



THE HONG KONG HOUSING AUTHORITY

Memorandum for Building Committee

Proposed Master Layout Plan, Scheme Design & Project Development Budget for Public Rental Housing Development at Shatin Area 2B (Hin Wo Lane)

PURPOSE

To seek Members' approval to the proposed Master Layout Plan, Scheme Design and Project Development Budget for the Public Rental Housing Development at Shatin Area 2B (Hin Wo Lane).

BACKGROUND

2. Shatin Area 2B was previously reserved for the development of a polyclinic and a general clinic. To meet CE's pledge of 85,000 flats per year, the development was identified as one of HOUSCOM's control projects to boost housing supply in the year 2003/04.
3. The whole of Area 2B is carved out into two separate portions, the major portion for the construction of housing and the remaining portion for clinic building.
4. The housing portion with a gross site area of about 0.573 ha, is re-zoned from "Government, Institution and Community" (GIC) to Residential (A). The Draft Outline Zoning Plan (OZP No. S/ST/13) was gazetted on 8 October 1999.
5. The Strategic Planning Committee (SPC) has, at its meeting held on 11.9.99, approved the inclusion of this site in the Public Housing Development Programme (PHDP) and the Project Development Cost Ceiling.

6. Past events which are relevant to this project are as follows –

Date	Event
(a) 21.5.1999	Client Brief, Control Plan and Project Estimate endorsed by the department's Project Design Review Committee (PDRC Paper No. 28/99)
(b) 29.6.1999	Shatin District Board Consultation
(c) 11.9.1999	Inclusion into Public Housing Development Programme (PHDP) approved by Strategic Planning Committee (SPC) of Paper No. SPC 30/99
(d) 11.2.2000	DipCon Submission for the agreement on the planning parameters was endorsed
(e) 2.3.2000	Endorsed by Project Design Review Committee for submission to the Building Committee (Paper No. PDRC 4/00 refers)

SCHEME DESIGN PROPOSAL

7. The proposed Master Layout Plan and Scheme Design at **Part I and Part II** of the attached **Annex** generally follows the development parameters and the conceptual layout endorsed in above 6(c). Explanatory notes and drawings attached as **Part I and Part II** of the **Annex** illustrate the disposition of the housing block, vehicular and pedestrian access and other facilities.

8. The proposed development comprises of –

- (a) 1 no. 41- storey New Harmony 1 Option 6 Block on grade;
- (b) 50 nos. covered private car parking spaces & 8 nos. light goods vehicle parking spaces;

- (c) 1 no. Estate Management Office (EMO);
- (d) 1 no. Refuse Collection Point (RCP);
- (e) Associated external works.

9. The main features of the design are as follows –

- (a) To mitigate noise generated from surrounding traffic,
 - A maximum domestic setback of 14m from Che Kung Miu Road and 40m from Tin Sam Street are provided.
 - Provision of noise barriers 10 m high to the west of the site and 7m high on top of roof of carpark to the north.
- (b) Architectural treatment to the Noise Barrier is as follows –
 - The high noise barriers are the dominant features to the development at street level. Care has been taken to avoid adverse visual impact.
 - The overhanging canopy at the top of the noise barrier is repeated at the roof level of the domestic block to unify the appearance of the whole development and provide specific individual identity.
- (c) An 8.5m wide drainage reserve area along site boundary to the south is required to be free from permanent structures.
- (d) EPD required for air-conditioning to the noise affected units on late March 2000, which is not in line with the established policy. Project team will liaise with EPD and develop further architectural details to mitigate the noise issue.

PROPOSED PROJECT DEVELOPMENT BUDGET

10. Based on the proposed Master Layout Plan and Scheme Design, the Project Development Budget for the development is estimated to be **\$372.629 M.**

11. The breakdown of the budget is given in Part IV of the Annex and the key elements are as follows –

Aspect			Project Development Budget (\$M)
(a)	Site Development Cost		-
(b)	Construction Cost	Foundation	27.260
		Building	263.827
		Soft Landscape & Others	0.942
		Sub-total (b)	292.029
(c)	Project Management Cost (a + b) x 14%		40.884
(d)	Other Project Cost (a + b) x 2%		5.841
(e)	Development Contingency (a+b+c+d) x 10%		33.875
Total Project development Budget (a) + (b) + (c) + (d) + (e)			372.629

12. The Unit Cost of the Proposed Project Development Budget as compared with SPC's Approved Project Development Unit Cost Ceiling is as follows –

	(a)	(b)	(c)	(d)
	Unit Cost of Proposed Project Development Budget	SPC's approved project development unit cost ceiling (SPC Paper No. 30/99)	Overall Unit Cost of Construction included in (a) (excluding external works and others)	June 1999 Cost Yardsticks adjusted to tender-in-date
	(\$ / m ² CFA)	(\$ / m ² CFA)	(\$ / m ² CFA)	(\$ / m ² CFA)
Domestic (PRH)	9,959	10,812	6,281	6,931
Private Carpark	5,698	6,763	3,055	4,324
LGV	1,419	1,506	1,112	1,109

13. The proposed Unit Development Cost Budget is within the SPC's Approved Unit Development Cost Ceiling.

14. The difference between the Overall Unit Cost of Construction (excluding external works and others) and the June 1999 Cost Yardsticks adjusted to Tender-In-Date are attributable to the following :

- (a) Adjustment for foundations to domestic block.
- (b) Additional allowance for single block project.

15. The proposed Project Development Cost for the public rental housing portion can be broken down into the cost per flat as follows :

Flat Type	(a) Proposed Development Cost per flat (\$)	(b) Overall Construction Cost per Flat included in (a) (excluding External Works & Others) (\$)	(c) June 1999 Cost Yardstick Adjusted to Tender-in-Date (per flat) (\$)
1P/2P	\$301,758	\$190,314	\$181,255
2P/3P	\$389,397	\$245,587	\$233,392
1B	\$516,872	\$325,984	\$309,989
2B	\$679,204	\$428,364	\$407,352

AVAILABILITY OF FUNDS

16. The estimated yearly expenditure of the Proposed Budget is shown below and would be included in the next capital budget updating of the Authority –

	Estimated Expenditure (\$M)			
	2000/2001	2001/2002	Post 31.3.2001	Total
Estimate	17.400	92.270	262.959	372.629

17. Provision in the Housing Authority's Capital Budget for the year 2000/2001 is \$31.650M (Paper No. FC 2/2000).

DEVELOPMENT PROGRAMME

18. Details of the Development Programme are in Part III of the Annex. The key dates are –

		Event	Date
(a)	Scheme Design	PDRC(2)	2/3/00
(b)	Design & Budget	BC	4/00
(c)	Detailed Design	DDRP	6/00
(d)	Piling	Commencement Completion	10/00 8/01
(e)	Building	Commencement Completion	8/01 2/04

RECOMMENDATIONS

19. It is recommended that the proposed Master Layout Plan, Scheme Design and Project Development Budget for the proposed Public Rental Housing Development at Shatin Area 2B be approved.

DISCUSSION

20. At the next meeting of the Building Committee to be held on 27 April 2000, Members will be invited to approve the recommendation in paragraph 19 above.

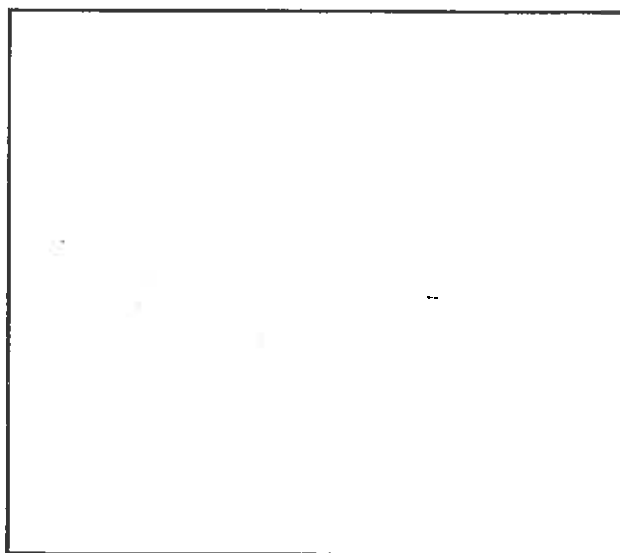
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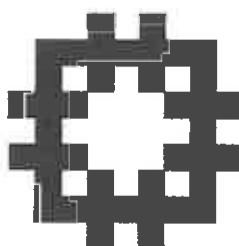
Date : 26 April 2000

**PUBLIC RENTAL HOUSING
DEVELOPMENT AT
SHATIN AREA 2B**

**PROPOSED MASTER LAYOUT PLAN, SCHEME DESIGN &
PROJECT DEVELOPMENT BUDGET**



BC SUBMISSION, APRIL 2000



**DEVELOPMENT AND CONSTRUCTION BRANCH
HOUSING DEPARTMENT**

Amendment Record Sheet**Part I : Master Layout Plan****1. Introduction**

- 1.1 Background
- 1.2 Location Plan

2. Site Analysis & Evaluation

- 2.1 Planning and Land Matters
 - 2.1.1 Site Location
 - 2.1.2 Adjacent Land Uses
 - 2.1.3 Zoning Consideration
 - 2.1.4 Land Clearance / Resumption
 - 2.1.5 Height Restriction
- 2.2 Engineering Considerations
 - 2.2.1 Noise and Air
 - 2.2.2 Geotechnical Consideration
 - 2.2.3 Foundation Design
 - 2.2.4 Drainage and Sewerage
 - 2.2.5 Water Supply
 - 2.2.6 Electricity, Telephone , Gas
 - 2.2.7 Traffic Improvement
 - 2.2.8 Drainage Reserve Area
 - 2.2.9 Site Formation

3. Accommodation and Facilities

- 3.1 Site Area
- 3.2 Development Ratio
- 3.3 Flat Number and Flat Mix
- 3.4 Design Population 3.5 Refuse Collection Point
- 3.6 Management Accommodation
 - 3.6.1 Estate Management Office
 - 3.6.2 MAC Office
 - 3.6.3 Artisan Workshop
 - 3.6.4 Office for Cleansing Contr.
 - 3.6.5 BW Term Maintenance Contr. Service / Store Room
 - 3.6.6 BS Term Maintenance Contr. Service / Store Room
- 3.7 Open Space
 - 3.7.1 Local Open Space
 - 3.7.2 recreation Facilities

4. Circulation and Transportation Matters


- 4.1 Vehicular Access
- 4.2 Pedestrian Access
- 4.3 Control of Ingress / Egress
- 4.4 Emergency Vehicular Access
- 4.5 Pedestrian Network
- 4.6 Parking Provision
 - 4.6.1 Carpark Spaces
 - 4.6.2 Motor-cycle Spaces
 - 4.6.3 Light Goods Vehicle Spaces
 - 4.6.5 Residential Loading/ Unloading
 - 4.6.6 Bicycle Parking

5. Design Consideration

- 5.1 Block Types, Disposition & Orientation
- 5.2 Noise Barrier Design
- 5.3 Landscape Design
- 5.4 Design For the Disabled
- 5.5 Graphics and Signage

Part II : Master Layout Drawings**Part III : Development Programme****Part IV : Project Development Budget**

AMENDMENT RECORD SHEET

	MONTH YEAR	DATE OF ISSUE		
		04		
		00	ISSUE NUMBER	
Content			1	
Amendment Record Sheet			1	
Part I : Master Layout Plan				
1. Introduction				
1.1 Background			1	
1.2 Location Plan			1	
2. Site Analysis & Evaluation				
2.1 Planning and Land Matters			1	
2.2 Engineering Considerations			1	
3. Accommodation and Facilities				
3.1 Site Area			1	
3.2 Development Ratio			1	
3.3 Flat Number and Flat Mix			1	
3.4 Design Population			1	
3.5 Refuse Collection Point			1	
3.6 Management Accommodation			1	
3.7 Open Space			1	
4. Circulation and Transportation Matters				
4.1 Vehicular Access			1	
4.2 Pedestrian Access			1	
4.3 Control of Ingress / Egress			1	
4.4 Emergency Vehicular Access			1	
4.5 Pedestrian Network			1	
4.6 Parking Provision			1	
5. Design Consideration				
5.1 Block Types, Disposition & Orientation			1	
5.2 Noise Barrier Design			1	
5.3 Landscape Design			1	
5.4 Design For Disabled			1	
5.5 Graphic and Signage			1	
Part II : Master Layout Drawings			1	
Part III : Development Programme			1	
Part IV : Development Cost Budget			1	
This document has been reviewed and approved for adequacy				
				
SIGNED :	Mr. I.A. GALLOWAY CA/2 (Atg.)			
DATE :	25 April 2000			

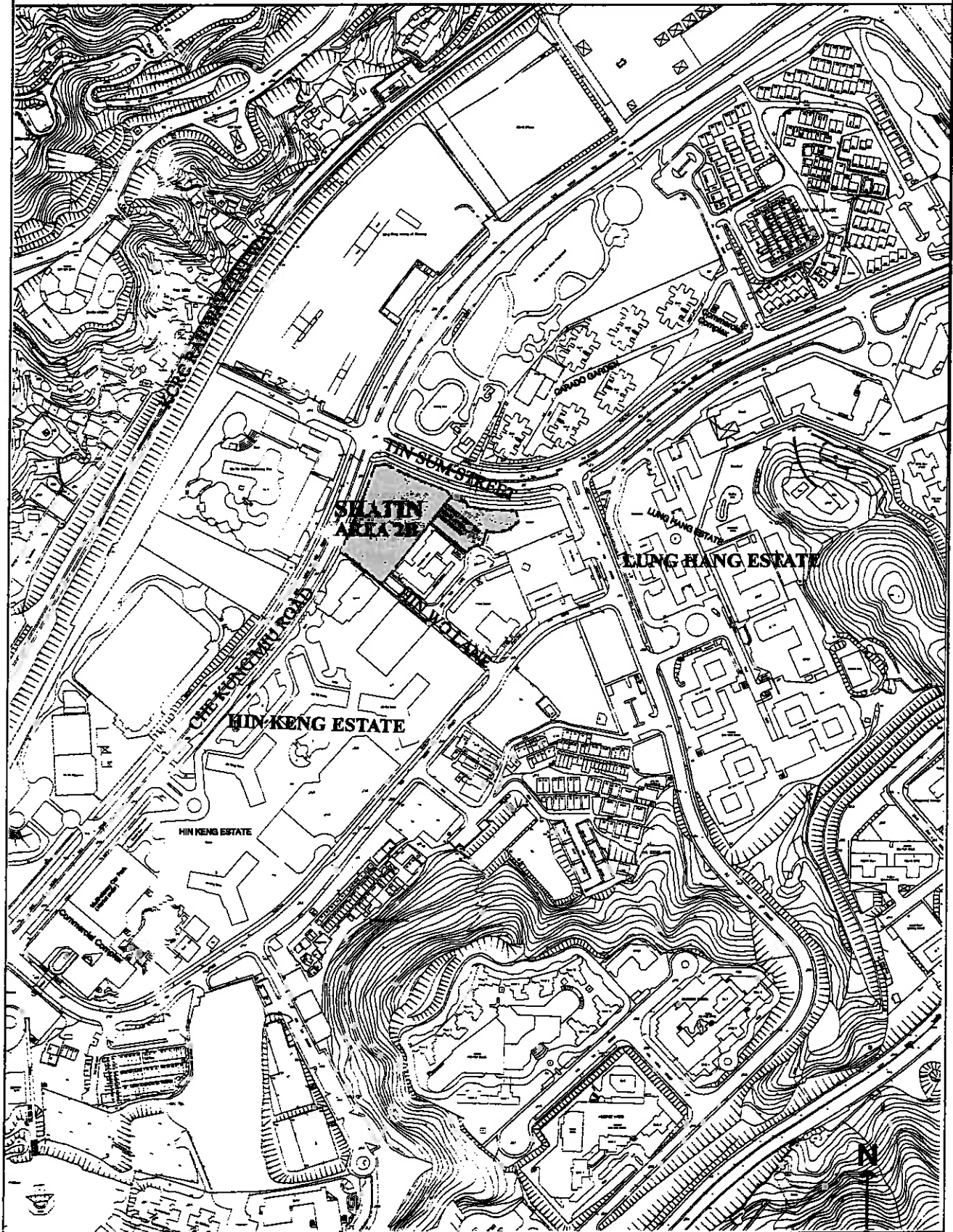
1. INTRODUCTION

1.1 BACKGROUND

1. The site is bounded by Che Kung Miu Road to the north and Tin Sam Street to the east. To its immediate west is a primary school located within Hin Keng Estate and south is an array of GIC facilities including a neighbourhood community centre, Tin Sum Divisional Police Station and Fire station. The site has a gross area of approx. 0.78 ha.
2. Originally, the site was reserved for the development of polyclinic and general clinic only. In view of the projected territory-wide shortfall of housing supply in the period 2001–2006, the Government identified the reserve clinic site in Area 2B as one of HOUSCOM's Control List for completion in 2003/04. As a result, a joint development proposal incorporating public housing of not less than 600 flats and the clinic will be planned, constructed and funded by HD and Health D respectively.
3. The subject site is originally zoned as GI/C and re-zoning of the housign portion to Residential (A) was incorporated into the Shatin OZP No. S/ST/13 which was gazetted on 8.10.1999 and no objection was received.
4. At present, the north-western portion of the site is occupied by Water Services Department under a short-term tenancy as a temporary maintenance yard. The southern portion is used as a temporary carpark. Upon DLO/ST's advice, the entire site can be ready for hand-over to HD and the Health Department for works commencement in October 2000.
5. The approval status of this PRHD scheme is as follows:
 - a) the development parameters, conceptual layout plans and cost estimates had been endorsed with revision on 21.5.1999 (PDRC Paper No. 28/99 refers).
 - b) the development parameters, conceptual layout plans and cost estimates were subsequently approved by Strategic Planning Committee (SPC) on 11.9.1999 (SPC Paper No. 30/99 refers) for inclusion into the Public Housing Development Programme (PHDP).
 - c) the planning parameters have been submitted for DIPCON circulation on September 1999 and was endorsed on 11.2.2000.
 - d) On 2.3.2000, the Proposed Master Layout Plan and the Project Development Cost Budget was endorsed by the Project Design Review Committee (Paper No. PDRC 4/00 refers)

1. INTRODUCTION

1.2 LOCATION PLAN



2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<p>2.1 <u>Planning and Land Matters</u></p> <p>2.1.1 <u>Site Location</u> Shatin Area 2B, is bounded by Che Kung Miu Road to the north and Tin Sam Street to the east.</p> <p>2.1.2 <u>Adjacent Land Uses</u> To the west a primary school and the south GIC facilities such as neighbourhood community centre, police station and fire station.</p> <p>2.1.3 <u>Zoning Consideration</u> The Shatin Outline Zoning Plan No. S/ST/13 was gazetted on 8 October 99 and no objection within the statutory period was received.</p> <p>2.1.4 <u>Land Clearance/ Resumption</u> No specific requirement.</p> <p>2.1.5 <u>Height Restriction</u> Nil</p>	<p>As in the Approved Development Parameters.</p> <p>As in the Approved Development Parameters.</p> <p>As in the Approved Development Parameters.</p>	<p>The site is relatively flat with no slope in the adjoining areas.</p>
<p>2.2 <u>Engineering Considerations</u></p> <p>2.2.1 <u>Noise</u> Study to be undertaken by HD.</p>	<p>According to the Final Road Traffic Noise Assessment by HD's consultant, Messrs. Ove Arup & Partners (ARUP) submitted to EPD on 28.2.2000, vertical noise barriers will be provided : - 7m high at roof top of</p>	<p>Draft final reports were submitted to EPD for comment since November 1999. EPD commented that additional measures such as cantilevered barrier along Che Kung Miu Road was desirable to explore on 10.1.2000, and as a result,</p>

2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
	<p>carport facing Tin Sum Street, and 10m high along western boundary facing Che Kung Miu Road.</p> <p>- Residual noise impacts will be mitigated by the provision of upgraded 6mm thick glass pane windows for the affected flats, with noise levels in excess of 70dB(A).</p>	<p>cantilevered canopies were provided.</p> <p>The final report was submitted to EPD on 23.2.2000 and EPD's memo dated 21.3.2000 required air-conditioning to the noise affected flats (i.e.300 out of 799 flats) was stated.</p> <p>A domestic set back of 14m from Che Kung Miu Road and 40m from Tin Sum Street are provided, and project team will liaise with EPD and develop further architectural details to mitigate the noise issue.</p> <p>A feature wall to be designed with solid and transparent screens to be provided for best noise screening as well as aesthetic results. (pls. refer to dwg no. SK/A/PLO-01)</p>
<p>2.2.2 <u>Geotechnical Considerations</u> No specific requirement.</p>	<p>The geological strata comprise a succession of fill, alluvium and insitu decomposed granitic soils down the bedrock, at some 45m to 60m below ground, therefore, shallow footing is not recommended.</p>	
<p>2.2.3 <u>Foundation Design</u> No specific requirement.</p>	<p>H piles would be used for the proposed building block, noise barrier and carpark.</p>	
<p>2.2.4 <u>Drainage and Sewerage</u></p>	<p>As in the Approved Development Parameters.</p>	

2. SITE ANALYSIS & EVALUATION

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<p>2.2.5 Water Supply Adequate water supply provisions for the proposed development to be undertaken by WSD.</p>	As in the Approved Development Parameters.	
<p>2.2.6 Electricity, Telephone, Gas Adequate utility supply provisions for the proposed development to be undertaken by utility companies.</p>	As in the Approved Development Parameters.	
<p>2.2.7 Traffic Improvement Traffic improvement has been covered by CED's Supplementary Traffic Impact Assessment.</p>	As in the Approved Development Parameters.	According to the Traffic Impact Assessment by MCAL, the current proposal of PRH/HOS can be accommodated by the planned traffic improvement works recommended in CED's study.
<p>2.2.8 Drainage Reserve Area Drainage reserves of 8.5m alongside the South-western boundary of the site.</p>	As in the Approved Development Parameters.	
<p>2.2.9 Site Formation The site is held under Short Term Tenancy which will be terminated before piling works commence on October 2000.</p>	As in the Approved Development Parameters.	Health Department is responsible to take up the works of the clinic portion.

3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks															
3.1 Site Area Gross site area: 7,800 m ² Clinic Site : 2,070 m ² Domestic Site Area : 5,730 m ² Net site area : 6,411 m ²	As approved in SPC paper No. 30/99 dated 11 September 99.	The net site area as shown on left has excluded area of the proposed estate road and non-building area (i.e. the drainage reserve to the south of the Site).															
3.2 Development Ratio Permissible DR : 5-7 Gross Floor Space Domestic 36,816m ² Clinic 7,000m ² Total: 43,816m ² Development Ratio : =43,816 / 6,411 =6.83 Domestic Plot Ratio : 7.98 Non-Domestic Plot Ratio : 0.13 (refer to plot ratio and development calculation sheets)	Development Ratio (D.R.) Calculation Gross Floor Space NH1 Opt. 6 = 38,253 m ² (933 m ² x 41) Area attached in Wings B & C = 106 m ² Total : 38,359m ² Development Ratio : =38,359/ 5,730 = 6.7 < 7	Domestic GFA = *34,625.63 m ² * refer to BC11/99 dated 15 January 99. GFA of EMO & Contractor's offices = 501.7 m ²															
3.3 Flat Number and Flat Mix The proposed public rental housing development is planned to provide a total of 799 flats.	The proposed development provided one standard New Harmony 1 Opt 6. The flat mix is as follows: <table><tr><td>Flat</td><td>1/2P</td><td>2/3P</td><td>1B</td><td>2B</td></tr><tr><td>Nos.</td><td>159</td><td>320</td><td>160</td><td>160</td></tr><tr><td>%</td><td>19.9</td><td>40.1</td><td>20.0</td><td>20.0</td></tr></table>	Flat	1/2P	2/3P	1B	2B	Nos.	159	320	160	160	%	19.9	40.1	20.0	20.0	
Flat	1/2P	2/3P	1B	2B													
Nos.	159	320	160	160													
%	19.9	40.1	20.0	20.0													

3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks
3.4 Design Population	The design population for 799 flats is 2,020 persons. (2.53 persons/ unit)	
3.5 Refuse Collection Point 1 for the whole Rental Estate	Proposed to be located at the corner of carpark. (110m ² IFA).	
3.6 Management Accommodation 3.6.1 Estate Management Office 1 for the whole Rental Estate	Proposed to be located at G/F of Wing C.	As per SHM/D&V's "Standard Provision for Rental Estate" for the project dated 5.5.99.
3.6.2 M.A.C. Office 1 for each block (15 - 20 m ² IFA)	Proposed to be provided at G/F of Wing B (17.3 m ² IFA).	Ditto.
3.6.3 Artisan Workshop 1 for the whole Rental Estate, to be detached from the Main EMO (20-40 m ² IFA)	Proposed to be provided at G/F of Wing B (21.5 m ² IFA).	Ditto.
3.6.4 Office for Cleansing Contractor 1 for the whole Rental Estate (32.5-46.5 m ² IFA)	Proposed to be provided at G/F of Wing B (22.2 m ² IFA)	Ditto.
3.6.5 BW Term Maintenance Contractor Service / Store Room 1 for the whole Rental Estate (70-100 m ² IFA)	Proposed to be provided at G/F of Wing B (49 m ² IFA)	Ditto.

3. ACCOMMODATION AND FACILITIES

Approved Development Parameters	Proposed Master Layout Plan	Remarks
<p>3.6.6 BS Term Maintenance Contractor Service / Store Room 1 for the whole Rental Estate (70-100 m² IFA)</p>	Proposed to be provided at G/F attached to Wing B (54.7 m ² IFA).	Area as shown on the control plan in PDRC Paper No. 28/99 is 58.2m ² .
<p>3.7 Open Space 3.7.1 Local Open Space A minimum of 2,560 sq.m. of local open space shall be provided to serve the proposed development.</p> <p>3.7.2 Recreation Facilities 205 sq.m. Children Playing Area is required.</p>	Local open space provided.	

4. CIRCULATION AND TRANSPORTATION MATTERS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
4.1 Vehicular Access Main access from Hin Keng Lane	As in the Approved Development Parameters	
4.2 Pedestrian Access No special requirement	Pedestrian access is provided at these points: at south-east giving access to the adjoining Hin Keng Estate and existing bus stops; at north-west giving access to the nearby KCR station; at north-east giving access to an existing pedestrian subway under Tin Sam Street.	
4.3 Control of Ingress and Egress No special requirement	Guard kiosk, drop gate to be provided at entrance to the estate road; automated carpark control system to be provided later by carpark operator as required.	
4.4 Emergency Vehicular Access (EVA) No special requirement	Domestic block and carpark building shall be accessible with EVA/estate road.	
4.5 Pedestrian Network No special requirement.		

4. CIRCULATION AND TRANSPORTATION MATTERS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
4.6 Parking Provision 4.6.1 Carpark Spaces $*799 / 16 = 50$ nos. * includes the no. of 1P/2P flat	As in the Approved Development Parameters	<u>Rate of Provision for carpark</u> PRH : 1 per 13-16 flats <u>Dimension</u> 2.5m (W) x 5m (L) x 2.4m (H)
4.6.2 Motor-cycle Spaces 3 nos.	As in the Approved Development Parameters	5 % of total parking space.
4.6.3 Light Goods Vehicle (LGV) Spaces $(799-*159) / 80 = 8$ nos. * * no. of 1P/2P flats	Along the site boundary at the South	<u>Rate of provision for LGV :</u> 1 space per 80 flats TD has no objection to the number of LGV provided. [PM/2 's memo to TD dated 22 March 00 (ref: HD(PM)55/693/1) refers]
4.6.4 Residential Loading/ Unloading 1 no. is required.	As in the Approved Development Parameters	Provision of 1 per domestic block.
4.6.5 Bicycle Parking 27 nos. is required.	As in the Approved Development Parameters	<u>Rate of provision for bicycle:</u> 1 space per 30 flats

5. DESIGN CONSIDERATIONS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
5.1 <u>Block Types, Disposition and Orientation</u>	As per Control Plan except :- i) orientation of block revised ii) RCP is relocated to away from the vehicular and pedestrian entrance.	
5.2 <u>Design of Noise Barrier</u> No special requirement.	<p>The site, with its trees and garden, and its limited area, suggested glass noise barrier would be appropriate. The result is a curtain of glass defines the development, yet maintain a certain degree of transparency.</p> <p>This transparent membrane adopted a playful form originated from the noise reduction requirement.</p> <p>The eave-like canopy defines the top-end of the noise barrier to reduce it to a human scale.</p> <p>The canopy at the roof top of the domestic block is proposed to reflect the canopy of the noise barrier, to unify the Development as a whole and to enhance the individual identity of the Development.</p>	<p>Both Transport Department and Highways Department have no objection to the proposed projection of canopies over street. [TE(NTE)Div./TD's memo dated 5.4.2000 (ref: NR 182/191-41) and Highways/NT Region 's memo dated 20.3.2000 (ref: HNT 706/ST/14) refers]</p> <p>Comment from DLO/ST is pending.</p>

5. DESIGN CONSIDERATIONS

Approved Development Parameters	Proposed Master Layout Plan	Remarks
5.3 Landscape Design No specific requirement.	Curvilinear planters create a leisure atmosphere and contrasting to the rectilinear building block. Landscaping in the roof garden and pedestrian area is to be designed in safe and secure manner to improve the built environment and visual quality of the Estate.	
5.4 Design for the Disabled No special requirement.	All buildings, open spaces, pedestrian circulation and public transport facilities are designed to cater for the needs of the disabled.	
5.5 Graphics and Signage No specific requirement.	Graphic and signage system to be designed in accordance with the D&S's signage manuals.	Reference: Signage Manual for Public Housing Estates.

2 MASTER LAYOUT DRAWING

MASTER LAYOUT DRAWINGS**DRAWING LIST :-**

<u>Drawing No.</u>	<u>Revision</u>	<u>Drawing Title</u>
ST32/SITE/A/PLO-01	P02	SITE LOCATION PLAN
ST32/SITE/A/PLO-02	P03	G/F LAYOUT PLAN
ST32/SITE/A/PLO-03	P02	PODIUM LAYOUT PLAN
ST32/SITE/A/PLO-04	P02	ROOF PLAN
ST32/SITE/A/PLO-05	P02	WEST ELEVATION
ST32/SITE/A/PLO-06	P02	SECTION A-A
ST32/BL1/A/PLO-01	P01	BLOCK 1 – G/F PLAN
ST32/BL1/A/PLO-02	P01	BLOCK 1 – F40 PLAN
ST32/BL1/A/PLO-03	P01	BLOCK 1 – UPPER ROOF PLAN WITH SPRINKLER TANK
SK/A/PLO-01	P02	ELEVATION OF NOISE BARRIER
SK/A/PLO-02	P02	AXONOMETRIC VIEW FROM CHE KUNG MIU ROAD
SK/A/PLO-03	P01	AXONOMETRIC VIEW FROM HIN WO LANE



NOTES

REVISIONS

NO	DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
		DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATC.)	ORIGINAL SIGNED	02/00
	MARTIN MAGILL SA/14	ORIGINAL SIGNED	02/00
CHECKED	JIMMY TAM A/107	ORIGINAL SIGNED	02/00
	MARY CHAN AG/4	ORIGINAL SIGNED	02/00
	Y.W. CHAN STO(A)/13	ORIGINAL SIGNED	02/00
	T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00
DRAWN	T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00

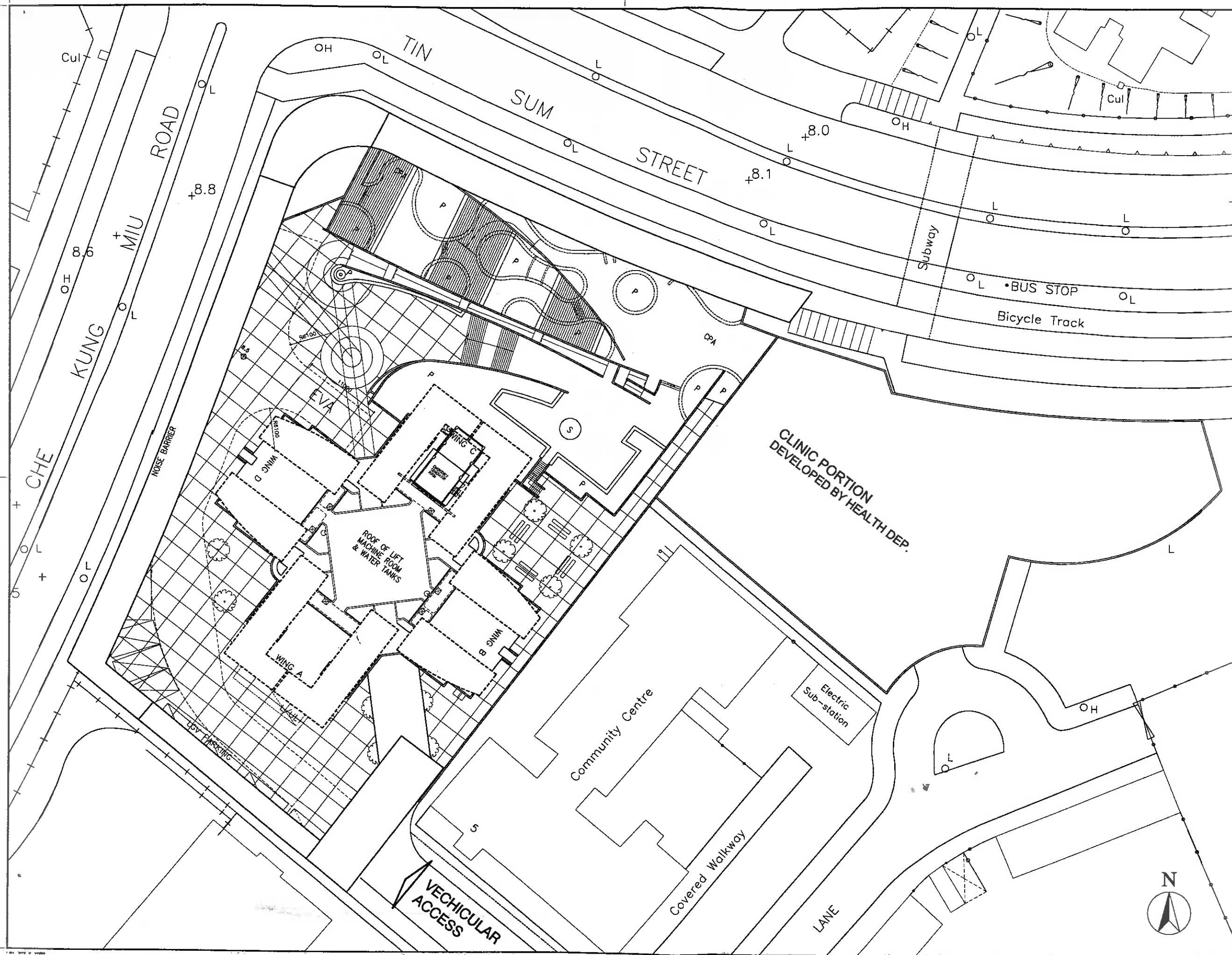
PROJECT
**SHATIN AREA 2B
HIN WO LANE**

DRAWING TITLE
SITE LOCATION PLAN

SCALE 1:4000

DRAWING NO
ST32/SITE/A/PLO-01/P02

SOURCE



NOTES

REVISIONS

NO	DESCRIPTION AND DATE	OWN	CHK	AUTH

NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED C.T. WONG CA/2 (ATC)	ORIGINAL SIGNED	02/00
MARTIN WAGILL SA/14	ORIGINAL SIGNED	02/00
JIMMIE TAY A/107	ORIGINAL SIGNED	02/00
CHECKED MARY CHAN AG/4	ORIGINAL SIGNED	02/00
Y.W. CHAN STO(A)/13	ORIGINAL SIGNED	02/00
DRAWN T.H. LAU TD(A)/142	ORIGINAL SIGNED	02/00

PROJECT
SHATIN AREA 2B
HIN WO LANE

DRAWING TITLE
ROOF PLAN

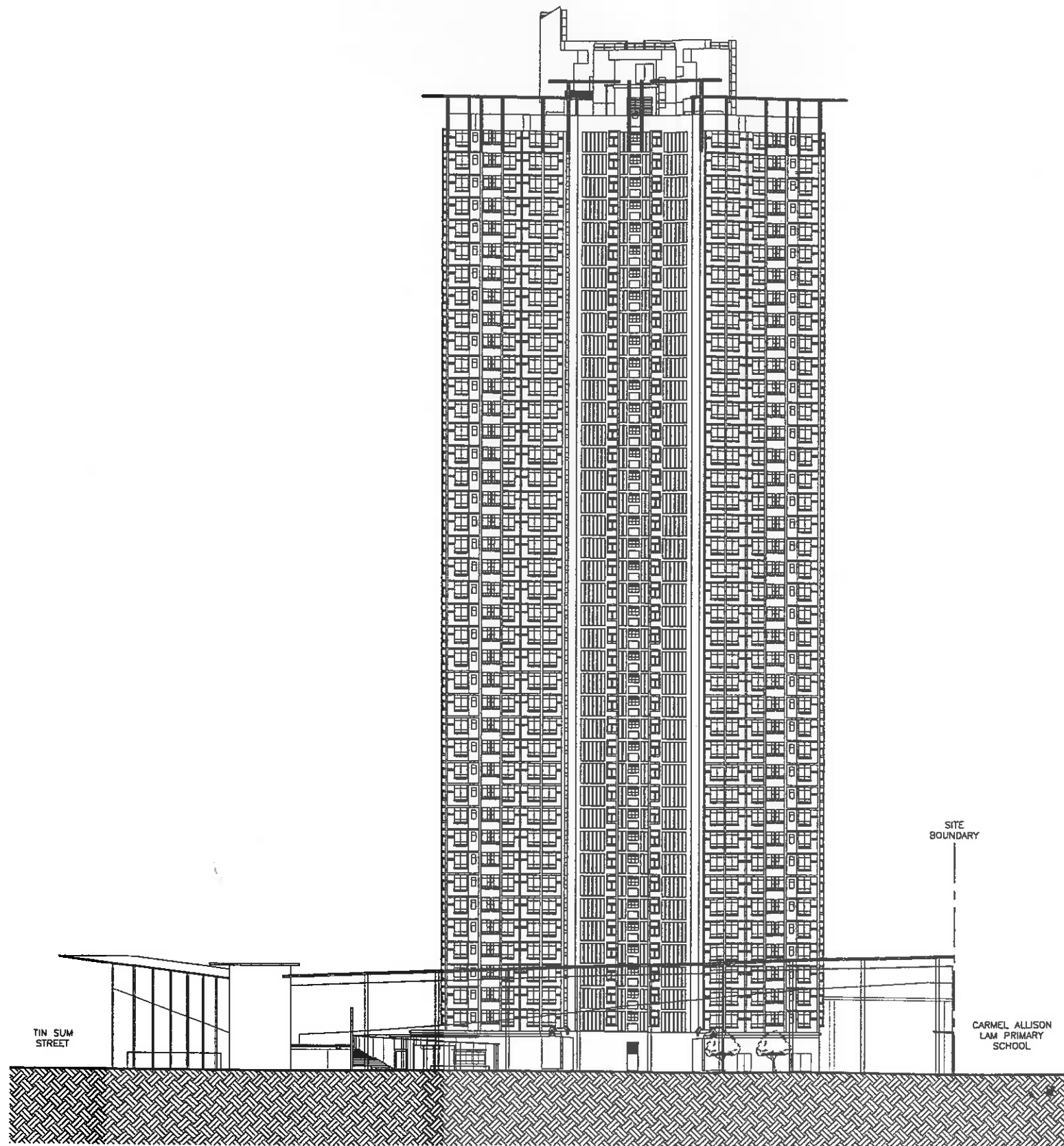
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SOURCE



WORKS GROUP
HOUSING DEPARTMENT



WEST ELEVATION

NOTES

REVISIONS

NO.	DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
		OWN	CHK	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.Y. WONG CA/2 (ATG)	ORIGINAL SIGNED	02/00
	MARTIN MAGILL SA/14	ORIGINAL SIGNED	02/00
CHECKED	JIMMIE TAM A/107	ORIGINAL SIGNED	02/00
	MARY CHAN AG/4	ORIGINAL SIGNED	02/00
	T.W. CHAN STO(A)/13	ORIGINAL SIGNED	02/00
DRAWN	T.H. LAM TO(A)/142	ORIGINAL SIGNED	02/00

PROJECT:
SHATIN AREA 2B
HIN WO LANE

DRAWING TITLE:
WEST ELEVATION

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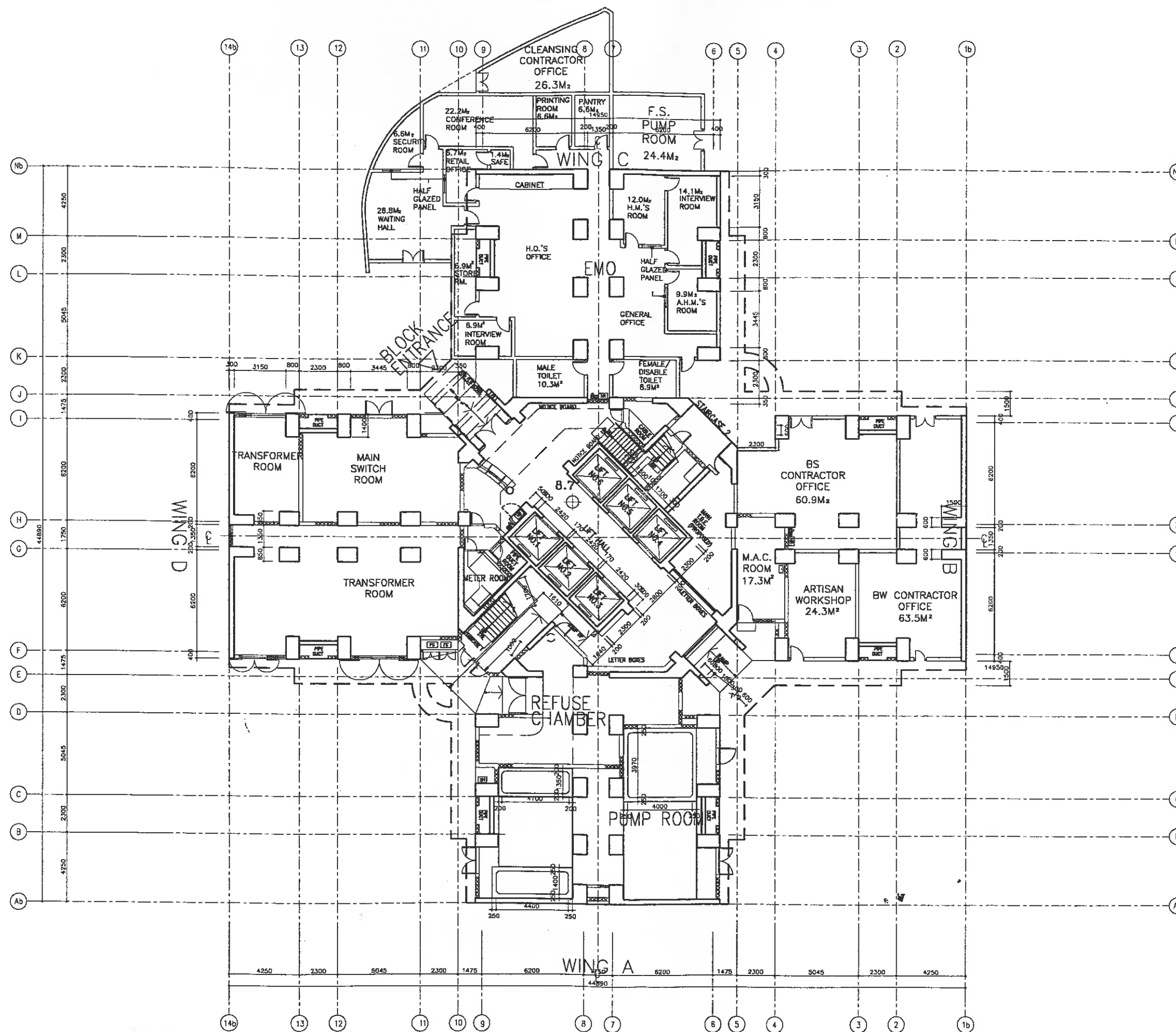
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SOURCE





WORKS GROUP
HOUSING DEPARTMENT



NOTES

REVISIONS

NO	DESCRIPTION AND DATE	DRN	CRD	AUTH

NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED C.T. WONG CA/2 (ARC.)		
CHECKED JIMMIE TAM A/107		

PROJECT
SHATIN AREA 2B
HIN WO LANE

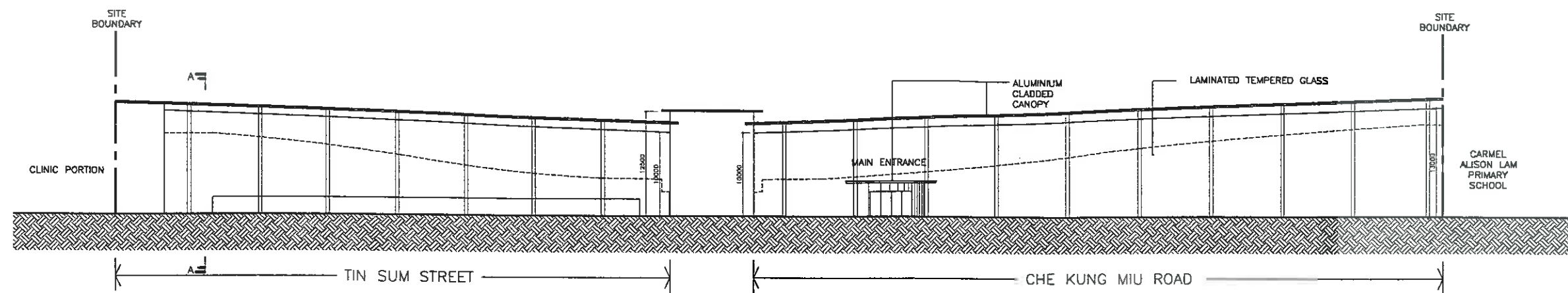
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BLK 1 -
GROUND FLOOR PLAN

SCALE
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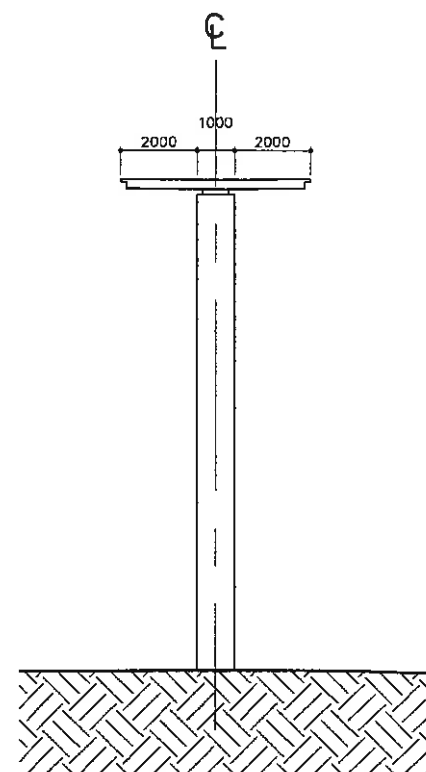
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ACAD REF: ST32, BL1, A, PLO-01, P01.DWG

SOURCE





ELEVATION OF NOISE BARRIER
SCALE 1:600



SECTION A-A
SCALE 1:300

NOTES

REVISIONS

NO		DESCRIPTION AND DATE	INITIAL AND DESIGNATION		
			DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)		
CHECKED	MARTIN MAGILL SA/14		
	JIMMY TAM A/107		
	MARY CHAN AG/4		
	Y.W. CHAN STO(A)/13		
DRAWN	T.H. LAM TO(A)/142		

PROJECT

**SHATIN AREA 2B
HIN WO LANE**

DRAWING TITLE

**ELEVATION & SECTION OF
NOISE BARRIER**

SCALE AS SHOWN

DRAWING NO

SK/A/PLO-01/P02

SOURCE



CADAM V3R2 A3 297 X 420

**WORKS GROUP
HOUSING DEPARTMENT**



REVISIONS		INITIAL AND DESIGNATION	
NO	DESCRIPTION AND DATE	DWN	CHK AUTH

NO	DESCRIPTION AND DATE	DWN	CHK	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	C.T. WONG CA/2 (ATG.)		
CHECKED	MARTIN MAGILL SA/14		
	JIMMY TAM A/107		
	MARY CHAN AG/4		
	Y.W. CHAN STO(A)/13		
DRAWN	T.H. LAM TO(A)/142		

PROJECT

**SHATIN AREA 2B
HIN WO LANE**

DRAWING TITLE

**AXONOMETRIC VIEW
FROM CHE KUNG MIU ROAD**

SCALE N.T.S.

DRAWING NO

SK/A/PLO-02 /PO2

SOURCE

CADAM V3R2 43 257 X 422

 **WORKS GROUP
HOUSING DEPARTMENT**



NOTES

[illegible]

PROJECT

SHATIN AREA 2B
HIN WO LANE

DRAWING TITLE

AXONOMETRIC VIEW
FROM HIN WO LANE

SCALE N.T.S.

DRAWING NO

SK/A/PLO-03 /P01

SOURCE

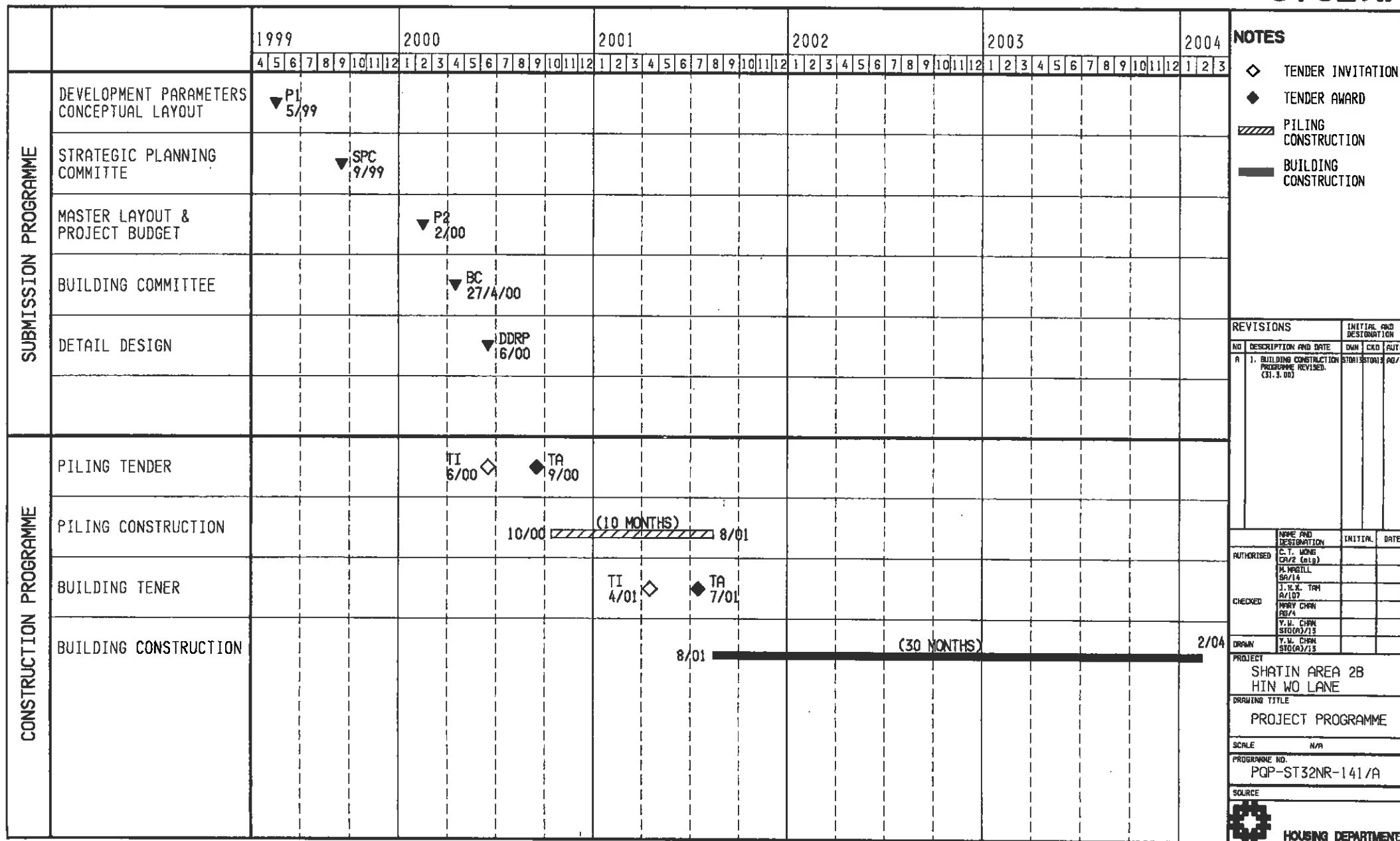


CADAM V3R2 A3 297 X 420

**WORKS GROUP
HOUSING DEPARTMENT**

SHATIN AREA 2B

ST32NR



4 DEVELOPMENT COST BUDGET

SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 4

PHASE

PROJECT: Shatin Area 1B PHASE: - PHDP Code: _____

	COST PORTIONS								Common Items		Total
	PRIL	IIOS	CC	CP (FC)	WEL	UN	GN	OCF(LGV)	TS	EW	
CFA of Cost Portions (m2)	36,014	-	-	1,367	21	509	-	-	-	-	37,913
COST ITEMS											
Estimated Cost in \$,000											Fluctuation Provisions
A. Site Development & Construction Cost Budget At June 1999 (Excluding Fluctuations & Tender Price Inflation)											
1.0 Site Development Costs											
1.1 Site Formation Contract	-	-	-	-	-	-	-	-	-	-	-
1.2 Demolition Contract	-	-	-	-	-	-	-	-	-	-	-
2.0 Construction Costs											
2.1 Foundation Contract	18,922	-	-	1,062	13	280	-	-	-	-	-
2.11 Building Foundations	5,688	-	-	216	4	80	-	-	-	-	-
2.12 External Works for Specific Businesses	-	-	-	-	-	-	-	-	-	-	-
2.2 Building Contract	-	-	-	-	-	-	-	-	-	-	-
2.21 Building Works (excl. building services)	156,226	-	-	2,474	129	2,839	-	194	-	-	161,882
2.22 Building Services	33,929	-	-	277	10	214	-	-	-	-	34,430
2.23 Transfer Structures	-	-	-	-	-	-	-	-	-	-	-
2.24 Public Transport Interchange	-	-	-	-	-	-	-	-	-	-	-
2.25 External Works for commonly shared elements	-	-	-	-	-	-	-	-	-	-	-
2.26 External Works for Specific Businesses	38,991	-	-	1,481	27	350	-	-	-	-	41,049
2.27 Automated Refuse Collection System	-	-	-	-	-	-	-	-	-	-	-
2.3 Other Separate Contracts (incl. Softlandscape)	838	-	-	32	1	12	-	-	-	-	883
Cost Budget At June 1999 Price Level	(A)	254,594	-	5,542	184	3,995	-	194	-	-	264,309
B. Cost Estimate Projected To Proposed Dates of Tenders (Cost in Item (A) plus Cost in (v), (vi) or (vi))											
1.0 Site Development Costs											
1.1 Site Formation Contract	-	-	-	-	-	-	-	-	-	-	-
1.2 Demolition Contract	-	-	-	-	-	-	-	-	-	-	-
2.0 Construction Costs											
2.1 Foundation Contract	19,439	-	-	1,102	13	291	-	-	-	-	-
2.11 Building Foundations	5,904	-	-	224	4	83	-	-	-	-	-
2.12 External Works for Specific Businesses	-	-	-	-	-	-	-	-	-	-	-
2.2 Building Contract	-	-	-	-	-	-	-	-	-	-	-
2.21 Building Works (excl. building services)	166,706	-	-	2,640	138	3,051	-	207	-	-	172,742
2.22 Building Services	36,203	-	-	296	11	228	-	-	-	-	36,740
2.23 Transfer Structures	-	-	-	-	-	-	-	-	-	-	-
2.24 Public Transport Interchange	-	-	-	-	-	-	-	-	-	-	-
2.25 External Works for commonly shared elements	-	-	-	-	-	-	-	-	-	-	-
2.26 External Works for Specific Businesses	41,607	-	-	1,580	29	587	-	-	-	-	43,803
2.27 Automated Refuse Collection System	-	-	-	-	-	-	-	-	-	-	-
2.3 Other Separate Contracts (incl. Softlandscape)	894	-	-	34	1	13	-	-	-	-	942
Cost Budget To Proposed Dates Of Tenders	(B)	270,955	-	5,876	196	4,253	-	207	-	-	281,487

Types of Contract

Site Formation

Demolition

Foundation

Building (for inflation adjustment, "External Works", "Others", etc.,

Tender-In Dates to be taken the same as "Building")

Tender-In Dates

Adjustment for months after June 1999

-	Months x 8 % / 12 =	(v)
-	Months x 8 % / 12 =	(vi)
7/2000	13 Months x 3.5 % / 12 =	0.037917 (v)
5/2001	23 Months x 3.5 % / 12 =	0.067083 (vi)

For the basis, exclusions and notes of this Cost Budget, please refer to Information shown on Page 2.

SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 4 (cont'd)

PROJECT : Shatin Area 2B PHASE : - PHDP Code : _____

Legend for Cost Portions:

PRH - Public Rental Housing	CP	Carpark	UN	Unallocable
HOS - Home Ownership Scheme	WEL	Welfare & Community Facilities	TS	Transfer Structure
CC - Commercial (Shopping) Centre	GN	Government Non-reimbursable	EW	External Works

Notes:

- (1) All prices are at June 1999 price level and adjusted for tender price inflation to tender in dates of contracts based on 3.5 % per annum.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out in relevant DCMBI.
- (3) Reasons for Cost Difference from Standard Cost Yardsticks shall be highlighted.
- (4) The costs for softlandscaping, utilities connections, etc. shall be grouped under Other Separate Contracts.
- (5) The fluctuation provisions shall be worked out based on the formula as shown on the Guidance Notes for Standard Cost Yardsticks.

Inclusions:

- (1)

Exclusions:

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc.
- (2) Other Project Costs, eg. traffic and environmental studies, land surveying studies, site potential and other engineering studies, site investigation, geotechnical advisory services, construction material test, piling test carried out by direct testing contractor, etc.

Assumptions:

- (1) Common architectural finishes and fittings are allowed for external areas including Podium Garden.

Basis of the Budget:

- (1) Project information included in Memorandum for the Strategic Planning Committee and Drawing No. KL23/6/BLKIII/S/EF001 issued on 9th February 2000 Letter ref. B241/29.
- (2) Drawings issued on 16 February 2000 under cover of AG/4's letter ref. HD(AR)55/693/1.
- (3) SE/69's memo ref. HD(SE2)55/693/1.

Prepared by :

Daniel Tsui

(PQS's Name)

Bridgewater & Coulton Ltd.

(Name of Consultant Firm)

Date :

2nd March 2000

Construction Cost Budget No. 4 (Domestic Blocks: Public Rental Housing Portion)

Project : Shatin Area 2B **Phase -** (PHDP Code:)

Cost at June 1999 Price Level	No. of Flats	Cost per Flat		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
1.0 Standard Blocks				
(a) New Harmony Block (Type 1 Option 6 Block No. 1 , 41 Storeys)				
- 1 B Flat	160	21,900	258,660	280,560
- 2 B Flat	160	28,780	339,910	368,690
- 1P/2P Flat	159	12,810	151,240	164,050
- 2P/3P Flat	320	16,490	194,750	211,240
	799			
Cost per Flat x Flat No. = Sub-Total (A) (Total CFA = <u>36,546</u> m2)		15,422	182,138	197,560 (\$ 5,406 /m2 CFA) (\$ 247,259 per flat)
2.0 Adjustments to Item 1.0 Above				
(a) Adjust for foundation to domestic block based on preliminary design		3,644	-	3,644
(b) Ddt. Basic carcass of ancillary/welfare facilities in domestic block = 532 m2)		-293	-1,570	-1,863
(c) Add allowance for single block project		-	9,028	9,028
(d) Add for provision of street hydrant tank and pump room		149	559	708
Sub-Total (B) (Total CFA = <u>36,014</u> m2)		3,500	8,017	11,517 (\$ 320 /m2-CFA) (\$ 14,414 per flat) 5.83 % over that calculated based on Standard Yardsticks
3.0 Non-standard Domestic Blocks				
Cost per Flat x Flat No. = Sub-Total (C) (Total CFA = <u>-</u> m2)		-	-	- (\$ - /m2 CFA) (\$ - per flat)
Total Cost of Domestic Block - Public Rental Housing Portion at June 1999 Price Level = (A) + (B) + (C) (excluding Provisions for Contract Fluctuations)		18,922	190,155	209,077 (\$ 5,805 /m2 CFA) (\$ 261,673 per flat)

Construction Cost Budget No. 4 (Welfare Portion)

Project : Shatin Area 2B Phase - (PHDP Code :)

Cost at June 1999 Price Level	CFA (m2)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
		←-----\$'000-----→		
1.0 <u>Welfare Facilities in Domestic Block) (G/F or Upper Floors)</u>				
(a) Welfare facilities (no fitting out included)	23	11	68	79
(b) Fitting Out for Welfare Facilities (Total area to be fitted out = 23 m2 GFA)		-	64	64
2.0 <u>Other Adjustments for Item 1.0 Above</u>				
(a) Adjust for Foundation to domestic block based on preliminary design		2	-	2
(b) Add allowance for single block project		-	7	7
Total Cost of Welfare Portion at June 1999 Price Level = Total of Items in 1.0 to 2.0 (excluding Provisions for Contract Fluctuations)		13	139	152 (\$ 6,609/m2 CFA)

Remarks

- Welfare Portion includes the following :
MAC 23 m2 CFA

.. Construction Cost Budget No. 4 (Unallocable Portion)

Project : Shatin Area 2B Phase - (PHDP Code :)

Cost at June 1999 Price Level	CFA (m2)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
<div><div></div><div>\$'000</div><div></div></div>				
1.0 <u>Ancillary Facilities in Domestic Block) (G/F or Upper Floors)</u>				
(a) Ancillary facilities (no fitting out included)	509	229	1,502	1,731
(b) Fitting Out for Ancillary Facilities (Total area to be fitted out = 509 m2 GFA)		-	1,425	1,425
2.0 <u>Other Adjustments for Item 1.0 Above</u>				
(a) Adjust for Foundation to domestic block based on preliminary design		51	-	51
(b) Add allowance for single block project		-	146	146
Total Cost of Unallocable Portion at June 1999 Price Level = Total of Items in 1.0 to 2.0 (excluding Provisions for Contract Fluctuations)		280	3,073	3,353 (\$ 6,587/m2 CFA)

Remarks

1. Unallocable Portion includes the following :

	m2 CFA
Estate Management Office	303
Artisan Workshop	24
BS & BW Contractor Office	139
Cleansing Contractor Office	43
	<u>509</u>

.. Construction Cost Budget No. 4 (Carpark Portion)

Project : Shatin Area 2B **Phase -** (PHDP Code :)

Cost at June __99__ Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
1.0 Freestanding Carpark Building based on Actual Design		←\$'000→		
(a) Carpark Portion - Private (27.34 m2 CFA per space)	50	2,125	4,949	7,074
(b) Building Services		-	553	553
(c) Ddt for construction cost apportioned to Roof Garden of External Works		-1,063	-2,751	-3,814
Sub-total (A) :- (excluding Provisions for Contract Fluctuations)		←\$'000→		
(Total CFA based on Actual Design = 1,367 m2 & Average CFA per carparking space = 27.34 m2)		1,062	2,751	3,813
		(\$ 2,789/m2 CFA) (\$ 76,260 / space) 45.88 % under that calculated based on Standard Yardsticks		

2.0 Difference between Actual Design (item 1.0 above) and Cost Yardsticks due to the following :-	Foundation (Incl Caps)	Building (Excl Caps)	TOTAL
	← \$'000 →		
(a) Ddt for adjustment to efficiency ratio of car space	-	-181	-181
(b) Add for adjustment on cost of foundation based on preliminary design	499	-	499
(c) Add allowance for single block project	-	263	263
(d) Ddt for construction costs apportioned to Roof Garden of External Works	-1,063	-2,751	-3,814

Remarks

- To be in line with the SPC paper, 50% of construction costs of carpark was apportioned to Roof Garden of External Works.

Construction Cost Budget No. 4 (Open Parking Spaces in External Work)

Project : Shatin Area 2B Phase - (PHDP Code :)

Cost at June __99__ Price Level	Space (No.)	Estimated Cost		TOTAL
		Foundation (Incl Caps)	Building (Excl Caps)	
1.0 <u>Open Parking Spaces in External Areas Based on Actual Design</u>		←-----S'000-----→		
(a) Light Goods Vehicle Parking at Open Area	8	-	194	194
Sub-total (A) :- (excluding Provisions for Contract Fluctuations) (Total CFA based on Actual Design = 196 m2 & Average CFA per carparking space = 24.5 m2)		←-----S'000-----→		
		-	194	194 (\$ 990/m2 CFA) (\$ 24,250 / space)

Construction Cost Budget No. 4 (External Works - Commonly Shared Across Phases of the Development and Amongst Various HA Businesses)

Project : Shatin Area 2B **Phase -** (PHDP Code :)

Total GEA = 5,730 m2; **Total CFA** 37,913 m2; **Total LAA =**

Cost at June 1999 Price Level	Estimated Cost		TOTAL
	Foundation (Incl Caps)	Building (Excl Caps)	
1.0 External Works based on Actual Design (excl. Contract Price Fluctuation)	← \$,000.00 →		
(a) Hard Landscape Works (Amenities)	-	9,614	9,614
(b) Underground Drainage	-	4,212	4,212
Sub-total (A)	-	13,826	13,826 (\$ 365 /m2 CFA) (\$ 2,413 /m2 GEA)
2.0 Special External Works based on Actual Design (excl. Contract Price Fluctuation)	← \$,000.00 →		
(a) Footbridges/staircases/ramps	-	197	197
(b) Noise barrier	4,925	14,965	19,890
(c) Aluminium Canopy	-	6,521	6,521
(d) Shoring and alignment for drainage reserve	-	2,789	2,789
(e) Add for partial construction costs of carpark apportioned to Roof Garden of External Works	1,063	2,751	3,814
Sub-total (B)	5,988	27,223	33,211 (\$ 876 /m2 CFA) (\$ 5,796 /m2 GEA)
Total Cost of Commonly Shared External Works at June 1999 Price Level = (A) + (B) (excluding Provisions for Contract Fluctuations)	5,988	41,049	47,037 (\$ 1,241/m2 CFA) (\$ 8,209 /m2 GEA)

Cost of Automated Refuse Collection System at June _____ Price Level (excluding Provisions for Contract Fluctuations)	-	-	- (\$ _____/m2 CFA) (\$ _____/m2 GEA)
--	---	---	---

Cost at June 1999 Price Level	Estimated Cost		TOTAL
	Soft Landscape	Fees & Others	
Cost of Other Separate Contracts (incl. Softlandscaping Work) at June 1999 Price Level (excluding Provisions for Contract Fluctuations)	418	465	883 (\$ 23 /m2 CFA) (\$ 154 /m2 GEA)

Remarks

- To be in line with SPC paper, 50% construction costs of carpark was apportioned to Roof Garden of External Works.
- Allowance has been made for drainage diversion works to be carried out by separate contracts.

Construction Cost Budget No. 4 (External Works - Charged to Specific HA Businesses)

Project : Shatin Area 2B Phase - (PHDP Code:)

Cost at June 1999 Price Level	COST PORTIONS						TOTAL
	PRH	HOS	CC	CP	UN	WEL	
1.0 External Works based on Actual Design (excl. Contract Fluctuation)	\$,000.00						
(a) Hard Landscape Works (Amenities)	9,132	-	-	347	129	6	9,614
(b) Underground Drainage	4,001	-	-	152	56	3	4,212
(c) Soft Landscape & others	838	-	-	32	12	1	883
Sub-total (A)	13,971	-	-	531	197	10	14,709
2.0 Special External Works based on Actual Design (excl. Contract Fluctuation)	\$,000.00						
(a) Footbridges/staircases/ramps	187	-	-	7	2	1	197
(b) Noise barrier - Foundation costs	4,678	-	-	178	66	3	4,925
(c) Noise barrier	14,215	-	-	540	201	9	14,965
(d) Aluminium Canopy	6,194	-	-	235	88	4	6,521
(e) Shoring and alignment for drainage reserve	2,649	-	-	101	37	2	2,789
(f) Add for partial construction costs of carpark - Foundation costs	1,010	-	-	38	14	1	1,063
(g) Add for partial construction costs of carpark	2,613	-	-	99	37	2	2,751
Sub-total (B)	31,546	-	-	1,198	445	22	33,211
Total Cost of External Works Charged to Specified HA Businesses at June 1999 Price Level (excluding Provisions for Contract Fluctuations)	\$,000.00						
	45,517	-	-	1,729	642	32	47,920