Appendix 9B Study on Alternative Building Height Profile

1. Introduction

According to "Central and East Kowloon Development Statement" (CEKDS), Yau Tong Bay is fall within the recommended board height band of 125m. The purpose of the recommended height band is to preserve the views of ridgeline and distinctive peaks of the Kowloon Hills. It also stated that landmark building with building height over 125m could be built at nodal location near Yau Tong MTR Station to lend a sense of place and serve as the focal point of Yau Tong.

Based on the proposed Master Layout Plan, the proposed highrise office tower, which located at north-eastern corner of Yau Tong Bay, is in general follow the planning intention of CEKDS and it will function as the focal point and landmark building for Yau Tong. The building height of this office tower is not subject to the recommended board height band of 125m.

However, for the residential towers, the proposed building height should make reference to the board height band of 125m to preserve the views of ridgeline as recommended by CEKDS, and to minimize the adverse visual impact due to the comprehensive development.

As reviewed from the information received from Housing Department (*Appendix 9A*) and the photograph taken from Quarry Bay Park recently (see Figure 9.21), it is noted that the ridgeline between Black Hill, Chiu Keng Wan Shan and Devil Hill will be breached by the new highrise housing blocks of EHC site, Yau Tong Estate Redevelopment, Ko Chiu Road Estae Redevelopment and Lei Yue Mun Housing Development. The proposed building height of these highrise housing blocks are range from +145.95mPD + 181.85mPD, and these housing blocks have create a wall of buildings surrounding Yau Tong Bay, they became a dominant background to the proposed comprehensive development, only a portion of ridgeline will be visible in near future.

2. Objective

This study will mainly focus on the proposed building height profile of the highrise residential towers of the proposed comprehensive development and their relationship with the ridgeline and adjacent public housing development, and to identify the preferred building profile so as to minimize the visual impact of these highrise residential towers. The preferred building profile will be adopted as the planning guideline for inclusion into the design so as to mitigate environmental impacts to acceptable levels.

3. Planning Parameter

According to the Master Layout Plan of Re-zoning Request for Yau Tong Bay which agreed by Metro Planning Committee of Town Planning Board on 11 December 1998, the planning parameters of the domestic portion of the comprehensive development are:-

Total Domestic GFA = 973,000m^2
Average Flat Size = 70m^2
Number of Flat Units = 13,900

4. Alternative Schemes

Based on the above planning parameters, alternative schemes were prepared by varying the building height and number of towers in order to identify the preferred scheme with minimum visual impact. The total domestic GFA to be remain unchange for these alternative schemes.

In general, increase in building height and number of towers will cause adverse visual impact to the adjacent visual sensitive receivers as it will block their views, create wall effect and reduce the landscape areas at podium and ground floor. Highrise buildings constructed near the waterfront will also induce adverse impact to the views from Hong Kong Island.

The proposed alternative schemes are summarized as follow:

(a) Scheme A - 39 nos. residential towers with 45 storeys, the building height is 143m (i.e. about +148mPD). It will provide 13,900 nos. flat units with average flat size 70m^2. (Figure 9B1 to 9B3)

(b) Scheme B - 43 nos. residential towers with 39 storeys, the building height is 125m (i.e. about +130mPD). It will provide 13,400 nos. flat units with average flat size 72.6m^2 or some towers to be with more than 8 unit/floor so as to provide 13,900 flat units. (Figure 9B4 to 9B6)

(c) Scheme C - 39 nos. residential towers with 39 to 48 storeys, the building height will range from 125m to 153m (i.e. from +130mPD to +158mPD). It will provide 13,500 nos. flat units with average flat size 72m^2 or some towers to be with more than 8 unit/floor so as to provide 13,900 units. (Figure 9B7 & 9B8)

(d) Scheme D - 39 nos. residential towers with 35 to 46 storeys, the building height will range from 114m to 146m (i.e. from +119mPD to 151mPD). It will provide 13,200 nos. flat units with average flat size about 73.7m^2 or some towers to be with more that 8 unit/floor so as to provide 13,900 units. (Figure 9B9 & 9B10)

Since the tower layout for Option 1A and 2A are more or less similar, for simplicity reason, the alternative schemes will be prepared based on Option 1A – Minimized Reclamation without I/R Interface, and the proposed master layout plan, elevation and perspective of above alternative schemes are shown on Figure 9B1 to 9B10.

5. Visual Impact Assessment

(a) Based on the Master Layout plan, provision of 43 nos. towers would make the site very congested and create wall effect, the number of residential towers should be minimize in order to provide more open space / landscape area and to avoid wall effect due to the crowd towers.

(b) By comparison of Scheme A with Scheme B, provision of highrise residential towers with height above 125m will further breach the ridgeline and create adverse visual impact to the views from Hong Kong Island. The building near the waterfront should be within 125m if possible.

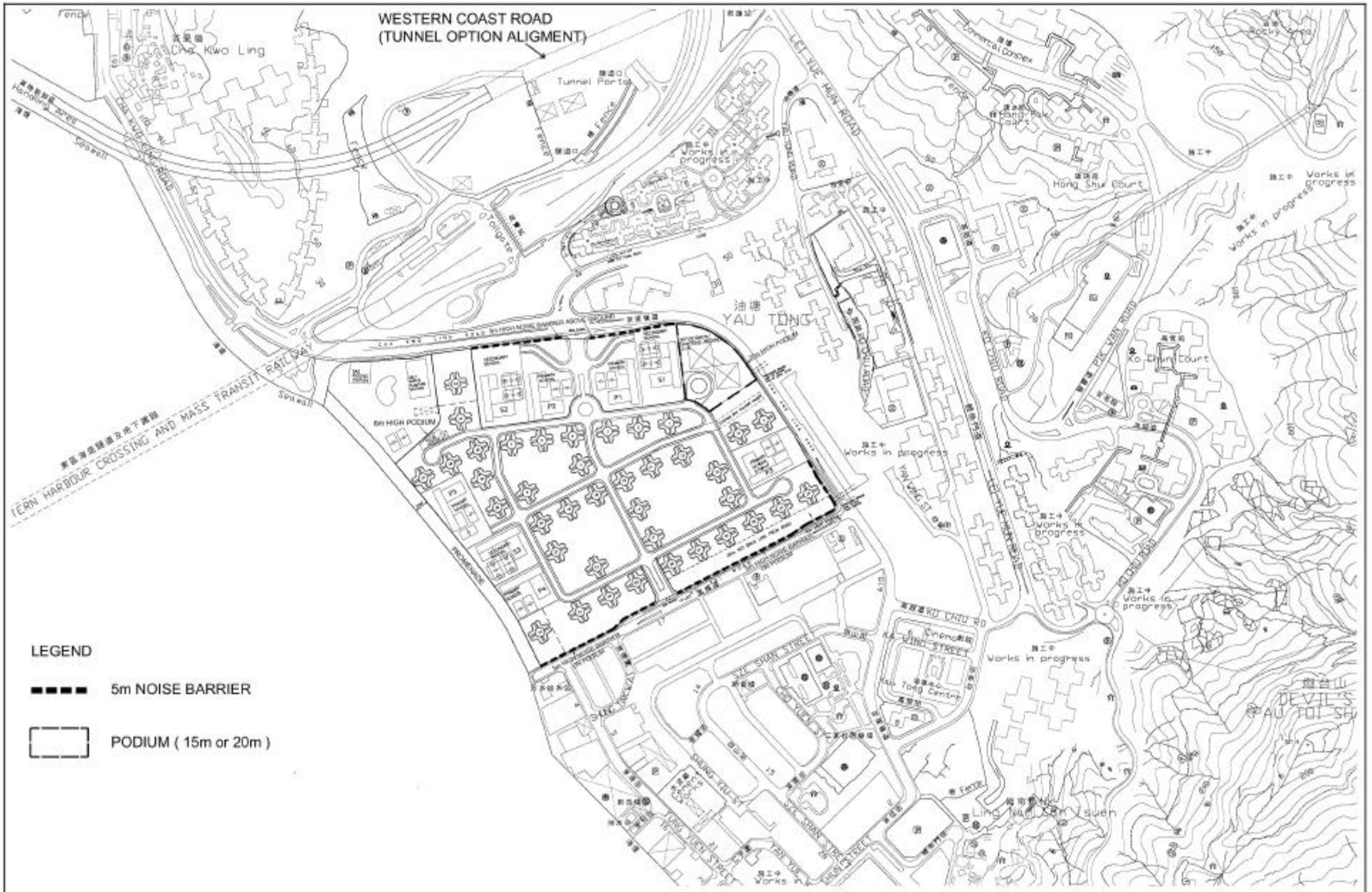
(c) Highrise residential towers built at inland will have less visual impact to the views from Hong Kong Island, however, it will induce negative visual impact to the visual sensitive receivers at the adjacent housing development. The residential towers of proposed comprehensive development near Cha Kwo Ling Road should be of similar height as EHC site and Yau Tong Estate Redevelopment (i.e. within +160mPD) so as to minimize the negative impact.

(d) By stepping of building height from inland toward waterfront, these residential towers will have better relationship with the waterfront, and add visual interest to views from Hong Kong Island / Victoria Harbour.

(e) Scheme D create a better visual effect than Scheme C as the stepped building height profile are more prominent and the visual impact are minimized by reducing the height of residential towers near the waterfront to 35 storeys.

6. Conclusion

Based on the above assessment, the building height profile of Scheme D is the preferred scheme as it has minimized the visual impact of the proposed comprehensive development, and this stepped building height profile is selected for Visual Impact Assessment of the EIA Report. The proposed building height for the residential towers to be range from 115m near the waterfront to about 150m at the inland area. This mitigation measure will form the design guideline and incorporated into the Master Layout Plan for Planning Application to Town Planning Board in the near future.



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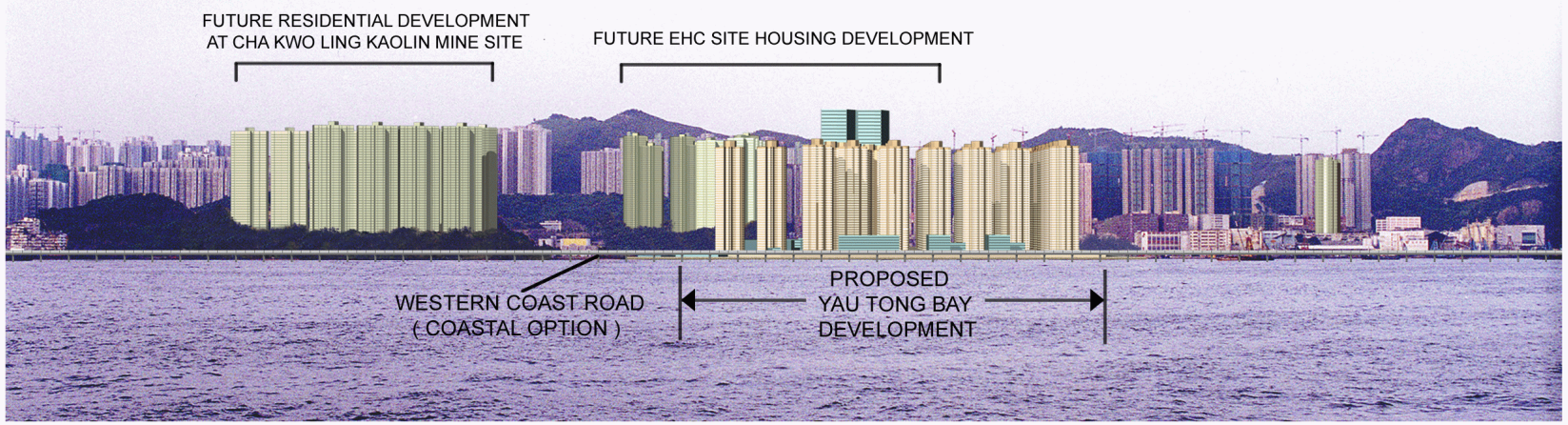
YAU TONG BAY DEVELOPMENT
ENVIRONMENT IMPACT ASSESSMENT STUDY
PROPOSED RECLAMATION WORK

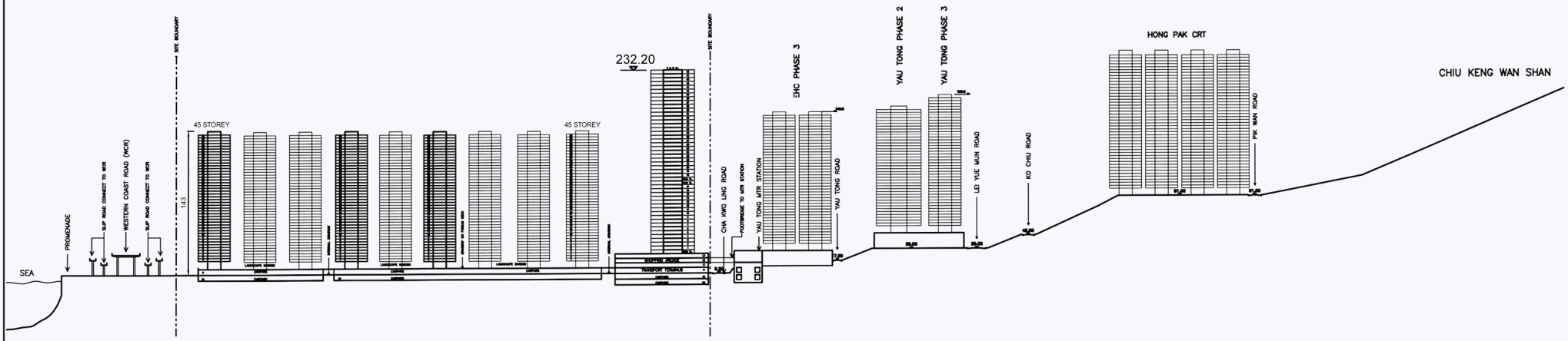
ALTERNATIVE MASTER LAYOUT PLAN FOR COMPREHENSIVE DEVELOPMENT OPTION 1A (SCHEME A,C &D)

MAIN WEALTH DEVELOPMENT LIMITED

Scale	1 : 5,000	Cad Ref.	
Date	OCT 01	Figure No.	9B1



26 VIEW FROM HONG KONG ISLAND WITH PROPOSED DEVELOPMENT OPTION 1A (SCHEME A)

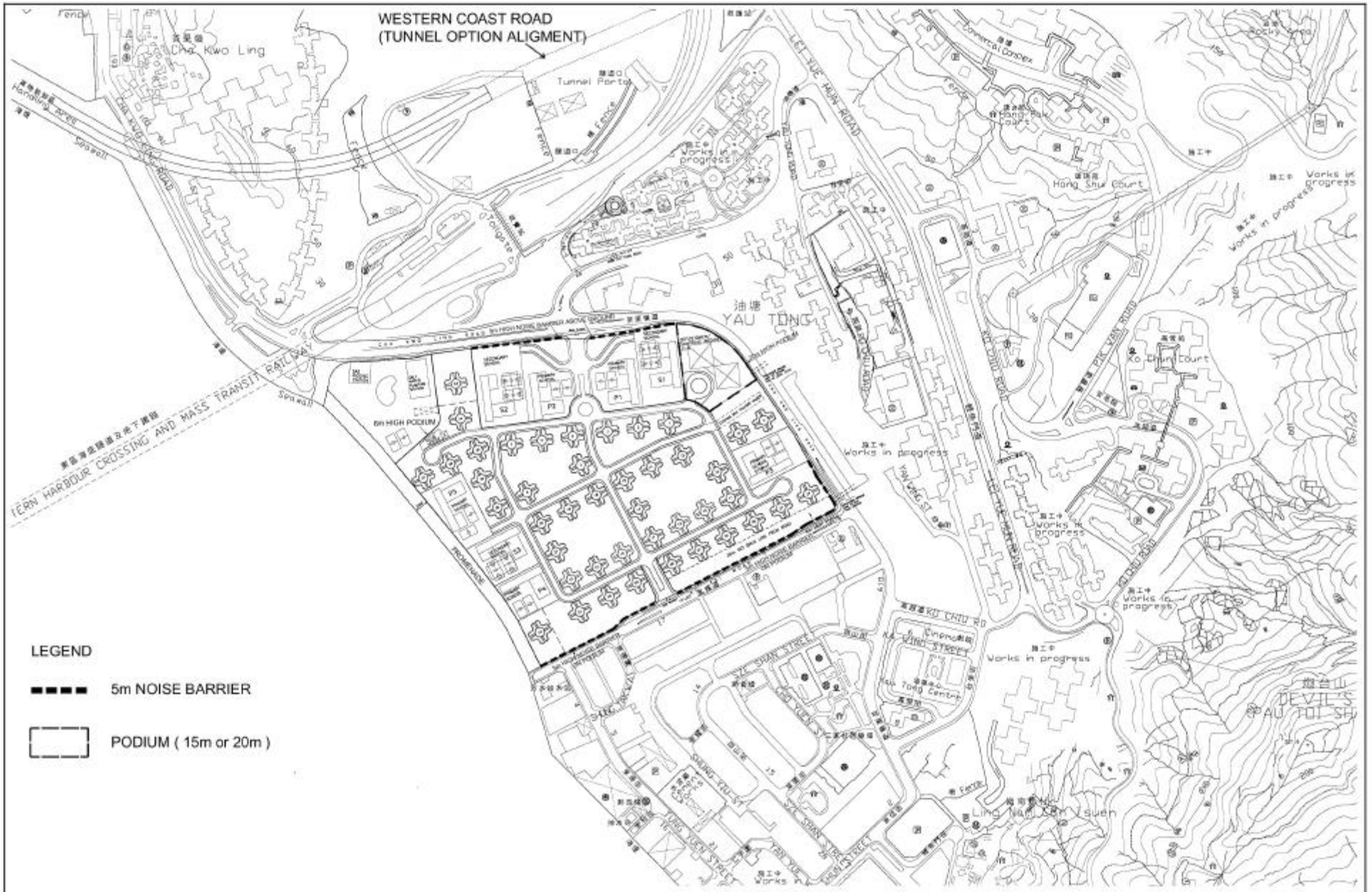


PROPOSED DEVELOPMET OPTION 1A (SCHEME A) - SCHEMATIC SECTION

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY VIEW FROM HONG KONG ISLAND	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B2

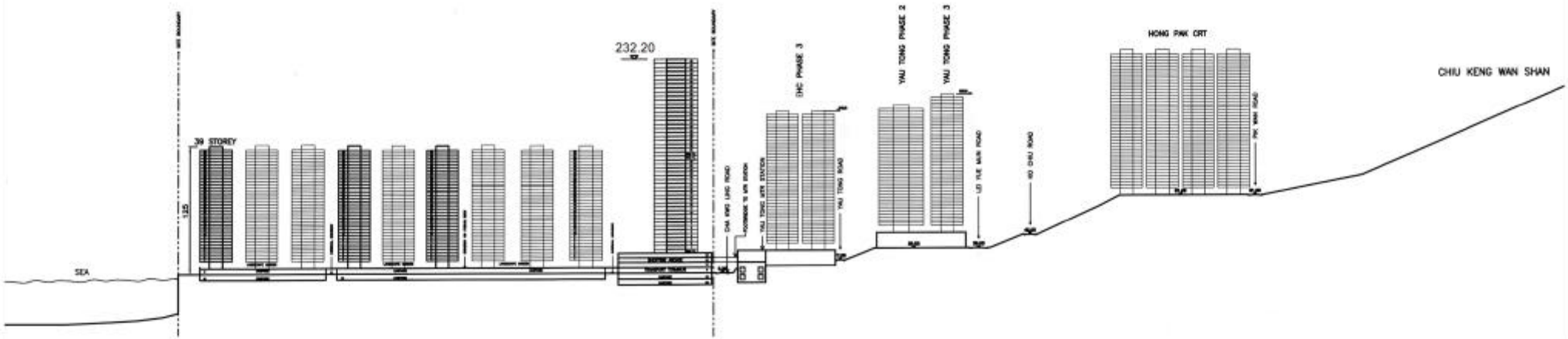
AERIAL PHOTO SHOWING PROPOSED DEVELOPMENT OPTION 1A (SCHEME A)

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY **AERIAL PHOTO OF YAU TONG BAY**	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B3



Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY PROPOSED RECLAMATION WORK **ALTERNATIVE MASTER LAYOUT PLAN FOR COMPREHENSIVE DEVELOPMENT OPTION1A (SCHEME B)**	**MAIN WEALTH DEVELOPMENT LIMITED** Scale 1 : 5,000 — Cad Ref. Date OCT 01 — Figure No. 9B4

26 VIEW FROM HONG KONG ISLAND WITH PROPOSED DEVELOPMENT OPTION 1A (SCHEME B)



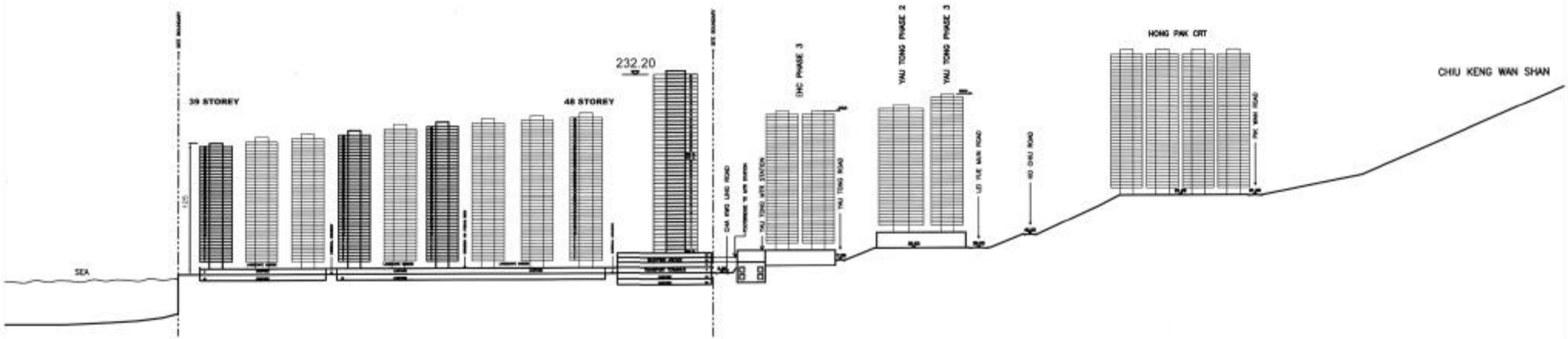
PROPOSED DEVELOPMENT OPTION 1A (SCHEME B) - SCHEMATIC SECTION

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY VIEW FROM HONG KONG ISLAND	MAIN WEALTH DEVELOPMENT LIMITED Scale: — Cad Ref.: — Date: OCT 01 — Figure No.: 9B5

AERIAL PHOTO SHOWING PROPOSED DEVELOPMENT OPTION 1A (SCHEME B)

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY **AERIAL PHOTO OF YAU TONG BAY**	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B6

26 VIEW FROM HONG KONG ISLAND WITH PROPOSED DEVELOPMENT OPTION 1A (SCHEME C)



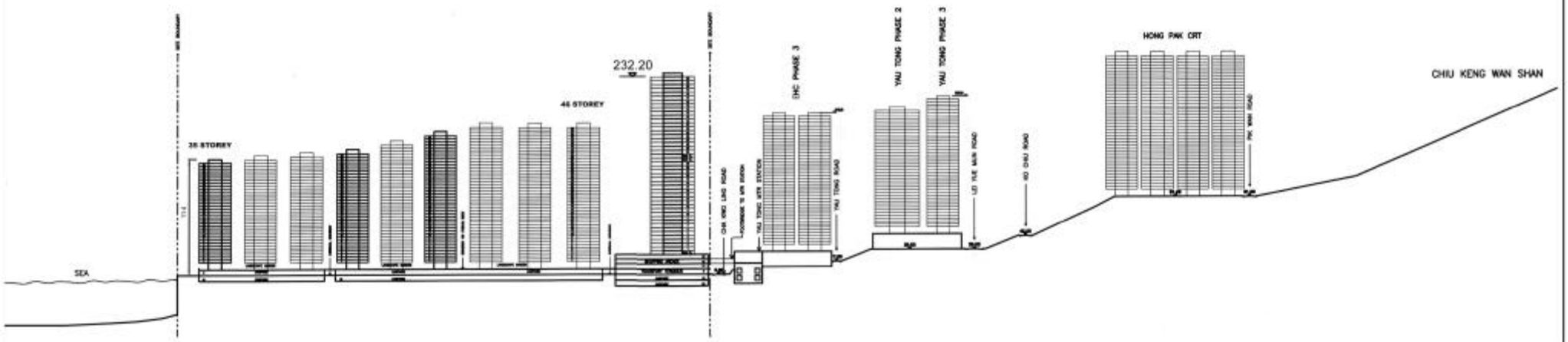
PROPOSED DEVELOPMENT OPTION 1A (SCHEME C) - SCHEMATIC SECTION

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY VIEW FROM HONG KONG ISLAND	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B7

AEIAL PHOTO SHOWING PROPOSED DEVELPMENT OPTION 1A (SCHEME C)

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY **AERIAL PHOTO OF YAU TONG BAY**	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B8

26 VIEW FROM HONG KONG ISLAND WITH PROPOSED DEVELOPMENT OPTION 1A (SCHEME D)



PROPOSED DEVELOPMENT OPTION 1A (SCHEME D) - SCHEMATIC SECTION

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY VIEW FROM HONG KONG ISLAND	MAIN WEALTH DEVELOPMENT LIMITED Scale: — Cad Ref.: — Date: OCT 01 Figure No.: 9B9

AERIAL PHOTO SHOWING PROPOSED DEVELOPMENT OPTION 1A (SCHEME D)

Maunsell in association with WHA, DLN, EHS, MEMCL, MGS	YAU TONG BAY DEVELOPMENT ENVIRONMENT IMPACT ASSESSMENT STUDY **AERIAL PHOTO OF YAU TONG BAY**	MAIN WEALTH DEVELOPMENT LIMITED Scale Cad Ref. Date OCT 01 Figure No. 9B10