Broad Development Parameters of the Applied Use/Development in respect of Application No. A/NE-TKL/728

關乎申請編號 A/NE-TKL/728 的擬議用途/發展的概括發展規範

Revised broad development parameters in view of the further information received on 9.5.2024

因應於 2024 年 5 月 9 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	A/NE-TKL/728		
Location/address 位置／地址	Lots 173 RP, 174, 175, 177, 178 S.A, 178 S.B and 178 S.C in D.D. 77 and Adjoining Government Land, Ping Che, New Territories 新界坪輋丈量約份第 77 約地段第 173 號餘段、第 174 號、第 175 號、第 177 號、第 178 號 A 分段、第 178 號 B 分段及第 178 號 C 分段及毗連政府土地		
Site area 地盤面積	About 約 4,434 sq. m 平方米 (Includes Government Land of about 包括政府土地約 205 sq. m 平方米)		
Plan 圖則	Approved Ping Che and Ta Kwu Ling Outline Zoning Plan No. S/NE-TKL/14 坪輋及打鼓嶺分區計劃大綱核准圖編號 S/NE-TKL/14		
Zoning 地帶	"Industrial (Group D)" 「工業(丁類)」		
Applied use/ development 申請用途/發展	Proposed Temporary Concrete Batching Plant for a Period of 5 Years 擬議臨時混凝土配料廠（為期 5 年）		
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	-	-
	Non-domestic 非住用	About 約 2,410	About 約 0.54
No. of block 幢數	Domestic 住用	-	
	Non-domestic 非住用	-	
	Composite 綜合用途	-	
Building height/No.	Domestic	-	m 米

of storeys 建築物高度／層數	住用	-	mPD 米(主水平基準上)
		-	Storey(s) 層
	Non-domestic 非住用	-	m 米
		-	mPD 米(主水平基準上)
		Not more than 不多於 13	Storey(s) 層
	Composite 綜合用途	-	m 米
		-	mPD 米(主水平基準上)
		-	Storey(s) 層
Site coverage 上蓋面積	About 約 41 %		
No. of units 單位數目	-		
Open space 休憩用地	Private 私人	-	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		18
	Private Car Parking Spaces 私家車車位		4
	Heavy Goods Vehicle Parking Spaces 重型貨車泊車位		14
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數		6
	Heavy Goods Vehicle Spaces 重型貨車車位		5
	Tankers 槽車		1

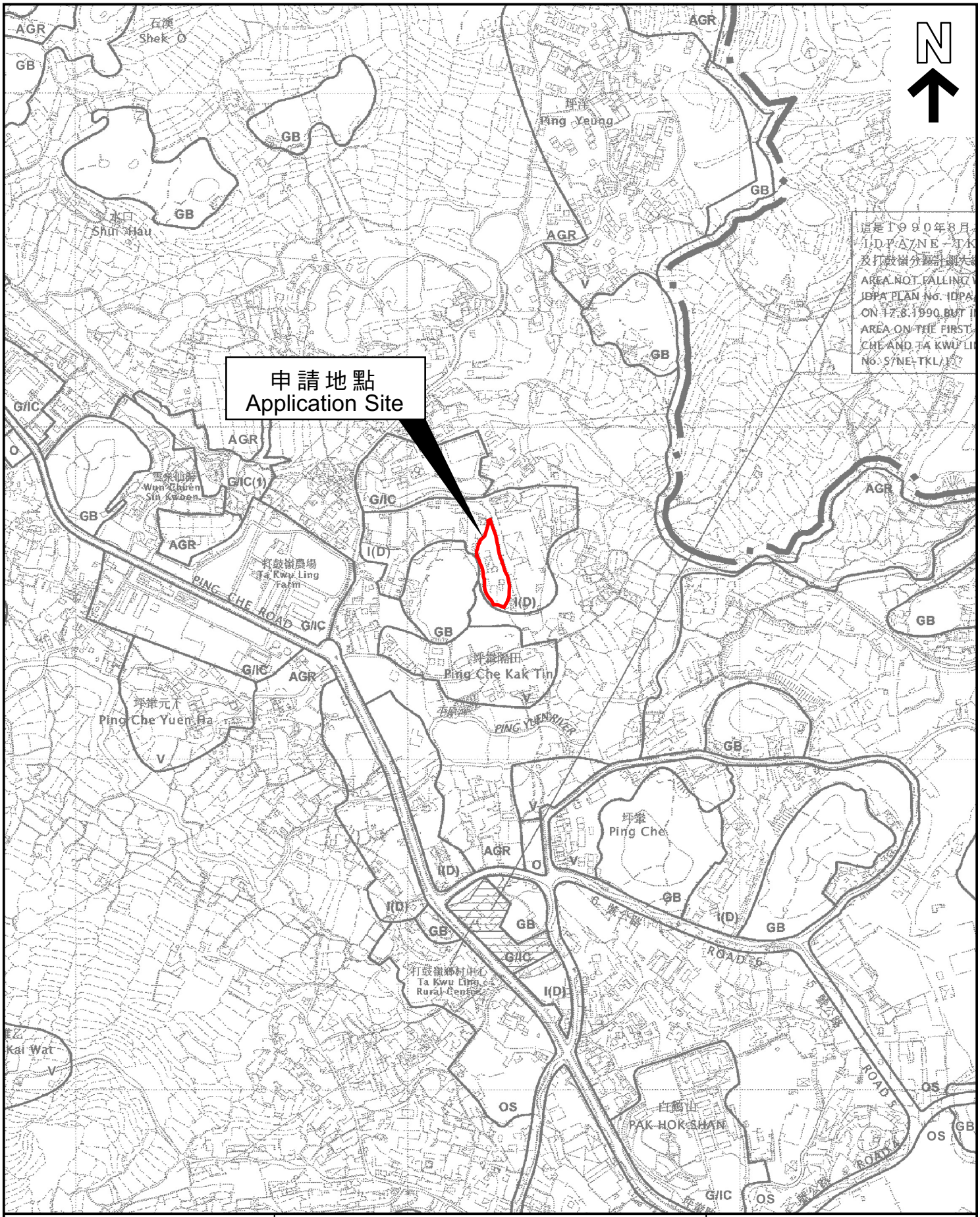
Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件

	Chinese 中文	English 英文
Plans and Drawings 圖則及繪圖		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖／布局設計圖	☐	☐
Block plan(s) 樓宇位置圖	☐	☐
Floor plan(s) 樓宇平面圖	☐	☐
Sectional plan(s) 截視圖	☐	☐
Elevation(s) 立視圖	☐	☐
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片	☐	☐
Master landscape plan(s)/Landscape plan(s) 園境設計總圖／園境設計圖	☐	☐
Others (please specify) 其他（請註明）	☐	☐
Reports 報告書		
Planning Statement / Justifications 規劃綱領 / 理據	☐	☐
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	☐	☑
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	☐	☐
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	☐	☐
Visual impact assessment 視覺影響評估	☐	☐
Landscape impact assessment 景觀影響評估	☐	☐
Tree Survey 樹木調查	☐	☐
Geotechnical impact assessment 土力影響評估	☐	☐
Drainage impact assessment 排水影響評估	☐	☐
Sewerage impact assessment 排污影響評估	☐	☐
Risk Assessment 風險評估	☐	☐
Others (please specify) 其他（請註明）	☐	☑
Responses to Departmental Comments 就部門意見作出回應		

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。



位置圖 LOCATION PLAN

本摘要圖於2024年5月17日擬備，
所根據的資料為於2010年2月2日
核准的分區計劃大綱圖編號S/NE-TKL/14
EXTRACT PLAN PREPARED ON 17.5.2024
BASED ON OUTLINE ZONING PLAN No.
S/NE-TKL/14 APPROVED ON 2.2.2010

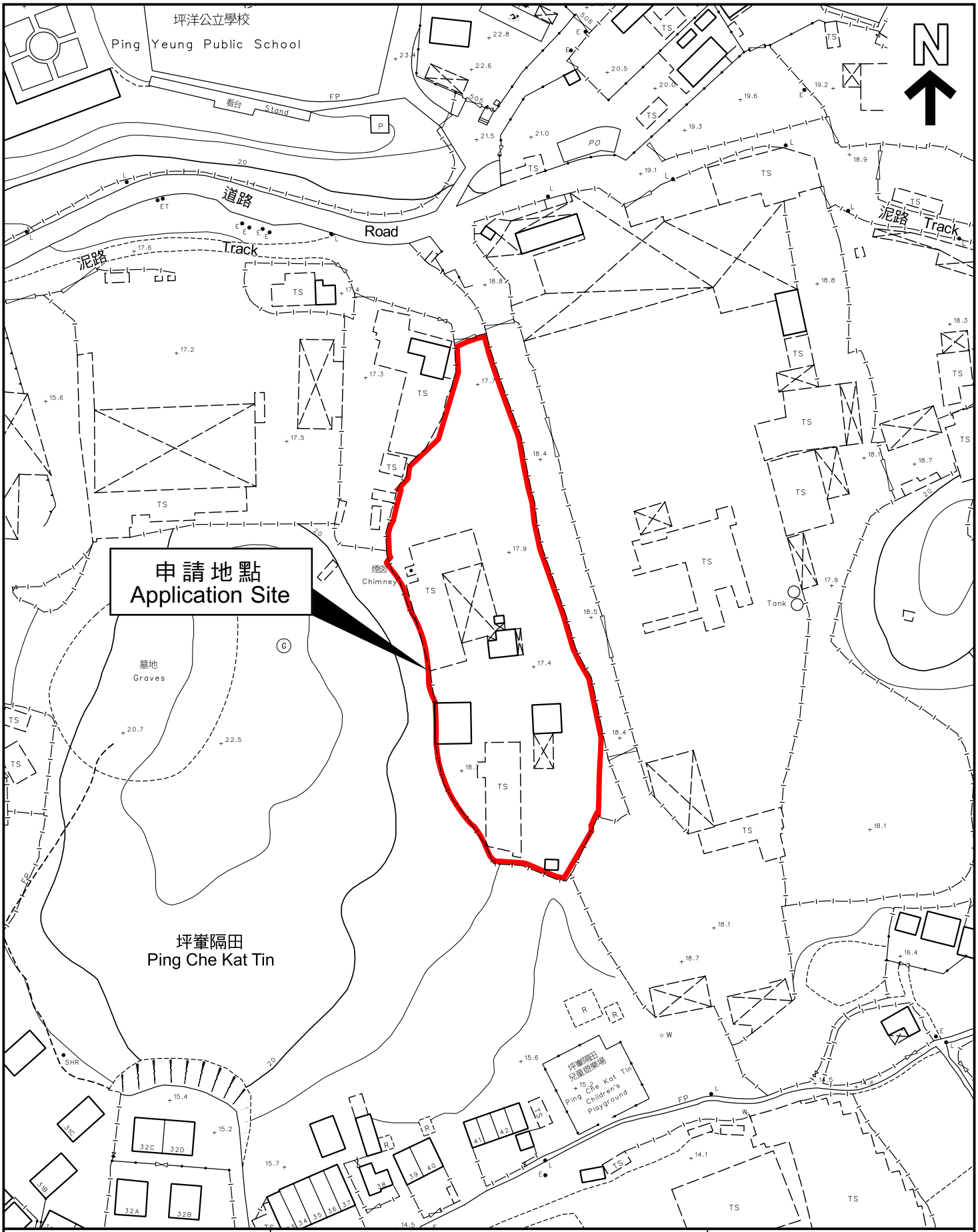
SCALE 1 : 7 500 比例尺

米 METRES 100 0 100 200 300 米 METRES

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

參考編號
REFERENCE No.

A/NE-TKL/728



本摘要圖於2024年5月17日擬備，
所根據的資料為測量圖編號
3-NW-19C及24A
EXTRACT PLAN PREPARED ON 17.5.2024
BASED ON SURVEY SHEETS No.
3-NW-19C & 24A

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.
A/NE-TKL/728

申請編號 Application No. : A/NE-TKL/728

備註 Remarks

申請人提交進一步資料，就環境保護署的意見作出回應，並提交經修訂的環境評估。

The applicant provides further information in responses to the comments of the Environmental Protection Department together with a revised environmental assessment.

11 ASSESSMENT RESULTS

11.1 The predicted air quality concentrations from vehicular emissions and industrial emissions have been quantitatively assessed separately for NO_2, RSP and FSP.

11.2 A summary of the predicted results of NO_2, RSP and FSP at all predetermined ASRs are presented in Table 11.1. The contour plots are presented in Figures 6a – 6f for the ground floor level (i.e. 1.5 mAG).

11.3 For contour plots, the assessment points used for generating the contour plots is provided in Figure 5.

Predicted NO_2 Results

11.4 The predicted results of the 19th highest 1-hour average and annual average NO_2 concentration at all representative ASR levels are summarised in Appendix 10. The results indicate that NO_2 concentrations at all representative ASRs comply with the relevant AQOs.

Predicted RSP Results

11.5 The predicted results of the 10th highest 24-hours average and annual average RSP concentration at all representative ASR levels are summarised in Appendix 10. The results indicate that RSP concentrations at all representative ASRs comply with the relevant AQOs.

Predicted FSP Results

11.6 The predicted results of the 36th highest 24-hours average and annual average FSP concentration at all representative ASR levels are summarised in Appendix 10. The results indicate that FSP concentrations at all representative ASRs comply with the relevant AQOs.

Table 11.1 Summary of Predicted Cumulative Concentration

Pollutant	Cumulative Concentration ($\mu g/m^3$)		AQO ($\mu g/m^3$)
NO_2	19th highest, 1-hour average	93.679 – 99.308	200
	Annual	11.258 – 12.224	40
RSP	10th highest, 24-hours average	67.076 – 92.044	100
	Annual	27.909 – 40.316	50
FSP	36th highest, 24-hours average	25.391 – 31.227	50
	Annual	15.910 – 19.475	25

7. FIXED NOISE SOURCES IMPACT ASSESSMENT

Operation Mode and Fixed Noise Sources

7.1 The major fixed noise sources listed below have been considered under different scenarios. Based on normal practices of CBP, there are two operation scenarios during daytime and evening-time:-

- Scenario 1, no Cement/ PFA/ GGBS/ Admixture tanker will enter the Site, as well as no associated PME will be in operation, which including air blower (mounted on unloading tank), filter fan (silo) – blower, pump (mounted on unloading tank). Only concrete truck will travel within the Site. The loader for emergency use will be assessed as a worst case scenario.

- Scenario 2, no concrete truck will enter the Site, and loader will not be in operation. There is only the travel of Cement/ PFA/ GGBS/ Admixture tanker within the Site. The associated PME including air blower (mounted on unloading tank), filter fan (silo) – blower, pump (mounted on unloading tank) will be in operation.

7.2 Each concrete lorry mixer can carry concrete with volume 8 – 10m^3. As confirmed by the Applicant, the maximum of 10 concrete lorry mixers (for concrete trucks) per hour for the maximum concrete production rate of 80m^3/hr is practical in terms of business operation. The plant lists are summarised in Table 7.1.

Table 7.1 Summary of PMEs during Operation Phase

Fixed Noise Source	Quantity	Quantity in Time period	Utilisation Rate (%)
Scenario 1			
Concrete Mixer (electric)	1	30mins	100%
Conveyor / Screw Conveyors	3	30mins	100%
Water / Admixture Pump	1	30mins	100%
Air Compressor (Stationary)	2	30mins	100%
Filter Fan (Mixing unit) - Blower	1	30mins	100%
Concrete Lorry Mixer for concrete collection	5	30mins	20%
Loader	1	30mins	16.7%
Concrete Lorry Mixer	10	1 hour	-
Scenario 2			
Concrete Mixer (electric)	1	30mins	100%
Conveyor / Screw Conveyors	3	30mins	100%
Air Blower (mounted on unloading tank)	2	30mins	100%
Water / Admixture Pump	1	30mins	100%
Air Compressor (Stationary)	2	30mins	100%
Filter Fan (Mixing Unit) - Blower	1	30mins	100%
Filter Fan (Silo) - Blower	2	30mins	100%
Pump on Unloading Tank	2	30mins	100%
Aggregate Truck	12	1 hour	-
Cement / PFA / GGBS / Admixture Tanker	2	1 hour	-

7.3 The detailed lists of equipment, utilisation rate and number of items as shown in Appendix 4 have been confirmed by the Applicant and it is considered to be practicable for business-as-usual operation of concrete batching plant. Loader will be used only if emergency case (i.e. daytime only) to transport aggregate from storage area to hopper. Vehicle washing facility will be applied on site during operation, however, the operation time of this facility is rather short each time (i.e. approximately 1 minute for each vehicle) and its function is not continuous. Aggregate will be stored in aggregate storage areas, which is served as an emergency use. No action will be taken on the aggregates storage except whenever there are insufficient aggregates provided for concrete production. As a result, insignificant noise will be generated due to the occasionally use of the aggregate storage.

7.4 The number of concrete lorry mixers was assumed based on the normal operation practice limitation, that approximate 6 minutes are needed for filling up 1 concrete lorry mixer with newly produced concrete. Thus, 5 concrete lorry mixers per 30 minutes as the maximum allowed traffic flow were assumed.

Assessment Methodology

7.5 Although the proposed CBP is an industrial use and the noise impact therefore references to IND-TM, the characteristics of concrete batching, involving concrete lorry mixer and concrete mixer, are also similar to construction activities. Therefore, the noise impact is proposed to be estimated in accordance with the guidelines given in GW-TM. As such, all items of PME, except truck movement, have been considered at the proposed positions. While due to the long travelling distance of conveyor/ screw conveyor, as a conservative approach, the closest distance between conveyor/ screw conveyor and each NSRs has been adopted and assessed based on the standard acoustic principle. The location of the PME is indicated in Appendix 4.

7.6 The truck movement will be considered as stationary source. The notional source position of the haul road segment has been adopted for each identified NSR. The locations of notional source position are provided in Appendix 4.

7.7 SWLs of PME are obtained from Table 3 of GW-TM and from "Sound Power Levels of Other Commonly used PME" available on EPD's website. Reference is also made to the "British Standard 5228 Code of Practice for Noise and Vibration Control on Construction and Open Site – Part 1: Noise" amended in February 2014 (BS 5228-1: 2009+A1:2014). The "Aggregates Truck" to be adopted during the operation phase is lorry, which will be used to transport raw materials to the Site. Its weight is between 5.5 tonnes and 38 tonnes, thus, the SWL of 105dB(A) with reference to EPD's "Sound Power Levels of Other Commonly used PME" was adopted in the calculation.

7.8 The loading / unloading raw materials would be operated during the operation hours (i.e. 0700 – 2300) only.

7.9 Tonality, impulsiveness and intermittency of the proposed CBP are not anticipated.

7.10 With regard to the Screening effect, a 10dB(A) reduction was adopted for NSRs without direct line-of-sight to the PME whereas a 5dB(A) reduction was adopted for NSRs without direct line-of sight only to the "noisy" part of the PME.

7.11 In order to minimise the potential operation noise level, a number of noise reduction measures will be adopted in the design of the CBP which have been confirmed by the Applicant, including:-

Mechanical and Electrical (M&E) Equipment

- The enclosure for the concrete mixing plant shall be with acoustic panels with an overall Noise Reduction (NR) of at least 10dB(A); an example of such an acoustic panel is provided in Appendix 7.
- The entire conveyor except the opening for aggregates unloading shall be provided with a noise enclosure with an overall NR of at least 10dB(A); an example of such enclosure to be made by a polymeric vinyl material such as "Wavebar" with a Sound Transmission Class (STC) of 30 is provided in Appendix 7.
- Air compressor, filter fan (i.e. blower) and the concrete collection activities should be located or carried out inside the enclosed concrete mixing plant and openings of the enclosure (minimum surface density of 10kg/m^2) shall be properly sealed to minimise noise leakage, thus to achieve an overall Noise Reduction (NR) of at least 10dB(A).
- Water/ admixture pump and filter fan (i.e. blower) at silo should be located inside the semi-enclosed structure and openings of the enclosure (minimum surface density of 10kg/m^2) shall be properly sealed to minimise noise leakage, thus to achieve an overall NR of at least 10dB(A).
- All ventilation openings/ openings of the semi-enclosure would adopt silencers (if applicable) and orient the direction of openings away from the nearby NSRs as far as practicable.
- Any amplifier/ PA system would be avoided inside the site.
- To plan and manage well the logistics arrangement as far as practicable in order to avoid the associated vehicles from queuing up inside the site and along the access road outside the concrete batching plant.

On-site Truck Movement

- The proposed 4m high barrier with minimum surface density of 10kg/m^2 at the site boundary to screen the vehicle movement noise as well as the noisy part of the plants, the location of the proposed 4m high barrier is provided in Figure 4. The 4m high barrier shall be sufficient to block the line-of sight of vehicles moving within the Site and the noisy part of plants.

7.12 The adjoining planned CBP would be the concurrent project. The cumulative impact from the two proposed CBPs will be considered.

Predicted Noise Levels

7.13 The predicted façade noise levels during operation phase at the representative NSRs are in the range of 54 – 65dB(A) Leq(30min) during day and evening time periods. These predicted noise levels are within the stipulated noise limits as mentioned in Section 5.

7.14 Sample calculations and summary of the predicted noise levels are given in Appendix 4.

8. ROAD TRAFFIC NOISE ASSESSMENT

8.1 In determining whether or not the road traffic noise impact due to the proposed CBP is considered significant, road traffic noise impacts with and without the operation of the proposed CBP in the design year have been assessed. The road traffic noise levels of the nearby NSRs should comply with the stipulated noise criteria, or the road traffic noise impact due to the proposed CBP is considered significant if the traffic noise levels with the proposed CBP are higher than those without the proposed CBP by 1.0dB(A) or more.

Traffic Forecast

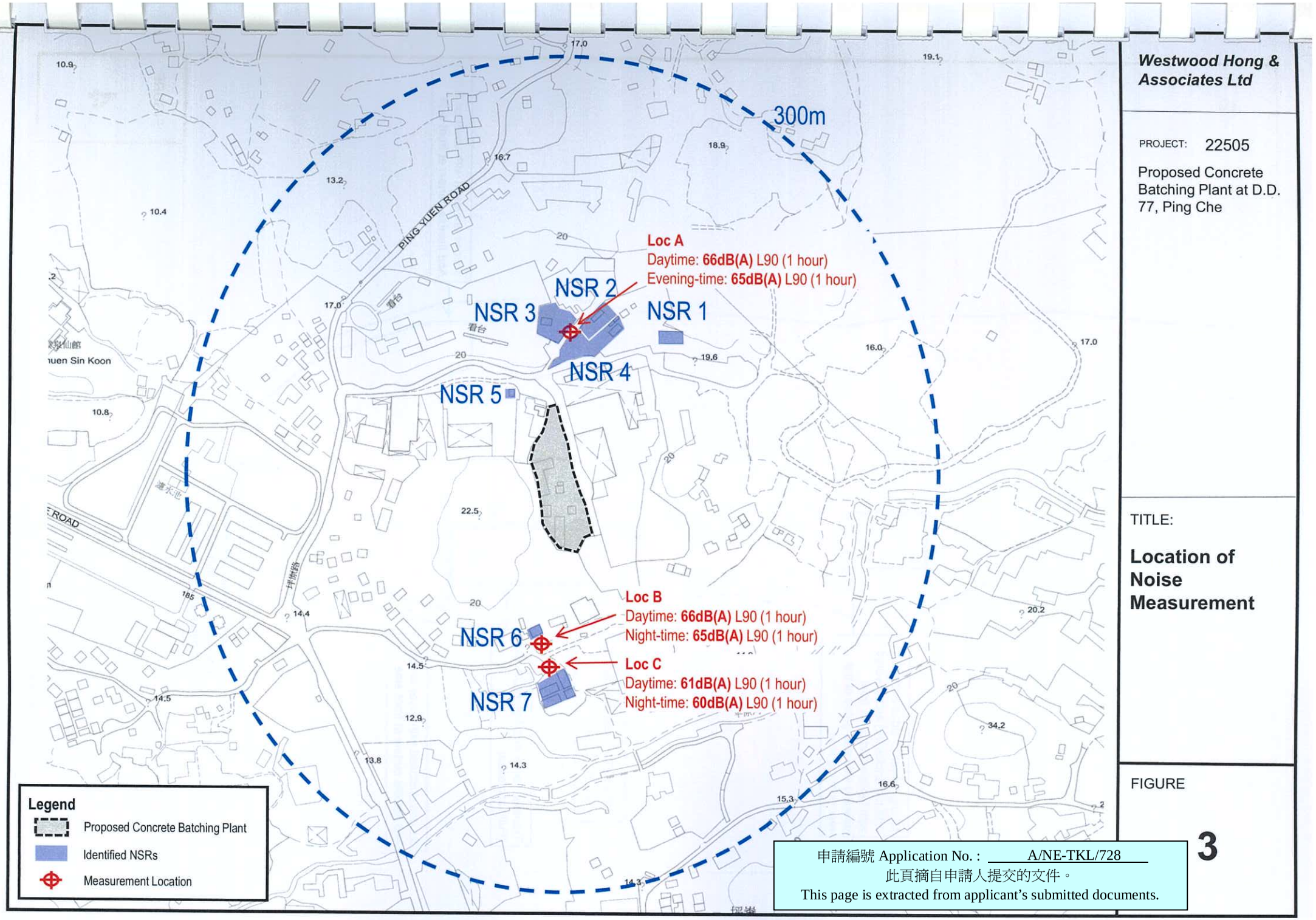
8.2 The current application of the proposed CBP is temporarily for 5 years, and the permission would be started from the approval of the planning application. Hence, the design year of 2029 would be adopted in the assessment.

8.3 The traffic forecast for Year 2029 was provided by the Traffic Consultant (MVA Asia Ltd). The definition of heavy vehicles in the U.K. Department of Transport's "Calculation of Road Traffic Noise" (CRTN)[2] has been adopted. The traffic forecast is provided in Appendix 5. The endorsement from Transport Department (TD) is provided in Appendix 5. Traffic Consultant has also confirmed that the traffic forecast is based on TD's approved methodology and 2029 is the maximum traffic projection.

Predicted Road Traffic Noise Levels

8.4 Road traffic noise levels have been predicted and provided in Appendix 6.

8.5 The results indicate that the noise contribution to the overall road traffic noise level due to the proposed CBP would be less than 1.0dB(A) or the predicted noise levels of the NSRs comply with the noise criteria. Therefore, the road traffic noise impact due to the proposed CBP on the representative NSRs is not considered significant.



Westwood Hong & Associates Ltd

PROJECT: 22505

Proposed Concrete Batching Plant at D.D. 77, Ping Che

TITLE:

Location of Noise Measurement

FIGURE

3