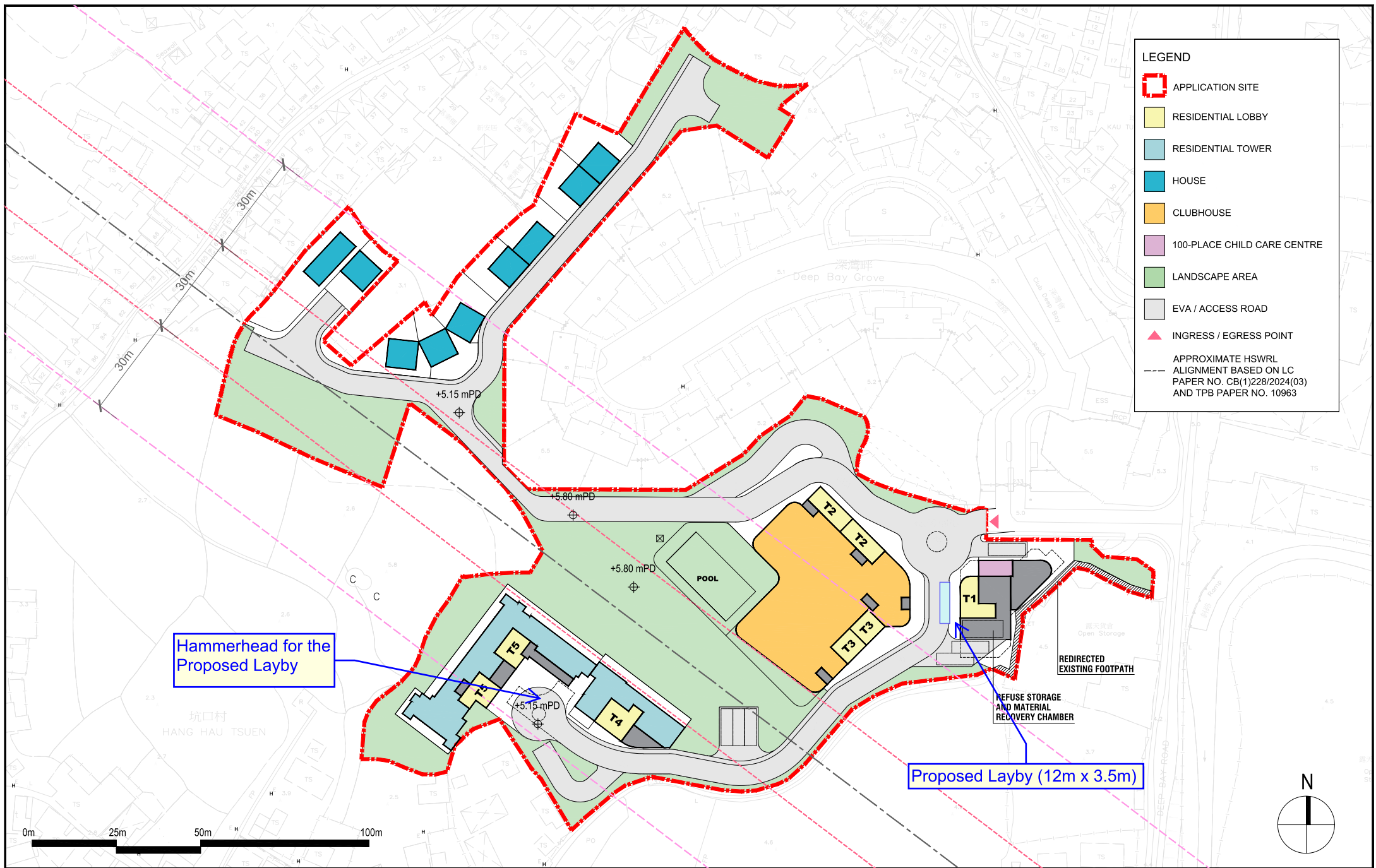
Project Title
 APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131) FOR PROPOSED RESIDENTIAL DEVELOPMENT AND SOCIAL WELFARE FACILITY (CHILD CARE CENTRE) AT VARIOUS LOTS IN D.D.128 AND D.D.129, AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Drawing Title			
PLANNED UPGRADING WORKS AT DEEP BAY ROAD			
Designed	FSC	Checked	PTC
Scale	1:1000(A3)	Date	NOV 2023
Drawing No.	3.3	Rev.	-



Annex F

Indicative Hammerhead for the Proposed Layby



LEGEND

- APPLICATION SITE
- RESIDENTIAL LOBBY
- RESIDENTIAL TOWER
- HOUSE
- CLUBHOUSE
- 100-PLACE CHILD CARE CENTRE
- LANDSCAPE AREA
- EVA / ACCESS ROAD
- INGRESS / EGRESS POINT
- APPROXIMATE HSWRL ALIGNMENT BASED ON LC PAPER NO. CB(1)228/2024(03) AND TPB PAPER NO. 10963

Application for Amendment of Plan Under Section 12A of the Town Planning Ordinance (Cap.131) for Proposed Residential Development and Social Welfare Facility (Child Care Centre) at Various Lots in D.D. 128 and D.D. 129, and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

INDICATIVE GROUND FLOOR PLAN

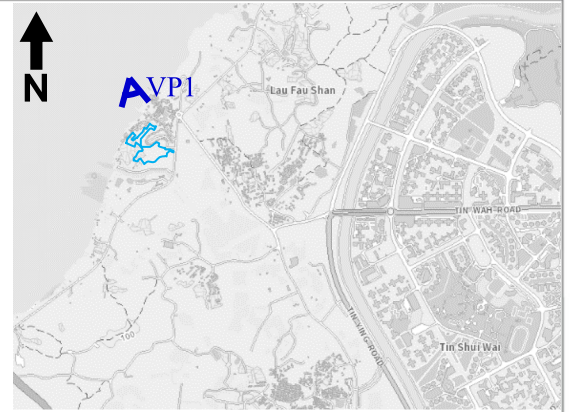


MAR 2024
1:1000 (A3)

Attachment B

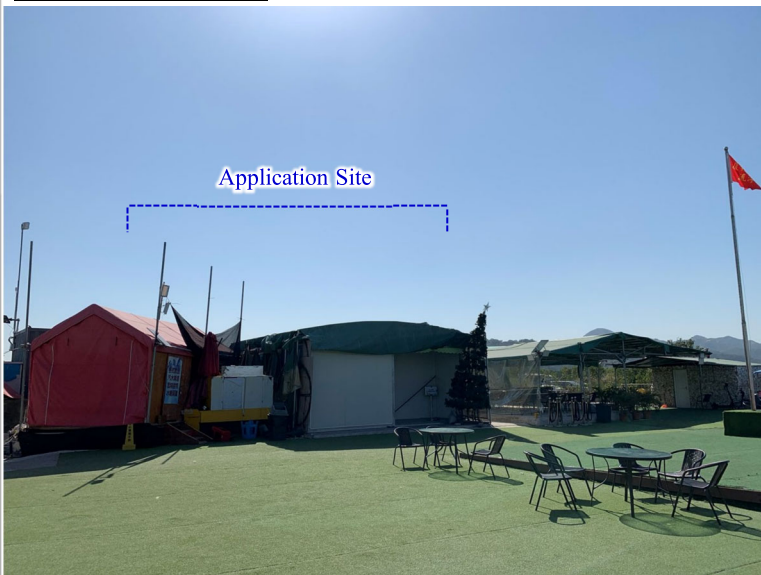
Revised Photomontages

Existing View



Key Plan

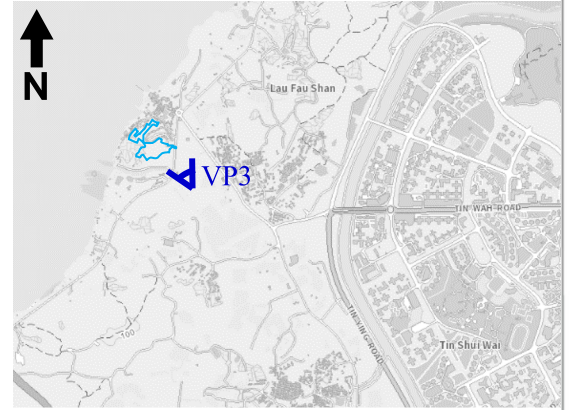
Baseline Condition



Baseline Condition with Indicative Scheme

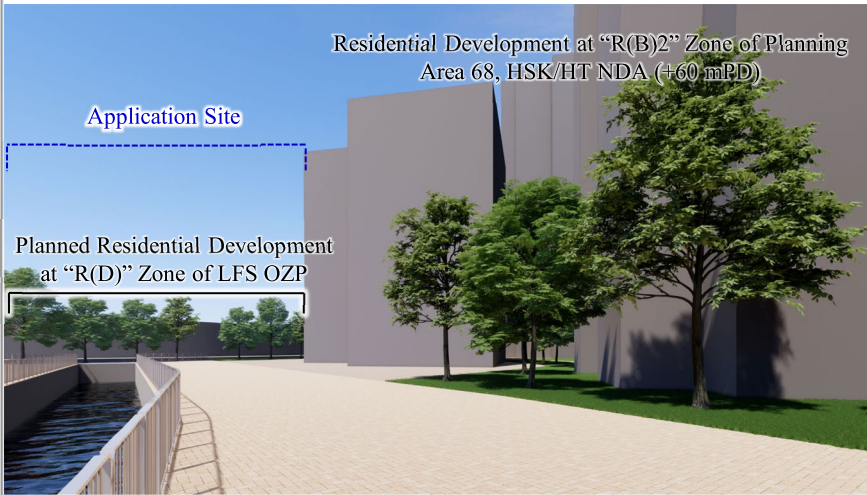


Existing View



Key Plan

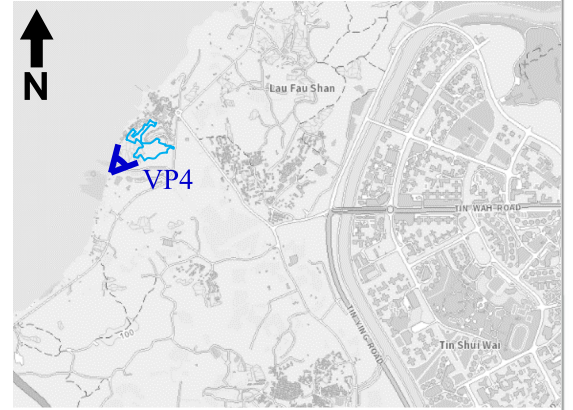
Baseline Condition



Baseline Condition with Indicative Scheme



Existing View

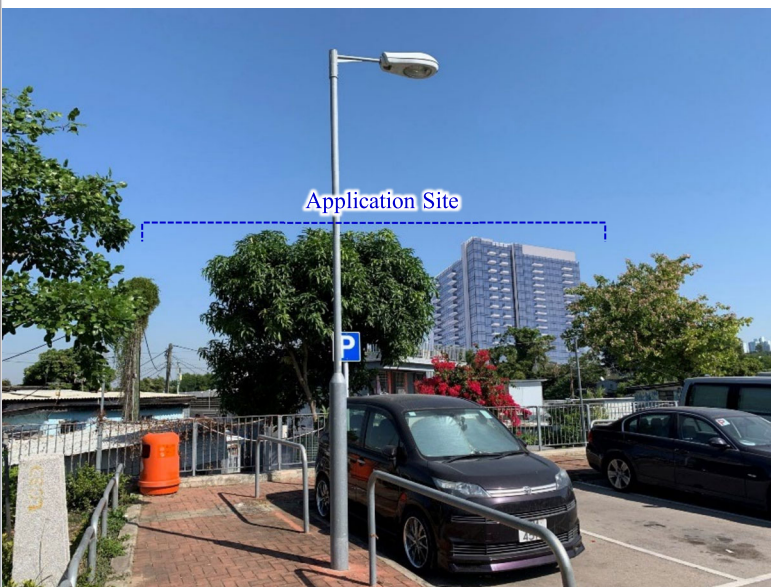


Key Plan

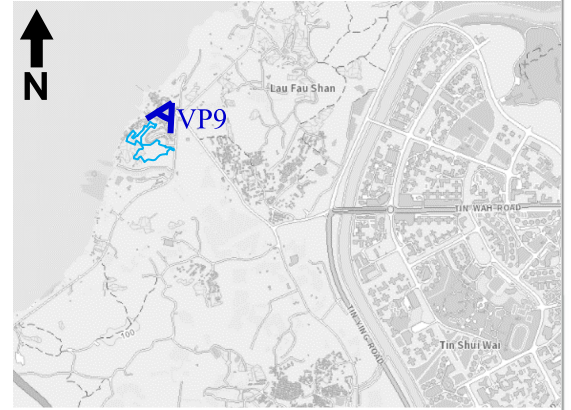
Baseline Condition



Baseline Condition with Indicative Scheme



Existing View



Key Plan

Baseline Condition



Baseline Condition with Indicative Scheme

