Public Drainage System

19. To ensure proper updating of drainage records and better control of drainage connections, APs are requested to inform the Drainage Services Department (Hong Kong and Islands Division/Mainland South Division/Mainland North Division, as appropriate) once the Registered General Building Contractor or RSC has completed the sealing of drains. Regulation 3(2)(b) of the B(DW)R refers.

Demolition Affecting Slopes and Retaining Walls

20. If demolition works affect slopes and retaining walls, RSE should ensure that all the relevant recommendations by RGE are incorporated in the demolition plans. Any difference in opinion should be resolved between RSE and RGE before submission to BD. The geotechnical reports and supporting documents are to be prepared and signed by RGE.

Safety and Convenience of Third Parties

21. Proper protection and safe passage for the public must be provided at all times by the erection and maintenance of suitable hoardings, covered walkways and gantries, and catch platforms.

22. Every effort must be made to minimise any nuisance to the public arising from dust, noise and vibration.

Design of Hoarding, Covered Walkway, Gantry and Catch Platform

23. Reference could be made to Chapter 3 of the Demolition Code for the general design requirements of hoarding, covered walkway, gantry and catch platform. The deck of the catch platform shall be designed to support a uniformly distributed load of 5.0 kPa or a point load of 20 KN acting on an effective area of 300 mm x 300 mm. In accordance with the requirement as stipulated in clause 2.5 of the Code of Practice on Wind Effects in Hong Kong 2019 (Wind Code), a wind load of 37 % of the wind reference pressure as defined in clause 3.2 of the Wind Code without the adjustments for wind directionality and sheltering effect could be adopted for checking the stability of these structures.

24. A design example of a gantry with single bay hoarding on each side is given in Appendix B for reference. If the catch platform which should have a minimum 2 000 mm distance from the existing building line encroaches into the 500 mm (minimum) recess from the carriageway, the catch platform shall be raised to allow 5 500 mm headroom over the carriageway. For narrow service lanes (width 3.5 m or less) which are generally shielded from the wind, a single deck design with the deck functioning as a catch platform fully capable of resisting the superimposed design loads is considered acceptable because of the relatively lower risk associated with these areas. A single deck design for narrow service lanes is given in Appendix B for reference. Structural justification may not be required if the parameters as adopted in the design examples are strictly followed.

25. Site constraints such as the presence of congested underground utilities and narrow pedestrian walkways may sometimes prohibit the construction of footings and counterweight, or render the sole reliance on counterweight for maintaining stability uneconomical. Under such circumstances, AP/RSE are encouraged to consider more economical designs with recyclable materials as alternatives to the examples given in Appendix B. Such alternatives may include the adoption of a rigorous analysis and/or the provision of tie forces at upper levels in securing the stability of the structure, thus reducing counterweight and/or some structural members' sizes.

Consent to Commencement of Works

26. All essential precautionary and protective measures should have been carried out and required documents submitted prior to or together with the application for consent to commencement of demolition works (Form BA8). AP may make reference to the checklist at Appendix C. The BA may refuse to give his consent to the commencement of demolition works under section 16(3)(b), (ba) or (bc) of the BO where the required documents have not been submitted or section 16(3)(bb) of the BO where the precautionary and protective measures have not been adequately provided for the demolition works.

Certification on Completion of Demolition Works

27. Within 14 days of the completion of the demolition works, AP, RSE and RGE, as the case may be, should certify the completion of works in Form BA14A, or in Form BA14B if the streamlined procedures in paragraphs 28 to 30 below are adopted.

Streamlined Procedures for Fast Track Acceptance of Completion of Demolition Works

28. To speed up the development process, BD may take into account the different complexity of demolition works, and advise fast track acceptance of completion of demolition works which satisfy the following criteria:

(a) The building to be demolished is structurally independent from other building/structure;

(b) The demolition works will not involve any basement[1] or structures below ground;

(c) No part of the building/structure above ground except ground floor slab and beam will remain after completion of the demolition works;

/(d) …

[1] For avoidance of doubt, criteria under paragraph 28(b) is considered satisfied if it is proposed to fill up a basement with debris for counteracting buoyancy. However, if the filling up of debris in basement is for stabilising the basement wall for earth retaining purpose, criteria under paragraph 28(e) is considered not satisfied.

(d) No party walls/structures or external walls of adjoining buildings require the erection of structural support during or after completion of the demolition works; and

(e) The demolition works will not affect the stability of any slopes and/or retaining structures, and will not require the sealing off of the ground surface of a sloping site, or additional drainage or stabilisation works[1] for slopes and/or retaining structures during and after completion of the demolition works.

29. AP, RSE and RGE who wish to take benefit of fast track acceptance should follow the procedures below:

(a) Indicate compliance with the criteria in paragraph 28 above on the demolition plans for BD's approval; and

(b) Submit Form BA14B upon completion of the demolition works certifying, among others, that the completed demolition works have fully satisfied the criteria in paragraph 28 above, together with colour record photos showing the general views of the site, the adjacent land or streets and all elevations of the adjoining buildings; and a mark-up plan indicating the direction of the photos taken.

30. BD will carry out audit checks when processing Form BA14B. For cases not selected for audit checks, BD will generally provide a reply within 14 days, advising acceptance of the completed works or outstanding issues to be rectified. For cases selected for audit checks, AP/RSE/RGE will be informed in writing within 14 days upon receipt of the Form BA14B that their case is selected for audit check, and a reply will generally be provided within 28 days, advising acceptance of the completed works or outstanding issues to be rectified, similar to that in processing Form BA14A.

Minor Works Relating to Demolition Works

31. Under the Minor Works Control System (MWCS), certain minor building works relating to demolition works have been designated as minor works and may be carried out under the simplified requirements as an alternative to obtaining prior approval and consent under the BO. Reference can be made to Schedule 1 of the Building (Minor Works) Regulation and PNAP APP-147 regarding the list of minor works items and the simplified requirements respectively.

Streamlined Procedures for Carrying out Minor Works before Demolition of Buildings

32. Before demolition of a building, minor building works such as the removal of unauthorised building works, projecting structures and windows of the parent building for various purposes including the installation of precautionary measures and formation of openings in floor slabs to convey debris are usually required. To facilitate these works, in addition to the staged consent procedures of applying separate consent for the commencement of these works and the procedures under MWCS for those falling within the definition of minor works, AP may adopt the streamlined procedures as detailed in Appendix D to carry out such works.

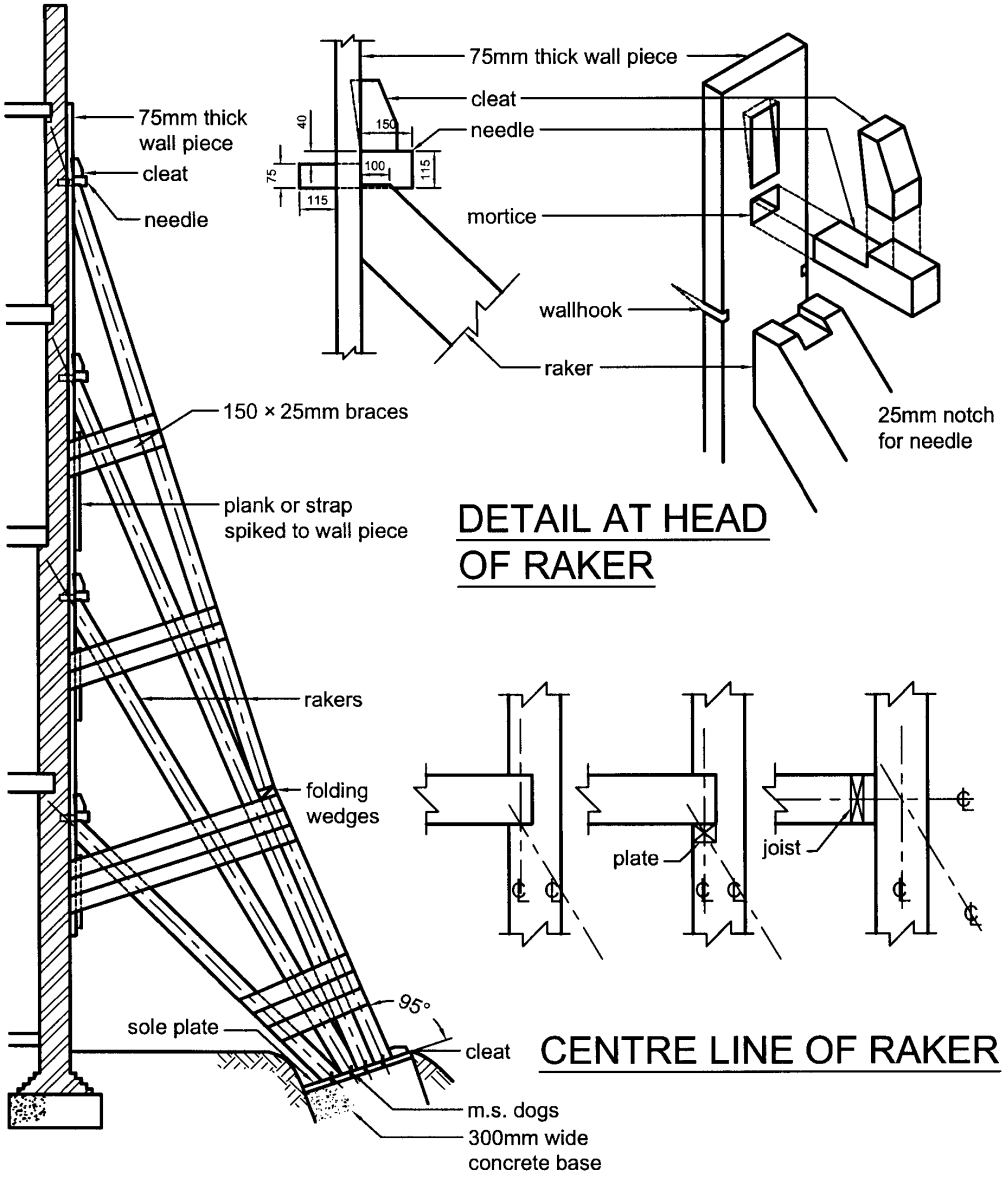
33. A similar practice note has been issued to all registered contractors.

(YU Po-mei, Clarice)
Building Authority

Ref. : BD GP/BREG/DW/1 (VII)
BD GP/BORD/27
GC/4/16/1 (GEO file)

This PNAP is previously known as PNAP 71
First issue May 1980
Last revision January 2021
This revision September 2022 (AD/NB1 and AD/NB2) (Paragraphs 26, 28 to 30 and Appendix C added, and paragraphs 6 & 27 and Appendix D amended)

STANDARD DETAILS

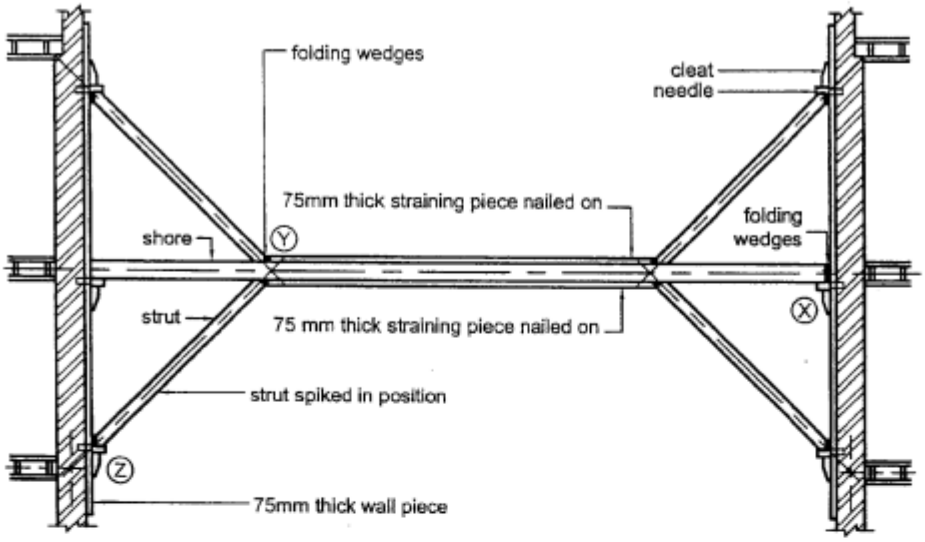


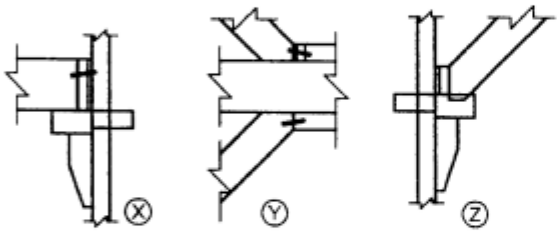
RAKING SHORES

NOTES: SPACING OF RAKING SHORES NOT TO EXCEED 5m

HEIGHT OF WALL	NO. OF RAKERS PER SET	SIZE OF RAKERS
6m	2	150 × 150
9m	3	150 × 150
12m	4	175 × 175
15m	5	200 × 200

STANDARD DETAILS



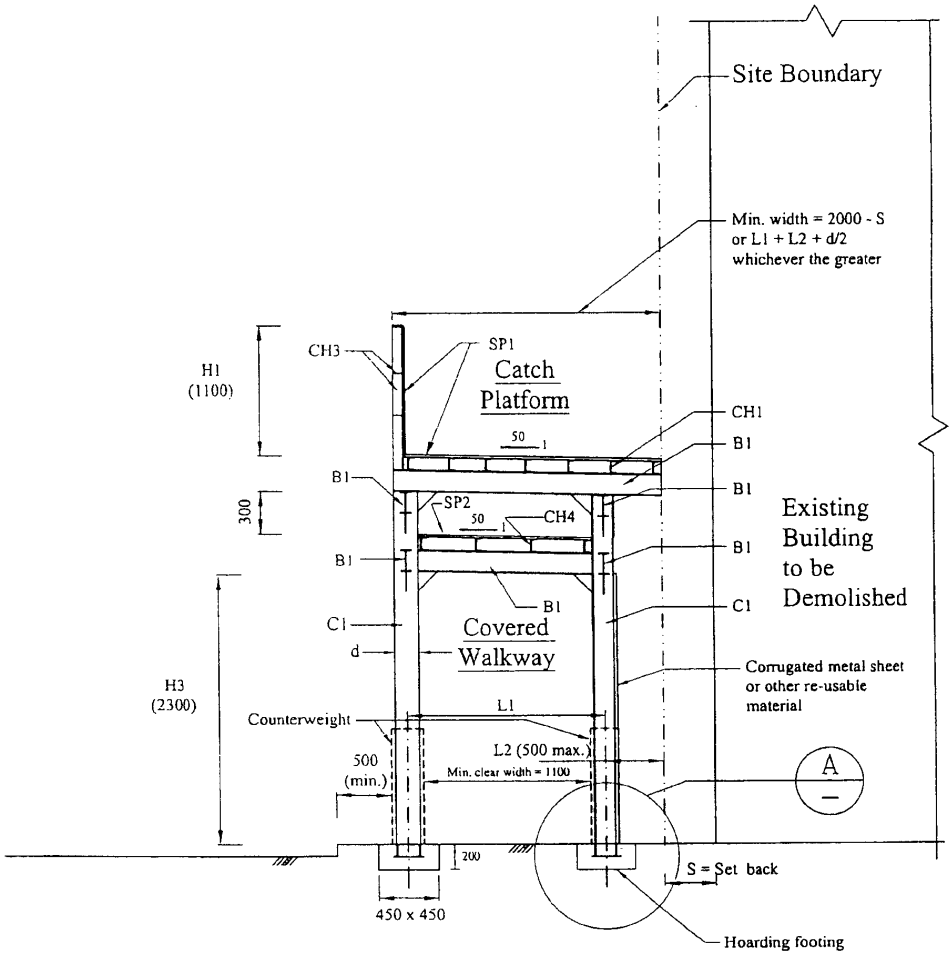


DETAILING

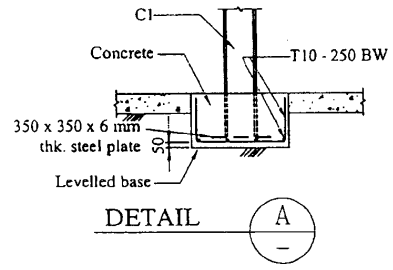
FLYING SHORES

NOTES: SPACING OF FLYING SHORES TO BE 3m - 5m

SIZE OF MEMBERS		
	SPAN UP TO 5m	SPAN 5m - 11m
FLYING SHORES	125 × 125	150 × 150 TO 225 × 225 (e.g. for 6m —— 175 × 175)
RAKING STRUTS	125 × 125	125 × 125 TO 200 × 200

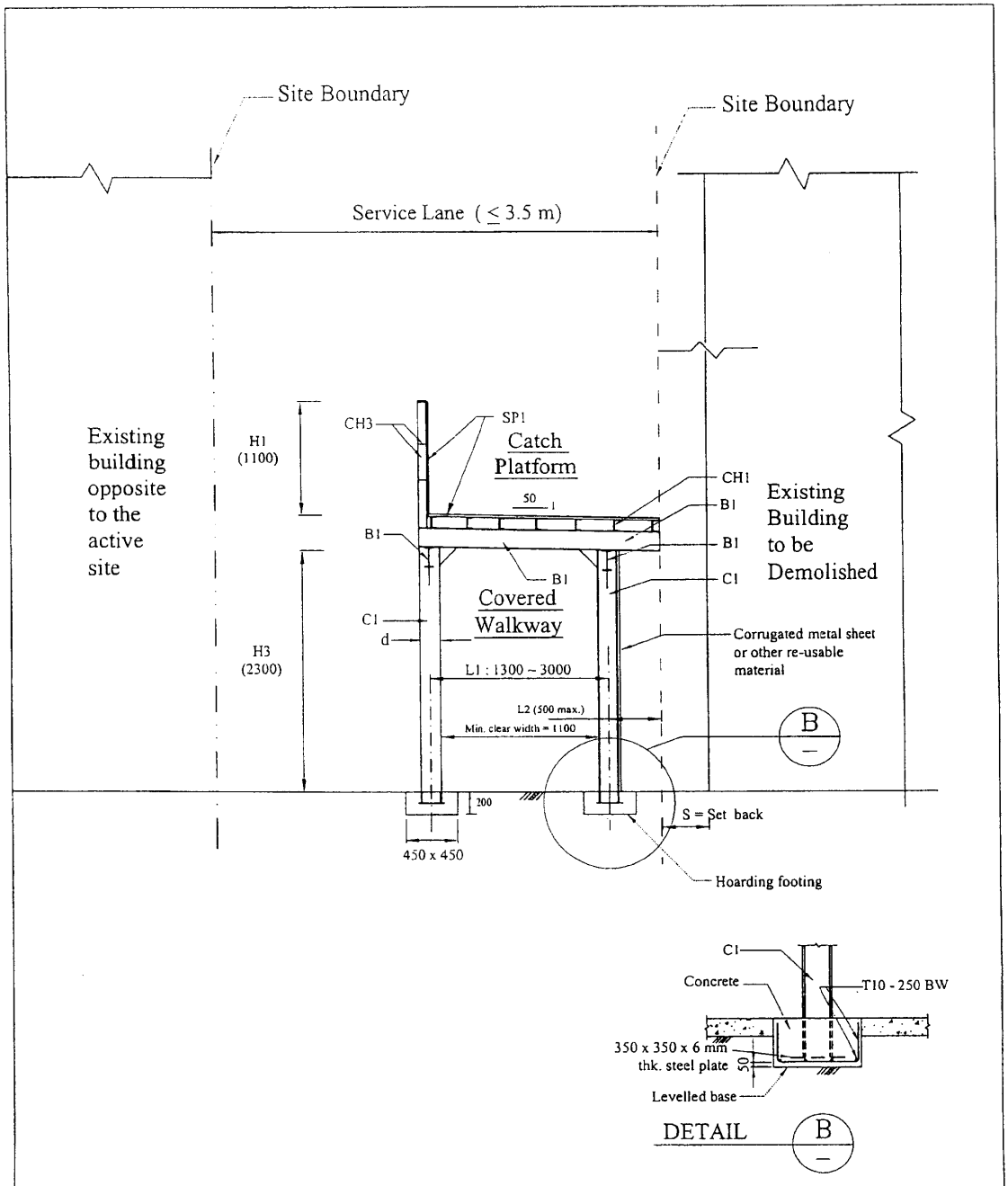


SECTION 1-1



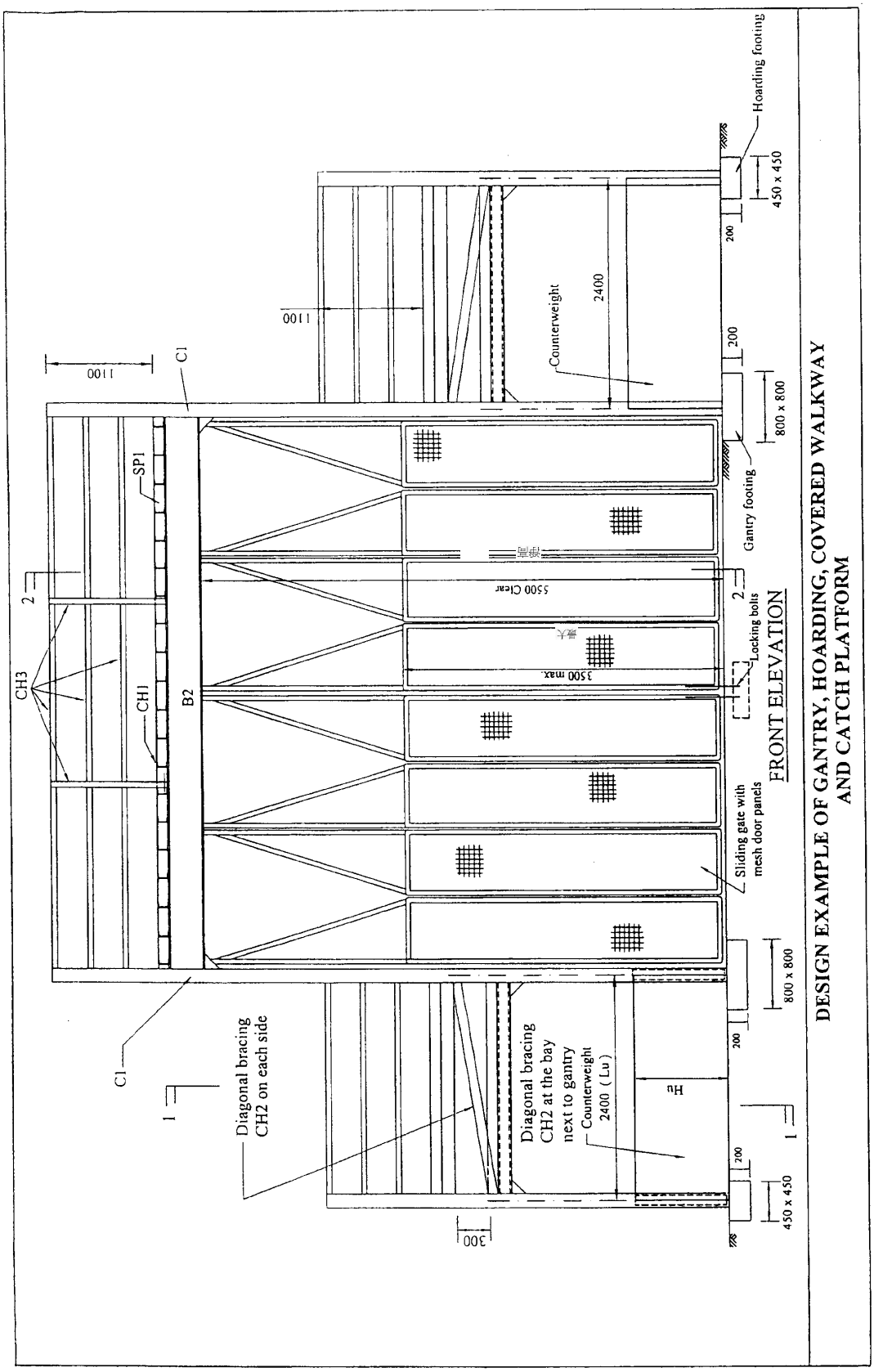
DETAIL A

DESIGN EXAMPLE OF CATCH PLATFORM AND COVERED WALKWAY

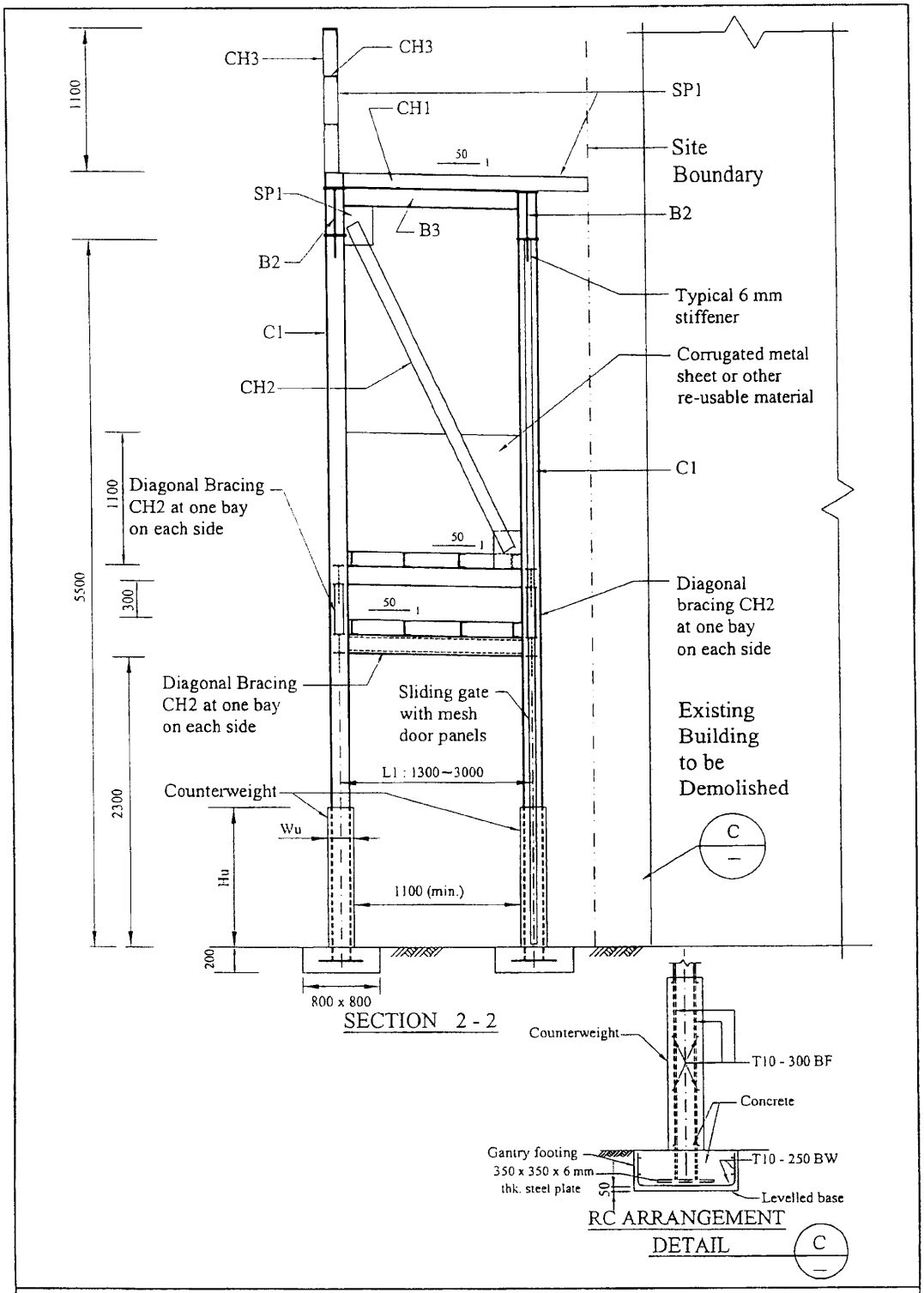


DESIGN EXAMPLE OF SINGLE DECK DESIGN FOR SERVICE LANE ≤ 3.5 m WIDTH

(see page 5 for design assumptions and structural member schedule)



DESIGN EXAMPLE OF GANTRY, HOARDING, COVERED WALKWAY AND CATCH PLATFORM



DESIGN EXAMPLE OF GANTRY

(see page 5 for design assumptions and structural member schedule)

Design assumptions and structural member schedule

Design example：

L1 (m)	1.3≤L1<1.6	1.6≤L1<2.3	2.3≤L1<3.0
L2 (m)	0.5 or less		
H1 (m)	1.1		
H2 (m)	0.9 or less		
H3 (m)	2.3		
S (m)	Any value		
Hoarding/Covered Walkway Footing Size: L×W×D (mm) Rebar size, spacing and location	450×450×200 deep T10 @ 250 B W		
Gantry Footing Size: L×W×D (mm) Rebar size, spacing and location	800×800×200 deep T10@250B W		
Counterweight： Size: Lu×Wu×Hu (mm) Rebar size, spacing and location	2400×200×600 T10@300 B F	2400×200×340 T10@300 B F	Not required
C1	152×152×23 UC		
B1	152×89×16 UB		
B2	305×102×28 UB		
B3	127×76×13 UB		
CH1	127×64×14.9 Channel @ 300 c/c		
CH2	102×51×10.42 Channel		
CH3	127×64×14.9 Channel		
CH4	76×38×6.7Channel @ 600 c/c		
SP1	6mm steel plate of mild steel grade or equivalent		
SP2	3mm steel plate of mild steel grade or equivalent		
Stiffener plate	6mm steel plate of mild steel grade or equivalent		
Base plate	6mm steel plate of mild steel grade or equivalent		

Design assumptions：

(a) All structural steelwork shall be grade 250 and design complies with the Code of Practice for the Structural Use of Steel 2011.
(b) All connections between steel members shall be 6mm fillet weld leg length all round.
(c) In accordance with clause 2.5 of the Code of Practice on Wind Effects in Hong Kong 2019 (Wind Code), the wind load is based on 37 % of the wind reference pressure as defined in clause 3.2 of the Wind Code without the adjustments for wind directionality and sheltering effect.
(d) Safe bearing pressure of soil underneath pavement is 100 kPa (or 125 kPa with wind condition).
(e) No overhang of the catch platform on the side of carriageway is required.
(f) 6 m bay width of gantry is adopted.
(g) 2.4 m bay width of hoarding/covered walkway is adopted.

(Rev. 1/2021)

Appendix C
(PNAP APP-21)

Checklist for Application for the First Consent to Commencement of Demolition Works
(This checklist is **not** required to be submitted to BD)

PART 1 - SITE PREPARATION WORKS

	Yes	No	N/A
1.1 Hoarding, covered walkway and catch platforms erected?			
1.2 Precautionary and protective measures including scaffoldings, dust screens and catchfans provided? (Including at the common boundaries of adjoining demolition sites where demolition works will be carried out concurrently.)			
1.3 Proppings and temporary support to the structural elements and floor slabs of the building installed?			
1.4 Shoring to the buildings and supports to adjacent retaining walls and/or slope installed?			
1.5 Debris chute(s) provided?[1]			
1.6 Video cameras and record system installed at strategic locations?			
1.7 All glazed sashes and doors removed?[1]			
1.8 All sewer and drainage connexions sealed?			
1.9 All water, electricity, gas and other utility services disconnected and meters removed?			
1.10 All fittings attached to the building in connexion with any tramway service, system of street lighting, supply of electricity or other service removed?			
1.11 Indications to show the route of emergency exit with lighting/fire extinguishing equipment provided?			
1.12 Markings to identify the prohibited areas for the movement of mechanical plants on the floor slabs and the concerned propped areas provided?			
1.13 Hazardous materials (e.g. asbestos containing materials, petroleum, etc.) removed/cleaned up/disposed of by specialist in accordance with the requirements of relevant government departments (e.g. Environmental Protection Department, Labour Department, etc.)?			
1.14 Details of authorized person/registered structural engineer/registered geotechnical engineer/registered specialist contractor/technically competent person and their contact telephone numbers posted close to the front entrance of the site?			
1.15 Works specifically required for the project Please specify: _____			

[1] See item 2.9 of this Appendix if minor works are involved.

PART 2 - DOCUMENTS SUBMITTED

	Yes	No	N/A
2.1 Form BA8 (Application for Consent to the Commencement and Carrying Out of Demolition Works)			
2.2 Form BA20 (Notice of Technically Competent Person(s) Appointed to Supervise Demolition Works)			
2.3 Supervision plan			
2.4 Names of technically competent persons and their particulars			
2.5 Details of operators of powered mechanical plant or equipment proposed to be used			
2.6 Details of debris disposal and management system			
2.7 Details of site engineer, if required to be appointed			
2.8 Chinese version of the demolition plans			
2.9 Minor works submission records such as removal of unauthorised building works, projecting structures, windows and formation of slab opening to convey debris			
2.10 Documents specifically required for the project Please specify: _____			

PART 3 - OTHER ASPECTS

	Yes	No	N/A
3.1 Hoarding Permit still valid?			
3.2 Excavation Permit, required by Highways Department, issued?			
3.3 Consent from the adjoining owners for demolition/strengthening of party wall/structures?			
3.4 Conditions imposed in the approval letters complied with?			
3.5 Requirements from other government departments and/or MTR Corporation Limited observed?			
3.6 Requirements from Antiquities and Monuments Office fulfilled?			
3.7 If there are street name plates affixed to the building, Highways Department informed?			

Appendix D
(PNAP APP-21)

Streamlined Procedures for Carrying out Minor Works (MW) before Demolition of Buildings

The following streamlined procedures for MW to be carried out before demolition of parent building are applicable if the authorized person, registered structural engineer and registered specialist contractor[1] (Project Team) responsible for the demolition of the parent building are also responsible for such MW.

Notification of Commencement

2. Form MW01 for the MW to be carried out before demolition of the parent building should be submitted not less than 7 days prior to their commencement, together with the application for approval of demolition plans for the parent building, by the same Project Team. The demolition plans should indicate such MW including a statement that protective and precautionary measures in accordance with the Technical Guidelines on Minor Works Control System are to be provided.

3. Photographs showing the locations of the proposed MW are not required if such have been included in the building appraisal report submitted with the demolition plans.

Certification of Completion

4. Form MW02 on completion of the MW should be submitted together with the Form BA14A/BA14B for completion of demolition of the parent building by the same Project Team. Photographs showing the MW as completed are not required if the whole parent building is demolished subsequent to the completion of the MW.

5. If such MW are completed before the submission of Form BA10 for demolition of the parent building, Form MW02 should be separately submitted together with the necessary documents and information under the MW Control System to New Buildings Division 1 of the Buildings Department.

(9/2022)

[1] The MW should be carried out by the registered specialist contractor (demolition works) (RSC(D)) who is qualified to carry out such either as a registered general building contractor or registered MW contractor for the relevant classes and types of MW. The authorized signatory (AS) from the RSC(D) supervising the demolition of the parent building should also be the AS (registered with the relevant classes types of MW) supervising such MW.