



## THE HONG KONG HOUSING AUTHORITY

### Memorandum for the Building Committee

#### **Proposed Master Layout Plan and Project Development Budget for Public Housing Development Cum Indoor Recreation Centre at Tai Pak Tin Street, Kwai Chung Area 9H**

#### **PURPOSE**

To seek Members' approval to the Proposed Master Layout Plan and Project Development Budget for the Public Housing Development cum Indoor Recreation Centre at Tai Pak Tin Street, Kwai Chung Area 9H.

#### **BACKGROUND**

2. The site was originally reserved for an Indoor Recreation Centre (IRC). To optimise land use, Government proposed to have an IRC cum public housing development, which was supported by the previous Regional Council. (See attached location plan at **Part I A of the Annex.**)

3. However, due to lack of funds, the Leisure and Cultural Services Department (LCSD) decided not to proceed with their IRC and requested HA to fund the construction of an Open Space within the site instead. HA then prepared a layout for the Open Space, which was accepted by LCSD in principle.

4. But the Working Group of Kwai Tsing District Council strongly objected to the deletion of the IRC and, on 21 November 2001, requested HA and LCSD to revert to the scheme with a joint development of Public Housing and IRC. After lengthy negotiation, LCSD eventually agreed to revert to the scheme including an IRC subject to funding approval. As requested by LCSD, HA will fund the construction of a provisional open space within the IRC reserved site in the interim period, and LCSD will take up the maintenance responsibility. The latest development proposal has been reported back to the Working Group and it was supported subject to LCSD's confirmation on programme.

5. Past major events for this project are as follows -

|     | <b>Date</b> | <b>Events</b>  |
|-----|-------------|--|
| (a) | 25.11.2000  | SPC approved the project for inclusion in the Public Housing Development Programme as a Group I project.<br>(Paper No. SPC 71/2000)  |
| (b) | 6.11.2001   | SPC approved the revised Development Parameters, Conceptual Layout and Development Cost Ceilings (with IRC deleted).<br>(Paper No. SPC 36/2001)  |
| (c) | 7.6.2002    | SPC approved the further revised Development Parameters, Conceptual Layout, Development Cost Ceilings and Government Non-Reimbursable Expenditure. The scheme had reserved an area for the IRC as part of the development; but its construction will be under a separate programme by LCSD later.<br>(Paper No. SPC 28/2002) |

## MASTER LAYOUT PLAN

6. The Proposed Master Layout Plan generally follows the approved Development Parameters with a site specific approach that was approved by SPC via Paper No. SPC 28/2002. It comprises -

- (a) One 39-storey modified New Harmony block.
- (b) A two storey podium with car park at G/F.
- (c) Two footbridges and covered walkway system for connection to On Yam and Shek Lei Estates.
- (d) Associated external works and landscape on podium.

7. The project will provide a total of 774 flats in Year 2006/2007. Parking provision of 38 private cars (including three for IRC), ten motorcycles and one loading and unloading bay have been allowed.

8. The revised Development Parameters are summarized as follows -  
----- (Details of major Client's Requirement refer to **Part I B & C of the Annex** ).

**Table 1: Comparison of Development Parameters**

|                                     |              | Approved by SPC<br>(Paper No. SPC 28/2002)  |             | Proposed Scheme   |             |
|-------------------------------------|--------------|---|-------------|---|-------------|
| Title                               |              | Public Housing Development cum Indoor Recreation Centre at Tai Pak Tin Street, Kwai Chung Area 9H   |             |   |             |
| Location                            |              | Kwai Chung District   |             |   |             |
| Existing Use                        |              | Vacant site   |             |   |             |
| Existing Zoning                     |              | Residential (Group A)   |             |   |             |
| Housing Type                        |              | Group 1   |             | Group 1   |             |
| Gross Site Area                     |              | 7749m <sup>2</sup>  |             | 7749m <sup>2</sup>  |             |
| No. of Flats                        |              | 778   |             | 774   |             |
| Flat Mix                            | Flat Type    | Number  | Mix         | Number  | Mix         |
|                                     | 1P/2P        | 100   | 13%         | 77  | 10%         |
|                                     | 2P/3P        | 148   | 19%         | 155   | 20%         |
|                                     | 1B           | 326   | 42%         | 311   | 40%         |
|                                     | 2B           | 204   | 26%         | 231   | 30%         |
|                                     | <b>Total</b> | <b>778</b>  | <b>100%</b> | <b>774</b>  | <b>100%</b> |
| Domestic GFA                        |              | 36,731m <sup>2</sup>  |             | 36,731m <sup>2</sup>  |             |
| Domestic Plot Ratio                 |              | 4.740   |             | 4.740   |             |
| Population (approx.)                |              | 2490  |             | 2477  |             |
| Parking Provision                   | Private Car  | 38 spaces, inclusive of 4 nos. reserved for LCSD's use. (1 per 20 flats excluding 1P/2P)  |             | 38 spaces, inclusive of 3 nos. reserved for LCSD's use. (1 per 20 flats excluding 1P/2P)        |             |
|                                     | Motor-cycle  | 4 spaces<br>(10% of private car)  |             | 10 spaces<br>(minimum number required by TD)  |             |
|                                     | LGV          | 4 spaces to be provided in Shek Lei Estate in the near future (1 per 200 flats excluding 1P/2P)   |             | 4 spaces to be provided in Shek Lei Estate in the near future (1 per 200 flats excluding 1P/2P) |             |
|                                     | L/UL Bay     | 1 bay (1 per block)   |             | 1 bay   |             |
| Vehicle-free pedestrian connections |              | Footbridges and covered walkway system for linkage to On Yam and Shek Lei Estates   |             |   |             |
| Management and maintenance          |              | Clear delineation of management and maintenance responsibility would be defined in the Vesting Order. If the flats are put under the selling option in the future, the lease conditions will be drafted with 2 nos. separate Deed of Mutual Covenants under one single lease. |             |   |             |
| Provision for LCSD                  |              | A site area of 2,736m <sup>2</sup> is reserved for an IRC at the north western half of the site; provisional Open Space will be provided to LCSD in this reserved site in the interim period.   |             |   |             |
| Retail Provision                    |              | Catered by adjacent facilities (On Yam and Shek Lei Estates)  |             |   |             |
| Community/Welfare Facilities        |              | Catered by adjacent facilities (On Yam and Shek Lei Estates)  |             |   |             |

9. The proposed Master Layout Plan drawing are attached in **Part II of the Annex**. The main features of the overall development are as follows -

## PLANNING CONTEXT

- (a) There are existing soil slopes in north eastern and south eastern part of the site. These fill up nearly half of the site area allowed for housing development. The crest of slope at approximately 78.0 mPD level falls at roughly 30 degrees gradient to the bottom at approximately 64.70 mPD.
- (b) The site is also sloped around the periphery. The north eastern boundary along Shek Pai Street slopes from approximately 78.60 mPD to 72.00 mPD. The south eastern boundary along On Chuk Street slopes from approximately 78.60 mPD to 72.00 mPD. The south western boundary along Shek Lei Street slopes from approximately 72.00 mPD to 65.0 mPD.
- (c) This island site will serve as a strategic linking point to surrounding areas. The footbridge/walkway linkage system together with the lift and staircase tower are all positioned strategically on the podium terrace to facilitate pedestrian flow to Shek Lei and On Yam Estates through the podium terrace.
- (d) The Emergency Vehicular Access (EVA) reaches the domestic block at podium level. Formation of the EVA entrance run-in on Shek Pai Street will require relocation of an existing bus layby.
- (e) Traffic noise impact -
  - i) The site is subjected to some traffic noise from the surrounding roads, particularly Shek Pai Street.
  - ii) Since the site area (about 1.2 ha) is below 2 ha, according to EPD Practice Note ProPECC PN 1/97, no minimum road traffic noise exposure compliance rate is required. However, it is still encouraged to consider and incorporate noise mitigation measure wherever practicable.
  - iii) Approximately 101 nos. flats i.e. 13% of the total flat number, exceed the stipulated standard of 70dB(A). The highest noise level is estimated to be 74dB(A).

- iv) To reduce the traffic noise impact, all these flats with noise level exceeding 70 dB(A) criterion are recommended to be provided with well-gasketted windows with a minimum 6mm pane glass and air-conditioning (subject to housing policy).
  - v) Addition of noise barriers at the boundary of this site on existing slopes was considered not cost effective and thus not recommended.
- (f) The domestic block is positioned centrally on the housing development portion of the site. Minimum setback requirement of 10 metres from Shek Pai Street and 5 metres from Tai Pak Tin Street for air quality have been met.

## **BUILDING DESIGN**

- (g) A site specific approach is adopted for the domestic block in order to achieve the following design objectives -
- i) To take advantage of unobstructed views, windows have been provided on all four sides of the building at the gable ends.
  - ii) The domestic flats are of modular design to enhance buildability and minimize construction cost.
  - iii) The flat modules are mainly based on the 'Standard New Harmony' flat modules. The bedroom for 1B and 2B flats next to re-entrant is slightly enlarged with an added window opening for access to the clothes drying rack. There is increased separation of the drying rack from the fume exhaust opening in kitchen.
  - iv) Bay windows are provided in living/bedroom area of 1P/2P flats to enhance spatial quality of these small flats.
  - v) Architectural features, mouldings and fins are designed at the roof level, facades and gable end walls to give identity to the development.

- (h) Regarding sustainability and maintainability, the following aspects have been considered -
- i) Some of the initiatives for 'Universal Design', i.e. a design approach that works for all residents throughout their lives, has been adopted in this project.
  - ii) Layout and configuration of flat modules are similar to standard New Harmony (NH1) domestic block. Hence, maintenance standards can be easily established in relation to other estates with standard design.
- (i) There are three hierarchical levels on the podium-
- i) The footbridge and raised covered walkway system traverse the site at level 77.00 mPD.
  - ii) The upper podium at level 72.00 mPD is designed to harmonize with the site topography and provide pedestrian access along Shek Pai Street and at junction of On Chuk Street and Shek Li Street.
  - iii) The sunken lower podium at level 70.00 mPD is designed to fit in with the carpark headroom below.
- (j) The domestic block entrance faces the eastern corner of the site for close proximity to an existing bus layby. Entry into the site on podium level is provided at 3 corners of the site -
- i) Eastern corner at level 77.00 mPD directly from the bus layby at Shek Pai Street.
  - ii) Northern corner at level 73.00 mPD via the EVA and disabled ramp.
  - iii) Southern corner entrance at level 72.00 mPD and underneath the footbridge leading to Shek Lei Estate.

(k) Measures to reduce construction waste as below -

| <b>Measures to Reduce C&amp;D Waste</b> |   |  |
|---|---|--|
| <b>Planning &amp; Design</b>            | <b>Precasting &amp; Prefabrication</b>          | Modular Design   |
|   |   | Precast Facades  |
|   |   | Precast Staircases   |
|   |   | Precast Slabs  |
|   |   | Prefabricated External Elements<br>(pergolas and street furniture) |
|   |   | Precast or Prefabricated footbridges, bridgedecks                  |
|   |   | Proprietary doorsets and Panel Walls                               |
|   |   | Sprayed Plaster  |
|   | PFA Option for Sub-structure                    |  |
|   | PFA Option for Super-structure                  |  |
|   | PFA Option for Road Works                       |  |
|   | Balance Cut and Fill in Site Formation          |  |
|   | Combined Services Trenches to reduce Excavation |  |
|   | <b>Construction &amp; Site Management</b>       | Waste Management Plan  |
| Non-timber Hoarding                     |   |  |
| Metal Formwork & Metal Falsework        |   |  |
| On-site Sorting of C&D Material         |   |  |
| Recycled Building Material              |   |  |
| Trip-ticket for Waste Disposal          |   |  |
| On-site Water Conservation              |   |  |

## LANDSCAPE DESIGN

- (l) In principle, the landscape design is based on the following objectives -
- i) To link up the site with the existing developments and to maintain a continuous pedestrian flow with the IRC in future;
  - ii) To create a sense of identity to the new Estate/community;



- iii) To maximize the use of the open space as gathering/passive recreation; and
  - iv) To provide sufficient active recreational facilities to the community.
- (m) Open spaces are provided at 3 hierarchies -
- (i) The Entrance Courtyards and active recreational facilities at podium level 72 mPD.
  - (ii) Green pocket spaces with shelter and seats at podium level 70 mPD.
  - (iii) At the reserved site for IRC at level 65 mPD, a provisional playground will be formed and equipped with 1 basketball court, spectator stand and benches. Lines of trees have been designed to provide greenery to the community.

## PROJECT DEVELOPMENT BUDGET

10. Based on the proposed Master Layout Plan, the total Project Development Budget for the development is estimated to be **HK\$276.489M** with details shown in **Part IV of the Annex**. Breakdown of the Project Development Budget is indicated in **Table 2**.

**Table 2 : Proposed Project Development Budget**

| Cost Heads |   | Works Elements   | Total<br>\$M   |
|------------|---|--|----------------|
| (a)        | Site Development Cost   | Site Formation   | -              |
|            |   | Demolition   | -              |
|            |   | Sub-total  | -              |
| (b)        | Construction Cost   | Foundation   | 28.843         |
|            |   | Building   | 197.476        |
|            |   | Soft Landscape & Others  | 0.358          |
|            |   | Sub-total  | 226.677        |
| (c)        | Other Project Cost<br>[2.5% on (a) + (b)]                         | Civil engineering and geotechnical studies, site investigation and material testing etc. | 5.667          |
| (d)        | Total Site Development and Construction Cost<br>[(a) + (b) + (c)] |  | 232.344        |
| (e)        | Project Management Cost<br>[19% of (d)]                           | Professional services and overheads, consultation fees and consultant site staff etc.    | 44.145         |
| (f)        | <b>Project Development Budget</b><br>[(d) + (e)]                  |  | <b>276.489</b> |

11. The relative costs based on the Master Layout Plan in comparison with that to the Approved Project Development Cost Ceilings is indicated in Table 3.

**Table 3 : Comparison of Proposed Development Cost/Construction Cost and Approved Development Cost Ceilings and Cost Yardsticks**

|                     | (a)                               | (b)  | (c)   | (d1)   | (d2)  |
|---------------------|-----------------------------------|--|---|--|---|
|                     | Proposed Project Development Cost | Approved Project Development Cost Ceiling (Paper No. SPC 28/2002)<br>(\$/m <sup>2</sup> CFA) | Proposed Project Unit Construction Cost adjusted to tender-in date<br>(Note 1 & 3)<br>(\$/m <sup>2</sup> CFA) | June 2002 Project Construction Cost Yardstick for Group 1<br>(Note 2)<br>(\$/m <sup>2</sup> CFA) | June 2002 Project Construction Cost Yardstick for Group 1 adjusted to tender-in date<br>(Note 2 & 3)<br>(\$/m <sup>2</sup> CFA) |
| PRH (non-std.)      | 6,553                             | 7,631  | 4,462   | 4,365  | 4,343   |
| Private Car Parking | 5,946                             | 7,220  | 4,541   | 4,441  | 4,419   |

Note :

1. For comparing with the Construction Cost Yardstick, external works, soft landscaping and other sundry costs such as drainage, utility connections, other project costs and project management costs, etc. have been excluded from the Unit Construction Cost. However, the costs of piling, substructure, superstructure, including fluctuation and transfer girder have been included in the Construction Cost. The Construction Cost has been adjusted to the price level at the time of tender.
2. Cost Yardstick for Group 1 Non-standard Design project based on the average Cost Yardsticks of New Harmony 1 (Option 2 & 6) with transfer-plate on podium, inclusive of 5% development contingency. Same provision being allowed for in the cost yardstick for private car parking under podium of domestic building.
3. The tender-in date for Building Contract is 1/04.

12. The proposed Project Development Cost of PRH and private carpark are within the Project Development Cost Ceiling as approved by Strategic Planning Committee (Paper No. SPC 28/2002).

13. With reference to **Table 3**, the Proposed Project Unit Construction Cost for the PRH is 2.7% over the Construction Cost Yardstick for Group 1 non-standard domestic (based on New Harmony 1 Option 2 & 6) for reasons as follows –

|     | Non-standard and Site Specific Items  | % over Yardstick |
|-----|---|------------------|
| (a) | Allowance for single block project  | +1.6%            |
| (b) | Higher storey height (2750 vs 2700mm of standard NH1 block)   | +0.2%            |
| (c) | Add bay windows, additional window openings, tie beams, roof features, and aluminium screens for drying racks | +0.5%            |
| (d) | Non-standard formwork   | +0.4%            |
|     | <b>Total</b>  | <b>+2.7%</b>     |

14. The carpark unit construction cost is just 2.8% higher than the cost yardstick for private carpark.

#### AVAILABILITY OF FUNDS AND CASH FLOW

15. Funds will be made available in the respective financial years. Based on the Proposed Project Development Budget, the estimated yearly expenditure for the project is as follows –

| Estimated Expenditure (\$/M) |         |         |         |         |           |                |
|------------------------------|---------|---------|---------|---------|-----------|----------------|
| 2002/03                      | 2003/04 | 2004/05 | 2005/06 | 2006/07 | Post 2007 | Total          |
| NIL                          | 21.404  | 48.095  | 86.817  | 66.890  | 9.138     | <b>232.344</b> |

## DEVELOPMENT PROGRAMME

16. The key dates for the development programme are as follows –

|     |                     |              |       |
|-----|---------------------|--------------|-------|
| (a) | Master Layout Plan  | PDRC (2)     | 7/02  |
| (b) | Master Layout Plan  | BC           | 9/02  |
| (c) | Detailed Design     | DDRP         | 11/02 |
| (d) | Foundation (Note 1) | Tender Out   | 12/02 |
|     |                     | Commencement | 4/03  |
|     |                     | Completion   | 4/04  |
| (e) | Building (Note 2)   | Tender Out   | 12/03 |
|     |                     | Commencement | 4/04  |
|     |                     | Completion   | 11/06 |

Note :

1. 12-months construction period allowed for foundation works.
2. 31-months construction period inclusive of inclement weather allowed for 39 nos. domestic storeys on 2-storeys podium.

----- The detailed programme is attached as **Part III of the Annex.**

## RECOMMENDATION

17. It is recommended that the proposed Master Layout Plan and Project Development Budget of \$276.489M be approved for the Public Housing Development cum Indoor Recreation Centre at Tai Pak Tin Street, Kwai Chung Area 9H.

## DISCUSSION

18. At the next meeting of the Building Committee to be held on 19 September 2002, Members will be invited to approve the recommendation in paragraph 17 above.

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File Ref. : HD(AR)7/659/1

Date : 16 September 2002

## CONTENT

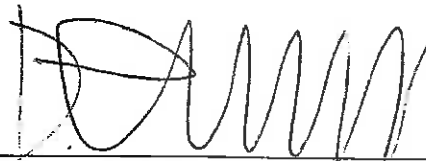
### Part II : Master Layout Drawings

1. Master Layout Plan
2. Architectural Perspective & Landscape Drawings
3. General Layout Plans
4. Elevations & Sections
5. Typical Flat Layout Plans

### Part III : Development Programme

### Part IV : Project Development Budget

THIS DOCUMENT HAS BEEN REVIEWED  
AND APPROVED FOR ADEQUACY

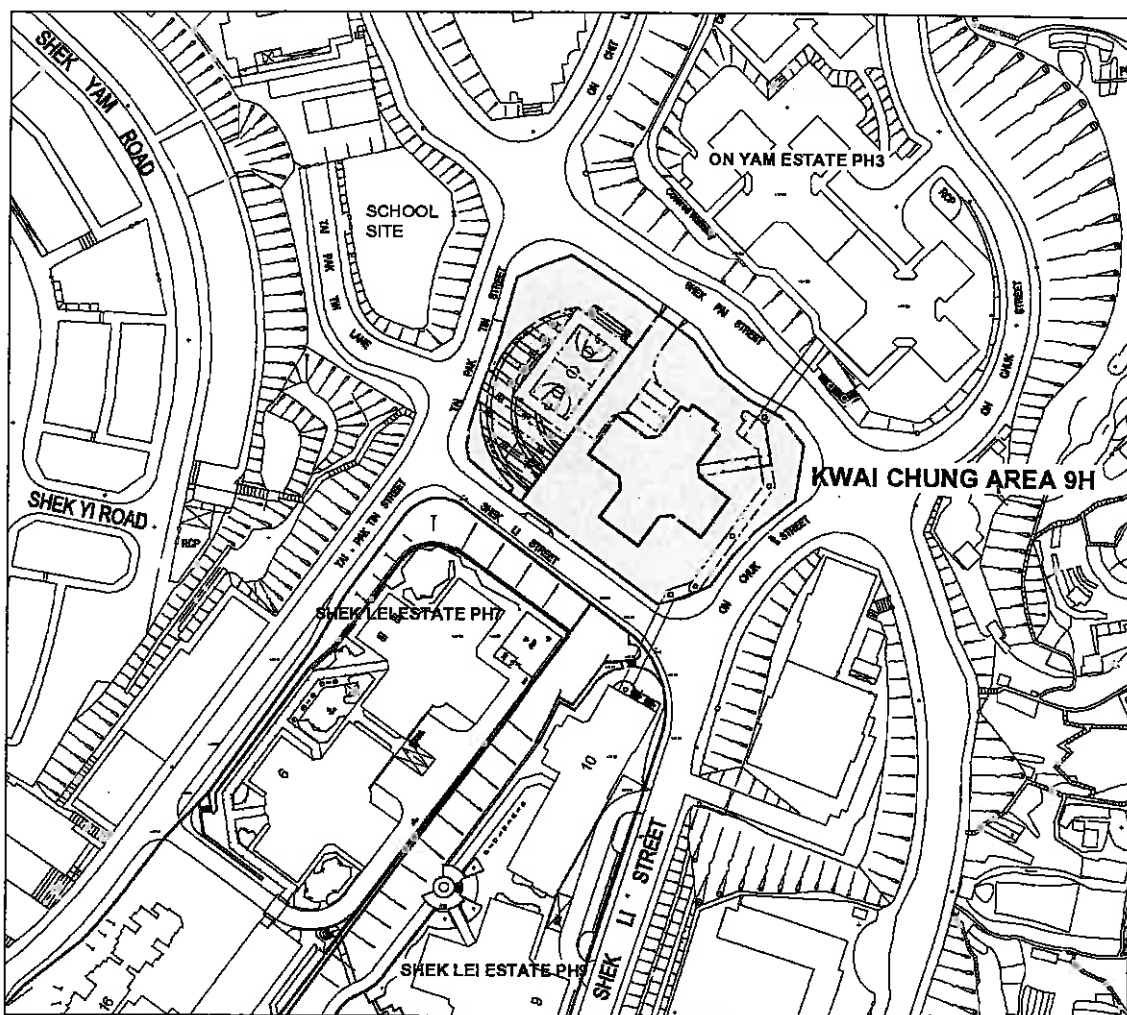


SIGNED : D.C.W. KO (CA/1)

Date : 12 September 2002

**Proposed Public Rental Housing Development  
cum Indoor Recreation Centre at  
Tai Pak Tin Street, Kwai Chung Area 9H**

**PROPOSED MASTER LAYOUT PLAN AND  
PROJECT DEVELOPMENT BUDGET**



**BC SUBMISSION  
SEPTEMBER 2002**

**DEVELOPMENT AND CONSTRUCTION BRANCH  
HOUSING DEPARTMENT**

**Proposed Public Rental Housing Development  
cum Indoor Recreation Centre  
at Tai Pak Tin Street, Kwai Chung Area 9H**

**BC Submission Attachments**

|                 |  |                      |
|-----------------|--|----------------------|
| <b>Part IA</b>  | <b><u>Location Plan</u></b>              |                      |
|                 | *Location Plan and Site Studies          | TW34/SITE/A/PLO-00/A |
| <b>Part II</b>  | <b><u>Master Layout Drawings</u></b>     |                      |
|                 | *Master Layout Plan                      | TW34/SITE/A/PLO-01/B |
|                 | <b><u>Car Park Layout Plan</u></b>       |                      |
|                 | *Car Park Floor Plan                     | TW34/SITE/A/PLO-02/B |
|                 | <b><u>Podium Layout Plan</u></b>         |                      |
|                 | *Podium Floor Plan                       | TW34/SITE/A/PLO-03/B |
|                 | <b><u>Sections</u></b>                   |                      |
|                 | *Section AA                              | TW34/BLK/A/PLO-08/B  |
|                 | *Section BB                              | TW34/BLK/A/PLO-09/A  |
|                 | <b><u>Elevations</u></b>                 |                      |
|                 | *Elevation A                             | TW34/BLK/A/PLO-07/A  |
|                 | <b><u>Typical Floor Plans</u></b>        |                      |
|                 | *1/FL to 38/FL Floor Plan                | TW34/BLK/A/PLO-03/B  |
|                 | *39/FL Floor Plan                        | TW34/BLK/A/PLO-031   |
|                 | *Main Roof Plan                          | TW34/BLK/A/PLO-04/A  |
|                 | *Machine Room Plan                       | TW34/BLK/A/PLO-05/A  |
|                 | *Upper Roof Plan                         | TW34/BLK/A/PLO-06/A  |
|                 | <b><u>Development Parameters</u></b>     |                      |
|                 | *Development Parameters                  |                      |
|                 | <b><u>Architectural Perspective</u></b>  |                      |
|                 | *Perspective                             |                      |
| <b>Part III</b> | <b><u>Development Programme</u></b>      |                      |
| <b>Part IV</b>  | <b><u>Project Development Budget</u></b> |                      |



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### Part I :

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    - 2.1.2 Adjacent Land Uses
  - 2.2 Environmental Mitigation
  - 2.3 Site Formation
  - 2.4 Zoning Consideration
  - 2.5 Infrastructure
    - 2.5.1 Drainage and Sewerage
    - 2.5.2 Water Supply
    - 2.5.3 Electricity, Telephone, Gas
    - 2.5.4 Traffic Improvement
- C. Accommodation and Facilities
  - 3.1 Site Area
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  - 3.3 Design Population
  - 3.4 Flat Number and Flat Mix
  - 3.5 Retail Provision
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  - 3.8 Management Accommodations
  - 3.9 Local Open Space
  - 3.10 Recreation Facilities
  - 3.11 Refuse Collection Facilities

**Part I B – EVALUATION OF MASTER LAYOUT PLAN**

| Development Parameters  | Master Layout Plan  | Remarks   |
|---|---|---|
| <p><b>2.1 The Site</b></p> <p><b>2.1.1 Site Location</b></p> <p>The site is located at Kwai Chung (Refer to location plan in Part IA of the Annex).</p> <p><b>2.1.2 Adjacent Land Use</b></p> <p>The site is bounded by Shek Pai Street to the northwest, On Chuk Street to the southeast, Shek Li Street to the southwest and Tai Pak Tin Street to the west.</p>  | <p>As in the Development Parameters.</p> <p>As in the Development Parameters.</p> |   |
| <p><b>2.2 Environmental Mitigation</b></p> <p><b>2.2.1</b> Since the total site area is less than 2 ha, there is no minimum rate in the ProPECC note on traffic noise that has to be complied with.</p> <p><b>2.2.2</b> The site is subjected to traffic noise from the surrounding roads, particularly Shek Pai Street. Given the size of the site and its proximity to the noise source, it would be difficult to mitigate such noise to fully comply with the standard of 70dB(A) stipulated in the HKPSG.</p> |   | <p>Although there is no specified minimum noise compliance rate for site area less than 2 hectares, noise mitigation measures whenever practicable and acoustic insulation to any remaining affected residential units should be considered and provided.</p> |

**Part I B – EVALUATION OF MASTER LAYOUT PLAN**

| Development Parameters   | Master Layout Plan   | Remarks |
|--|--|---------|
| <p>2.2.3 Approximately, 106 nos. flats which is 14% of the total flat number, exceed the stipulated standard of 70dB(A). The highest noise level is estimated to be 74dB(A).</p> | <p>Addition of noise barriers on existing slopes at boundary of Shek Pai Street was considered not cost effective nor practicable as a mitigation measure.</p> <p>Provision of well-gasketted windows with a minimum of 6mm pane glass together with air-conditioning (subjected to housing policy) is recommended for those flats exceeding the stipulated standard of 70db(A).</p> |         |
| <p><b>2.3 Site Formation</b></p>   |  |         |
| <p>No site formation works are required.</p>   | <p>As in the Development Parameters.</p>   |         |
| <p><b>2.4 Zoning Consideration</b></p>   |  |         |
| <p>The site is zoned “Residential (Group A) on the Outline Zoning Plan.</p>  | <p>As in the Development Parameters.</p>   |         |
| <p><b>2.5 Infrastructure</b></p>   |  |         |
| <p><b>2.5.1 Drainage and Sewerage</b></p>  |  |         |
| <p>Existing public drains are available along Shek Li Street.</p>  | <p>As in the Development Parameters.</p>   |         |
| <p><b>2.5.2 Water Supply</b></p>   |  |         |
| <p>Existing fresh/salt water supply pipes are available under Shek Pai Street.</p>   | <p>As in the Development Parameters.</p>   |         |

**Part I B – EVALUATION OF MASTER LAYOUT PLAN**

| <b>Development Parameters</b>   | <b>Master Layout Plan</b>                | <b>Remarks</b> |
|---|--|----------------|
| <p>2.5.3 Utilities</p> <p>Some diversions of utilities services may be required. Detailed advice on the new supply system should be sought from various utility companies at detailed design stage.</p> | <p>As in the Development Parameters.</p> |                |

**Part I C – ACCOMMODATION & FACILITIES**

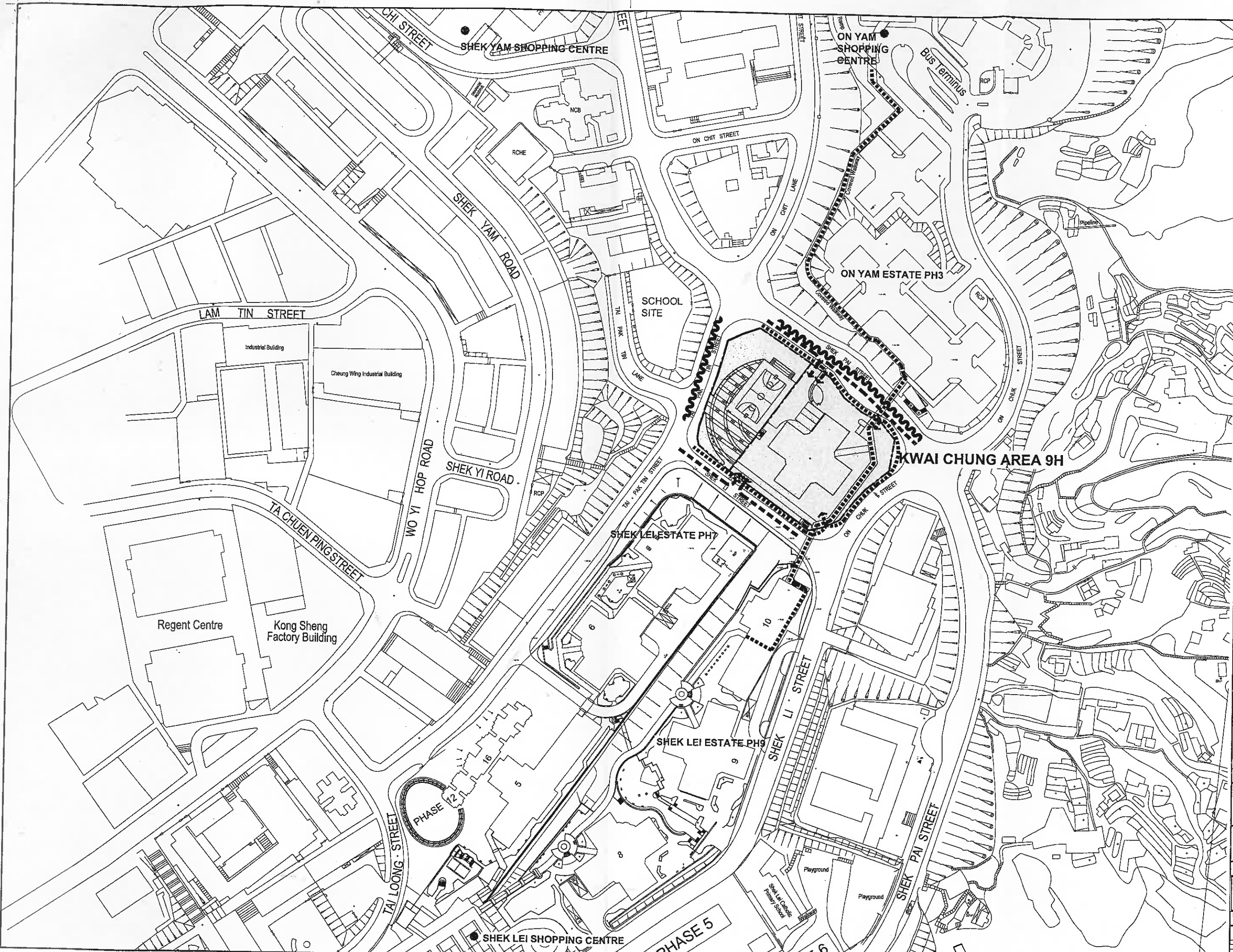
| <p align="center"><b>Approved by SPC<br/>(Paper No. SPC no. 28/2002)</b></p>  | <p align="center"><b>Proposed Scheme</b></p>   | <p align="center"><b>Remarks</b></p> |      |      |       |    |       |    |  |     |     |     |     |   |    |    |    |    |     |  |
|---|--|--------------------------------------|------|------|-------|----|-------|----|--|-----|-----|-----|-----|---|----|----|----|----|-----|--|
| <p><b>3.1 Site Area</b></p> <p>Gross site area : 7,749m<sup>2</sup><br/>(5,013m<sup>2</sup> for PRH Development)<br/>(2,736m<sup>2</sup> reserved site for IRC)</p> <p><b>3.2 Plot Ratio</b></p> <p>Gross Floor Area (Domestic) is 36,731m<sup>2</sup></p> <p>Domestic Plot Ratio is 4.740</p> <p><b>3.3 Design Population</b></p> <p>The Total Design Population is 2,490.</p> <p><b>3.4 Flat Number and Flat Mix</b></p> <p>The proposed housing development is planned to provide a total of 778 nos. rental flats.</p> <p><b>3.5 Retail Provision</b></p> <p>Nil. To be served by the existing retail facilities in adjacent area.<br/>(On Yam and Shek Lei Estates)</p> <p><b>3.6 Community/Welfare</b></p> <p>Nil. To be served by existing facilities in adjacent area.<br/>(On Yam and Shek Lei Estate)</p> | <p>Gross site area : 7,749m<sup>2</sup><br/>(5,013m<sup>2</sup> for PRH Development)<br/>(2,736m<sup>2</sup> reserved site for IRC)</p> <p>Gross floor Area (Domestic) is 36,731m<sup>2</sup></p> <p>Domestic Plot Ratio is 4.740</p> <p>The Total Design Population is 2,477 (approx.)</p> <p>Provision of 774 nos. rental flats in one 38<sup>3</sup>/<sub>4</sub> residential storeys modified standard block.</p> <p>Actual Flat Mix Production :</p> <table border="1" data-bbox="746 1317 1198 1420"> <thead> <tr> <th>Flat No.</th> <th>1/2P</th> <th>2/3P</th> <th>1B</th> <th>2B</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>77</td> <td></td> <td>155</td> <td>311</td> <td>231</td> <td>774</td> </tr> <tr> <td>%</td> <td>10</td> <td>20</td> <td>40</td> <td>30</td> <td>100</td> </tr> </tbody> </table> <p>As in SPC Development Parameters.</p> <p>As in SPC Development Parameters.</p> | Flat No.                             | 1/2P | 2/3P | 1B    | 2B | Total | 77 |  | 155 | 311 | 231 | 774 | % | 10 | 20 | 40 | 30 | 100 |  |
| Flat No.  | 1/2P   | 2/3P                                 | 1B   | 2B   | Total |    |       |    |  |     |     |     |     |   |    |    |    |    |     |  |
| 77  |  | 155                                  | 311  | 231  | 774   |    |       |    |  |     |     |     |     |   |    |    |    |    |     |  |
| %   | 10   | 20                                   | 40   | 30   | 100   |    |       |    |  |     |     |     |     |   |    |    |    |    |     |  |

**Part I C – ACCOMMODATION & FACILITIES**

| <p align="center"><b>Approved by SPC<br/>(Paper No. SPC no. 28/2002)</b></p>   | <p align="center"><b>Proposed Scheme</b></p>   | <p align="center"><b>Remarks</b></p> |
|--|--|--------------------------------------|
| <p><b>3.7 Parking Provision</b></p>  |  |                                      |
| <p>3.7.1 Private Carpark Spaces*<br/>38 nos.<br/>(1 space per 20 nos. flats<br/>excluding 1P/2P)</p>   | <p>Private Carpark Spaces*<br/>38 nos.<br/>3 nos. reserved for LCSD's use<br/>(1 space per 20 nos. flats excluding<br/>1P/2P)</p>  |                                      |
| <p>3.7.2 Motor-cycle Spaces*<br/>4 nos.<br/>(10% of private car)</p>   | <p>Motor-cycle Spaces*<br/>10 nos.<br/>(Minimum number required by TD)</p>   |                                      |
| <p>3.7.3 Light Goods Vehicle (LGV)<br/>Spaces*<br/>4 nos.<br/>(1 space per 20 nos. rental flats<br/>excluding 1P/2P)</p>                     | <p>Light Goods Vehicle (LGV) Spaces*<br/>4 nos.<br/>(1 space per 20 nos. rental flats, to be<br/>provided in Shek Lei Estate in the<br/>near future)</p>   |                                      |
| <p><b>3.8 Management Accommodation</b><br/>Refer to attached Appendix.</p>   | <p>Management Office : 1(218m<sup>2</sup> provided)<br/>Mutual Aid Committee (MAC)<br/>Office : 1(19m<sup>2</sup> provided)<br/>Office for Cleansing Contractor : 1(10m<sup>2</sup> provided)<br/>Maintenance Service/Store Room : 1(51m<sup>2</sup> provided)<br/>Plant Nursery : 1(47m<sup>2</sup> provided)</p> |                                      |
| <p><b>3.9 Local Open Space</b><br/>Not mentioned.<br/>(HKPSG : 10 ha. per 100,000<br/>persons (min.) i.e. 1m<sup>2</sup> per<br/>person)</p> | <p>2,979m<sup>2</sup></p>  |                                      |
| <p><b>3.10 Recreation Facilities</b><br/>(200m<sup>2</sup> required)</p>   | <p>206m<sup>2</sup> provided</p>   |                                      |
| <p><b>3.11 Refuse Collection Facilities</b><br/>Refer to attached Appendix.</p>  | <p>As in SPC Development Parameters.</p>   |                                      |

***PART IA - LOCATION PLAN***

PROPOSED PRH DEVELOPMENT AT TAI PAK TIN STREET, KWAI CHUNG AREA 9H



**NOTES**

- NOISE SOURCE
- SITE BOUNDARY LINE
- VEHICULAR ACCESS
- PEDESTRIAN WAY

**REVISIONS**

| NO | DESCRIPTION AND DATE | INITIAL AND DESIGNATION | DWN | CHK | AUTH |
|----|----------------------|-------------------------|-----|-----|------|
|    |                      |                         |     |     |      |

|            | NAME AND DESIGNATION | INITIAL   | DATE |
|------------|----------------------|-----------|------|
| AUTHORISED | C.W. KO              | CA/1      |      |
| CHECKED    | ANN MARY TAM         | SA/27     |      |
|            | W.K. LEUNG           | A/85      |      |
|            | W.Y. TONG            | STO(A)/14 |      |
| DRAWN      | C.C. LO              | TO(A)/14  |      |

**TAI PAK TIN STREET  
KWAI CHUNG AREA 9H**

**DRAWING TITLE**  
SITE LOCATION PLAN  
& SITE STUDIES

**SCALE** 1:2000(A3), 1:800 (B1)

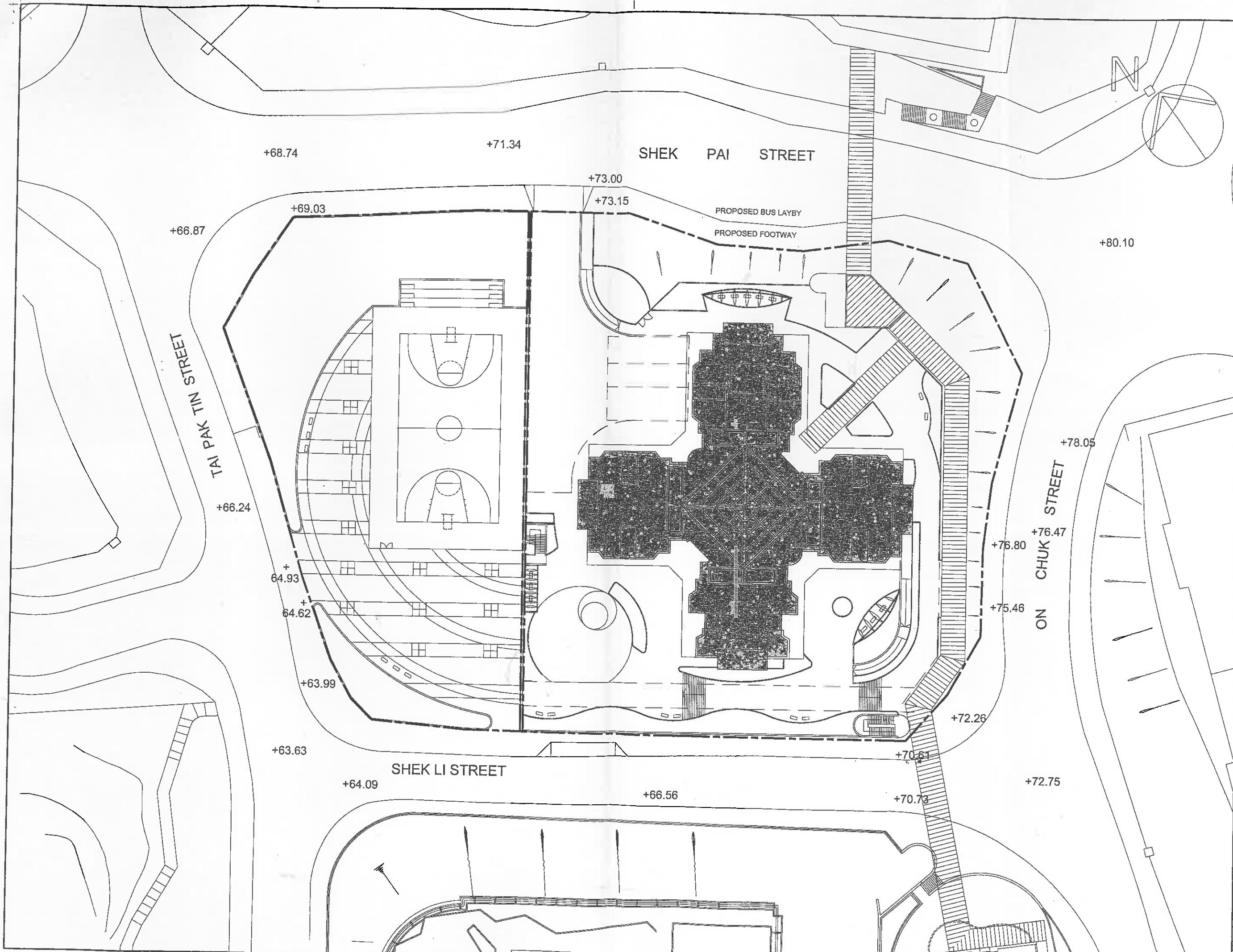
**DRAWING NO**  
TW34/SITE/A/PLO-00/A

**SOURCE**



***PART II - MASTER LAYOUT DRAWINGS***

PROPOSED PRH DEVELOPMENT AT TAI PAK TIN STREET, KWAI CHUNG AREA 9H



NOTES

| REVISIONS |                      | INITIAL AND DESIGNATION |            |
|-----------|----------------------|-------------------------|------------|
| NO.       | DESCRIPTION AND DATE | OWN                     | CHK / AUTH |
|           |                      |                         |            |
|           |                      |                         |            |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA1          |         |      |
|            | ANN MARY TAM SA27    |         |      |
| CHECKED    | W.K. LEUNG A/B5      |         |      |
|            | W.Y. TONG ST(A)14    |         |      |
| DRAWN      | C.C. LO TO(A)14      |         |      |

PROJECT

**TAI PAK TIN STREET KWAI CHUNG AREA 9H**

DRAWING TITLE

**MASTER LAYOUT PLAN**

SCALE 1:500 (A3), 1:200 (B1)

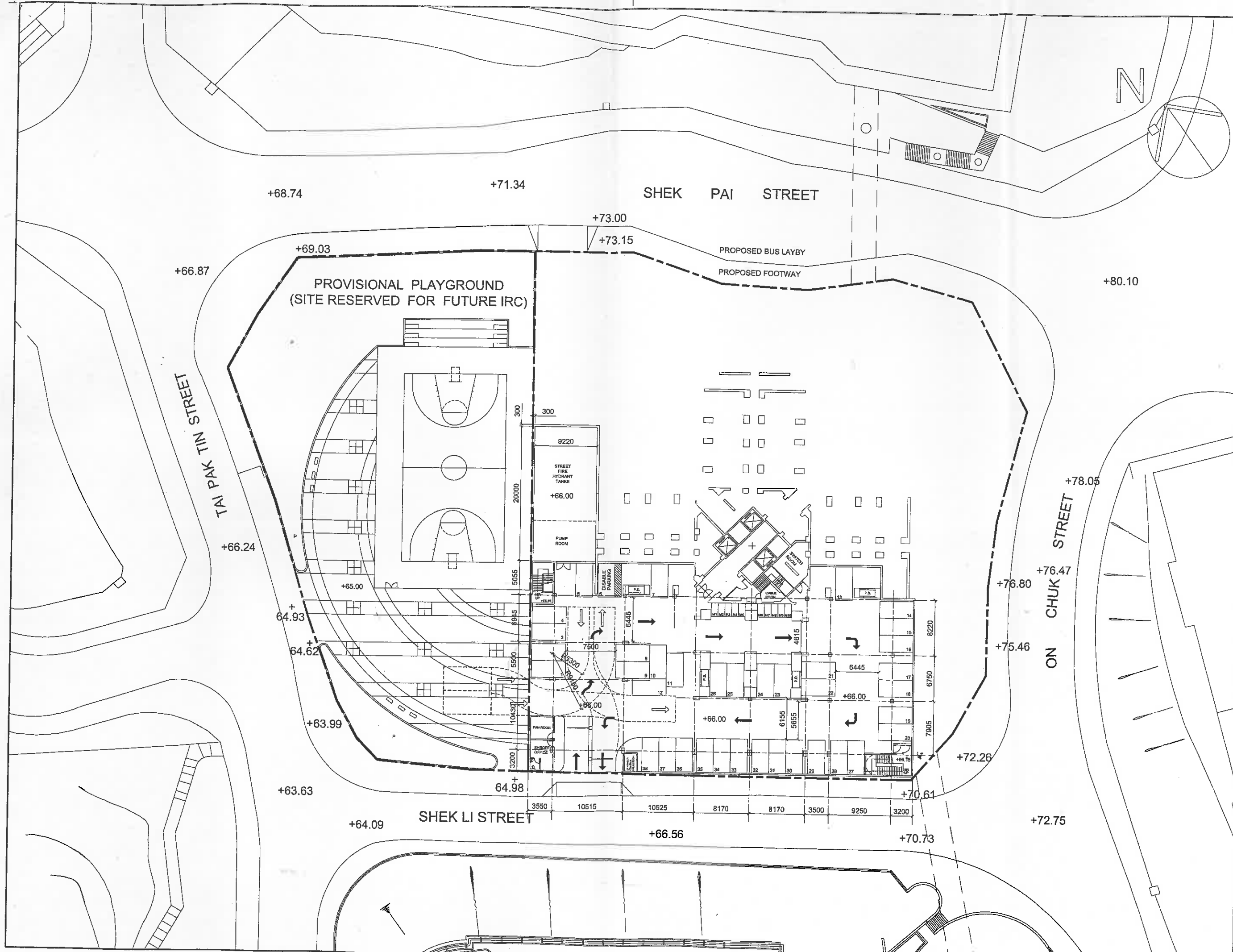
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**TW34/SITE/A/PLO-01/A**

SOURCE

CHK/ENG: ST/13/2008

DATE: 13/03/2008



NOTES

REVISIONS

| NO | DESCRIPTION AND DATE | INITIAL AND DESIGNATION |     |      |
|----|----------------------|-------------------------|-----|------|
|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
| CHECKED    | ANN MARY TAM SA/27   |         |      |
|            | W.K. LEUNG A/85      |         |      |
|            | W.Y. TONG STQ/A/14   |         |      |
| DRAWN      | C.C. LO TO/A/114     |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
**CARPARK  
 GROUND FLOOR PLAN**

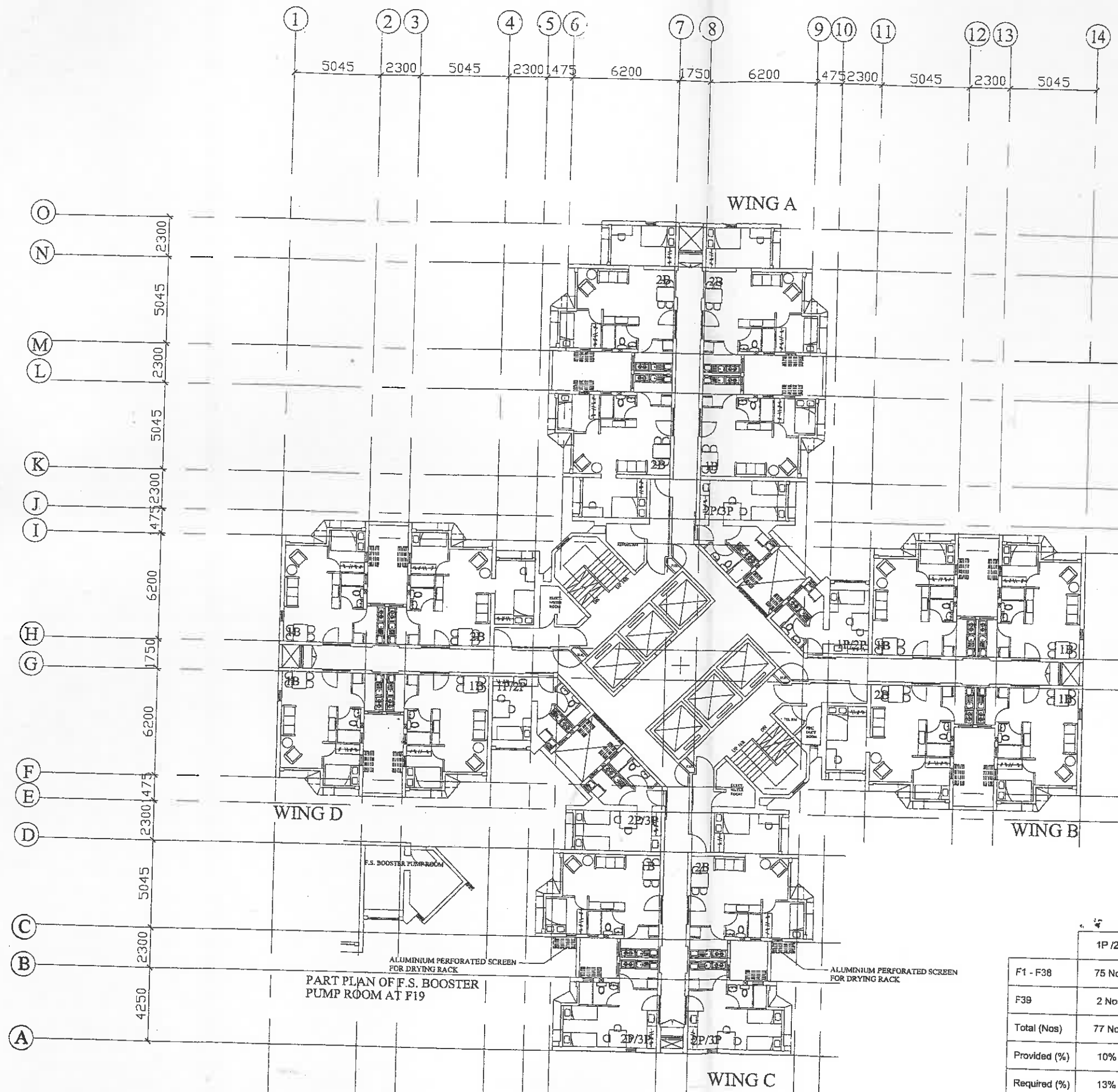
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DRAWING NO  
**TW34/SITE/A/PLO-02/B**

SOURCE

HOUSING DEPARTMENT





|                | 1P /2P  | 2P /3P   | 1B       | 2B       |          |
|----------------|---------|----------|----------|----------|----------|
| F1 - F38       | 75 Nos. | 152 Nos. | 304 Nos. | 228 Nos. |          |
| F39            | 2 Nos.  | 3 Nos.   | 7 Nos.   | 3 Nos.   |          |
| Total (Nos)    | 77 Nos. | 155 Nos. | 311 Nos. | 231 Nos. | 774 Nos. |
| Provided (%)   | 10%     | 20%      | 40%      | 30%      | 100%     |
| Required (%)   | 13%     | 20%      | 39%      | 28%      | 100%     |
| Efficiency (%) | 75%     |          |          |          |          |

NOTES

REVISIONS

| NO | DESCRIPTION AND DATE | INITIAL AND DESIGNATION |     |      |
|----|----------------------|-------------------------|-----|------|
|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
| CHECKED    | ANN MARY TAM SA/27   |         |      |
|            | W.K. LEUNG A/85      |         |      |
|            | W.Y. TONG STO/A/14   |         |      |
| DRAWN      | G.C. LO TO/A/114     |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
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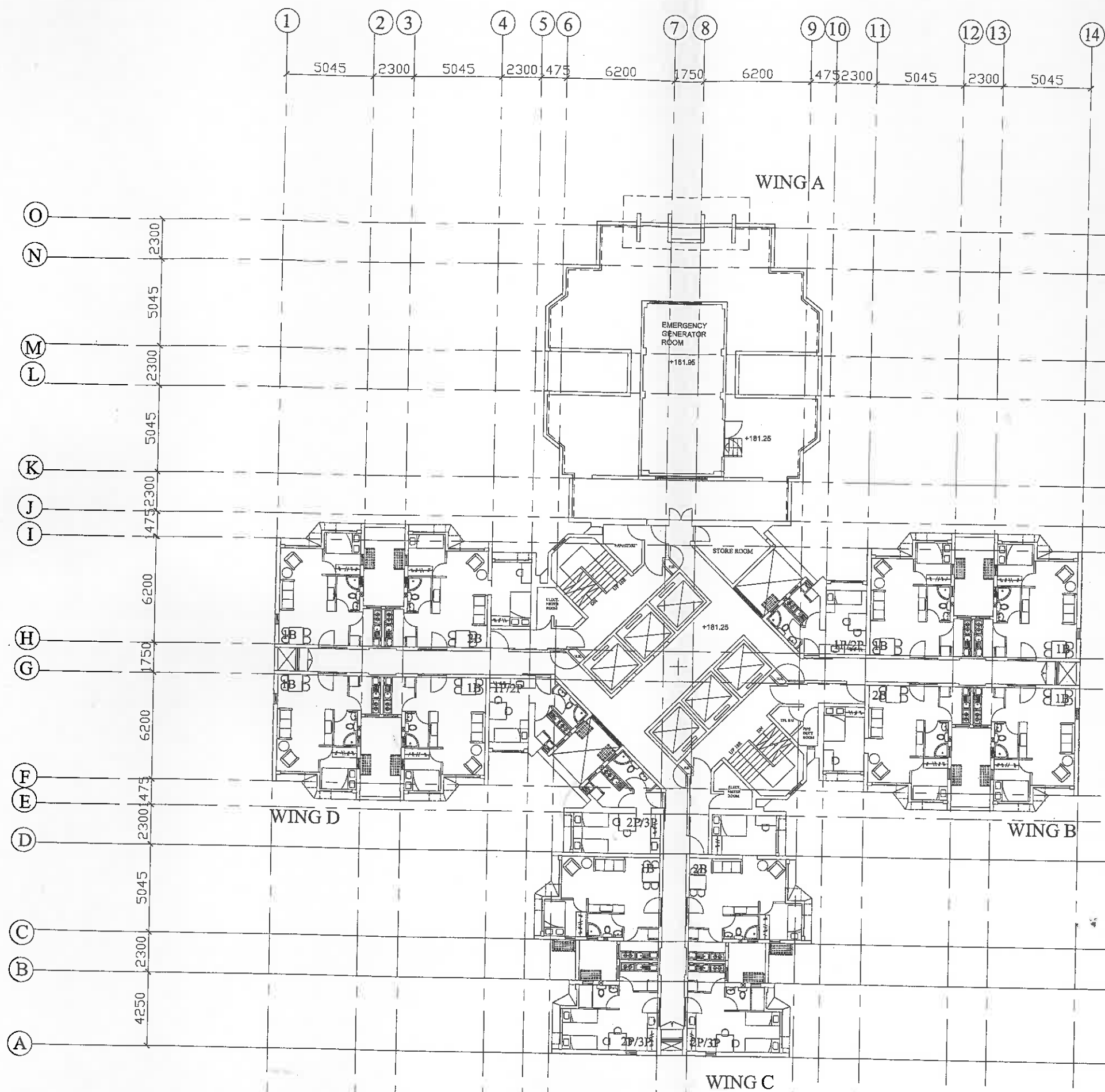
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DRAWING NO  
**TW34/BLK/A/PL0-03/B**

SOURCE



NOTES



REVISIONS

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|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
| CHECKED    | ANN MARY TAM SA/27   |         |      |
|            | W.K. LEUNG AR/85     |         |      |
| DRAWN      | W.Y. TONG STQ/A/14   |         |      |
|            | C.C. LO TQ/A/14      |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
**F39 FLOOR PLAN**

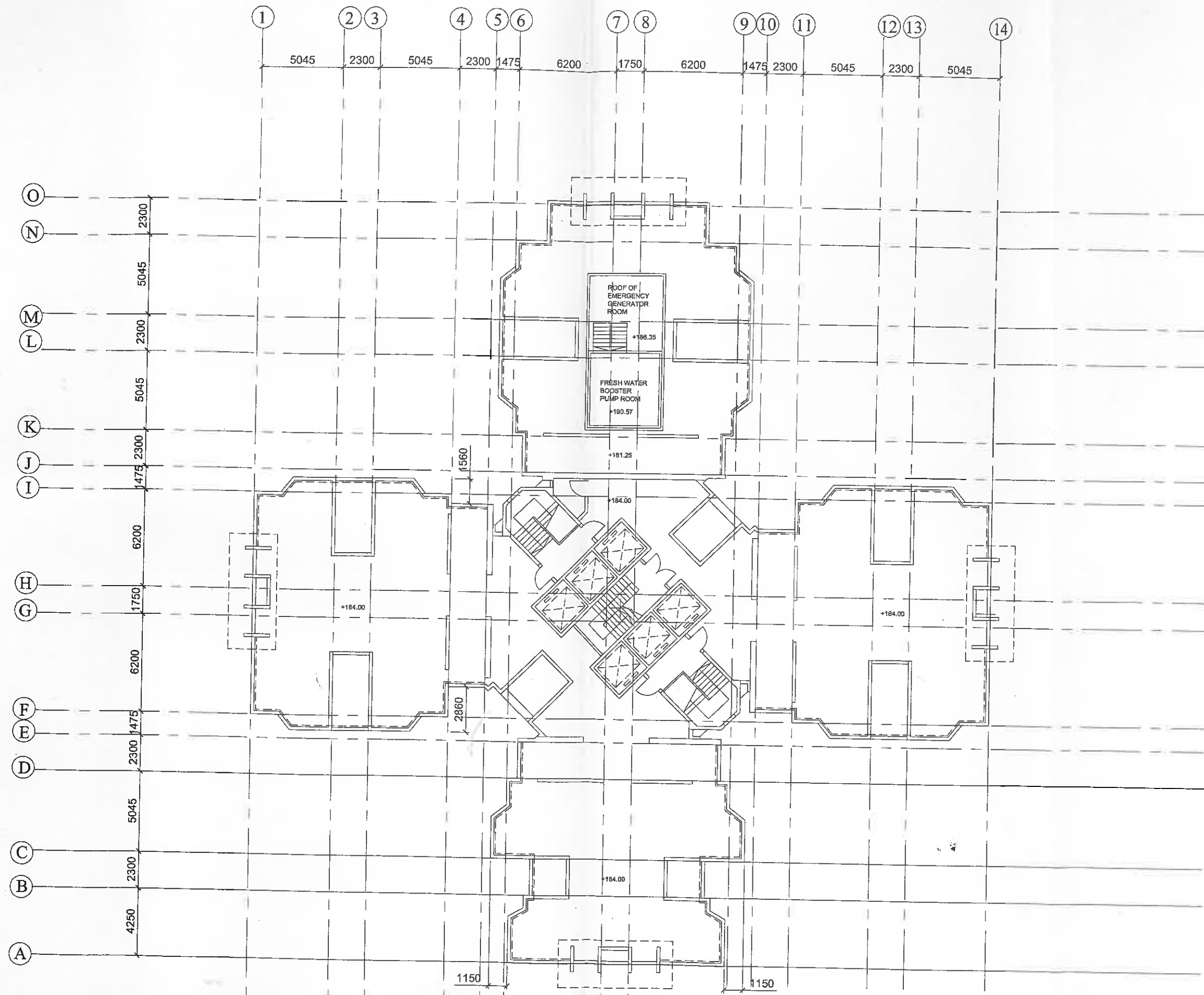
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SOURCE



NOTES



REVISIONS

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|----|----------------------|-------------------------|-----|------|
|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
| CHECKED    | ANN MARY TAM SA/27   |         |      |
|            | W.K. LEUNG A/85      |         |      |
|            | W.Y. TONG STO/A/14   |         |      |
| DRAWN      | N.H.N. TSO TO/A/44   |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
**MAIN ROOF PLAN**

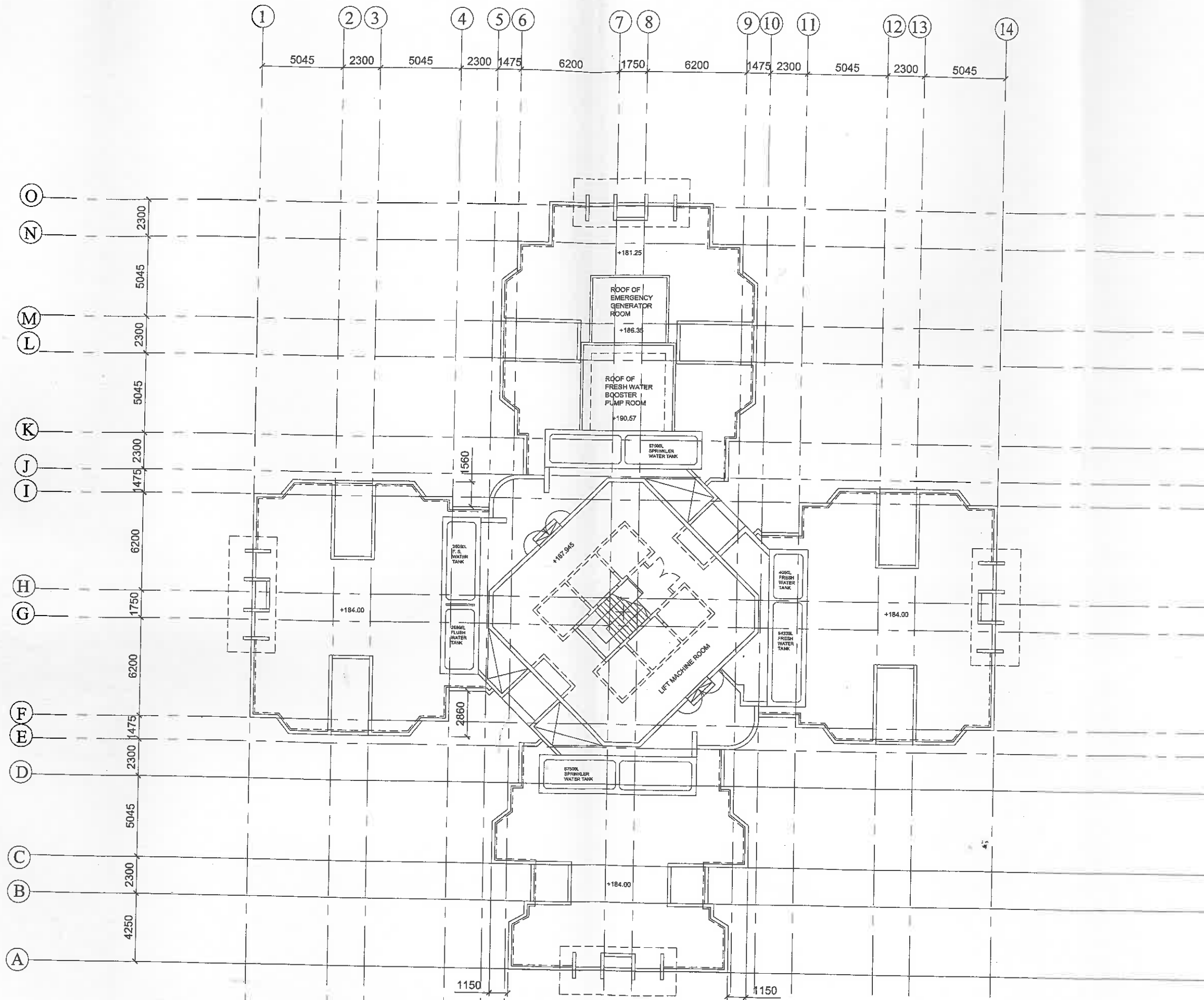
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DRAWING NO  
**TW34/BLK/A/PLO-04/A**

SOURCE



NOTES



REVISIONS

| NO. | DESCRIPTION AND DATE | INITIAL AND DESIGNATION |       |
|-----|----------------------|-------------------------|-------|
|     |                      | DWNR                    | AUTH. |
|     |                      |                         |       |
|     |                      |                         |       |
|     |                      |                         |       |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
| CHECKED    | ANN MARY TAM SA/27   |         |      |
|            | W.K. LEUNG A/85      |         |      |
|            | W.Y. TONG STO(A)/14  |         |      |
| DRAWN      | N.H.N. TSD TO(A)/44  |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
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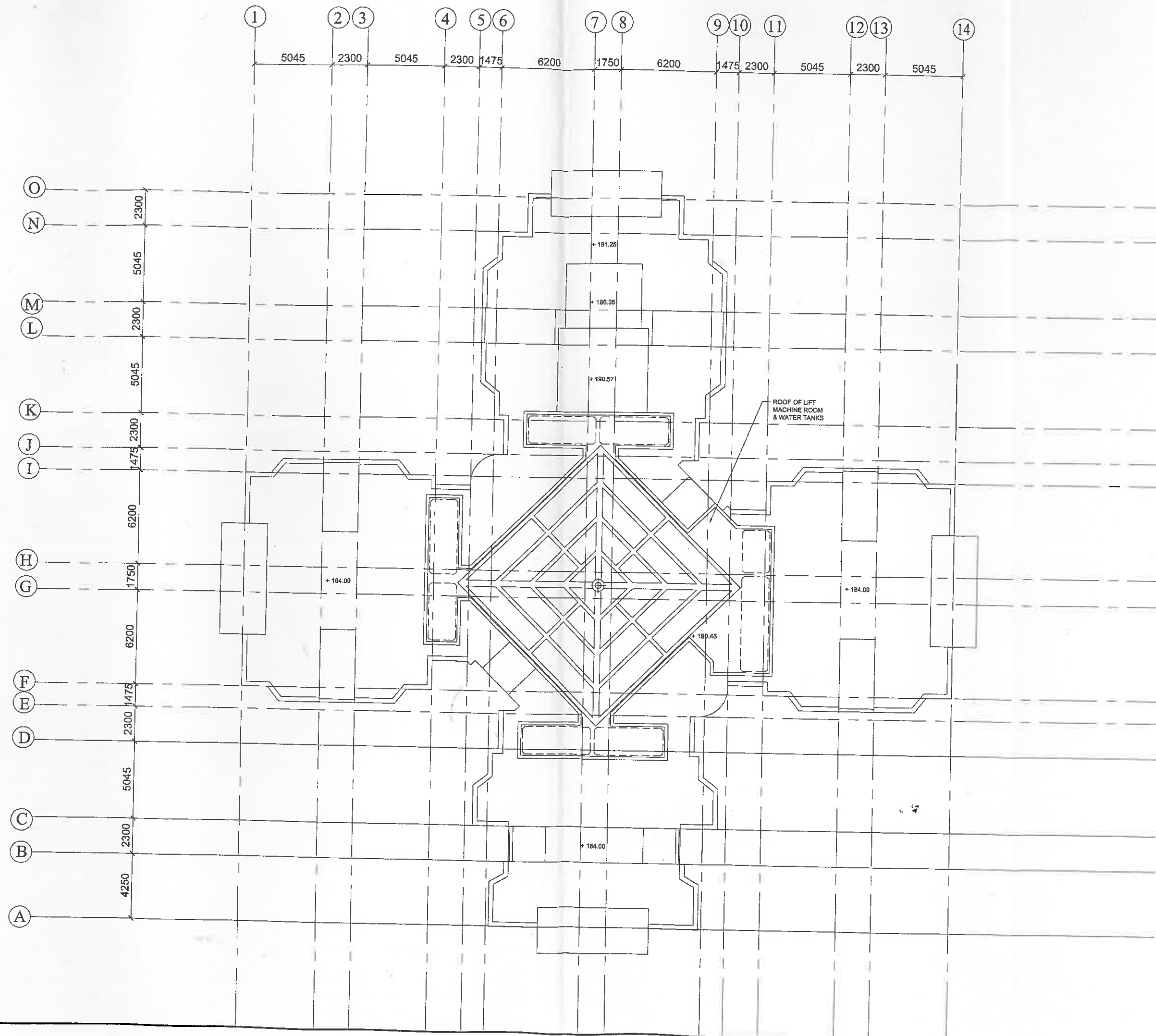
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SOURCE





NOTES



REVISIONS

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|----|----------------------|-------------------------|-----|------|
|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL  | DATE |
|------------|----------------------|----------|------|
| AUTHORISED | C.W. KO              | CA/1     |      |
| CHECKED    | ANN MARY TAM         | SA/27    |      |
|            | W.K. LEUNG           | A/85     |      |
|            | W.Y. TONG            | STO/A/14 |      |
| DRAWN      | N.H.N. TSO           | TQ/A/44  |      |

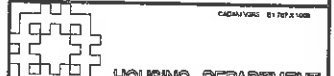
PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
**UPPER ROOF PLAN**

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DRAWING NO  
**TW34/BLK/A/PLO-06/A**

SOURCE



TOP LEV. +212.00

ROOF +184.00

39/F +181.25

38/F +178.50

35/F +170.25

30/F 158.50

25/F +142.75

20/F +128.00

15/F +115.25

10/F +101.50

5/F +87.75

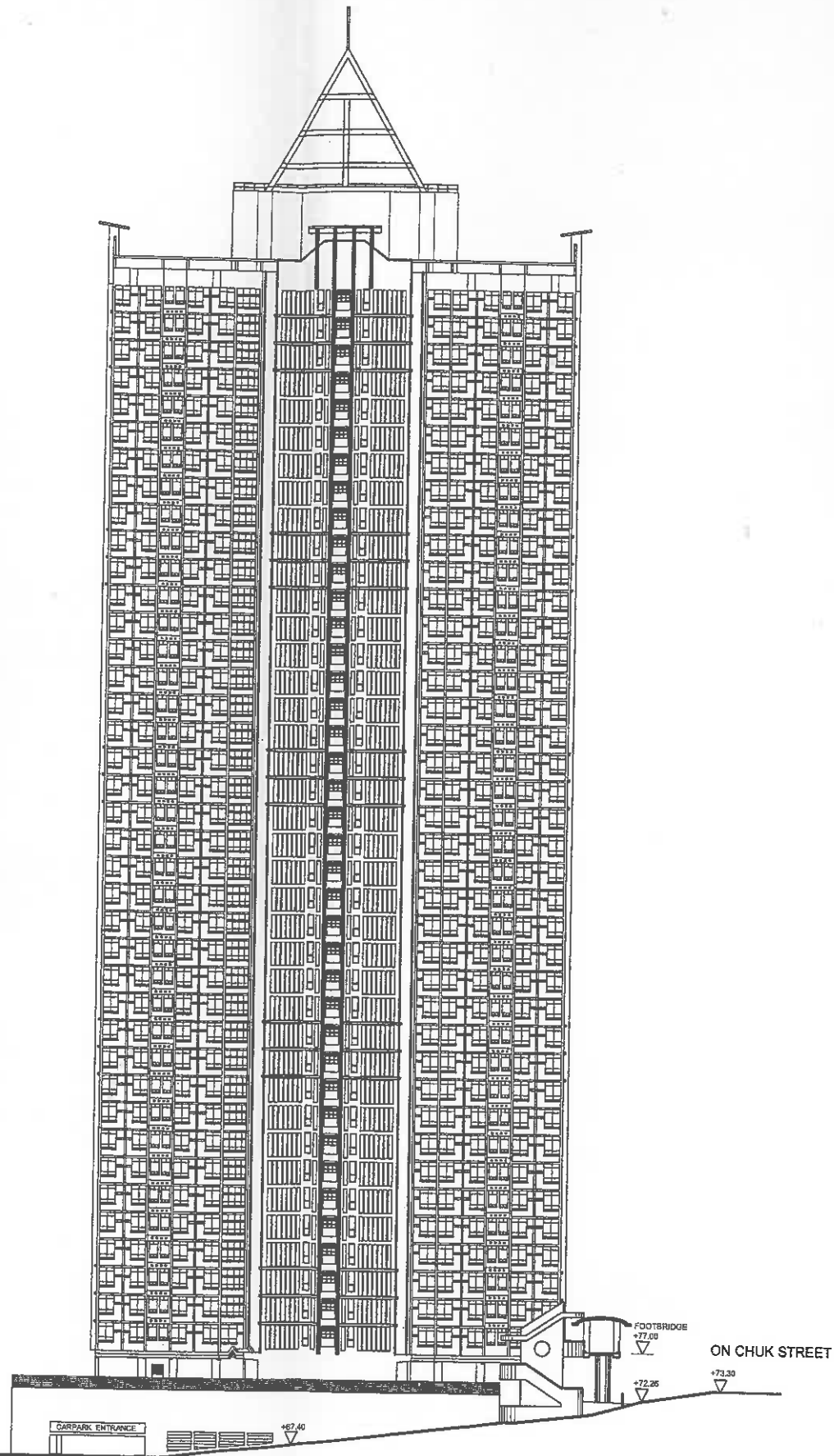
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UPPER PODIUM +72.00

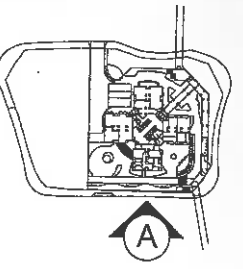
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G/F +65.00

AREA DESIGNATED TO LCSD FOR IRC



NOTES



REVISIONS

| NO | DESCRIPTION AND DATE | INITIAL AND DESIGNATION |     |      |
|----|----------------------|-------------------------|-----|------|
|    |                      | DWN                     | CHK | AUTH |
|    |                      |                         |     |      |
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|    |                      |                         |     |      |
|    |                      |                         |     |      |

|            | NAME AND DESIGNATION | INITIAL | DATE |
|------------|----------------------|---------|------|
| AUTHORISED | C.W. KO CA/1         |         |      |
|            | ANN MARY TAM SA/27   |         |      |
| CHECKED    | W.K. LEUNG A/85      |         |      |
|            | W.Y. TONG STO(A)/14  |         |      |
| DRAWN      | C.C. LO TO(A)/14     |         |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

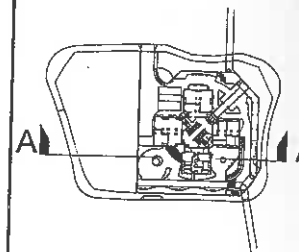
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SCALE 1:250 (B1)

DRAWING NO  
**TW34/BLK/A/PLO-07/A**

SOURCE

NOTES



TOP LEV. +212.00

ROOF +184.00

39/F +181.25

38/F +178.50

35/F +170.25

30/F 156.50

25/F +142.75

20/F +129.00

15/F +115.25

10/F +101.50

5/F +87.75

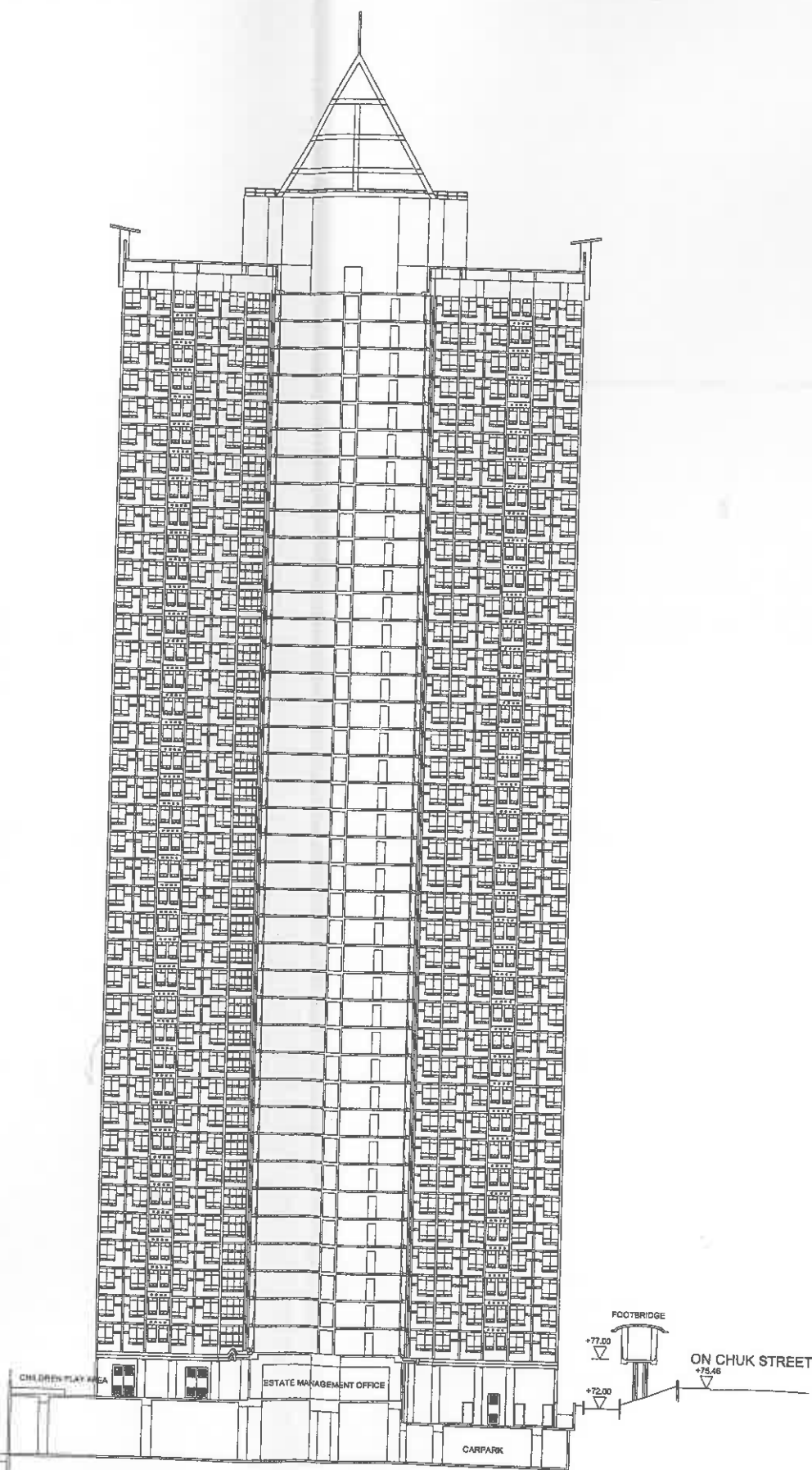
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UPPER PODIUM +72.00  
LOWER PODIUM +70.00

G/F +66.00

TAI PAK TIN STREET  
+64.00

AREA DESIGNATED TO LCSD FOR IRC



REVISIONS

| NO. | DESCRIPTION AND DATE | INITIAL AND DESIGNATION |      |      |
|-----|----------------------|-------------------------|------|------|
|     |                      | DWN                     | CHKD | AUTH |
|     |                      |                         |      |      |
|     |                      |                         |      |      |
|     |                      |                         |      |      |
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|     |                      |                         |      |      |
|     |                      |                         |      |      |
|     |                      |                         |      |      |
|     |                      |                         |      |      |

|            | NAME AND DESIGNATION | INITIAL   | DATE |
|------------|----------------------|-----------|------|
| AUTHORISED | C.W. KO              | CA/1      |      |
| CHECKED    | ANN MARY TAM         | SA/27     |      |
|            | W.K. LEUNG           | AR/5      |      |
|            | W.Y. TONG            | STO(A)/14 |      |
| DRAWN      | C.C. LO              | TO(A)/14  |      |

PROJECT  
TAI PAK TIN STREET  
KWAI CHUNG AREA 9H

DRAWING TITLE  
SECTION A - A

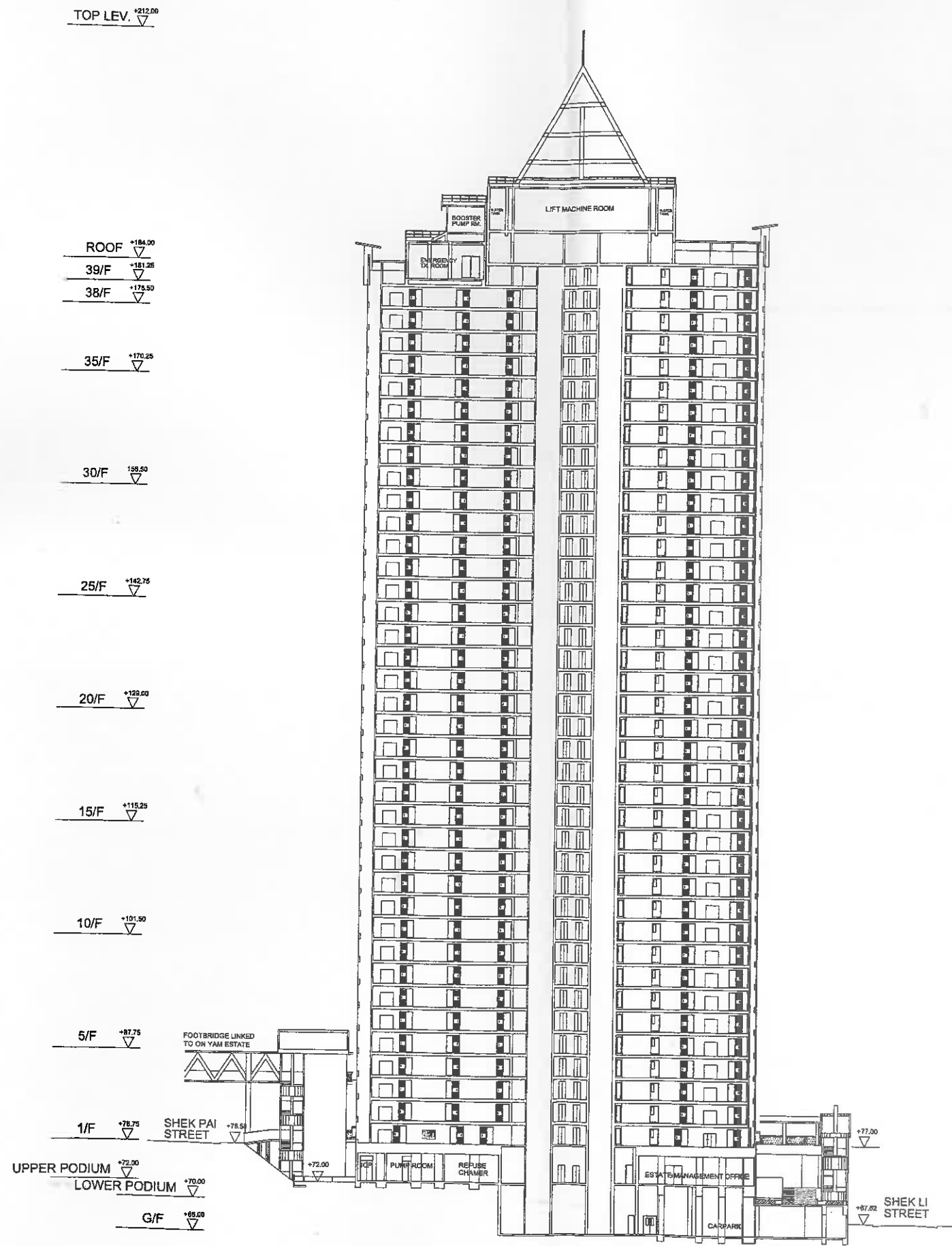
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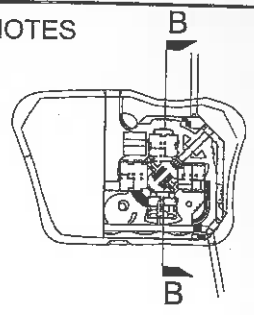
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HOUSING DEPARTMENT



NOTES



| REVISIONS |                      | INITIAL AND DESIGNATION |            |
|-----------|----------------------|-------------------------|------------|
| NO        | DESCRIPTION AND DATE | DWN                     | CHK / AUTH |
|           |                      |                         |            |
|           |                      |                         |            |
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|           |                      |                         |            |

|            | NAME AND DESIGNATION | INITIAL   | DATE |
|------------|----------------------|-----------|------|
| AUTHORISED | C.W. KO              | CAW       |      |
| CHECKED    | ANN MARY TAM         | SAZT      |      |
|            | W.K. LEUNG           | A/BS      |      |
|            | W.Y. TONG            | STC(A)/14 |      |
| DRAWN      | C.C. LO              | TO(A)/114 |      |

PROJECT  
**TAI PAK TIN STREET  
 KWAI CHUNG AREA 9H**

DRAWING TITLE  
**SECTION B - B**

SCALE  
 1:250 (B1)

DRAWING NO  
**TW34/BLK/A/PLO-09/A**

SOURCE





Revised Development Parameters for:  
Public Housing Development cum Indoor Recreation Centre at Tai Pak Tin  
Street, Kwai Chung Area 9H

**1. Site Area**

|     |  |                    |
|-----|--|--------------------|
| 1.1 | Gross Site Area  | 7749m <sup>2</sup> |
|     | Comprising 2,736m <sup>2</sup> provisional open space reserved for IRC and 5,013m <sup>2</sup> for Public Housing Development. |                    |

**2. Floor Area**

|     |  |                      |
|-----|--|----------------------|
| 2.1 | Maximum Permissible domestic GFA*                  | 36,738m <sup>2</sup> |
| 2.2 | Total domestic GFA                                 | 36,455m <sup>2</sup> |
| 2.3 | Maximum Permissible (domestic + non-domestic) GFA* | 40,558m <sup>2</sup> |
| 2.4 | Total non-domestic GFA (IRC)                       | 3,820m <sup>2</sup>  |

\* Based on composite building formula  
P.R. permitted for wholly non-domestic building 9.5  
P.R. permitted for wholly domestic building 5.0  
P.R. permitted for domestic part of composite building 4.741  
P.R. permitted for non-domestic part of composite building 0.493

**3. Number of Flats and Flat Mix**

|     |                     | Number | Flat Mix |
|-----|---------------------|--------|----------|
| 3.1 | 1P/2P               | 77     | 10%      |
| 3.2 | 2P/3P               | 155    | 20%      |
| 3.3 | 1B                  | 311    | 40%      |
| 3.4 | 2B                  | 231    | 30%      |
| 3.5 | Total No. PRH flats | 774    | 100%     |

**4. Population**

|     |            |                       |
|-----|------------|-----------------------|
| 4.1 | Population | approx. 2,477 persons |
|-----|------------|-----------------------|

**5. Open Space / Recreational Facilities**

|     |  |  |
|-----|--|--|
| 5.1 | Local open space<br>(Requirement : 10 ha. per 100,000 persons (min.)<br>i.e. 1m <sup>2</sup> per person) | 2979m <sup>2</sup> provided<br>(2,429m <sup>2</sup> min. required) |
| 5.2 | Children's Playground  | 206m <sup>2</sup> provided<br>(200m <sup>2</sup> required)         |

**6. Carpark and Loading / Unloading Provision**

|     |   |  |
|-----|---|--|
| 6.1 | Private car parking space (for PRH)<br>(Based on 1 private car parking space per 20 flats size excluding 1P/2P flats) | 35   |
| 6.2 | Carparking space for IRC  | 3  |
| 6.3 | Motor-cycle parking space<br>(Minimum number required by TD.)   | 10   |
| 6.4 | LGV Parking space (for PRH)<br>(Based on 1 per 200 flats; excluding 1P/2P flats)                                      | 4 to be provided<br>in Shek Lei Estate<br>in the near future |
| 6.5 | Loading / Unloading bay (domestic)<br>(Based on 1 per housing block)  | 1  |

**7. Estate Management Facilities**

|     |  |   |
|-----|--|---|
| 7.1 | Estate Management Office   | 1 for whole rental estate<br>(218m <sup>2</sup> provided) |
| 7.2 | Mutual Aid Committee (MAC) Office                                | 1 for each rental block<br>(19m <sup>2</sup> provided)    |
| 7.3 | Office for Cleansing Contractor                                  | 1 for whole rental estate<br>(10m <sup>2</sup> provided)  |
| 7.4 | Maintenance Service / Store Room<br>for fitters and electricians | 1 for whole rental estate<br>(51m <sup>2</sup> provided)  |
| 7.5 | Plant Nursery  | 1 for whole rental estate<br>(47m <sup>2</sup> provided)  |

***PART III - DEVELOPMENT PROGRAMME***

PROPOSED PRH DEVELOPMENT AT TAI PAK TIN STREET, KWAI CHUNG AREA 9H





**PART IV - PROJECT DEVELOPMENT BUDGET**

PROPOSED PRH DEVELOPMENT AT TAI PAK TIN STREET, KWAI CHUNG AREA 9H

**ANALYSIS OF SITE DEVELOPMENT &  
CONSTRUCTION COST BUDGET NO. 1  
(For Financial Viability Assessment Purpose)**

PROJECT : Kwai Chung Area 9 H PHDP Code : \_\_\_\_\_

| Estimated Costs (incl. common elements apportioned across all phases within the Whole Development Site) | COST PORTIONS        |                |                |                |                |                |  | Government Non-Reimbursable Items | Total including Government Non-Reimbursable Items | PWP Funded Items       |                  |
|---|----------------------|----------------|----------------|----------------|----------------|----------------|--|-----------------------------------|---|------------------------|------------------|
|   | PRH                  | CP(PC)         | CP(LGV)        | CP(L&UL)       | UN             | MAC            | Total excluding GN (incl. fluctuation) |                                   |   | GN (incl. Fluctuation) | Pri Sch          |
| <b>A. Cost Budget No. 1</b>   | m <sup>2</sup>       | m <sup>2</sup> | m <sup>2</sup> | m <sup>2</sup> | m <sup>2</sup> | m <sup>2</sup> | m <sup>2</sup>                         | m <sup>2</sup>                    | m <sup>2</sup>                                    | m <sup>2</sup>         | m <sup>2</sup>   |
| CFA of Cost Portions (m2)   | 39,600               | 1,863          | -              | -              | 304            | 19             | 41,786                                 | 41,786                            | 41,786  | -                      | -                |
| <b>1.0 Site Development Costs</b>   | ← Cost in (\$'000) → |                |                |                |                |                |  | Cost in (\$'000)                  | Cost in (\$'000)                                  | Cost in (\$'000)       | Cost in (\$'000) |
| 1.1 Demolition  | -                    | -              | -              | -              | -              | -              | -                                      | -                                 | -   | -                      | -                |
| 1.2 Site Formation  | -                    | -              | -              | -              | -              | -              | -                                      | -                                 | -   | -                      | -                |
| <b>2.0 Construction Costs</b>   |                      |                |                |                |                |                |  |                                   |   |                        |                  |
| 2.1 Foundation (incl. caps)   | 26,696               | 555            | -              | -              | 205            | 13             | 27,469                                 | -                                 | 27,469  | -                      | -                |
| 2.2 Building (incl. building services)  | 141,570              | 7,502          | -              | -              | 1,472          | 92             | 150,636                                | -                                 | 150,636   | -                      | -                |
| 2.3 Transfer Structures   | -                    | -              | -              | -              | -              | -              | -                                      | -                                 | -   | -                      | -                |
| 2.4 Government non-reimbursable external works  | -                    | -              | -              | -              | -              | -              | -                                      | 2,534                             | -   | -                      | -                |
| 2.5 a) External Works for Commonly Shared Elements  | 12,290               | 578            | -              | -              | 94             | 6              | 12,968                                 | -                                 | 12,968  | -                      | -                |
| 2.5 b) Footbridge / Covered Walkway / Lift Tower  | 21,756               | -              | -              | -              | 167            | 10             | 21,933                                 | -                                 | 21,933  | -                      | -                |
| 2.6 Automated Refuse Collection System  | -                    | -              | -              | -              | -              | -              | -                                      | -                                 | -   | -                      | -                |
| 2.7 Other Separate Contracts (incl. Soft landscape)   | 323                  | 15             | -              | -              | -              | -              | -                                      | -                                 | -   | -                      | -                |
| 2.8 Government non-reimbursable other separate contracts  | -                    | -              | -              | -              | 3              | -              | 341                                    | -                                 | 341   | -                      | -                |
| <b>3.0 Development Contingencies and Other Project Costs</b>  |                      |                |                |                |                |                |  |                                   |   |                        |                  |
| 3.1 Development Contingencies (5%)  | 10,132               | 433            | -              | -              | 97             | 6              | 10,668                                 | 127                               | 10,795  | -                      | -                |
| 3.2 Other Project Costs (2.5%)  | 5,319                | 227            | -              | -              | 51             | 3              | 5,600                                  | 67                                | 5,667   | -                      | -                |
| <b>Cost Budget No. 1</b>  |                      |                |                |                |                |                |  |                                   |   |                        |                  |
| Projected to Date of Tenders (A)  | 218,086              | 9,310          | -              | -              | 2,089          | 130            | 229,615                                | 2,728                             | 232,343   | -                      | -                |
| (Unit Cost in terms of \$/m2 CFA) :-  | (\$5,507/m2)         | (\$4,997/m2)   | -              | -              | (\$6,872/m2)   | (\$6,842/m2)   | (\$5,495/m2)                           | (\$65/m2)                         | (\$5,560/m2)                                      | -                      | -                |

| Estimated Costs (incl. common elements but excluding Footbridge and conversion of existing road to pedestrianized areas apportioned across all Phases within the Whole Development Site) | COST PORTIONS |                 |                  |                   |             |              |                             | Government Non-Reimbursable Items | Total including Government Non-Reimbursable Items |
|--|---------------|-----------------|------------------|-------------------|-------------|--------------|-----------------------------|-----------------------------------|---|
|  | PRH \$/m2CFA  | CP(PC) \$/m2CFA | CP(LGV) \$/m2CFA | CP(L&UL) \$/m2CFA | UN \$/m2CFA | MAC \$/m2CFA | Total excluding GN \$/m2CFA |                                   |   |
| <b>Total Construction cost /m2 CFA (including development contingencies and other project costs) for cost portions</b>   | 5,507         | 4,997           | -                | -                 | 6,872       | 6,842        | 5,495                       | 65                                | 5,560   |
| <b>Less Construction Costs /m2 CFA (including development contingencies and other project costs) for :-</b>  |               |                 |                  |                   |             |              |                             |                                   |   |
| i) Footbridge / Covered Walkway / Lift Tower   | 578           | -               | -                | -                 | 591         | 566          | 565                         | -                                 | 565   |
| <b>Net Construction Cost /m2 CFA (including development contingencies and other project costs but excluding Footbridge / Covered Walkway / Lift Tower)</b>                               | \$4,929/m2    | \$4,997/m2      | -                | -                 | \$6,281/m2  | \$6,276/m2   | \$4,930/m2                  | \$65/m2                           | \$4,995/m2  |

**SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST  
BUDGET NO.1 (For BC Submission)**

Project : Kwai Chung Area 9H (PHDP Code : )

| COST HEADS                                    | WORK ELEMENTS   | BUDGET COST (\$M) |
|---|---|-------------------|
| (a) Site Development Cost                     | Site formation  | -                 |
|   | Demolition  | -                 |
|   | Sub-total:  | -                 |
| (b) Construction Cost                         | Foundation  | 28.843            |
|   | Building  | 197.476           |
|   | Other separate contracts  | 0.358             |
|   | Sub-total:  | 226.677           |
| (c) Other Project Cost<br>(2.5% on (a) & (b)) | Civil engineering and geotechnical studies,<br>site investigation, material testing and<br>the like | 5.667             |
| (d)   | Total Site Development and Construction Cost<br>(a) + (b) + (c) :                                   | 232.344           |

**Notes :**

- (1) All prices are at June 2002 price level and adjusted for tender price inflation to tender in dates of contracts based on -1% per annum from July 2002 to December 2002 and 0 % per annum from January 2003 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out by CQS/CS and approved by EB.
- (3) The costs for soft landscaping and utilities connections have been grouped under Other Separate Contracts.
- (4) Development Contingencies has been allowed for non-standard blocks/building and elements in the Site Development and Construction Costs.
- (5) Other Project Costs provided at 2.5% of the Site Development and Construction Cost which is an allowance for traffic and environmental studies, land surveying studies and other engineering studies, site investigation geotechnical advisory service, construction material test etc. carried out by direct testing contractor, etc.

**Exclusions:**

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc. and other Project Costs, e.g. ancillary project expenses, etc. financing and legal costs/expenses, etc.

**Basis of the Budget :**

- (1) Cost of yardsticks have been used in the calculation of building works and building services to all buildings, carpark, welfare/ancillary facilities and external works with adjustment for non-standard elements/features.
- (2) Drawings under A/R's memo (option 1) dated 28/6/02
- (3) Preliminary foundation design as advised by SE/15.

Prepared by :                     Ringo Wong                     (PQS/Widnell Ltd)

Date :                     10/9/02

**SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 1 (For BC Submission)**

PROJECT : Kwai Chung Area 9 H PHDP Code : \_\_\_\_\_

| COST ITEMS  | COST PORTIONS |        |         |          |       |     |       | Common Items                    |        |          |    | Total<br>(incl. fluctuation) |
|---|---------------|--------|---------|----------|-------|-----|-------|---------------------------------|--------|----------|----|------------------------------|
|   | PRH           | CP(PC) | CP(LGV) | CP(L&UL) | UN    | MAC | GN    | TS                              | EW     | FB/CW/LT | PA |                              |
| <b>CFA of Cost Portions (m2)</b>  | 39,600        | 1,863  | -       | -        | 304   | 19  | -     | -                               | -      | -        | -  | 41,786                       |
| <b>Estimated Cost in \$,000</b>   |               |        |         |          |       |     |       | <b>Estimated Cost in \$,000</b> |        |          |    | <b>\$,000</b>                |
| <b>A. Site Development &amp; Construction Cost Budget At June 2002<br/>(Excluding Other Project Costs &amp; Tender Price Inflation)</b> |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| <b>1.0 Site Development Cost</b>  |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 1.1 Demolition Contract   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 1.2 Site Formation Contract   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| <b>2.0 Construction Costs</b>   |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 2.1 Foundation Contract   | 28,172        | 586    | -       | -        | 216   | 14  | -     | -                               | -      | -        | -  | 28,988                       |
| 2.2 Building Contract   |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 2.21 Building (excl. building services)   | 125,864       | 6,370  | -       | -        | 1,466 | 92  | -     | -                               | -      | -        | -  | 133,792                      |
| 2.22 Building Services  | 23,532        | 1,547  | -       | -        | 87    | 5   | -     | -                               | -      | -        | -  | 25,171                       |
| 2.23 Transfer Structures  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.24 Public Transport Interchange   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.25 Open Space   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.26 External Works for Specific Businesses   | -             | -      | -       | -        | -     | -   | 2,674 | -                               | -      | -        | -  | 2,674                        |
| 2.27 External Works for Commonly Shared Elements  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.28 Automated Refuse Collection System   | -             | -      | -       | -        | -     | -   | -     | 13,684                          | 23,146 | -        | -  | 36,830                       |
| 2.3 Other Separate Contracts (incl. Soft landscape)   | -             | -      | -       | -        | -     | -   | -     | -                               | 360    | -        | -  | 360                          |
| <b>Cost Budget At June 2002 Price Level (A)</b>   | 177,568       | 8,503  | -       | -        | 1,769 | 111 | 2,674 | -                               | 14,044 | 23,146   | -  | 227,815                      |
| <b>B. Cost Budget Projected To<br/>Proposed Dates of Tenders [ Cost in Item (A) plus Cost x (v), (w), (y) or (z) ]</b>                  |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| <b>1.0 Site Development Cost (Total \$'M)</b>   |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 1.1 Demolition Contract \$  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 1.2 Site Formation Contract \$  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| <b>2.0 Construction Costs</b>   |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 2.1 Foundation Contract \$ 28.843   | 28,031        | 583    | -       | -        | 215   | 14  | -     | -                               | -      | -        | -  | 28,843                       |
| 2.2 Building Contract \$ 197.476  |               |        |         |          |       |     |       |                                 |        |          |    |                              |
| 2.21 Building (excl. building services)   | 125,235       | 6,338  | -       | -        | 1,459 | 92  | -     | -                               | -      | -        | -  | 133,124                      |
| 2.22 Building Services  | 23,414        | 1,539  | -       | -        | 87    | 5   | -     | -                               | -      | -        | -  | 25,045                       |
| 2.23 Transfer Structures  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.24 Public Transport Interchange   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.25 Open Space   | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.26 External Works for Specific Businesses   | -             | -      | -       | -        | -     | -   | 2,661 | -                               | -      | -        | -  | 2,661                        |
| 2.27 External Works for Commonly Shared Elements  | -             | -      | -       | -        | -     | -   | -     | -                               | -      | -        | -  | -                            |
| 2.28 Automated Refuse Collection System   | -             | -      | -       | -        | -     | -   | -     | 13,616                          | 23,030 | -        | -  | 36,646                       |
| 2.3 Other Separate Contracts (incl. Soft landscape) \$ 0.358  | -             | -      | -       | -        | -     | -   | -     | -                               | 358    | -        | -  | 358                          |
| <b>Cost Budget Projected To Proposed Dates Of Tenders (B)</b>   | 176,680       | 8,460  | -       | -        | 1,761 | 111 | 2,661 | -                               | 13,974 | 23,030   | -  | 226,677                      |

**Types of Contract**

Demolition  
 Site Formation  
 Foundation  
 Building ( for inflation adjustment, 'Other Separate Contracts'  
 Tender-In Dates to be taken the same as "Building")

**Tender In Dates**

/  
 /  
 01/03  
 12/03

**Adjustment for months after June 2001 (see Guidance Notes 2)**

Months x (-1%) / 12 +  
 Months x (-1%) / 12 +  
 6 Months x (-1%) / 12 + 13  
 6 Months x (-1%) / 12 + 24

Months x (0%) / 12 = (y)  
 Months x (0%) / 12 = (w)  
 Months x (0%) / 12 = -0.005000 (y)  
 Months x (0%) / 12 = -0.005000 (z)

**Legend for Cost Portions :**

|   |   |                                  |                             |
|---|---|----------------------------------|-----------------------------|
| PRH - Public Rental Housing                           | CP(PC) - Carpark (Private Cars)               | GN - Government Non-reimbursable | CC - Commercial Centre      |
| PRH/HOS - Public Rental Housing/Home Ownership Scheme | CP(LGV) - Carpark (Light Goods Vehicles)      | TS - Transfer Structure          | MAC - Mutual Aids Committee |
| UN - Unallocable                                      | CP(L&UL) - Carpark (Loading & Unloading Area) | EW - External Works              | FB - Footbridge             |
|   |   | LT - Lift Tower                  | CW - Covered Walkway        |

For the basis, exclusions and notes of this Cost Estimate, please refer to information shown on next page.

SUMMARY OF SITE DEVELOPMENT & CONSTRUCTION COST BUDGET NO. 1 (For BC Submission) (Cont'd)

Project : Kwai Chung Area 9H (PHDP Code: \_\_\_\_\_)

Legend for Cost Portions :

|        |                               |    |                      |
|--------|-------------------------------|----|----------------------|
| PRH    | - Public Rental Housing       | TS | - Transfer Structure |
| CP(PC) | - Carpark (Private Car)       | EW | - External Works     |
| UN     | - Unallocable                 | FB | - Footbridge         |
| MAC    | - Mutual Aids Committee       | CW | - Covered Walkway    |
| GN     | - Government Non-reimbursable | LT | - Lift Tower         |

**Notes :**

- (1) All prices are at June 2002 price level and adjusted for tender price inflation to tender in dates of contracts based on -1% per annum from Jul 2002 to Dec 2002 and 0% per annum from Jan 2003 onwards.
- (2) Apportionment of the Construction Costs are in accordance with the existing cost apportionment guidelines set out by CQS/CS and approved by EB.
- (3) The costs for soft landscaping and utilities connections have been grouped under Other Separate Contracts.
- (4) Development Contingencies has been allowed for non-standard blocks/building and elements in the Site Development and Construction Costs.
- (5) Other Project Costs provided at 2.5% of the Site Development and Construction Cost which is an allowance for traffic and environmental studies, land surveying studies and other engineering studies, site investigation geotechnical advisory service, construction material test etc. carried out by direct testing contractor, etc.

**Exclusions :**

- (1) Project Management Costs, e.g. professional services & overheads, consultant fees, etc. and other Project Costs, e.g. ancillary project expenses, financing and legal costs/expenses, etc. financing and legal costs/expenses, etc.

**Basis of the Budget :**

- (1) Cost of yardsticks have been used in the calculation of building works and building services to all buildings, carpark, welfare/ancillary facilities and external works with adjustment for non-standard elements/features.
- (2) Drawings under A/85's memo (option 1) dated 28/6/02.
- (3) Preliminary foundation design as advised by SE/15.

Prepared by :           Ringo Wong           (PQS/Widnell Ltd)

Date :                   10/9/02

| Cost at June 2002 Price Level   | No. of Flats       | Cost per Flat           |                       |                   | TOTAL   |
|---|--------------------|-------------------------|-----------------------|-------------------|---|
|   |                    | Foundation (Incl. Caps) | Building (Excl. Caps) | Building Services |   |
| <b>1.0 Non-standard Blocks based on Construction Cost Yardsticks</b>  |                    |                         |                       |                   |   |
| (a) Wings A, B, D (Yardstick as NHI, Opt2)  |                    |                         |                       |                   |   |
| 1P/2P Flat 31.05 m2 CFA per Flat/Unit (30.70)   | 77                 | 28,244                  | 80,310                | 15,210            | 123,764   |
| 2P/3P Flat 39.35 m2 CFA per Flat/Unit (38.90)   | 38                 | 35,788                  | 108,530               | 21,530            | 165,848   |
| 1B Flat 50.27 m2 CFA per Flat/Unit (49.70)  | 272                | 45,724                  | 130,020               | 24,620            | 200,364   |
| 2B Flat 66.26 m2 CFA per Flat/Unit (65.50)  | 192                | 60,260                  | 171,200               | 32,410            | 263,870   |
|   | 579                |                         |                       |                   |   |
| (b) Wing C (Yardstick as NHI, Opt6)   |                    |                         |                       |                   |   |
| 2P/3P Flat 39.35 m2 CFA per Flat/Unit (38.90)   | 117                | 35,788                  | 108,530               | 21,530            | 165,848   |
| 1B Flat 51.79 m2 CFA per Flat/Unit (51.20)  | 39                 | 47,104                  | 142,660               | 28,300            | 218,064   |
| 2B Flat 69.09 m2 CFA per Flat/Unit (68.30)  | 39                 | 62,836                  | 190,340               | 37,750            | 290,926   |
|   | 195                |                         |                       |                   |   |
| Standard CFA/Flat in bracket  | Total Flat No. 774 |                         |                       |                   |   |
| <b>Cost per Flat x Flat No. = Sub-Total (A)</b>   |                    | \$0,000.00              |                       |                   |   |
| Total CFA of Domestic Blocks = 39,600 m2<br>(Standard CFA = 39,148 m2)  |                    | 36,016                  | 104,229               | 20,004            | 160,249   |
|   |                    |                         |                       |                   | (\$4,093/m2 CFA)<br>(\$207,040 per Flat)  |
| <b>2.0 Non-standard Adjustment</b>  |                    |                         |                       |                   |   |
|   |                    | \$0,000.00              |                       |                   |   |
| (a) Adjustment of foundation based on footing design  |                    | (9,186)                 | -                     | -                 | (9,186)   |
| (b) Add for costs of air conditioner to domestic flats  |                    | -                       | -                     | 450               | 450   |
| (c) Add for increase in thickness of podium slabs   |                    | -                       | 476                   | -                 | 476   |
| (d) Add for podium extended outside carpark   |                    | -                       | 2,172                 | 357               | 2,529   |
| (e) Add for columns outside carpark   |                    | -                       | 985                   | -                 | 985   |
| (f) Add for ramps to podium levels  |                    | -                       | 1,356                 | 260               | 1,616   |
| (g) Add allowance for single block project  |                    | -                       | 5,211                 | 1,000             | 6,211   |
| (h) Adjustment for extra CFA 1.2%   |                    | -                       | 1,251                 | 240               | 1,491   |
| (i) Adjustment for non-standard formwork  |                    | -                       | 1,650                 | -                 | 1,650   |
| (j) Adjustment for higher storey height   |                    | -                       | 700                   | 100               | 800   |
| (k) Add for roof features extra windows, tie beams and bay windows to 1P, 2P flats  |                    | -                       | 1,710                 | -                 | 1,710   |
| (l) Add covers to drying racks (78 No)  |                    | -                       | 130                   | -                 | 130   |
| <b>Sub-Total (B)</b>  |                    | -9,186                  | 15,641                | 2,407             | 8,862   |
| (Total CFA = 39,600 m2)   |                    |                         |                       |                   | (\$224/m2 CFA)<br>(\$11,450 per Flat)<br>5% over that calculated based on Standard Yardsticks |
| <b>5.0 Development Contingency</b>  |                    |                         |                       |                   |   |
|   |                    | \$0,000.00              |                       |                   |   |
| Allow 5% for Development Contingency  |                    | 1,342                   | 5,994                 | 1,121             | 8,457   |
| <b>Sub-Total (C)</b>  |                    | 1,342                   | 5,994                 | 1,121             | 8,457   |
|   |                    |                         |                       |                   | (\$214/m2 CFA)<br>(\$10,926 per Flat)   |
| <b>Total Cost of Domestic Block at June 2002 Price Level = (A) + (B) + (C) (including Provisions for Contract Fluctuations)</b> |                    | \$0,000.00              |                       |                   |   |
|   |                    | 28,172                  | 125,864               | 23,532            | 177,568   |
|   |                    |                         |                       |                   | (\$4,484/m2 CFA)<br>(\$229,416 per Flat)  |

Notes:

**Remarks:**

- Foundation cost for domestic block is based on preliminary footing design as in ASE/148's memo dated 26/6/02

**Notes on Non-standard Adjustment**

- As advised by SE/15, the foundation cost for minipiles was apportioned based on the following preliminary design:-

**Piling**

- Podium and Carpark not under Domestic Block:- 96 No. Minipiles (200mm diameter with 4Y50 high yield bar), founding level = 12 m below ground level

**Raft/Pile Cap/Footing**

- Podium and Carpark not under Domestic Block:- 32 No. isolated cap 1.8x1.8m with 0.6x0.8m tie beam, reinforcement ratio = 200kg/m3
- The top of pile cap shall be 1.5m below existing ground level

- No laboratory compression test and standard penetration test is necessary.

- As advised by APM/A122 in meeting dated 16/8/2001, the foundation cost for minipiles of podium and carpark shall be apportioned in term of CFA
- As advised by APM/A122, the costs of podium extended outside carpark shall be apportioned to PRH, UN and MAC only.
- As advised by APM/A122 on 6/9/2001, the cost for columns at northern side of the site and outside carpark shall be apportioned to PRH, UN and MAC only.
- As advised by A/85 dated 6/9/2002, 202 No. A/C units shall be added to domestic flats, 50% of which shall be 1hp and 50% shall be 1½ hp.
- As advised by APM/A122 in letter dated 11/04/2002, the single block factor shall be 5%.

| Cost at June 2002 Price Level   | Space (No.) | Cost per Space          |                       |                   | TOTAL  |
|---|-------------|-------------------------|-----------------------|-------------------|--|
|   |             | Foundation (Incl. Caps) | Building (Excl. Caps) |                   |  |
|   |             |                         | Builder's Works       | Building Services |  |
| <b>1.0 Cost Yardsticks for Carpark Under Podium</b>   |             |                         |                       |                   |  |
| Area of which yardstick is based upon   |             |                         |                       |                   |  |
| (a) Carpark Portion   |             |                         |                       |                   |  |
| - Private ( 43 m2 CFA per space)  | 38          | 39,560                  | 129,300               | 32,470            | 201,330  |
| - Motor cycle ( 7 m2 CFA per space)   | 10          | 6,440                   | 21,049                | 5,286             | 32,775   |
| * 6 Nos. of motorcycle space is equal to 1 no. of private parking space   | 39          |                         |                       |                   |  |
| <b>Cost per Space x No. of Space = Sub-total (A)</b>  |             | \$0,000.00              |                       |                   |  |
| (Total CFA based on that of Yardstick = 1,704 m2)<br>& Average CFA per carparking space = 44 m2)  |             | 1,568                   | 5,124                 | 1,287             | 7,979  |
|   |             |                         |                       |                   | (\$4,683/m2 CFA)<br>(\$204,590/ space)   |
| <b>2.0 Adjustments to Item 1.0 Above</b>  |             |                         |                       |                   |  |
|   |             | \$0,000.00              |                       |                   |  |
| (a) Adjustment of foundation based on preliminary design  |             | (1,010)                 | -                     | -                 | (1,010)  |
| (b) Adjustment to efficiency ratio, +9% of car space.   |             | -                       | 461                   | 122               | 583  |
| (c) Add allowance for single block project  |             | -                       | 256                   | 64                | 320  |
| (d) Adjustment for higher headroom abutting open area   |             | -                       | 226                   | -                 | 226  |
| <b>Sub-Total (B)</b>  |             | (1,010)                 | 943                   | 186               | 119  |
| (Total CFA based on Actual Design = 1,863 m2)<br>& Average CFA per carparking space = 48 m2)  |             |                         |                       |                   | (\$64/m2 CFA)<br>(\$3,051/ space)<br>1% above that calculated based on Standard Yardsticks |
| <b>3.0 Development Contingency</b>  |             |                         |                       |                   |  |
|   |             | \$0,000.00              |                       |                   |  |
| Allow 5% for Development Contingency  |             | 28                      | 303                   | 74                | 405  |
| <b>Total Cost of Carpark Portion (Private Carpark Space) at June 2002 Price Level = (A) + (B) + Item 3.0 (including Provisions for Contract Fluctuations)</b> |             | \$0,000.00              |                       |                   |  |
|   |             | 586                     | 6,370                 | 1,547             | 8,503  |
|   |             |                         |                       |                   | (\$4,564/m2 CFA)<br>(\$218,026/ space)   |

**Notes on Non-standard adjustments**

- Refer to the "Notes on Non-standard adjustment" in the calculation sheet of domestic block for the details of preliminary design of foundation being used in the cost estimate.

Construction Cost Budget No. 1 (Unallocable Portion)

Project : Kwai Chung Area 9 H (PHDP Code: )

Building : 1 No. Non-standard New Harmony PRH Block (39 storeys)

| Cost at June 2002 Price Level   | CFA (m2) | Cost per m2 CFA        |                      |                   | TOTAL                  |
|---|----------|------------------------|----------------------|-------------------|------------------------|
|   |          | Foundation (Incl Caps) | Building (Excl Caps) |                   |                        |
|   |          |                        | Builder's Works      | Building Services |                        |
| <b>1.0 Estimate Cost for Ancillary/Welfare Facilities in Domestic Block</b>   |          |                        |                      |                   |                        |
| (a) Ancillary/Welfare facilities (no fitting out included)  | 304      | 920                    | 1,945                | 250               | 3,115                  |
| <b>Cost per m2 CFA x m2 CFA</b>   |          | 280                    | 591                  | 76                | 947                    |
| (b) Fitting Out for Unallocable Portion (Total area to be fitted out = 304 m2 CFA)  |          |                        | 736                  | -                 | 736                    |
| <b>2.0 Other Adjustments for Item 1.0 Above</b>   |          |                        |                      |                   |                        |
| (a) Adjustment of foundation based on preliminary design  |          | (74)                   | -                    | -                 | (74)                   |
| (b) Add for increase in thickness of podium slabs   |          | -                      | 4                    | -                 | 4                      |
| (c) Add for podium extended outside carpark   |          | -                      | 17                   | 2                 | 19                     |
| (d) Add for columns and footings outside carpark  |          | -                      | 8                    | -                 | 8                      |
| (e) Add for ramps to podium level   |          | -                      | 10                   | 1                 | 11                     |
| (f) Add allowance for single block project  |          | -                      | 30                   | 4                 | 34                     |
| <b>3.0 Development Contingency</b>  |          |                        |                      |                   |                        |
| Allow 5% for Development Contingency  |          | 10                     | 70                   | 4                 | 84                     |
| <b>Total Cost of Unallocable Portion at June 2002 Price Level = Total of Items in 1.0 to 3.0 (including Provisions for Contract Fluctuations)</b> |          | 216                    | 1,466                | 87                | 1,769 (\$5,819/m2 CFA) |

**Note**

- For fitting out for Ancillary/Welfare Facilities, refer to Guidance Notes on Cost Split for items to be chargeable to Unallocable portion.
- Unallocable Portion includes the following :

|  |                   |
|--|-------------------|
| EMO  | 216 m2 CFA        |
| TMU  | 23 m2 CFA         |
| Service / Storeroom for Fitters & Electricians | 55 m2 CFA         |
| Service room for cleansing services            | 10 m2 CFA         |
| <b>Total</b>                                   | <b>304 m2 CFA</b> |
- Unit cost per m2 CFA for fitting-out work was based on June 2002 Construction Cost Yardsticks at HK\$2,420 for Ancillary Facilities portion.
- The costs for fitting out just allow for expenditure on HA funded items, Lottery funded items have to be charged by PWP.

Construction Cost Budget No. 1 (MAC Portion)

Project : Kwai Chung Area 9 H (PHDP Code: )

Building : 1 No. Non-standard New Harmony PRH Block (39 storeys)

| Cost at June 2002 Price Level  | CFA (m2) | Cost per m2 CFA        |                      |                   | TOTAL                |
|--|----------|------------------------|----------------------|-------------------|----------------------|
|  |          | Foundation (Incl Caps) | Building (Excl Caps) |                   |                      |
|  |          |                        | Builder's Works      | Building Services |                      |
| <b>1.0 Estimate Cost for Ancillary/Welfare Facilities in Domestic Block</b>                                  |          |                        |                      |                   |                      |
| (a) Ancillary/Welfare facilities (no fitting out included)   | 19       | 920                    | 1,945                | 250               | 3,115                |
| <b>Cost per m2 CFA x m2 CFA</b>  |          | 17                     | 37                   | 5                 | 59                   |
| (b) Fitting Out for Unallocable Portion (Total area to be fitted out = 19 m2 CFA)                            |          |                        | 46                   | -                 | 46                   |
| <b>2.0 Other Adjustments for Item 1.0 Above</b>  |          |                        |                      |                   |                      |
| (a) Adjustment of foundation based on preliminary design   |          | (4)                    | -                    | -                 | (4)                  |
| (b) Add for increase in thickness of podium slabs  |          | -                      | -                    | -                 | -                    |
| (c) Add for podium extended outside carpark  |          | -                      | 1                    | -                 | 1                    |
| (d) Add for columns and footings outside carpark   |          | -                      | 1                    | -                 | 1                    |
| (e) Add for ramps to podium level  |          | -                      | 1                    | -                 | 1                    |
| (f) Add allowance for single block project   |          | -                      | 2                    | -                 | 2                    |
| <b>3.0 Development Contingency</b>   |          |                        |                      |                   |                      |
| Allow 5% for Development Contingency   |          | 1                      | 4                    | -                 | 5                    |
| <b>Total Cost of MAC Portion at June 2002 Price Level = Total of Items in 1.0 to 3.0 (Total CFA = 19 m2)</b> |          | 14                     | 92                   | 5                 | 111 (\$5,842/m2 CFA) |

**Note**

- For fitting out for Ancillary/Welfare Facilities, refer to Guidance Notes on Cost Split for items to be chargeable to Unallocable portion.
- Unit cost per m2 CFA for fitting-out work was based on June 2002 Construction Cost Yardsticks at HK\$2,420 for MAC.

Construction Cost Budget No. 1 (Open Space - Government Non-reimbursable External Works)

Project : Kwai Chung Area 9 H (PHDP Code: )

Total GEA = 4,345 m2; Total CFA = 41,786 m2 Total GSA = 4,983 m2 GEA : CFA = 1 : 9.62

| Cost at June 2002 Price Level   | GEA (m2) | Cost per m2 GEA        |                      |                      | TOTAL |
|---|----------|------------------------|----------------------|----------------------|-------|
|   |          | Foundation (Excl Caps) | Building (Excl Caps) | Soft Lands. & Others |       |
| <b>1.0 Estimate Cost for Government Non-reimbursement Item</b>  |          | ← \$,000.00 →          |                      |                      |       |
| (a) Cost of Open Space  | -        | -                      | 2,547                | -                    | 2,547 |
| Sub-total (A)   | -        | -                      | 2,547                | -                    | 2,547 |
| <b>2.0 Development Contingency</b>  |          | ← \$,000.00 →          |                      |                      |       |
| (a) Allow 5% for Development Contingency  | -        | -                      | 127                  | -                    | 127   |
| Sub-total (B)   | -        | -                      | 127                  | -                    | 127   |
| <b>Total Cost of Government Non-reimbursement Items at June 2002 Price Level = (A) + (B) (including Provisions for Contract Fluctuations)</b> | -        | -                      | 2,674                | -                    | 2,674 |

**Remarks:**

- As advised by APM/A122, the open space shall be treated as External Works for Specific Businesses.
- As advised by APM/A122, area of open space designated to LCSD = 2,736m2
- As advised by A/85, just allow costs for provisions of 1 No. basket-ball court and associated irrigation system in this area

Construction Cost Budget No. 1 (External Works - Commonly Shared Across Phases of the Development and Amongst Various HA Businesses)

Project : Kwai Chung Area 9 H (PHDP Code: )

Total GEA = 4,345 m2; Total CFA = 41,786 m2 Total LAA = 3,091 m2

| Cost at June 2002 Price Level   | Estimated Cost         |                      | TOTAL  |
|---|------------------------|----------------------|--|
|   | Foundation (Excl Caps) | Building (Excl Caps) |  |
|   | ← \$,000.00 →          |                      |  |
| <b>1.0 External Works (Include Contract Price Fluctuation)</b>  |                        |                      |  |
| (a) Hard Landscape Works  | -                      | 5,492                | 5,492  |
| (b) Underground Drainage  | -                      | 2,464                | 2,464  |
| Sub-total (A)   | -                      | 7,956                | 7,956<br>(\$190/m2 CFA)<br>(\$1,831/m2 GEA)  |
| <b>2.0 Special External Works (incl. Contract Price Fluctuation)</b>  |                        |                      |  |
| (a) Slope stabilization works   | -                      | 2,808                | 2,808  |
| (b) Retaining wall and screen wall  | -                      | 2,268                | 2,268  |
| Sub-total (B)   | -                      | 5,076                | 5,076<br>(\$121/m2 CFA)<br>(\$1,168/m2 GEA)  |
| <b>3.0 Development Contingency (5%)</b>   |                        |                      |  |
|   | -                      | 652                  | 652  |
| Sub-total (C)   | -                      | 652                  | 652<br>(\$16/m2 CFA)<br>(\$150/m2 GEA)       |
| <b>Total Cost of Commonly Shared External Works at June 2002 Price Level = (A) + (B) + (C) (including Provisions for Contract Fluctuations)</b>               | -                      | 13,684               | 13,684<br>(\$327/m2 CFA)<br>(\$3,149/m2 GEA) |
| <b>4.0 Cost of Automated Refuse Collection System at June 2002 Price Level</b>  |                        |                      |  |
|   | -                      | -                    | -  |
| <b>5.0 Development Contingency</b>  |                        |                      |  |
|   | -                      | -                    | -  |
| <b>Total Cost of Automated Refuse Collection System at June 2002 Price Level = 4.0 to 5.0 (including Provisions for Contract Fluctuations)</b>                | -                      | -                    | -  |
| Cost at June 2002 Price Level   | Estimated Cost         |                      | TOTAL  |
|   | Soft Landscaping       | Others               |  |
|   | ← \$,000.00 →          |                      |  |
| <b>6.0 Cost of Other Separate Contracts (Incl. Soft landscaping Works) at June 2002 Price Level</b>   | 200                    | 143                  | 343  |
| <b>7.0 Development Contingency Allow 5% for Development Contingency</b>   | 10                     | 7                    | 17   |
| <b>Cost of Other Separate Contracts (incl. Soft Landscaping Works) at June 2002 Price Level = 6.0 to 7.0 (including Provisions for Contract Fluctuations)</b> | 210                    | 150                  | 360<br>(\$9/m2 CFA)<br>(\$83/m2 GEA)         |

**Remarks:**

- The cost on external works is based on yardstick.
- As advised by SE/15, allowance for recompaction and protection works to existing slope is required.
- As advised by APM/A122 on 21/5/02, retaining wall shall be provided under the ramp and lift tower.



Construction Cost Budget No 1 (External Works - Footbridge/Covered Walkway outside Site Boundary and Lift Tower)

Project: Kwai Chung Area 9H (PHDP Code: )

| Cost at June 2002 Price Level  | GEA (m <sup>2</sup> ) | Cost per m <sup>2</sup> GEA |                      |                      | TOTAL  |
|--|-----------------------|-----------------------------|----------------------|----------------------|--------|
|  |                       | Foundation (Excl Caps)      | Building (Excl Caps) | Soft Lands. & Others |        |
| <b>1.0 Cost Yardstick for External Works (Include Contract Price Fluctuation)</b>              |                       |                             |                      |                      |        |
| (a) Hard Landscape Works (Amenities), Others, & Soft Landscaping                               | -                     | -                           | -                    | -                    | -      |
| (b) Underground Drainage   | -                     | -                           | -                    | -                    | -      |
| (c) Allowance for fluctuation provision  | -                     | -                           | -                    | -                    | -      |
| Cost per m <sup>2</sup> GEA x m <sup>2</sup> GEA = Sub-total (A)                               |                       | \$,000.00                   |                      |                      |        |
| <b>2.0 Special External Works (incl. Contract Price Fluctuation)</b>                           |                       |                             |                      |                      |        |
| (a) Provisions of footbridge in connection with On Yam Estate and Shek Li Estate               | 2,233                 |                             | 14,910               |                      | 17,143 |
| (b) Relocation of existing bus layby   | -                     |                             | 200                  |                      | 200    |
| (c) Allow for lift tower & 2 Nos. lift   | 800                   |                             | 2,300                |                      | 3,100  |
| (d) Adjust for extra concrete covered walkway  | 640                   |                             | 960                  |                      | 1,600  |
| <b>3.0 Development Contingency</b>   |                       |                             |                      |                      |        |
| Allow 5% for Development Contingency   | 184                   |                             | 919                  |                      | 1,103  |
| Sub-total (B)  |                       | 3,857                       | 19,289               | -                    | 23,146 |
| Total Cost of Commonly Shared External Works (Footbridge) at June 2002 Price Level = (A) + (B) |                       | \$,000.00                   |                      |                      |        |
|  |                       | 3,857                       | 19,289               | -                    | 23,146 |

**Remarks:**

- Fluctuation allowed in cost yardstick have been adjusted for the contract period of 30 months including anticipated EOT.
- As advised by SE15, the foundation cost for footbridge to On Yam Estate was based on the following preliminary foundation design:-  
Piling  
 6 No. minipiles (200mm diameter with 4Y50 steel bar), 20m boring length, rock level at 9m below existing ground level  
Pile caps  
 (i) Area of cap is assumed to be 7 x 2m  
 (ii) 1.3m thick cap with steel ratio of 200kg/m<sup>3</sup>