

**Amendments to
Technical Guidelines
on
Minor Works Control System
(March 2021)**

Legends :  Amended

3. Categorisation of “Minor Works”

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Section 3

Categorisation of Minor Works

3 Categorization of “Minor Works”

The 187 items of minor works “MW” (“MW”) can be categorised by the substance of works into 31 combinations. In this chapter, all categories of MW will be illustrated by photographs, with simple comparison of their description and other considerations in the design, planning and carry out of them. The version of regulations, codes, manuals, practice notes or guidelines mentioned is for reference only. Latest edition prevailing at the time of works should be followed. General structural requirements of some MW are listed in subsection 3.32.

3.1 Window or Window Wall and Curtain Wall

3.1.1 Window or window wall

MW items	1.60	2.8	3.6
Types of works	A		
Simple comparison	Repair or replacement of ... Window or window wall ...	Construction, alteration, repair or replacement of ...	
	In accordance with the original design.	Not involve alteration of other structural elements, except a simply supported beam that - (a) is not of pre-stressed construction; & (b) is not used to support any column, flat slab or ribbed beam;	
		No additional load to cantilevered slabs;	
		The highest point of the window or window wall > 3.5 m above ground;	The highest point of the window or window wall ≤ 100m above ground;
		Span of structural elements of the window or window wall ≤ 6 m;	If the highest point of the window or window wall ≤ 3.5 m above ground, span of structural elements of the window or window wall ≤ 6 m

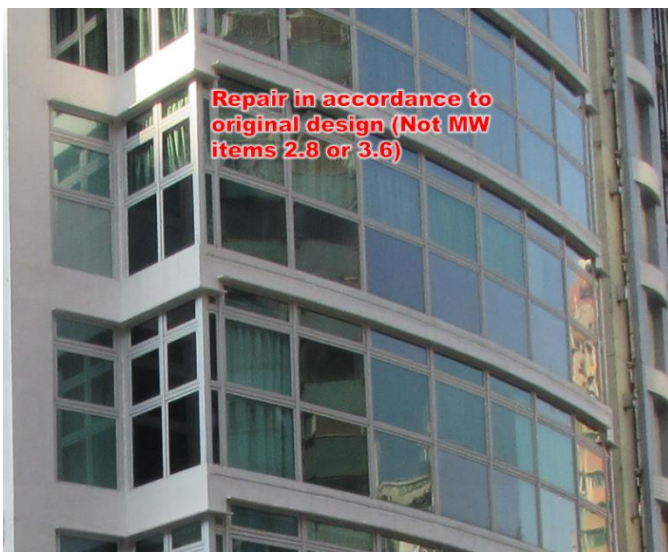
MW items	1.60	2.8	3.6
		<p>If the highest point of the window or window wall \leq 100 m above ground:</p> <ul style="list-style-type: none"> (a) involve main frame of the window or window wall; or (b) involve sub-frame of the window or window wall & length of sub-frame $>$ 1.2 m; 	<p>If the highest point of the window or window wall $>$ 3.5 m & \leq 100 m above ground:</p> <ul style="list-style-type: none"> (a) involve sub-frame of the window or window wall only; and (b) length of sub-frame \leq 1.2 m.
		<p>If the highest point of the window or window wall $>$ 100 m above ground:</p> <ul style="list-style-type: none"> (a) for construction or alteration <ul style="list-style-type: none"> (i) area of external wall opening for the window or window wall \leq 6 m²; and (ii) length or width (whichever is shorter) of the opening \leq 1.8 m. (b) for repair or replacement : <ul style="list-style-type: none"> (i) the works are carried out in accordance with the original design of the window or window wall; or (ii) the works falls within the description of (a)(i) and (ii) above. 	
	Not MW item 2.8 or 3.6.		

MW items	1.60	2.8	3.6
<p>Other considerations</p> <p>*See subsection 3.32</p>	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C5, C7, C9 & C11 - Requirements of fire resisting construction. 		
	<ul style="list-style-type: none"> B(P)R 29, 30, 33 & 36 - Natural lighting & ventilation should not be affected. 		
	<ul style="list-style-type: none"> B(EE)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67, APP-156 & PNAP APP-2 - Energy Efficiency in commercial building or hotel and residential building. 		
	<ul style="list-style-type: none"> Glass Code 2018 - Design, material specifications, construction and workmanship requirements of glass. If tempered glass is used, please refer to section 3.32.2 of this guidelines on the requirements for quality control and supervision of tempered glass. 		
	<ul style="list-style-type: none"> PNAP APP-116 & PNRC 47 - Guidelines on design & installation of aluminium window & fixing of hinges. 		
	<ul style="list-style-type: none"> PNAP APP-37 - Curtain wall, window and window wall. 		
	<ul style="list-style-type: none"> Requirements stipulated in B(C)R 37 & 38 or B(P)R 3A & PNAP APP-110 regarding protective barrier or external wall should be complied with, if applicable. 		
	<ul style="list-style-type: none"> PNAP APP-24 para. 10 & PNRC 14 para. 9 - No window opening within 5 m of the MTR vent shaft. 		
	<ul style="list-style-type: none"> The RMWC should understand the structural system of the window, window wall and curtain wall before repair or replacement of glass. 		
	<ul style="list-style-type: none"> Code of Practice of Electricity (Wiring) Regulation - Earth equipotential requirement. 		
	<ul style="list-style-type: none"> Balconies which have been exempted from gross floor area calculation under BO s42 not to be enclosed. 		
	<ul style="list-style-type: none"> For repair or replacement of window or window wall with its span of structural elements exceeding 6 m in accordance with the original design, the works can be carried out under MW item 1.60. 		
	<ul style="list-style-type: none"> Window wall, including glass wall, refers to window and wall formed by structural glass elements spanning between floors. 		
	<ul style="list-style-type: none"> If the lowest frame of the window or window wall < 1.1 m from the adjoining floor and form part of the protective barrier, MW item 1.6 or 2.5 may be involved if main frames of the window or window wall are affected. 		
<ul style="list-style-type: none"> Enhancement works as shown in Appendix X may be involved if the lowest frame of the window or window wall ≥ 0.5 m but < 1.1 m from the adjoining floor in domestic building. 			
<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 			

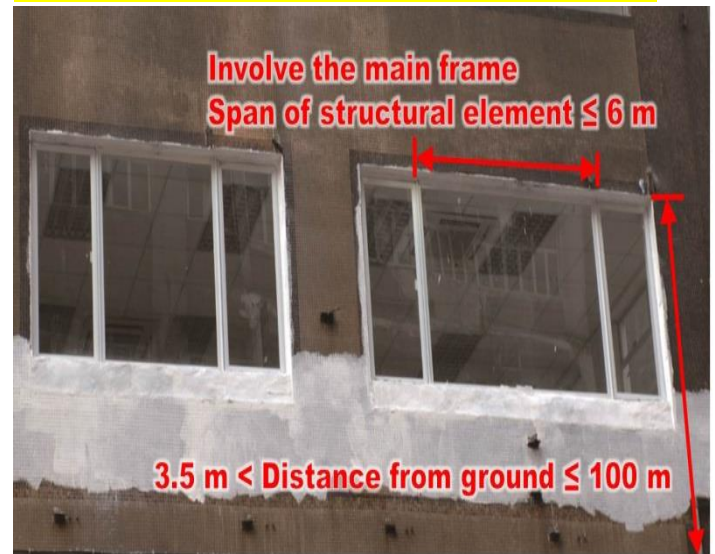
B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(EE)R represents Building (Energy Efficiency) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; OTTV Code 1995 represents Code of Practice for Overall Thermal Transfer Value in Buildings 1995; Glass Code 2018 represents Code of Practice for Structural Use of Glass 2018; RTTV Guidelines 2014 represents Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings 2014; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors.

Recommended design & details for MW items 2.8 & 3.6 are shown in Appendix VII and Appendix X

Item 1.60 Repair or replacement of window or window wall



Item 2.8 Construction, alteration, repair or replacement of window or window wall



Item 3.6 Construction, alteration, repair or replacement of window or window wall



Item 3.6 Construction, alteration, repair or replacement of window or window Wall



3.1.1 Window or window wall

MW items	2.9	3.7
Types of works	A & G	
Simple comparison	Removal of...	
	Window or window wall...	
	Not involve alteration of other structural elements;	
	Height of the window or window wall ≤ 6 m;	The highest point of the window or window wall ≤ 3.5m above ground.
	Not MW item 3.7.	
Other considerations	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C5, C7, C9 and C11 - Requirements of fire resisting construction. 	
	<ul style="list-style-type: none"> B(P)R 29-33 & 36 - Natural lighting & ventilation should not be adversely affected. 	
	<ul style="list-style-type: none"> PNAP APP-37 - Curtain Wall, Window and Window Wall. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> B(E)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67, APP-156 & PNAP APP-2 - Energy efficiency in commercial building or hotel and residential building. 	
	<ul style="list-style-type: none"> The RMWC should understand the structural system of the window, window wall and curtain wall before repair or replacement of glass. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

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Recommended design & details for MW items 2.9 and 3.7 are shown in Appendix VII

Item 2.9 Removal of window



Item 3.7 Removal of window wall



3.1.2 Window or window wall acting as a protective barrier

When the height between the lowest frame of the window or window wall and the existing finished floor level is less than 1.1 m, alteration or replacement of the window or window wall which act as a protective barrier may involve MW items 1.6 and 2.5. Relevant guidelines for the window or window wall of domestic buildings (include staircase landing) are as below with details given in Appendix X :

Case	A	B	C		D
The height (h) between the lowest frame of the window or window wall and the existing finished floor level	$h \geq 1.1 \text{ m}$	$h < 1.1 \text{ m}$	$0.5 \text{ m} \leq h < 1.1 \text{ m}$ (In order to fulfill the requirement of FS Code 2011 subsection C11.1 regarding protection of external fire spread by spandrel when $h < 0.8 \text{ m}$, the requirements shown in Appendix X should be fulfilled. Otherwise, Case D should be followed)		$h < 0.5 \text{ m}$
Basic Design	<ul style="list-style-type: none"> All the design and installation of aluminum windows should follow strictly the requirement as stipulated in "PNAP APP-116 & PNRC 47" - Guidelines on design & installation of aluminium window & fixing of hinges. The distance between the highest point of the window or window wall and the ground is not more than 100m. 				
Existing opening	Wall opening not be altered				-
Original design	-	Available	Not Available		
Width (W) and height (H) of wall opening	-	-	$W \leq 2.5 \text{ m}$ $H \leq 1.9 \text{ m}$	$H \leq 2.1 \text{ m}$	-
Related minor works items	2.8	2.5 and 2.8	2.8 and enhancement work type C(I) ¹ or C(II) ² for domestic uses, stairs and landings only or 1.6 and 2.8	2.8 and enhancement work type C(II) ² for domestic uses, stairs and landings only or 1.6 and 2.8	1.6 and 2.8

¹ C(I) : Enhancement works by reinforcement of transom.

² C(II) : Enhancements works by reinforcement of transom and mullion.

3.1.3 Curtain wall

MW item	1.61
Types of works	A
Simple comparison	<p>Repair or replacement of ...</p> <p>Curtain wall ...</p> <p>In accordance with the original design;</p> <p>Not involve the replacement of supporting structures or structural elements, that connects the wall to its parent structure (e.g. mullions, glass fins (designed as the main support frames of curtain wall), transoms and their connections).</p>
Other considerations	<ul style="list-style-type: none"> • B(C)R 35 & FS Code 2011 subsection C10 - Protection against fire spread between floors. • B(C)R 28 - Proper specification of non-combustible materials, fixings, strength & durability for cladding. • Glass Code 2018 - Design, construction, material specifications, workmanship, testing and quality assurance of glass should comply with the code. If tempered glass is used, please refer to Section 3.32.2 of this guideline on the requirements for quality control and supervision of tempered glass. • B(EE)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67, APP-156 & PNAP APP-2 - Energy efficiency in commercial building or hotel and residential building. • PNAP APP-37 - Curtain Wall, Window and Window Wall. • The RMWC should understand the structural system of the window wall and curtain wall before repair or replacement of glass. • Repair of the openable window of a curtain wall can be carried out under MW item 2.8 or 3.6 if the respective descriptions and specifications of these MW items are met. • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

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Item 1.61 Repair or replacement of curtain wall



3.2 Supporting Structure for Building Services Installation (BSI)

3.2.1 On-grade, on a roof or on a canopy

MW items	1.14	1.50	3.50
Types of works	A	A & E	
Simple comparison	Erection or alteration of ...	Supporting structure or metal casing for a building services installation (BSI) ...	
	Supporting structure for a radio base station solely for telecommunications services ...		
	Located on a roof;	Located: (a) on-grade; or (b) on a roof (other than a cantilevered slab); or (c) on a canopy (other than a cantilevered slab) ;	Located: (a) on-grade; or (b) on a roof (other than an inaccessible roof / a cantilevered slab);
	Length of the cabinet \leq 1.5 m; Width of the cabinet \leq 1 m; and Height of the cabinet \leq 2.3 m;	For a supporting structure for an antenna or transceiver, height of the structure \leq 2.5 m; For a supporting structure for other BSIs, height of the structure \leq 1.5 m;	
	No additional load to cantilevered slabs;	Not involve alteration of other structural elements;	
	In the form of an equipment cabinet.	For a metal casing sheltering the BSI: (a) weight of the casing \leq 10% of the weight of the installation; (b) distance between any point on the inner surface of the casing and the installation \leq 200 mm.	
			For a supporting structure designed for a BSI: (a) weight of the BSI \leq 200 kg; and (b) average weight of the BSI \leq 100 kg/m ² of ground or slab area.
	Not MW item 3.50.		

<p>Other considerations</p> <p>*See subsection 3.32</p>	<ul style="list-style-type: none"> • B(P)R 41 and FS Code 2011 subsection B5 - General requirement of exit routes shall be complied with. • B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or used as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. • B (P)R 30, 31 and 36 - No obstruction to windows providing natural lighting and ventilation. • B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof or canopy. • B(C)R 34 - Not to damage the waterproofing of the roof. • B(DW)R5 - Not having the electric cables or the apparatus electrically charged before alteration. • Stainless steel drilled-in anchors should be used. • Waterworks Regulation 13(a) - Except with the permission in writing of the Water Authority, no person shall use water from the waterworks for cooling plant. • Waterworks Ordinance s 14(1) - Except with the permission in writing of the Water Authority, no person shall construct, install, alter or remove a fire service or inside service. • Code of Practice for Prevention of Legionnaires 'disease and Code of Practice for Fresh Water Cooling Towers. • Hong Kong Airport (Control of Obstructions) Ordinance & PNAP APP-32 - Not exceeding the airport height restrictions. ⁽³⁾ • Outline Zoning Plan - Not exceeding the height restrictions. ⁽³⁾ • No part exceeds the highest point of the building. ⁽²⁾ • Not to obstruct drainage on roof. • For the structure or casing on the canopy, no part of the structure or casing projects beyond edge of the canopy. ⁽¹⁾ • For structure or casing on the roof, no part of the structure or casing project beyond the external wall of building. • Height (≤ 1.5 m) refers to that measured from the level of the ground/ roof to the top of the supporting structure. • No FRR separation is required for PV panel installed on roof. ⁽⁴⁾ • Guidance Note for Submission of Applications by Public Telecommunications Operators for the Installation of Radio Base Stations for Public Telecommunications Services in Buildings and on Rooftops issued by the Office
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	of the Telecommunications Authority.
	<ul style="list-style-type: none"> • Code of Practice for the Protection of Workers and Members of Public Against Non-Ionizing Radiation Hazard from Radio Transmitting Equipment issued by Communication Authority.
	<ul style="list-style-type: none"> • If the structure or casing is fixed to a parapet wall, the wall should be made of RC and the thickness of the wall is not less than 125 mm. ⁽²⁾
	<ul style="list-style-type: none"> • Guidance Notes for Solar Photovoltaic (PV) System Installation (January 2019) by ENB.
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) in case common part will be affected.
	<ul style="list-style-type: none"> • PNAP APP-42 - The antenna, transceiver and radio base station in the form of a equipment cabinet of a size not exceeding 1.5m(L) x 1m (W) x 2.3 m (H) are equipment only and not considered as minor works. Erection or alteration of a radio base stations larger than 1.5 m (L) x 1 m (W) x 2.3 m (H) are building works requiring prior approval of plans and consent from the BA.

⁽¹⁾ For MW item 1.50 only

⁽²⁾ For MW item 3.50 only

⁽³⁾ For MW item 1.14 & 1.50 only

⁽⁴⁾ For MW item 1.50 & 3.50 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works; ENB represents Environment Bureau.

Recommended design and details for MW item 3.50 are shown in Appendix VII

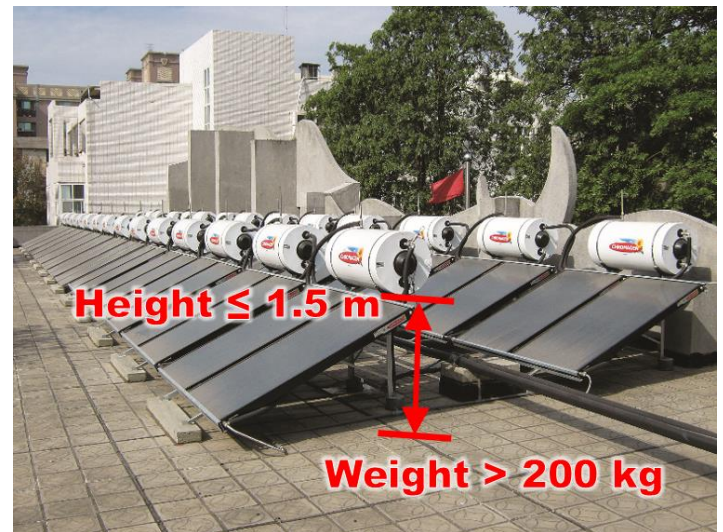
Item 1.14 Erection or alteration of supporting structure for radio base station solely for telecommunications services



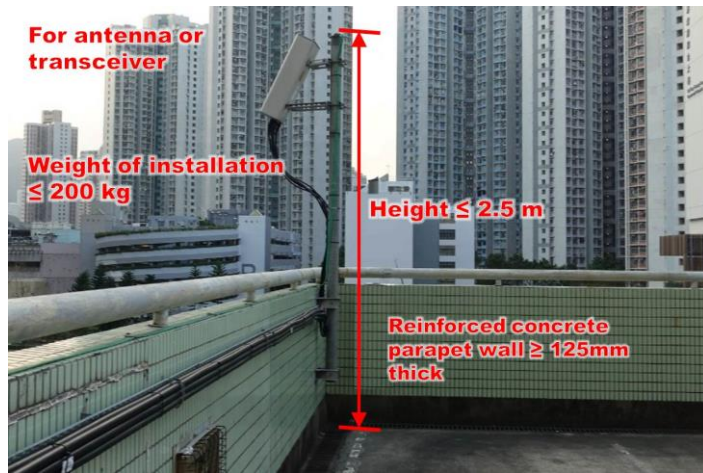
Item 1.50 Erection or alteration of supporting structure for BSI



Item 1.50 Erection or alteration of supporting structure for BSI



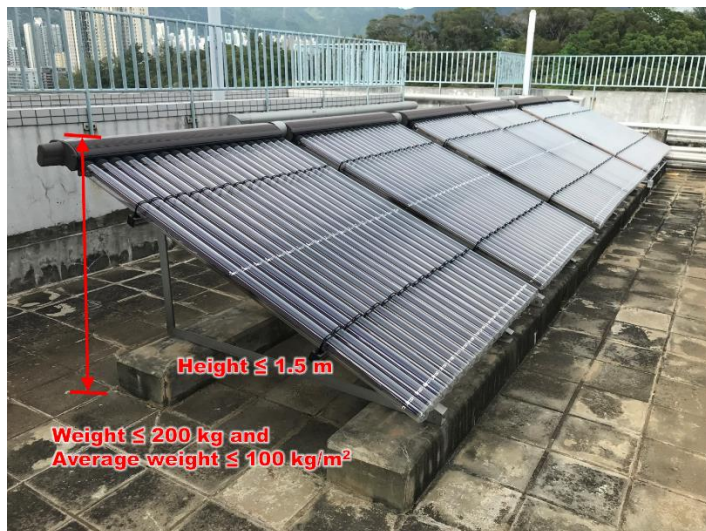
Item 3.50 Erection or alteration of supporting structure for antenna or transceiver



Item 3.50 Erection or alteration of supporting structure for BSI



Item 3.50 Erection or alteration of supporting structure for BSI



3.2.1 On-grade, on a roof or on a canopy

MW items	1.5	2.2	3.2
Types of works	A , E & G		
Simple comparison	Removal of ...		
	Supporting structure or metal casing for a BSI ...		
	Located on a cantilevered slab with a span > 1 m.	Located: (a) on-grade; or (b) on a roof; or (c) on a canopy; or (d) on a cantilevered slab, with a span ≤ 1 m;	Located: (a) on-grade or (b) on a roof/canopy (other than a cantilevered slab);
			(a) For a supporting structure for an antenna/transceiver, height of the structure ≤ 2.5m; and (b) For a supporting structure for other BSIs, height of the structure ≤ 2 m;
			Not MW item 3.2;
			Not DEW item 12.
Other considerations	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 		
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 		
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the waterproofing of the roof. 		
	<ul style="list-style-type: none"> B(DW)R10 - Not to overload the floor 		
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Report to the Environmental Protection Department if the cooling tower contains asbestos and will be demolished on site. The works must be conducted by registered qualified personnel under the supervision of registered consultant. 		

MW items	1.5	2.2	3.2
	See Section 10.6.4 for reference of the standards & guidelines on the handling, transportation and disposal of asbestos Waste.		
	<ul style="list-style-type: none"> PNAP APP-42 - The antenna and transceiver of a size not larger than 1.5 m (L)x 1m(W)x 2.3(H) are equipment only and not considered as minor works. 		
	<ul style="list-style-type: none"> Removal of supporting structures or metal casings for a BSI ≤ 1 m in height on-grade, on a canopy (other than a cantilevered slab) or on a roof (other than a cantilevered slab) of a building may be DEW item 12. For details, please refer to descriptions of the relevant DEW item. 		

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.2 and 3.2 are shown in Appendix VII

Item 1.5 Removal of supporting structure or metal casing for BSI



Item 2.2 Removal of supporting structure or metal casing for BSI



Item 3.2 Removal of supporting structure or metal casing for BSI



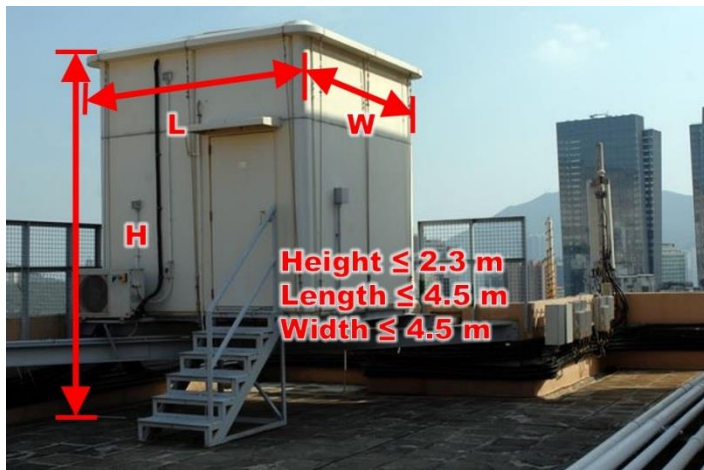
3.2.1 On-grade, on a roof or on a canopy

MW items	2.12	3.8
Types of works	A & G	
Simple comparison	Removal of ...	
	Radio base station for telecommunications services ...	
	In the form of an enclosure or equipment cabinet, together with its supporting structure;	
	Located on a roof;	
	Length of the station \leq 4.5 m;	
	Width of the station \leq 4.5 m;	
	Height of the station \leq 2.3 m; and	Height of the station \leq 2 m; and
		Not involve structural elements constructed of concrete.
	Not MW item 3.8.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> B(DW)R10 - Not to overload the floor. 	
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the waterproofing of the roof. 	
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> PNAP APP-42 - The antenna, transceiver and radio base station in the form of equipment cabinet of a size not larger than 1.5 m (L) \times 1 m (W) \times 2.3 m (H) are equipment only and not considered as minor works. Erection or alteration of radio base stations larger than this are building works requiring prior approval of plans and consent from the BA. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common parts will be affected. 	

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Recommended design and details for MW items 2.12 and 3.8 are shown in Appendix VII

Item 2.12 Removal of radio base station



Item 3.8 Removal of radio base station



3.2.2 Projecting from external wall or fence wall

MW items	1.28	2.49	3.27
Types of works	A & E		
Simple comparison	Erection, alteration or removal of ...	Erection or alteration of ...	Erection, Alteration or Removal of ...
	Supporting frame for an air-conditioning unit, light fitting, or antenna or transceiver for public telecommunications services ...		
	Projecting from an external wall of a building;		
	No additional load to cantilevered slabs;		
	Projection ≤ 750 mm; and	Projection ≤ 600 mm;	
		The highest point of the frame > 3 m from ground or roof below;	
		Designed for an air-conditioning unit, light fitting, antenna or transceiver ≤ 150 kg; and	Designed for an air-conditioning unit, light fitting, antenna or transceiver ≤ 100 kg.
	Not MW item 2.49 or 3.27;	Not MW item 3.27.	
	Not DEW Item 13.		
Other considerations	<ul style="list-style-type: none"> B(P)R 7(3) - Not project at height < 2.5 m over street. B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting and ventilation. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. PNAP APP-112 - Proper disposal system for condensation from A/C. PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. Stainless steel drilled-in anchors should be used. Guidance Notes for Submission of Application by Public Telecommunications Operators for the Installation of Radio Base Stations for Public Telecommunications Services in Buildings and on Rooftops issued by the Office of the Telecommunication Authority. 		

	<ul style="list-style-type: none">• Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common part will be affected.
	<ul style="list-style-type: none">• Erection, alteration or removal of metal supporting frames for air-conditioning unit or light fitting ≤ 100 kg & projecting ≤ 600 mm from external wall and not more than 3 m above ground or roof may be DEW item 13. For details, please refer to descriptions of the relevant DEW item.

B(P)R represents Building (Planning) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.49 and 3.27 are shown in Appendix VII

Item 1.28 Erection, alteration or removal of supporting frame for BSI



Item 1.28 Erection, alteration or removal of supporting frame for BSI



Item 2.49 Erection or alteration of supporting frame for BSI



Item 3.27 Erection, alteration or removal of supporting frame for BSI



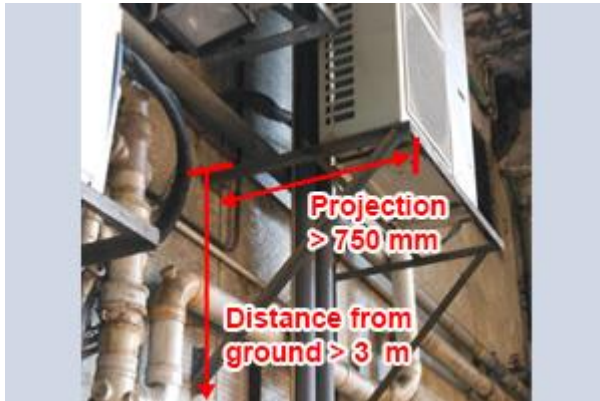
3.2.2 Projecting from external wall or fence wall

MW items	2.31	3.26
Types of works	A, E & G	
Simple comparison	Removal of ...	
	Supporting frame for an air-conditioning unit, light fitting or antenna or transceiver for public telecommunications services ...	
	Projecting from an external wall or from a fence wall;	
	Projection > 750 mm;	Projection ≤750 mm;
	Not constructed of concrete.	
		Not DEW item 13.
Other considerations	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Report to the Environmental Protection Department if the cooling tower contains asbestos & will be demolished on site. The works must be conducted by registered qualified personnel under the supervision of registered consultant. See Section 10.6.4 for reference of the standards & guidelines on the handling, transportation and disposal of asbestos Waste. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common part will be affected. 	
	<ul style="list-style-type: none"> • Removal of supporting frames for air-conditioning unit or light fitting projecting ≤ 600 mm from external wall and not more than 3 m above ground or roof may be DEW item 13. For details, please refer to descriptions of the relevant DEW item. 	

B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.31 and 3.26 are shown in Appendix VII.

Item 2.31 Removal of supporting frame from external wall



Item 3.26 Removal of supporting frame from external wall



3.2.3 Strengthening of unauthorised supporting structure

MW items	3.34	3.35
Type of works	A & E	
Simple comparison	Strengthening of ...	
	Unauthorised supporting structure for an air-conditioning unit, water cooling tower or associated ducts...	Unauthorised supporting frame for an air-conditioning unit or associated ducts...
	Located on-grade or on a slab (other than a cantilevered slab);	Projecting from the external wall of a building \leq 600 mm;
	An air-conditioning unit or water cooling tower \leq 100 kg.	An air-conditioning unit \leq 100 kg;
		If the highest point \leq 3m from ground, not project over any street or common part of a building.
Other considerations	<ul style="list-style-type: none"> B(P)R 41 & FS Code subsection B5 - Exit route not affected. ⁽¹⁾ 	
	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting and ventilation. 	
	<ul style="list-style-type: none"> *See subsection 3.32 	
	<ul style="list-style-type: none"> B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. ⁽¹⁾ 	
	<ul style="list-style-type: none"> B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. 	
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the water proofing of the roof. ⁽¹⁾ 	
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. 	
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> Not to obstruct drainage on roof. ⁽¹⁾ 	
<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		

⁽¹⁾ For MW item 3.34 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings

2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 3.34 and 3.35 are shown in Appendix VII

Item 3.34 Strengthening of unauthorised supporting structure for BSI on grade or on slab



Item 3.35 Strengthening of unauthorised supporting structure for BSI projecting from external wall



3.2.4 Air-conditioning plant or mechanical ventilation plant

MW item	1.51
Types of works	A ,E & H
Simple comparison	<p>Erection or alteration of ...</p> <p>Supporting frame for suspending an air-conditioning plant or a mechanical ventilation plant inside a building ...</p> <p>No additional load to cantilevered slabs;</p> <p>Not involve alteration of other structural elements; and</p> <p>Weight of the plant > 150 kg.</p>
Other considerations	<ul style="list-style-type: none"> • B(P)R 41 and FS Code 2011 subsection B5 - General requirement of exit routes shall be complied with. • B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. • Sample drawings showing the schematic layout for suspending air-conditioning plants or mechanical ventilation plants of more than 150 kg and the typical structural details of the associated supporting frames are given in Appendix A4 and Appendix B5 of PNAP ADV-33 respectively. • For assessing the structural adequacy of the existing structures, the design imposed load of the slab which the plant is to be suspended underneath should not be less than that in the original design. • Air-conditioning plants or mechanical ventilation plants include cooking fume exhaust plant or electrical precipitator and the like in commercial kitchen or air handling unit.
*See subsection 3.32	

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Item 1.51 Erection or alteration of supporting structure for
mechanical ventilation plant



3.3 Drainage

3.3.1 Aboveground drain

MW items	2.30	3.23	3.24
Types of works	D		
Simple comparison	Erection, repair, alteration or removal of ...		Removal of...
	Aboveground drain ...		Unauthorised aboveground drain ...
		Not involve main pipes (other than replacement of components at existing junctions);	
		Not involve embedded pipes (other than a pipe passes through a wall or slab);	
	Not involve repair or replacement of internal branch pipes or sanitary fitments;		
	No additional load to cantilevered slabs; and		
	Not MW item 3.23.		
Other considerations	<ul style="list-style-type: none"> • B(SSFPDWL)R 11 - Proper disposal of soil. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 24 , 25 & 30 - Provision of traps for soil & waste pipes and anti-siphonage pipes. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 28 - Control of bends in soil & waste pipes. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 31 - Ventilation pipe carried up to not less than 1 m above roof. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 29, PNAP APP-93 & PNAP ADV-14 - Provision of access for repair & maintenance. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 34 - Control of the materials for pipes. 		
	<ul style="list-style-type: none"> • B(SSFPDWL)R 26, 27, 31 & 32 - Internal diameter of pipes. 		
	<ul style="list-style-type: none"> • FS Code 2011 subsections C8 & E7 -Protection of openings for passage of pipes through fire barrier. 		
	<ul style="list-style-type: none"> • PNAP APP-133 - Performance requirements and standards of cast iron pipes. 		
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		

B(SSFPDWL)R represents Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.30, 3.23 and 3.24 are shown in Appendix VII.

Item 2.30 Erection, repair, alteration or removal of aboveground drainage



Item 3.23 Erection, repair, alteration or removal of aboveground drainage



Item 3.24 Removal of unauthorised aboveground drainage



3.3.2 Underground drain

MW items	1.25	1.36	2.28	2.36	2.29	1.26
Types of works	D					
Simple comparison	Repair of ...	Removal of ...	Repair of ...	Removal of ...	Addition / Alteration of ...	
	Underground drain...					
	Involve excavation of: 1.5 m < Depth ≤ 3 m;		Involve excavation of: Depth ≤ 1.5 m;		Involve excavation of: 1.5 m < Depth ≤ 3 m;	
	Distance between any point of the excavation & the toe of a slope (with gradient > 15°) ≥ depth of the excavation;					
	Distance between any points of the excavation & the bottom of a retaining wall ≥ depth of the excavation;					
	Not involve the last manhole;					
	If the works are carried out beside the crest of a slope (gradient ≤ 30°): (a) distance between any point of the excavation & outer edge of the crest ≥ height of the slope;			If the works are carried out beside the crest of a slope: (a) gradient ≤ 15°; (b) height of the slope ≤ 3m; and (c) distance between any point of the excavation & outer edge of the crest ≥ Height of the slope;		
	If the works are carried out beside the crest of a slope (gradient > 30°): (a) height of the slope ≤ 3m; and (b) distance between any point of the excavation & outer edge of the crest ≥ 1.5 x height of the slope;					
	If the works are carried out beside the top of a retaining wall: (a) height of the wall ≤ 3m; and (b) distance between any point of the excavation & the wall ≥ 1.5 x height of the wall.					
Other considerations	<ul style="list-style-type: none"> B(SSFPDWL)R 40 & 41 - Proper disposal of foul & surface water. B(SSFPDWL)R 73, PNAP APP-58 & PNRC 11 - Testing of drainage works and procedure. ⁽¹⁾ PNAP APP-103 - Not laying drainage on newly reclaimed land. Differentiation settlement for newly reclaimed land should be considered. ⁽¹⁾ MTRCL's agreement should be obtained before carrying out the excavation 					

	<p>works in Schedule Area 3 (Railway Protection Area). Section 27 of the Railways Ordinance, Cap 519 or section 15 of the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance, Cap 276 will be invoked in case the proposed MW would be incompatible with any works for the construction, Maintenance or improvement of the railway or with the operation thereof.</p>
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
	<ul style="list-style-type: none"> • Associated excavation may be MW item 1.12 ($1.5\text{m} < \text{Depth} \leq 3\text{m}$) or 2.11 ($0.3\text{m} < \text{Depth} \leq 1.5\text{m}$).

⁽¹⁾ For MW items 1.26 and 2.29 only.

B(SSFPDWL)R represents Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors.

Recommended design and details for MW items 2.28, 2.36 and 2.29 are shown in Appendix VII.

Items 1.25, 1.26, 1.36 Addition, alteration, repair or removal of underground drain



Items 2.28, 2.36, 2.29 Addition, alteration, repair or removal of underground drain



3.4 Repair of Structural Elements

3.4.1 Repair of structural elements

MW items	1.17	2.17
Types of works	A & B	
Simple comparison	Repair of ...	
	Structural elements including flat slab, cantilevered slab, ribbed slab, waffle slab, pre-stressed beam, post-tensioned beam, cantilevered beam, transfer plate, transfer beam, earth retaining structure or concrete projection from the structural element (concrete projection) ...	Column, load bearing wall, slab or beam (other than a flat slab, cantilevered slab, ribbed slab, waffle slab, pre-stressed beam, post-tensioned beam, cantilevered beam, transfer plate, transfer beam or earth retaining structure) (structural member) or concrete projection from the structural member (concrete projection) ...
	In accordance with the original design;	
		For the concrete projection: (a) thickness of the projection ≤ 125 mm; and (b) projection from the structural member ≤ 150 mm;
		Not involve recasting or replacement of structural elements;
		Not involve dismantling of the whole of the floor or roof;
	If the works involve removal of core from any structural elements or concrete projection, the removal is carried out only for testing and ascertaining the condition of the concrete that forms the structural elements;	Not involve removal of core from the structural member or concrete projection by drilling;
	No additional load to cantilevered slabs; and	
Not MW item 2.17.		
Other considerations	<ul style="list-style-type: none"> Code of Practice for the Mandatory Building Inspection Scheme and the Mandatory Window Inspection Scheme 2012 para. 5.2 & 5.4 - Selection of appropriate repair methods. 	
*See subsection 3.32	<ul style="list-style-type: none"> PNAP APP-102 para. 5 - General safety requirements. 	

MW items	1.17	2.17
	<ul style="list-style-type: none"> Repair of existing fire resisting coating in accordance with the original design can be carried out under MW item 1.17 or 2.17. 	
	<ul style="list-style-type: none"> Practice Guidebook for Adaptive Re-use of and Alteration and Addition Works to Heritage Buildings 2012. 	
	<ul style="list-style-type: none"> During construction, proper formwork, temporary propping shall be provided. 	
	<ul style="list-style-type: none"> Adequate quality control of concrete and reinforcement shall be provided. 	
	<ul style="list-style-type: none"> Where defects in reinforced concrete structure are extensive or severe, recasting of structural elements may be required. The recasting works may be carried out under MW item 1.17. 	
	<ul style="list-style-type: none"> For strengthening/replacement of individual timber purlins and rafters of a timber roof structure that do not involve demolition and reconstruction of the timber roof or any change in geometry, material and load paths, such strengthening/ replacement may be considered as repair works; and may be carried out under MW item 1.17 in accordance with the original design. 	
	<ul style="list-style-type: none"> For the connection of existing and new reinforcement, welding, drill-in reinforcement with chemical grout, couplers or any methods (other than lapping of reinforcement) are not allowed unless the relevant method statement and details are shown in the approval plans. 	
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes 2nd edition - Provision of precautionary measures against damage to gas pipes. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors.

Recommended design and details for MW item 2.17 are shown in Appendix VII

Item 1.17 Repair of structural elements



Item 2.17 Repair of structural elements



Item 2.17 Repair of structural elements



Item 2.17 Repair of structural elements



Item 2.17 Repair of structural elements



3.5 External Rendering, Wall Tile, Roof Finish and Cladding

3.5.1 Roof finishes

MW items	1.62	2.34
Types of works	A & F	
Simple comparison	Laying or repair of ...	Laying, repair or removal of ...
	Roof finishes ¹ ...	
	Not involve alteration of structural elements;	
		For laying or repair of roof finishes, the thickness of finishes at the completion of the works ≤ original design of the finishes; and
	Not MW item 2.34; and Not DEW item 7.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(C)R 34 - Making the roof weatherproof. 	
	<ul style="list-style-type: none"> B(EE)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67, APP-156 & PNAP APP-2 - Energy efficiency in commercial building or hotel and residential building. 	
	<ul style="list-style-type: none"> Thickness of the original design of the roof finishes can be found by : <ul style="list-style-type: none"> (a) difference between the structural level and finishes level in the approved building plans; or (b) the following equation using the design imposed load shown in the approved structural plans or design calculations : 	
	$\text{Thickness of the original design (mm)} = \frac{\text{Design finishes load (kPa)} \times 1,000}{23(\text{N/mm}^2)}$	
	<ul style="list-style-type: none"> PNAP APP-102 para. 5 - General safety requirements. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. Laying, repair or removal of roof finishes on accessible roof with gradient < 1 in 4 may be DEW item 7. For details, please refer to descriptions of the relevant DEW item. 	

⁽¹⁾ **roof finishes** includes the tile layer, screeding layer, insulation layer and associated waterproofing layer on the roof of a building.

- Laying or replacement of waterproofing layer (liquid applied or membrane applied type) not involving laying or removal of solid screeding layer or tile layer may be DEW item 29. For details, please refer to descriptions of the relevant DEW item.

B(C)R represents Building (Construction) Regulation; B(EE)R represents Building (Energy Efficiency) Regulation; OTTV Code 1995 represents Code of Practice for Overall Thermal Transfer Value in Buildings 1995; RTTV Guidelines 2014 represents Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works;

Recommended design and details for MW item 2.34 are shown in Appendix VII

Item 1.62 Laying and repair of roof finished



Item 2.34 Laying, repair or removal of roof finishes



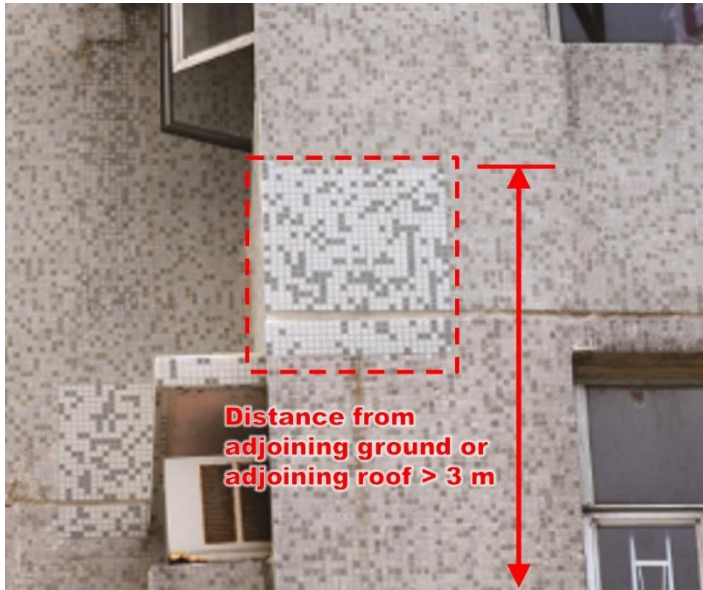
3.5.2 External rendering / external wall tiles

MW item	2.34
Types of works	A & F
Simple comparison	Laying, repair or removal of ...
	External rendering or external wall tile ...
	Not DEW item 7.
Other considerations	<ul style="list-style-type: none"> B(EE)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67 & APP-156 - Energy efficiency in commercial building or hotel and residential building.
	<ul style="list-style-type: none"> PNAP APP-102 para. 5 - General safety requirements.
	<ul style="list-style-type: none"> PNAP ADV-31 & PNRC 67 - Proper design & specification for external rendering and tiling works.
	<ul style="list-style-type: none"> PNAP APP-2 para.9 -No part of any wall finishes should project beyond the site boundaries and over street.
	<ul style="list-style-type: none"> Painting on external wall without removal or addition of rendering is not regarded as building works.
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
	<ul style="list-style-type: none"> Laying, repair or removal of external rendering or external wall tiles with distance between the highest point of the rendering or tile and the adjoining ground or roof is not more than 3 m may be DEW item 7.

B(EE)R represents Building (Energy Efficiency) Regulation; OTTV Code 1995 represents Code of Practice for Overall Thermal Transfer Value in Buildings 1995; RTTV Guidelines 2014 represents Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW item 2.34 are shown in Appendix VII.

Item 2.34 Laying, repair or removal of external rendering



3.5.3 Cladding

MW items	1.48	2.48	3.31
Types of works	A, E & G		
Simple comparison	Repair, replacement or removal of ...		Erection, repair or removal of...
	External cladding ...	External metal cladding ...	External cladding ...
			(a) distance between any part of the cladding and the adjoining ground or roof ≤ 6 m; and (b) if not fixed to an external wall of a building: (i) metal cladding only; (ii) not fixed to cantilevered slabs; (iii) if above a roof: (A) setback distance of the cladding from edge of the roof > 600 mm; and (B) the roof ≤ 20 m above ground.
	For repair or replacement works: in accordance with the original design;		
	Not MW item 2.48 or 3.31.	Not MW item 3.31.	
Other considerations	<ul style="list-style-type: none"> B(C)R 28 & PNAP APP-16 - Proper specification of non-combustible material, fixings, strength & durability for cladding. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(DW)R11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. B(EE)R 4, OTTV Code 1995, RTTV Guidelines 2014, PNAP APP-67 & APP-156 - Energy efficiency in commercial building or hotel and residential building. PNAP APP-102 para. 5 - General safety requirements. PNAP APP-2 para.9 - No part of any wall finishes, including claddings, should project 		

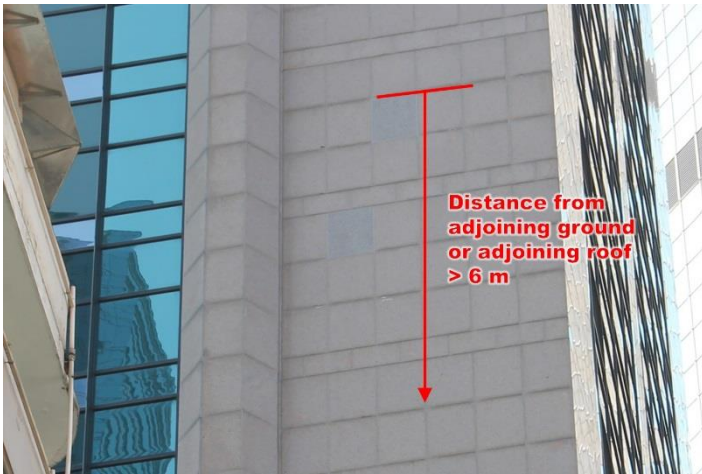
	beyond the site boundaries. Claddings with overall thickness ≤ 90 mm fixed to external wall (≤ 75 mm for non-structural prefabricated external walls) may be disregarded for GFA calculation under B(P)R 23.
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works.
	<ul style="list-style-type: none"> • If temporary removal and subsequent re-installation of cladding is required for maintenance purpose, such works should be carried out under the respective minor works items for cladding works.
	<ul style="list-style-type: none"> • Stainless steel drilled-in anchors should be used.
	<ul style="list-style-type: none"> • If the panel (eg. the climbing wall panel) is required to carry imposed load, the works shall not be carried out under the above item. ⁽¹⁾
	<ul style="list-style-type: none"> • External cladding includes false ceiling hung underneath the soffit of canopy, covered walkway, horizontal screen, balcony and verandah.
	<ul style="list-style-type: none"> • In case demountable access panels or hinged access panels are provided for maintenance of services above the external cladding at ceiling, the dismantling / reinstatement of these access panels without affecting the approved structural design/details/materials will not be considered as minor works.
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

⁽¹⁾ For MW item 3.31 only

B(C)R represents Building (Construction) Regulation; B(DW)R represents Building (Demolition Works) Regulation; B(EE)R represents Building (Energy Efficiency) Regulation; OTTV Code 1995 represents Code of Practice for Overall Thermal Transfer Value in Buildings 1995; RTTV Guidelines 2014 represents Guidelines on Design and Construction Requirements for Energy Efficiency of Residential Buildings 2014; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.48 and 3.31 are shown in Appendix VII.

Item 1.48 Repair, replacement or removal of external cladding



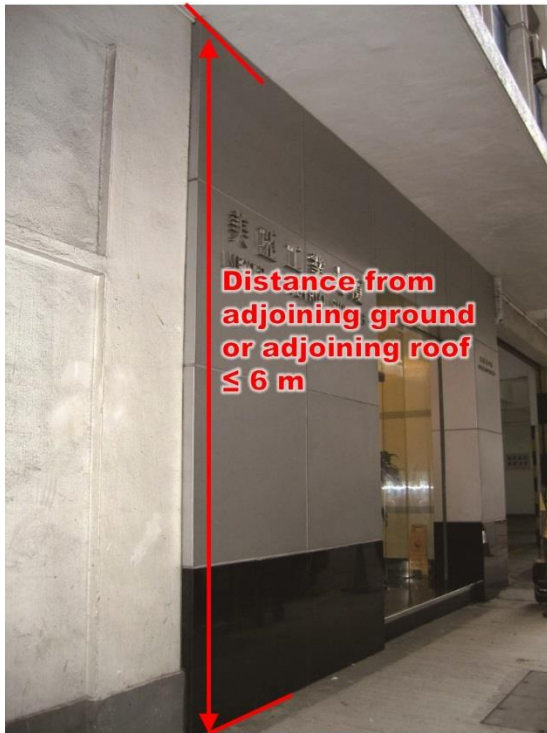
Item 2.48 Repair, replacement or removal of external metal cladding



Item 2.48 Repair, replacement or removal of external metal cladding



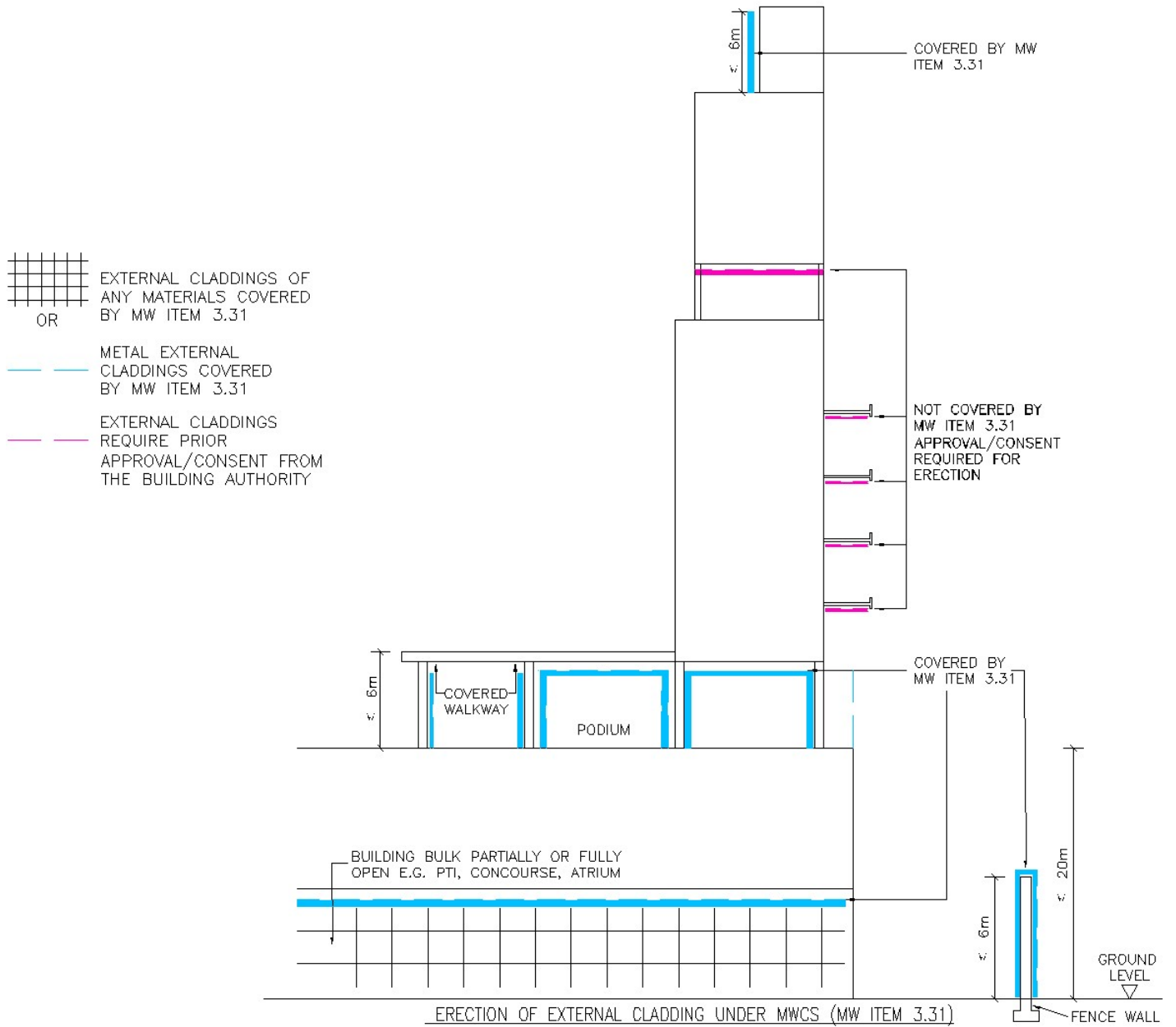
Item 3.31 Erection, repair or removal of cladding



Item 3.31 Erection, repair or removal of cladding



3.5.3.1 Locations for erection of external cladding under MW item 3.31.



3.6 Signboard

3.6.1 Projecting signboard

MW items	1.20	2.18	3.16
Types of works	C		
Simple comparison	Erection or alteration of ...		Erection, Alteration or Removal of ...
	Projecting signboard ...		Projecting signboard (Including replacement of the display surface of the signboard) ...
	Not consist of stone;		
	Not involve alteration of other structural elements;		
	No additional load to cantilevered slabs;		
	10 m ² < Display area of the signboard ≤ 20 m ² ;	Display area of the signboard ≤ 10 m ² ;	Display area of the signboard ≤ 1 m ² ;
	Projection from the external wall ≤ 4.2 m;		Projecting from the external wall ≤ 1 m;
	Thickness of the signboard ≤ 600 mm; and		Thickness of the signboard ≤ 300 mm; and
			Any part of the signboard ≤ 6m from ground.
	Not MW item 3.16.		
Other considerations	<ul style="list-style-type: none"> BO s31(1)(aa) & PNAP APP-126 Appendix B - Positional and Dimensional Requirements for Signboards. 		
*See subsection 3.32	<ul style="list-style-type: none"> In case of signboard projecting ≤ 600 mm over a footpath or over street, clearance ≥ 2.5 m from ground. ⁽²⁾ 		
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. 		
	<ul style="list-style-type: none"> B(P)R 30-Natural lighting & ventilation, prescribed plane for prescribed window for adjacent building on the same site, if any, not obstructed. 		
	<ul style="list-style-type: none"> B(P)R 30, 31 and 36 -No obstruction to windows providing natural lighting and ventilation. 		
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures in relation to cutting of steelworks. 		
	<ul style="list-style-type: none"> External Maintenance Code 2021 para. 3.9.2 - Maintenance and repair access 		

	for external signboard should be provided.
	<ul style="list-style-type: none"> External Maintenance Code 2021 para. 3.9.3 - Signboards containing concealed structural elements are advised to have access panel(s) not less than 200 mm in dimension or diameter for inspection of the concealed structure.
	<ul style="list-style-type: none"> PNAP APP-126 Appendices A, C-E & J-L - Design & construction requirements of signboard given by the BA, FSD, TD, HyD, LandsD & EMSD etc. and other requirements. Para. 27-31 of Appendix A regarding selection of display surface should be observed to avoid surface spread of flame.
	<ul style="list-style-type: none"> PNAP APP-126 para. 15 - Minimize light pollution and reduce energy consumption by make reference to Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the ENB, EPD and EMSD.
	<ul style="list-style-type: none"> PNAP APP-24 Appendix A s.C.1 & PNRC 14 - No signboard projected within 6 m of the MTR tracks.
	<ul style="list-style-type: none"> PNAP APP-126 para. 18 - Maintenance manual should be issued to the owner of the signboard to undertake maintenance inspections of the signboard annually and after typhoons.
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used.
	<ul style="list-style-type: none"> No structural frame of signboard to be of timber construction (display surface excluded).
	<ul style="list-style-type: none"> Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee - Harbour planning principles. ⁽¹⁾
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

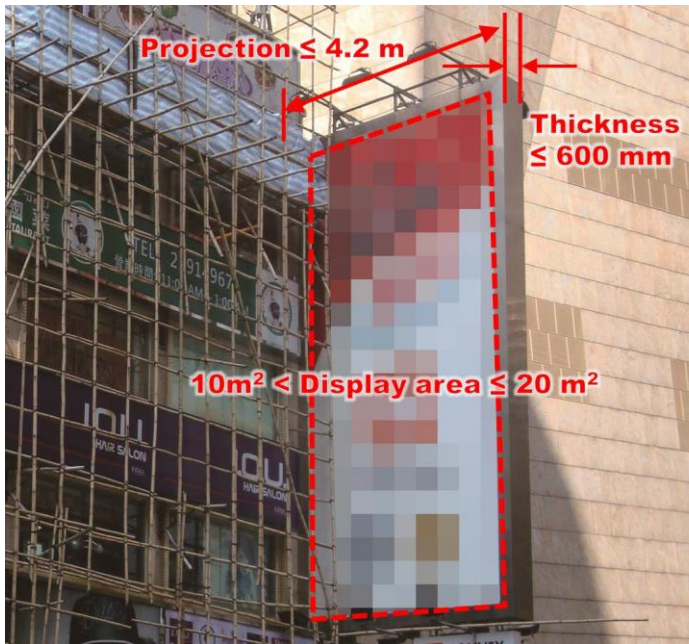
⁽¹⁾ For MW items 1.20 & 2.18 only

⁽²⁾ For MW item 3.16 only

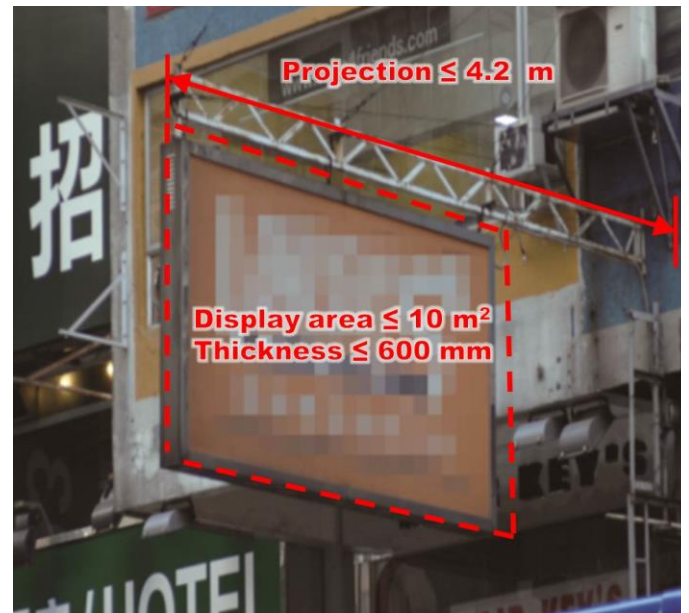
BO represents Buildings Ordinance; B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; External Maintenance Code 2021 represents Code of Practice on Access for External Maintenance 2021; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; ENB represents Environment Bureau; BA represents Building Authority; FSD represents Fire Services Department; TD represents Transport Department; HyD represents Highways Department; LandsD represents Lands Department; EMSD represents Electrical and Mechanical Services Department; EPD represents Environmental Protection Department.

Recommended design and details for MW items 2.18 and 3.16 are shown in Appendix VII.

Item 1.20 Erection or alteration of projecting signboard



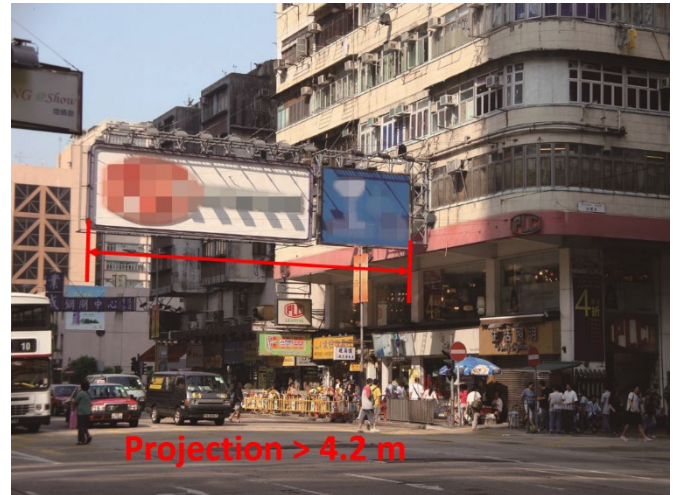
Item 2.18 Erection or alteration of projecting signboard



Item 3.16 Erection, alteration or removal of projecting signboard



Not minor works



3.6.1 Projecting signboard

MW items	2.24	3.18
Types of works	C & G	
Simple comparison	Removal of ...	
	Projecting signboard ...	Projecting signboard or signboard fixed to a fence wall on-grade ...
	Display area of the signboard $\leq 20 \text{ m}^2$;	For projecting signboard: (a) Display area of the signboard $\leq 2 \text{ m}^2$; (b) Projecting from the external wall $\leq 2 \text{ m}$; and (c) Any part of the signboard $\leq 6 \text{ m}$ from ground.
	Not MW item 3.18.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> Removal of signboard fixed to external wall with display area $\leq 1 \text{ m}^2$, not projecting $> 600 \text{ mm}$ from wall and $\leq 3 \text{ m}$ above ground may be DEW item 11. For details, please refer to description of relevant DEW item. 	

B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents Designated Exempted Works.

Recommended design and details for MW items 2.24 and 3.18 are shown Appendix VII.

Item 2.24 Removal of projecting signboard



Item 3.18 Removal of projecting signboard



3.6.2 Wall signboard

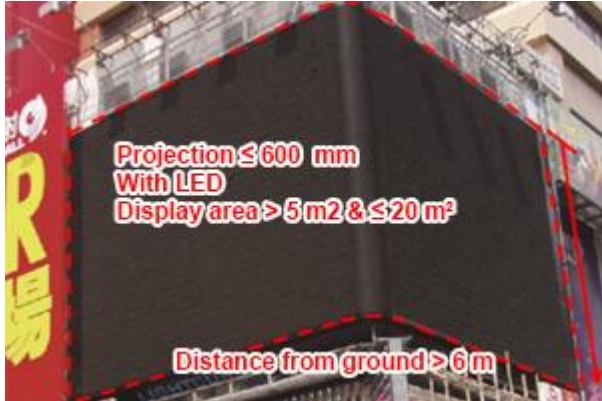
MW items	1.22	2.19	3.17
Types of works	C		
Simple comparison	Erection or alteration of ...		Erection, alteration or removal of ...
	Wall signboard ...		Wall signboard (Including replacement of the display surface of the signboard) ...
	No additional load to cantilevered slabs;		
	Not involve alteration of other structural elements;		
	With LED display system: 5 m ² < Display area of the signboard ≤ 20 m ² ;	With LED display system: Display area of the signboard ≤ 5 m ² ;	Display area of the signboard ≤ 5 m ² ;
	Without LED display system: 10 m ² < Display area of the signboard ≤ 40 m ² ;	Without LED display system: Display area of the signboard ≤ 10 m ² ;	
	If any part of the signboard > 6m from ground, the signboard not consist of stone.		Any part of the signboard ≤ 6 m from ground; and
		Not MW item 3.17; and	
	Not DEW item 10.	Not DEW item 10 , 11 or 30.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 30 - Natural lighting & ventilation, prescribed plane for prescribed window for adjacent building on the same site, if any, not obstructed. 		
	<ul style="list-style-type: none"> B(P)R 30, 31 and 36 - No obstruction to windows providing natural lighting and ventilation. 		
	<ul style="list-style-type: none"> BO s31(1)(aa) & PNAP APP-126 Appendix B - Positional and Dimensional Requirements for Signboards. 		
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 		
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. 		
	<ul style="list-style-type: none"> External Maintenance Code 2021 para. 3.9.2 - Maintenance and repair access for external signboard should be provided. 		
	<ul style="list-style-type: none"> External Maintenance Code 2021 para. 3.9.3 - Signboards containing concealed structural elements are advised to have access panel(s) not less than 200 mm in dimension or diameter for inspection of the concealed structure. 		

MW items	1.22	2.19	3.17
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> PNAP APP-126 Appendices A, C-E & J-L - Design & construction requirements of signboard given by the BD, FSD, TD, HyD, LandsD & EMSD etc. and other requirements. Para. 27-31 of Appendix A regarding selection of display surface should be observed to avoid surface spread of flame. 		
	<ul style="list-style-type: none"> PNAP APP-126 para. 15 - Minimize light pollution and reduce energy consumption by make reference to Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the ENB, EPD and EMSD. 		
	<ul style="list-style-type: none"> PNAP APP-126 para. 18 - Maintenance manual should be issued to the owner of the signboard to undertake maintenance inspections of the signboard annually and after typhoons. 		
	<ul style="list-style-type: none"> For signboard projecting ≤ 600 mm over a footpath, it should have clearance ≥ 2.5 m from ground. 		
	<ul style="list-style-type: none"> For Signboard at overhead of shopfront, it shall have Clearance ≥ 2.5 m from ground and structurally independent from any roller shutter or air conditioning unit and should not be used for storage. 		
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 		
	<ul style="list-style-type: none"> Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee - Harbour planning principles. 		
	<ul style="list-style-type: none"> No structural frame of signboard to be of timber construction (display surface excluded). 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Erection or alteration of signboard (including replacement of its display surface) fixed on external wall with display area ≤ 1 m², projecting ≤ 150 mm from wall and ≤ 3 m above ground may be DEW item 10. For details, please refer to descriptions of the relevant DEW item. 		

BO represents Buildings Ordinance; B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; External Maintenance Code 2021 represents Code of Practice on Access for External Maintenance 2021; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; ENB represents Environment Bureau; BA represents Building Authority; FSD represents Fire Services Department; TD represents Transport Department; HyD represents Highways Department; LandsD represents Lands Department; EMSD represents Electrical and Mechanical Services Department; EPD represents Environmental Protection Department.

Recommended design and details for MW items 2.19 and 3.17 are shown in Appendix VII.

Item 1.22 Erection or alteration of wall signboard



Item 2.19 Erection or alteration of wall signboard



Item 3.17 Erection, alteration or removal of wall signboard



Not minor works



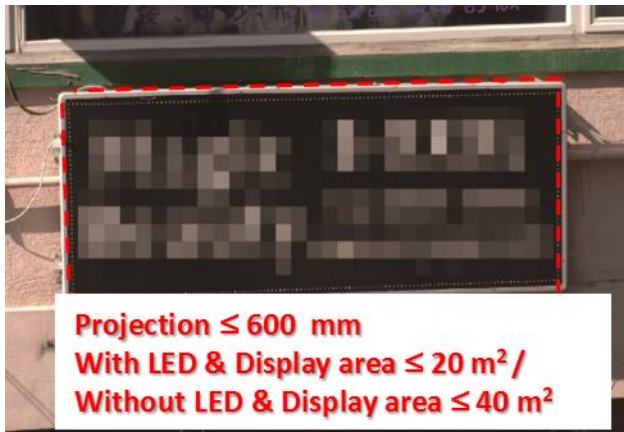
3.6.2 Wall signboard

MW items	2.26	3.20
Types of works	C & G	
Simple comparison	Removal of ...	
	Wall signboard ...	
	With LED display system: Display area of the signboard $\leq 20 \text{ m}^2$;	Display area of the signboard $\leq 10 \text{ m}^2$;
	Without LED display system: Display area of the signboard $\leq 40 \text{ m}^2$; and	
		Any part of the signboard $\leq 6 \text{ m}$ from ground; and
	Not MW item 3.20; and	
	Not DEW item 11.	Not DEW item 11.
Other considerations	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> • Removal of signboard fixed on external wall with display area $\leq 1\text{m}^2$, projecting $\leq 600 \text{ mm}$ from wall and distance between any part of signboard and $\leq 3 \text{ m}$ above ground may be DEW item 11. For details, please refer to descriptions of the relevant DEW item. 	

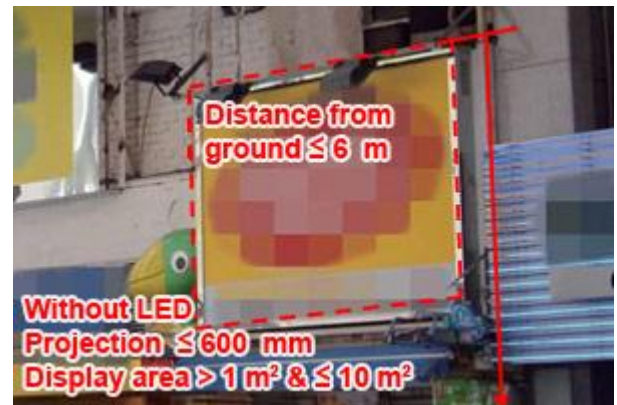
B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents Designated Exempted Works.

Recommended design and details for MW items 2.26 and 3.20 are shown in Appendix VII.

Item 2.26 Removal of wall signboard



Item 3.20 Removal of wall signboard



3.6.3 Signboard on roof, or on or hung underneath the soffit of a balcony or canopy

MW items	1.21	2.20
Types of works	C	
Simple comparison	Erection or alteration of...	
	Signboard on a roof ...	Signboard on or hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) ...
	Not consist of stone;	
	Not involve alteration of other structural elements;	
	Display area of the signboard $\leq 20 \text{ m}^2$;	Display area of the signboard $\leq 2 \text{ m}^2$;
	Thickness of the signboard $\leq 600 \text{ mm}$;	Thickness of the signboard $\leq 100 \text{ mm}$;
	Not projecting beyond the external wall of the building;	Not projecting beyond the balcony or canopy; and
	Any part of the signboard $\leq 6 \text{ m}$ from roof level; and	Height of the signboard $\leq 600 \text{ mm}$.
	No additional load to cantilevered slab.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> • BO s31(1)(aa) & PNAP APP-126 Appendix B - Positional and Dimensional Requirements for Signboards. 	
	<ul style="list-style-type: none"> • B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or used as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. ⁽¹⁾ 	
	<ul style="list-style-type: none"> • B(P)R 30, 31 & 36 - Natural lighting & ventilation should not be adversely affected. 	
	<ul style="list-style-type: none"> • B(C)R 34 - Not to damage the waterproofing. 	
	<ul style="list-style-type: none"> • External Maintenance Code 2021 para. 4.1.4 & 4.2.4 - Access for maintenance and repair shall be provided for signboard on roof if any part of the signboards is more than 5 m high measuring from the roof finishes. ⁽¹⁾ 	
	<ul style="list-style-type: none"> • External Maintenance Code 2021 para. 3.9.2 - Maintenance and repair access for external signboard should be provided. ⁽²⁾ 	
	<ul style="list-style-type: none"> • External Maintenance Code 2021 para. 3.9.3 - Signboards containing concealed structural elements are advised to have access panel(s) not less than 200 mm in dimension or diameter for inspection of the concealed structure. 	
	<ul style="list-style-type: none"> • PNAP APP-126 Appendices A, C-E & J-L - Design & construction requirements of signboard given by the BD, FSD, TD, HyD, LandsD & EMSD etc. and other requirements. Para. 27-31 of Appendix A regarding selection of display surface 	

MW items	1.21	2.20
		should be observed to avoid surface spread of flame.
		<ul style="list-style-type: none"> PNAP APP-126 para. 15 - Minimize light pollution and reduce energy consumption by make reference to Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the Environment Bureau, Environmental Protection Department and EMSD.
		<ul style="list-style-type: none"> PNAP APP-126 para. 18 - Maintenance manual should be issued to the owner of the signboard to undertake maintenance inspections of the signboard annually and after typhoons.
		<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used.
		<ul style="list-style-type: none"> Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee - Harbour planning principles.
		<ul style="list-style-type: none"> No structural frame of signboard to be of timber construction (display surface excluded).
		<ul style="list-style-type: none"> Not to obstruct drainage on roof. ⁽¹⁾
		<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

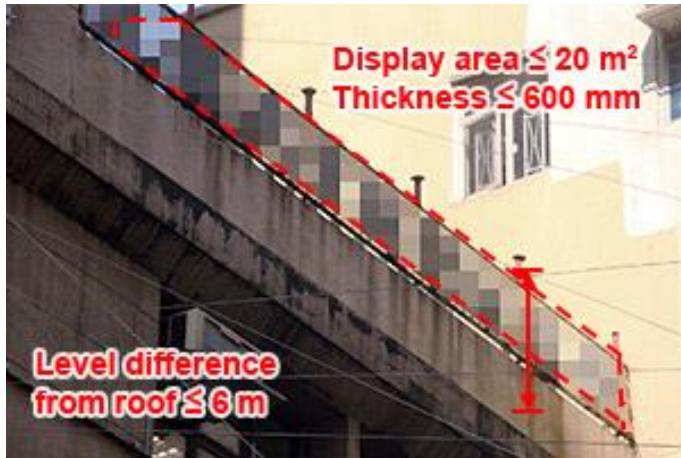
⁽¹⁾ For MW item 1.21 only

⁽²⁾ For MW item 2.20 only

BO represents Buildings Ordinance; B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; External Maintenance Code 2021 represents Code of Practice on Access for External Maintenance 2021; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; ENB represents Environment Bureau; BA represents Building Authority; FSD represents Fire Services Department; TD represents Transport Department; HyD represents Highways Department; LandsD represents Lands Department; EMSD represents Electrical and Mechanical Services Department; EPD represents Environmental Protection Department.

Recommended design and details for MW item 2.20 are shown in Appendix VII.

Item 1.21 Erection or alteration of signboard on roof



Item 2.20 Erection or alteration of signboard hung underneath soffit of a balcony



3.6.3 Signboard on roof, or on or hung underneath the soffit of a balcony or canopy

MW items	2.25	3.19	2.27	3.21
Types of works	C & G			
Simple comparison	Removal of...		Signboard on or hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) ...	
	Signboard on a roof ...			
	Display area of the signboard $\leq 20 \text{ m}^2$; and	Display area of the signboard $\leq 5 \text{ m}^2$; and		If located on a balcony or canopy, display area of the signboard $\leq 5 \text{ m}^2$;
				If hung underneath the soffit of a balcony or canopy, display area of the signboard $\leq 2 \text{ m}^2$; and
		Height of the signboard $\leq 2\text{m}$.		Height of the signboard $\leq 1 \text{ m}$.
	Not MW item 3.19.		Not MW item 3.21.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 			
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 			
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 			
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 			

B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.25, 2.27, 3.19 and 3.21 are shown in Appendix VII.

Item 2.25 Removal of signboard on roof



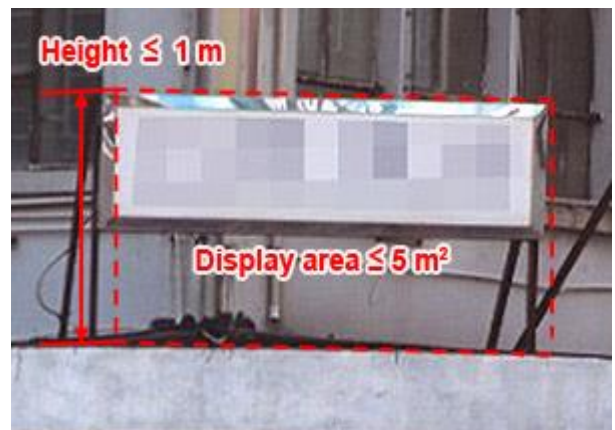
Item 3.19 Removal of signboard on roof



Item 2.27 Removal of signboard hung underneath balcony



Item 3.21 Removal of signboard on canopy



3.6.4 Outdoor signboard fixed on grade or with spread footing

MW items	1.23	2.21	2.22
Types of works	C		
Simple comparison	Erection or alteration of ...		
	Outdoor signboard ...		
	Fixed on-grade (other than the construction of a spread footing);		Together with a spread footing;
	Display area of the signboard $\leq 20 \text{ m}^2$;	Display area of the signboard $\leq 10 \text{ m}^2$;	Display area of the signboard $\leq 1 \text{ m}^2$;
	Thickness of the signboard $\leq 600 \text{ mm}$;		Thickness of the signboard $\leq 300 \text{ mm}$;
	Any part of the signboard $\leq 6 \text{ m}$ from ground; and	Any part of the signboard $\leq 2 \text{ m}$ from ground.	Any part of the signboard $\leq 3 \text{ m}$ from ground; and
			Involve a depth of an excavation $\leq 500 \text{ mm}$ for construction of the footing.
	Not MW item 2.21.		
Other considerations	<ul style="list-style-type: none"> External Maintenance Code 2021 para. 3.9.3 - Signboards containing concealed structural elements are advised to have access panel(s) not less than 200 mm in dimension or diameter for inspection of the concealed structure. 		
*See subsection 3.32	<ul style="list-style-type: none"> PNAP ADV- 15 & PNRC 41 - Control of fixing of reinforcement. 		
	<ul style="list-style-type: none"> PNAP APP-126 Appendices A, C-E & J-L - Design & construction requirements of signboard given by the BD, FSD, TD, HyD, LandsD & EMSD etc. and other requirements. Paragraphs 27-31 of Appendix A regarding selection of display surface should be observed to avoid surface spread of flame. 		
	<ul style="list-style-type: none"> PNAP APP-126 para. 15 - Minimize light pollution and reduce energy consumption by make reference to Guidelines on Industry Best Practices for External Lighting Installations jointly issued by the Environment Bureau , Environmental Protection Department and EMSD. 		
	<ul style="list-style-type: none"> PNAP APP-126 para. 18 - Maintenance manual should be issued to the owner of the signboard to undertake maintenance inspections of the signboard annually and after typhoons. 		
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 		
	<ul style="list-style-type: none"> Harbour Planning Guidelines for Victoria Harbour and its Harbour-front Areas issued by the Harbour-front Enhancement Committee - Harbour planning 		

MW items	1.23	2.21	2.22
	principles. ⁽¹⁾		
	<ul style="list-style-type: none"> Code of Practice on Working near Electricity Supply Lines - Provision of precautionary measures against damage to underground electricity supply cables. ⁽²⁾ 		
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. ⁽²⁾ 		
	<ul style="list-style-type: none"> No structural frame of signboard to be of timber construction (display surface excluded). 		
	<ul style="list-style-type: none"> MTRCL's agreement should be obtained before carrying out the excavation works in Schedule Area 3 (Railway Protection Area). Section 27 of the Railways Ordinance, Cap 519 or section 15 of the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance, Cap 276 will be invoked in case the proposed MW would be incompatible with any works for the construction, Maintenance or improvement of the railway or with the operation thereof. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 (1.5m < Depth ≤ 3m) or 2.11(0.3m < Depth ≤ 1.5m). 		
	<ul style="list-style-type: none"> Associate spread footing construction may be MW item 1.11 (Depth ≤ 3m) or 2.10 (Depth ≤ 1.5m). ⁽¹⁾ 		

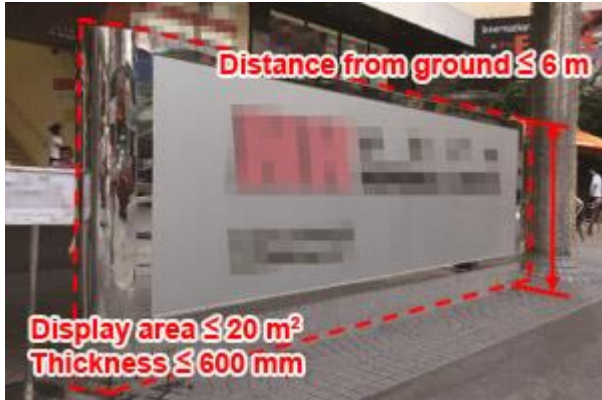
⁽¹⁾ For MW item 1.23 & 2.21 only

⁽²⁾ For MW item 2.22 only

B(C)R represents Building (Construction) Regulations; External Maintenance Code 2021 represents Code of Practice on Access for External Maintenance 2021; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; ENB represents Environment Bureau; BA represents Building Authority; FSD represents Fire Services Department; TD represents Transport Department; HyD represents Highways Department; LandsD represents Lands Department; EMSD represents Electrical and Mechanical Services Department; EPD represents Environmental Protection Department.

Recommended design and details for MW items 2.21 and 2.22 are shown in Appendix VII

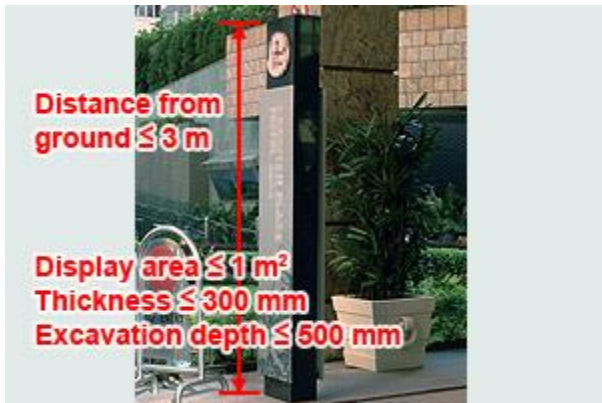
Item 1.23 Erection or alteration of outdoor signboard on-grade



Item 2.21 Erection or alteration of outdoor signboard on-grade



Item 2.22 Erection or alteration of signboard on-grade with spread footing



3.6.4 Outdoor signboard fixed on grade or with spread footing

MW items	2.25	3.22
Types of works	C & G	
Simple comparison	Removal of ...	
	Outdoor signboard fixed on-grade (other than the removal of spread footing of outdoor signboards) ...	
	Display area of the signboard $\leq 20 \text{ m}^2$; and	Display area of the signboard $\leq 1 \text{ m}^2$; and
		Any part of the signboard $\leq 3 \text{ m}$ from ground.
	Not MW item 3.22.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.25 and 3.22 are shown in Appendix VII.

Item 2.25 Removal of outdoor signboard on-grade



Item 3.22 Removal of outdoor signboard on-grade



3.6.5 Other works related to signboards which apply to all situations

MW items	1.24
Types of works	C & G
Simple comparison	Removal of ...
	Signboard (other than the removal of the spread footing of outdoor signboards) ...
	Not MW item 2.24, 2.25, 2.26, 2.27, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21 or 3.22; Not DEW Item 11.
Other considerations	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge.
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork.
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works.
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Item 1.24 Removal of signboard



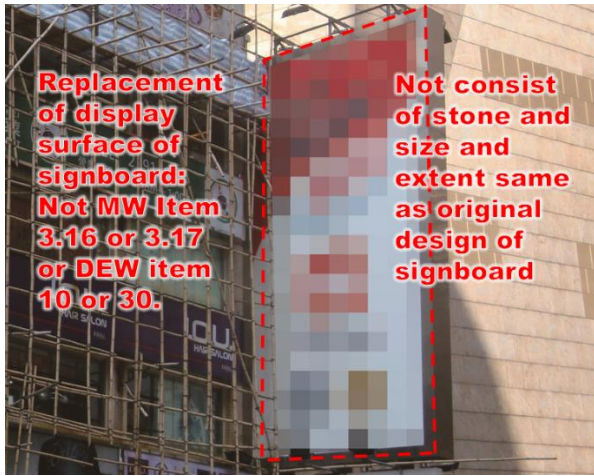
3.6.6 Display surface

MW items	2.68	2.23
Types of works	C	
Simple comparison	Installation, alteration, replacement or removal ...	Replacement of ...
	Display surface of a signboard ...	Display surface of a signboard referred to item 1.22, 1.23, 2.19 or 2.21 ...
	No additional load to cantilevered slab;	
	Not involve alteration of structural elements;	
	Display surface not consisting of stone	Display surface consisting of stone.
	For replacement works, size and coverage of the display surface are the same as those of the display surface to be replaced; and	
	Not MW Item 3.16 or 3.17; and	
	Not DEW Item 10 or 30.	
Other considerations	<ul style="list-style-type: none"> PNAP APP-126 Appendices A - Requirements on display surface and their fixings. Paras. 27-31 of Appendix A regarding selection of display surface should be observed to avoid surface spread of flame. 	

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.23 and 2.68 are shown in Appendix VII.

Item 2.68 Installation, alteration, replacement or removal item of display surface of signboard



Item 2.23 Replacement of display surface of signboard



3.7 Removal of Unauthorised Structure

3.7.1 On-grade or on a slab (other than a cantilevered slab)

MW items	1.38	2.39	3.32
Types of works	A & G		
Simple comparison	Removal of ...		
	Unauthorised structure located on-grade or on a slab (other than a cantilevered slab) ...		
	Structure ≤ 2 storeys;	Single storey structure;	
	Not involve alteration of other structural elements;		
	Not a flat slab, pre-stressed concrete construction, transfer girder, hanger, cantilevered structure with a span > 1.2 m or earth retaining structure;		
	Span of structural elements;		
	≤ 6 m; and		≤ 4.5 m;
	Height of the structure		
	> 5 m & ≤ 10 m.	≤ 5 m;	≤ 2.5 m; and
			Roofed over area of the structure ≤ 20 m ² .
Other considerations	Not MW item 3.32.		
	<ul style="list-style-type: none"> B(DW)R 10 - Not to overload the floor. 		
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 		
	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 		
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the waterproofing of the roof. 		
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 		
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> PNAP APP 102 para. 5 - General safety requirements. 		
	<ul style="list-style-type: none"> Other legislations affecting the associated provision of protective barrier /external wall should be complied with. 		
<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 			

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.39 and 3.32 are shown in Appendix VII.

Item 1.38 Removal of unauthorised structure



Item 2.39 Removal of unauthorised structure



Item 3.32 Removal of unauthorised structure



3.7.2 Projecting from external wall or fixed to or hung underneath balcony or canopy

MW items	1.30	2.32
Types of works	A & G	
Simple comparison	Removal of ...	
	Unauthorised structure (other than an architectural projection, canopy, frame or rack) projecting from the external wall ...	
		Projection \leq 2 m; and
		If the structure is fixed to a balcony or canopy that is a cantilevered slab, the span of the balcony or canopy \leq 1 m.
	Not MW item 2.32.	
Other considerations	<ul style="list-style-type: none"> • B(DW)R 10 - Not to overload the floor. 	
	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Other legislations affecting the associated provision of protective barrier /external wall should be complied with. 	
	<ul style="list-style-type: none"> • PNAP APP-102 para. 5 - General safety requirements. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common parts will be affected. 	

B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW item 2.32 are shown in Appendix VII.

Item 1.30 Removal of unauthorised structure



Item 2.32 Removal of unauthorised structure



3.7.3 Other unauthorised structure

MW items	1.39	2.38
Types of items	A & G	
Simple comparison	Removal of ...	
	Unauthorised floor slab.	Unauthorised structure ... Hung underneath the soffit of a balcony or canopy (other than a cantilevered slab) or fixed to a balcony or canopy (other than a cantilevered slab).
Other considerations	<ul style="list-style-type: none"> • B(DW)R 10 - Not to overload the floor. 	
	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Other legislation affecting the associated provision of protective barrier /external wall should be complied with. 	
	<ul style="list-style-type: none"> • PNAP APP 102 para. 5 - General safety requirements. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represent Code of Practice for Demolition of buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW item 2.38 are shown in Appendix VII.

Item 1.39 Removal of unauthorised floor slab



Item 2.38 Removal of unauthorised structure fixed to a balcony



3.8 Removal of Other Structures

3.8.1 Removal of chimney

MW items	1.37	2.37
Types of works	A & G	
Simple comparison	Removal of ...	
	Chimney ...	
	Attached to the external wall or located on the roof of a building;	
	The highest point of the chimney \leq 10 m from the level of the adjoining roof; and	The highest point of the chimney \leq 5 m from the level of the adjoining roof; and
		The smallest cross-sectional dimension of the chimney \leq 500mm.
	Not MW item 2.37.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures for sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW item 2.37 are shown in Appendix VII.

Item 1.37 Removal of chimney



Item 2.37 Removal of chimney



3.8.2 Removal of architectural projection

MW items	2.31	3.26
Types of works	A, E & G	
Simple comparison	Removal of ...	
	Architectural projection ...	
	Projecting from an external wall of a building or a fence wall;	
	Not constructed of concrete; and	
	Projection > 750 mm.	Projection ≤ 750 mm.
Other considerations	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge if applicable. 	
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures for sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case the projection or rack are located at common parts. 	

B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.31 and 3.26 are shown in Appendix VII.

Item 2.31 Removal of architectural projection projecting from external wall



Item 3.26 Removal of rack projecting from external wall



3.9 Protective Barrier

3.9.1 Protective barrier

MW items	1.6	2.5	3.3
Types of works	A		
Simple comparison	Erection, alteration or removal of ...	Repair or replacement of ...	
	Protective barrier (other than an external reinforced concrete (RC) wall or block wall) ...		
		In accordance with the original design;	
		Level on which the protective barrier is located > 2m from its adjacent level; and	Level on which the protective barrier is located ≤ 2m from its adjacent level; and
	No additional load to cantilevered slab.		
Other considerations	<ul style="list-style-type: none"> B(P)R3A, B(C)R 37-38 & PNAP APP- 110 - Design & construction requirements of protective barrier for level difference more than 600 mm. ⁽¹⁾ B(C)R 35 & FS Code 2011 clause C11.1 - Fire resisting spandrel. ⁽¹⁾ 		
*See subsection 3.32	<ul style="list-style-type: none"> B(DW)R11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. Glass Code 2018 - Design, material specifications, construction and workmanship requirements of glass. If tempered glass is used, please refer to Section 3.32.2 of this guideline on the requirements for quality control and supervision of tempered glass. Demolition Code 2004 - Provision of precautionary measures. PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. Existing provision for the building under JPN 1 & 2, if applicable, not contravened. ⁽¹⁾ Stainless steel drilled-in anchors should be used. Protective barrier used as parapet wall on roof shall not exceed 2m in height. If the lowest frame of the window or window wall ≤ 1.1 m from its adjoining floor level, part of the window or window wall forms part of the protective barrier. Alteration or replacement of such window or window wall will involve alteration of protective barrier under MW item 1.6. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		

⁽¹⁾ For MW item 1.6 only

B(C)R represents Building (Construction) Regulation; B(P)R represents Building (Planning) Regulation; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Glass Code 2018 represents Code of Practice for Structural Use of Glass 2018; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; JPN 1 & 2 represents Joint Practice Notes by Buildings Department, Lands Department and Planning Department 1 & 2.

Recommended design & details for MW items 2.5 and 3.3 are shown in Appendix VII.

Item 1.6 Erection, alteration or removal of protective barrier



Item 2.5 Repair or replacement of protective barrier



Item 3.3 Repair or replacement of protective barrier



3.10 Floor Opening

3.10.1 Formation of opening in a slab

MW items	1.2	2.1
Types of works	A	A & D
Simple comparison	Formation of opening in a slab ...	
	No additional load to cantilevered slab;	
	Not involve alteration of other structural elements, except a simply supported beam that is (a) not pre-stressed construction; and (b) not used to support any column, flat slab or ribbed beam;	
	$1\text{m}^2 < \text{Area of the opening} \leq 4.5\text{m}^2$.	Area of the opening $\leq 1\text{m}^2$; and Not DEW item 1.
Other considerations	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C3 and C4 - Control of compartment volume and fire resisting construction. 	
	<ul style="list-style-type: none"> B(C)R 37-38 & PNAP APP-110 - Provision of protective barrier for level difference resulted after completion of works. 	
	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsection C10 - Provision of a 450 mm smoke barrier to surround the opening at the underside of the floor. 	
	<ul style="list-style-type: none"> B(DW)R 10 - Not overload the floor. 	
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> For forming openings to combine two residential units, JPN 1 & 2 should not be contravened if there are green features provided to the units. 	
	<ul style="list-style-type: none"> The "Area of the opening" specified above are the aggregate area of the newly formed opening(s) and the immediate adjoining existing opening, if any, at the completion stage. 	
	<ul style="list-style-type: none"> Usage of the slab opening eg. for passage of building services, drainage, lift and staircase etc be clearly indicated on plan. 	
	<ul style="list-style-type: none"> Formation of slab openings in which the distance between the 2 points that are farthest away from each other ≤ 150 mm may be DEW item 1. For details, please see descriptions of the relevant DEW item. 	

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; JPN 1 & 2 represents Joint Practice Notes by Buildings Department, Lands Department and Planning Department 1 & 2; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.1 are shown in Appendix VII.

Item 1.2 Formation of slab opening



Item 2.1 Formation of slab opening



3.10.2 Reinstatement of opening in a slab

MW items	1.35	2.35
Types of works	A	
Simple comparison	Reinstatement of...	
	Slab in respect of which an opening has been formed...	
	In accordance with the original design;	
	No additional load to cantilevered slab;	
	Not involve alteration of other structural elements;	
	1m ² < Area of the opening ≤ 4.5m ² .	Area of the opening ≤ 1m ² ; and
	Distance between the 2 farthest points within the area of the opening > 150 mm.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(C)R 33 - Certain floor to be impermeable. 	
	<ul style="list-style-type: none"> For the connection of existing and new reinforcement, welding, drill-in reinforcement with chemical grout, couplers or any methods (other than lapping of reinforcement) are not allowed unless the relevant method statement and details were shown in the approval plans. 	
	<ul style="list-style-type: none"> The "Area of the opening" specified above for the reinstatement of slab are the aggregate area of all the slabs reinstated in the same opening at the completion of works. 	
	<ul style="list-style-type: none"> Reinstatement of a slab for an opening in which the distance between the 2 points that are farthest away from each other within the area of the opening ≤ 150 mm may be DEW item 2. For details, please refer to descriptions of the relevant DEW item. 	

B(C)R represents Building (Construction) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW item 2.35 are shown in Appendix VII.

Item 1.35 Reinstatement of slab



Item 2.35 Reinstatement of slab



3.11 Spread Footing

3.11.1 Spread footing

MW items	1.11	2.10
Types of works	A	
Simple comparison	Construction or alteration of ...	
	Spread footing associated with the carrying out of other MW or DEW ...	
	Depth of excavation ≤ 3 m;	Depth of excavation ≤ 1.5 m;
	For the area bounded by lines 10 m away from the location of the footing in downhill direction:	
	(a) Overall gradient $\leq 15^\circ$;	(a) Overall gradient $\leq 5^\circ$;
	(b) No slope $> 15^\circ$;	
	(c) No retaining wall or terrace wall of: (i) Height > 1.5 m; or (ii) Below a line drawn down from the base of the footing that is 45° to the horizontal;	
	Allowable pressure imposed by the footing on the ground: (i) ≤ 100 kPa; or (ii) ≤ 50 kPa if footing is located below the ground water level;	
	Not founded on soft clay or mud; and	
	Not MW item 2.10.	
Other considerations	<ul style="list-style-type: none"> Foundation Code 2017 sections 4 & 7.1.3 - General design requirements of shallow foundations & sampling & testing requirements of concrete & reinforcement. 	
	<ul style="list-style-type: none"> Due consideration on the effect to the adjacent buildings and ground should be taken. 	
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 ($1.5 \text{ m} < \text{Depth} \leq 3 \text{ m}$) or 2.11 ($0.3 \text{ m} < \text{Depth} \leq 1.5 \text{ m}$). 	
	<ul style="list-style-type: none"> MTRCL's agreement should be obtained before carrying out the excavation works in Schedule Area 3 (Railway Protection Area). Section 27 of the Railways Ordinance, Cap 519 or section 15 of the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance, Cap 276 will be invoked in case the proposed MW would be incompatible with any works for the construction, maintenance or improvement of the railway or with the operation thereof. 	

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW item 2.10 are shown in Appendix VII.

Item 1.11 Construction or alteration of spread footing



Item 2.10 Construction or alteration of spread footing



3.12 Canopy

3.12.1 Canopy

MW items	1.27	3.25	3.37	3.38
Types of works	A & E			
Simple comparison	Erection, alteration or removal of ...		Strengthening of ...	Alteration of ...
	Canopy projecting from the external wall ...		Unauthorised canopy projecting from the external wall ...	
	Over an entrance to the building;			
	Projection ≤ 2 m;	For erection or alteration, projection ≤ 500 mm;	Projection ≤ 500 mm;	Immediately before the alterations: 500 mm < Projection ≤ 750 mm ;
		For removal, projection ≤ 750 mm;		Immediately after the alterations: Projection ≤ 500 mm;
	No additional load to cantilevered slabs;			
	Not constructed of concrete; and			
		The highest point > 3 m from ground or roof.	If the highest point ≤ 3 m from ground or roof, not project over streets or common part of the building.	
	Not MW item 3.25; and			
	Not DEW item 14.			
Other considerations	<ul style="list-style-type: none"> B(P)R 10(1) - Adequate clearance ($5.5 \text{ m} \leq \text{clearance} \leq 7.5 \text{ m}$) beneath the canopy if it is within 600mm of the outer edge of a footpath or projecting over a road. 			
*See subsection 3.32	<ul style="list-style-type: none"> B(P)R 10(2) - Adequate clearance ($3.3 \text{ m} \leq \text{clearance} \leq 7.5 \text{ m}$) beneath the canopy if it is over a footpath. B(P)R 10(3) - Provision of adequate surface water drainage. B(P)R 10(4) - Not projecting over a street by > 1/10 of its width or within 4.5 m from the centre line of street. B(P)R 12 - No doorway to the top of canopy. B(P)R 2 & 31 - Min. dimension of the unobstructed rectangular horizontal planes and the open air not be affected when fixing canopies at light wells or re-entrants. 			

	<ul style="list-style-type: none"> • B(DW)R11 - Provision of precautionary measures from sudden collapse on cutting the steelwork.
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures and resident supervision for demolition of the cantilevered structure with span greater than 1.2 m and is over street (section 6.2 of the Code).
	<ul style="list-style-type: none"> • Glass Code 2018 - Design, material specifications, construction and workmanship requirements of glass. If tempered glass is used, please refer to Section 3.32.2 of this guideline on the requirements for quality control and supervision of tempered glass.
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works.
	<ul style="list-style-type: none"> • PNAP APP-139 - Allowing for the wind channel down effect in design.
	<ul style="list-style-type: none"> • Stainless steel drilled-in anchors should be used.
	<ul style="list-style-type: none"> • MW item 1.27 does not apply to entrance of individual premises eg. Individual shops or units.
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
	<ul style="list-style-type: none"> • Erection, alteration or removal of canopy projecting ≤ 500 mm from the external wall & ≤ 3 m above ground or roof (but not project over street or common part) or roof may be DEW item 14.

B(P)R represents Building (Planning) Regulations; B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; Glass Code 2018 represents Code of Practice for Structural Use of Glass 2018; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details of MW items 3.25, 3.37 and 3.38 are shown in Appendix VII.

Item 1.27 Erection, alteration or removal of canopy



Item 3.25 Erection or alteration of canopy



Item 3.37 Strengthening or unauthorised canopy



Item 3.38 Alteration of unauthorised canopy



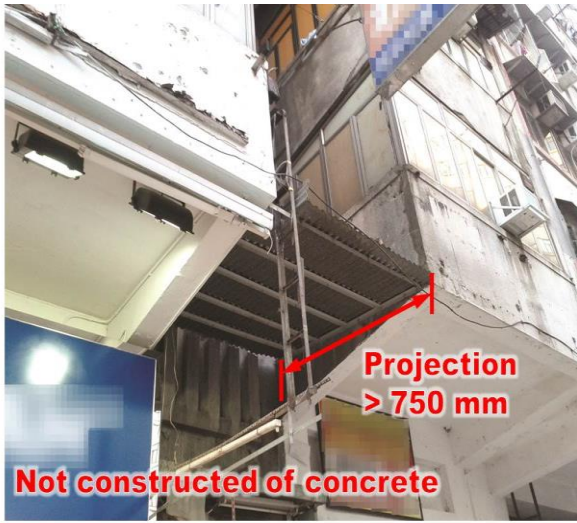
3.12.1 Canopy

MW items	2.31	3.26
Types of works	A, E & G	
Simple comparison	Removal of ...	
	Canopy ...	
	Projecting from an external wall or from a fence wall;	
	Projection > 750 mm; and	Projection ≤750 mm; and
	Not constructed of concrete.	
		Not DEW item 14.
Other considerations	<ul style="list-style-type: none"> • B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge before alteration or removal. 	
	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures for sudden collapse on cutting the steelwork. 	
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures and resident supervision for demolition of the cantilevered structure with span greater than 1.2m and is over street (section 6.2 of the Code). 	
	<ul style="list-style-type: none"> • Guidelines on the Design and Construction of Bamboo Scaffolds & Labour Department's Code of Practice for Bamboo Scaffolding Safety - Guidelines on design, installation & maintenance of bamboo scaffolding. 	
	<ul style="list-style-type: none"> • PNAP ADV 1 - Removal of asbestos containing material by registered asbestos personnel. 	
	<ul style="list-style-type: none"> • PNAP APP 102 para. 5 - General safety requirements 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common part will be affected. 	
	<ul style="list-style-type: none"> • Removal of canopy projecting ≤ 500mm from the external wall & ≤ 3 m above ground or roof (but not project over street or common part) may be DEW item 14. 	

B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.31 and 3.26 are shown in Appendix VII.

Item 2.31 Removal of canopy



Item 3.26 Removal of canopy



3.13 Rack/Drying Rack

3.13.1 Rack/drying rack

MW items	3.29	3.36	3.30	2.31	3.26
Types of works	A & E		A, E & G		
Simple comparison	Erection, alteration or removal of ...	Strengthening of ...	Removal of ...		
	Drying rack ...	Unauthorised drying rack ...	Drying rack ...	Rack (other than a drying rack) ...	
	Projecting from the external wall or from a fence wall;				
	No additional load to cantilevered slab;			Not constructed of concrete; and	
	Projection \leq 750 mm; and			Projection > 750 mm.	Projection \leq 750 mm.
	The highest point > 3 m from adjoining ground or roof.	If the highest point \leq 3 m from ground, not project over streets or common parts of the building.			
			Not DEW item 15.		
Other considerations	<ul style="list-style-type: none"> B(P)R 7(3) – No undesirable projection over a street.⁽²⁾ 				
*See subsection 3.32	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation.⁽¹⁾ 				
	<ul style="list-style-type: none"> B(P)R 35A, PNAP APP-27 & PNAP APP-98 - No drying rack directly above any aperture of gas water heater and outlet of ventilation duct for internal bathroom.⁽¹⁾ 				
	<ul style="list-style-type: none"> B(DW)R11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 				
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 				
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used.⁽²⁾ 				
	<ul style="list-style-type: none"> Projection of drying rack should be measured from the external wall where the rack is fixed. 				

	<ul style="list-style-type: none">• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
	<ul style="list-style-type: none">• Erection, alteration or removal of drying racks projecting ≤ 750 mm from external wall (but not projecting over street or common part) & ≤ 3 m above adjoining ground or roof may be DEW item 15.

(1) For MW items 3.29 & 3.36 only

(2) For erection and alteration under MW item 3.29 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details of MW items 3.26, 3.29, 3.30, 2.31 and 3.36 are shown in Appendix VII.

Item 3.29 Erection, alteration or removal of drying rack



Item 3.36 Strengthening of unauthorised drying rack



Item 3.30 Removal of drying rack



Item 3.26 Removal of rack



Item 2.31 Removal of rack



3.14 Non-load Bearing External Wall

3.14.1 Non-load bearing reinforced concrete (RC) wall

MW items	1.15	2.15	2.13
Types of works	A		A & B
Simple comparison	Erection or alteration of ...	Repair or removal of ...	Repair of ...
	Erection, alteration or removal of ...		
	External non-loading bearing RC wall ...		
	Including concrete projection;		
		(a) Thickness of the projection \leq 125mm; and (b) Projecting from the external wall \leq 150mm;	
	Not involve alteration of other structural elements;		
	No additional load to cantilevered slab;		
	1.1 m < Height of the wall \leq 3.5 m; and	Height of the wall \leq 3.5 m.	Height of the wall \leq 1.1 m; and
	Not MW item 2.15, 3.45 or 3.46.		Not MW item 3.45 or 3.46.
Other considerations	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C5 and C11- Provision of fire resistance wall and spandrel if applicable. ⁽¹⁾ B(P)R 41 & FS Code 2011 subsection B5.7 - Separation between exit route with other accommodation. ⁽¹⁾ B(P)R 29,30, 33 and 36 - Provision of natural lighting and ventilation for habitable room, office, kitchen and toilet. ⁽¹⁾ B(DW)R 10 - Not to overload the floor. B(P)R 3A, B(C)R 37-38 & PNAP APP-110 - Provision of protective barrier to opening on external wall. ⁽¹⁾ B(C)R 32 - Protection against penetration of moisture. Demolition Code 2004 - Provision of precautionary measures. PNAP APP-24 para. 10 & PNRC 14 para. 9 - Not having any opening within 5m of the MTR vent shaft. ⁽¹⁾ PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. PNAP APP-86 - Design & construction of non-loadbearing wall. ⁽¹⁾ Existing provision for the building under JPN 1 & 2 not contravened if green features 		
*See subsection 3.32			

	are provided. ⁽¹⁾
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes.
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
	<ul style="list-style-type: none"> Formation of openings, in which 2 farthest points of the opening $\leq 150\text{mm}$ from each other, in external non-load bearing RC wall and corresponding reinstatement works may be MW item 3.45 & 3.46.

⁽¹⁾ For MW items 1.15 & 2.13 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; JPN represents Joint Practice Notes by Buildings Department, Lands Department and Planning Department; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors.

Recommended design and details for MW items 2.13 and 2.15 are shown Appendix VII.

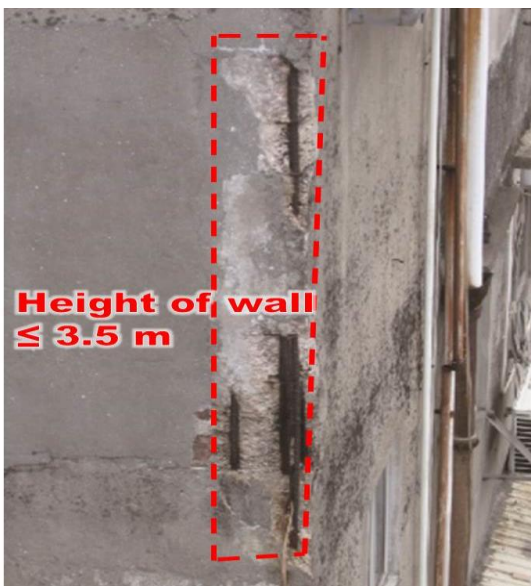
Item 1.15 Erection, alteration or removal of external RC wall



Item 2.13 Erection, alteration or removal of external RC wall



Item 2.15 Repair of RC wall



3.14.2 Non-load bearing block wall

MW items	2.14	3.11	3.12
Types of works	A		A & B
Simple comparison	Erection, alteration or removal of ...		Repair of ...
	External non-load bearing block wall ...		
	Not involve alteration of other structural elements;		
	No additional load to cantilevered slab;		
	1.1 m < Height of the wall ≤ 3.5 m; and	Height of the wall ≤ 1.1 m;	Height of the wall ≤ 3.5 m.
Not MW item 3.45 or 3.46.			
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C5 and C11 - Provision of fire resistance wall and spandrel if applicable. ⁽¹⁾ 		
	<ul style="list-style-type: none"> B(P)R 41 & FS Code 2011 subsection B5.7 - Separation between exit route with other accommodation. ⁽¹⁾ 		
	<ul style="list-style-type: none"> B(P)R 29,30, 33 and 36 - Provision of natural lighting and ventilation for habitable room, office, kitchen and toilet. ⁽¹⁾ 		
	<ul style="list-style-type: none"> B(P)R 3A, B(C)R 37-38 & PNAP APP-110 - Provision of protective barrier to opening on external wall. ⁽¹⁾ 		
	<ul style="list-style-type: none"> B(C)R 32 - Protection against penetration of moisture. 		
	<ul style="list-style-type: none"> B(DW)R 10 - Not to overload the floor. 		
	<ul style="list-style-type: none"> Existing provision for the building under JPN 1 & 2 not contravened if green features are provided. ⁽¹⁾ 		
	<ul style="list-style-type: none"> PNAP APP-24 para. 10 & PNRC 14 para. 9 - Not having any opening within 5m of the MTR vent shaft. ⁽¹⁾ 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Formation of openings in which 2 farthest points of the opening ≤ 150mm from each other, in external non-load bearing block wall and corresponding reinstatement works may be MW item 3.45 or 3.46 respectively. 		

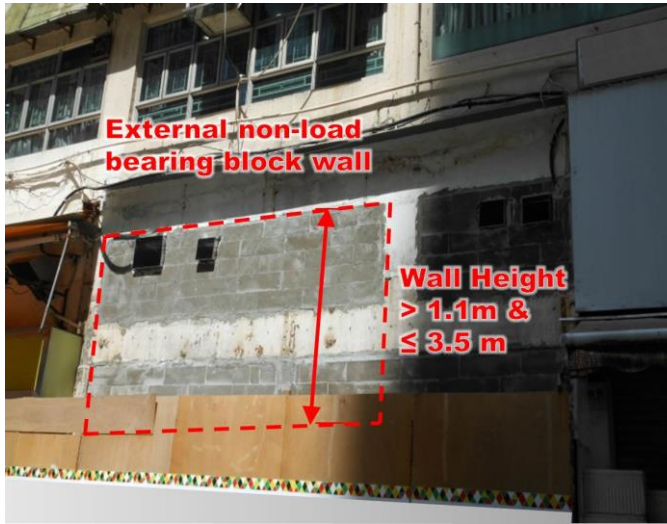
⁽¹⁾ For MW items 2.14 and 3.11 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; JPN represents Joint Practice Notes by Buildings Department, Lands Department and Planning Department; PNAP represents Practice Notes for

Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors.

Recommended design and details for MW items 2.14, 3.11 and 3.12 are shown in Appendix VII.

Item 2.14 Erection, alteration or removal of non-load bearing block wall



Item 3.11 Erection, alteration or removal of non-load bearing block wall



Item 3.12 Repair of non-load bearing block wall



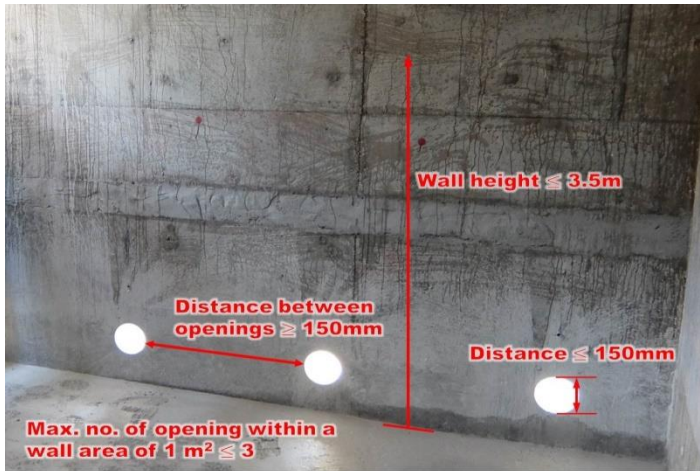
3.14.3 Forming of opening in external non-load bearing wall

MW items	3.45	3.46
Types of works	A, B, D & E	
Simple comparison	Formation of...	Reinstatement of...
	Opening on an external non-load bearing RC or block wall...	External non-load bearing RC or block wall in respect of which opening has been formed...
	Distance between 2 farthest points of the opening \leq 150mm from each other;	
	Distance between each of the openings (whether before or after the formation works) on the wall \geq 150 mm;	
	At the completion of the works, the number of opening \leq 3 within a wall area of 1 m ² .	
Other considerations	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsection C11 - Provision of fire resistance wall and spandrel if applicable. B(C)R 32 - Protection against penetration of moisture. 	
	*See subsection 3.32	<ul style="list-style-type: none"> B(DW)R 10 - Not to overload the floor. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011.

Recommended design and details for MW items 3.45 and 3.46 are shown in Appendix VII.

Item 3.45 Formation of opening on a non-load bearing RC/block wall



Item 3.46 Reinstatement of opening on a non-load bearing RC/block wall



3.15 Fence Wall, Mesh Fence, Railing and Pole

3.15.1 Solid fence wall on roof

MW items	1.55	2.55	3.55
Types of works	A		
Simple comparison	Erection or alteration of ...		
	Solid fence wall on a roof ...		
	Height of the wall \leq 2 m;	Height of the wall \leq 1.5 m;	Height of the wall \leq 1.1 m;
		Density of the wall \leq 650 kg/m ³ ;	
		Thickness of the wall \leq 100 mm;	
		Aggregate length of additional walls per m ² of roof area \leq 0.3 m;	
	Not involve alteration of other structural elements;		
	No additional load to cantilevered slab;		
		Thickness of the supporting roof slab \geq 150 mm;	
	Not MW item 2.55 or 3.55; and	Not MW item 3.55; and	
Not DEW item 20.			
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 		
	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. 		
	<ul style="list-style-type: none"> B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. 		
	<ul style="list-style-type: none"> B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof. 		
	<ul style="list-style-type: none"> B(C)R 37-38 & PNAP APP-110 – Design and construction requirements of protective barrier.⁽¹⁾ 		
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the existing waterproofing of the roof. 		
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 		
	<ul style="list-style-type: none"> Hong Kong Airport (Control of Obstructions) Ordinance, PNAP APP-32 & PNRC 7 - Not exceeding the airport height restrictions.⁽¹⁾ 		
	<ul style="list-style-type: none"> Outline Zoning Plan - Not exceeding the height restrictions.⁽¹⁾ 		
	<ul style="list-style-type: none"> Not exceeding the highest point of building (including features on top).⁽²⁾ 		
<ul style="list-style-type: none"> Not to obstruct drainage on the roof. 			

MW items	1.55	2.55	3.55
	<ul style="list-style-type: none"> Fence wall to be used as dividing wall (usually for demarcation of ownerships) but not to be used as parapet wall and protective barrier.⁽²⁾ 		
	<ul style="list-style-type: none"> No fence wall ≥ 1.1 m in height should be constructed within horizontal clearance of 500 mm from retractable awning either fully extended or retracted. 		
	<ul style="list-style-type: none"> No part of fence wall projects beyond external wall. 		
	<ul style="list-style-type: none"> No fence wall should be erected within 500 mm from trellis. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Erection or alteration of fence walls ≤ 500 mm in height on a roof may be DEW item 20. For details, please refer to descriptions of the relevant DEW item. 		

⁽¹⁾ For MW item 1.55 only

⁽²⁾ For MW items 2.55 and 3.55 only

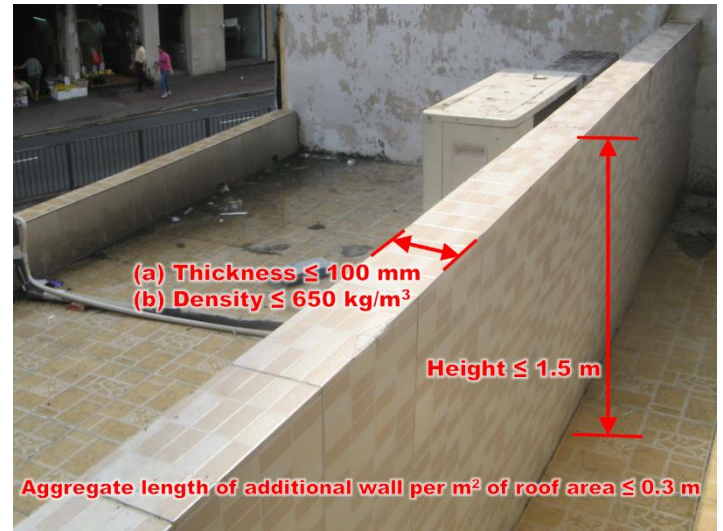
B(P)R represents Building (Planning) Regulations; (C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and detail for MW items 2.55 and 3.55 are shown in Appendix VII.

Item 1.55 Erection or alteration of fence wall on roof



Item 2.55 Erection or alteration of fence wall on roof



Item 3.55 Erection or alteration of fence wall on roof



3.15.1 Solid fence wall on roof

MW items	2.61	3.61
Types of works	A & B	
Simple comparison	Repair of ...	
	Solid fence wall on a roof ...	
	Height of the wall ≤ 2 m;	Height of the wall ≤ 1.5 m;
	Not involve alteration of other structural elements;	
	Not MW item 3.61; and	
	Not DEW item 20.	
Other considerations	<ul style="list-style-type: none"> B(C)R 34 - Not damage waterproofing of the roof. Not to obstruct drainage on the roof. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
*See subsection 3.32	<ul style="list-style-type: none"> Repair of fence walls ≤ 500 mm in height on a roof may be DEW item 20. For details, please refer to descriptions of the relevant DEW item. 	

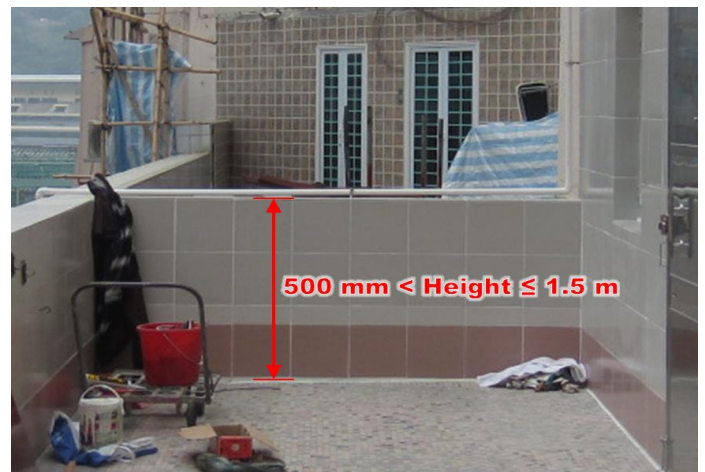
B(C)R represents Building (Construction) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW items 2.61 and 3.61 are shown in Appendix VII.

Item 2.61 Repair of solid fence wall on roof



Item 3.61 Repair of solid fence wall on roof



3.15.1 Solid fence wall on roof

MW items	2.64	3.64
Types of works	A & G	
Simple comparison	Removal of ...	
	Solid fence wall on a roof ...	
	Height of the wall \leq 2 m;	Height of the wall \leq 1.5 m;
	Not involve alteration of other structural elements;	
	Not MW item 3.64; and	
	Not DEW item 20.	
Other considerations	<ul style="list-style-type: none"> • B(DW)R10 - Not to overload the floor. 	
	<ul style="list-style-type: none"> • B(C)R 34 - Not to damage the existing waterproofing of the roof. 	
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> • Not to obstruct drainage on the roof. 	
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> • Removal of solid fence walls \leq 500 mm in height on a roof may be DEW item 20. For details, please refer to descriptions of the relevant DEW item. 	

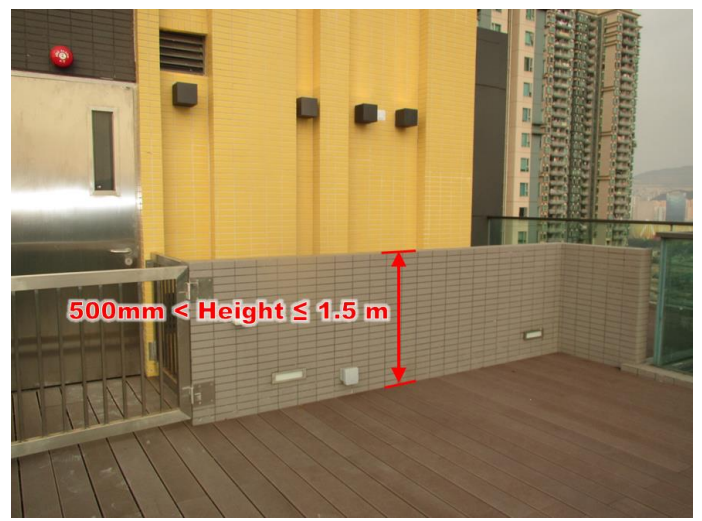
B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.64 and 3.64 are shown in Appendix VII.

Item 2.64 Removal of solid fence wall on roof



Item 3.64 Removal of solid fence wall on roof



3.15.2 Solid fence wall on-grade

MW items	1.7	2.6
Types of works	A	
Simple comparison	Erection or alteration of ...	
	Solid fence wall on-grade ...	
	Height of the wall ≤ 5 m;	Height of the wall ≤ 3 m; and
	Not MW Item 2.6; and	
	Not DEW item 5.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 	
	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. 	
	<ul style="list-style-type: none"> PNAP APP-103 - Not to construct fence wall on newly reclaimed land. 	
	<ul style="list-style-type: none"> PNAP ADV-22 - Control of the felling or transplanting of trees. 	
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. 	
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> Code of Practice on Working near Electricity Supply Lines - Provision of precautionary measures against damage of underground electricity supply cables. 	
	<ul style="list-style-type: none"> No fence wall > 1.1 m in height should be constructed within horizontal clearance of 500 mm from retractable awning (no matter fully extended or retracted). 	
	<ul style="list-style-type: none"> No fence wall should be erected within 500 mm from trellis. 	
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 ($1.5 \text{ m} < \text{Depth} \leq 3 \text{ m}$) or 2.11 ($0.3 \text{ m} < \text{Depth} \leq 1.5 \text{ m}$). Associate spread footing construction may be MW Item 1.11 ($\text{Depth} \leq 3 \text{ m}$) or 2.10 ($\text{Depth} \leq 1.5 \text{ m}$). 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
<ul style="list-style-type: none"> Erection or alteration of fence walls ≤ 1.1 m in height on-grade may be DEW item 5. For details, please refer to descriptions of the relevant DEW item. 		

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered

Contractors; DEW represents designated exempted works.

Recommended design and details for MW item 2.6 are shown in Appendix VII.

Item 1.7 Erection or alteration of fence wall on-grade



Item 2.6 Erection or alteration of fence wall on-grade



3.15.2 Solid fence wall on-grade

MW items	1.57	3.57
Types of works	A & B	
Simple comparison	Repair of ...	
	Solid fence wall on-grade ...	
		Height of the wall ≤ 3 m; and
	Not MW item 3.57; and	
Other considerations	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Repair of solid fence walls ≤ 1.1 m in height on-grade may be DEW item 5. For details, please refer to descriptions of the relevant DEW item. 	
*See subsection 3.32		

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents Designated exempted works; DEW represents designated exempted works.

Recommended design and details for MW item 3.57 are shown in Appendix VII.

Item 1.57 Repair of solid fence wall on-grade



Item 3.57 Repair of solid fence wall on-grade



3.15.2 Solid fence wall on-grade

MW items	1.9	3.4
Types of works	A & G	
Simple comparison	Removal of ...	
	Solid fence wall on-grade ...	
		Height of the wall ≤ 3 m; and
	Not MW item 3.4; and	
Other considerations	Not DEW Item 5.	
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Removal of fence walls ≤ 1.1 m in height on-grade may be DEW item 5. For details, please refer to descriptions of the relevant DEW item. 	

Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents Designated Exempted Works.

Recommended design and details for MW item 3.4 are shown in Appendix VII.

Item 1.9 Removal of solid fence wall on-grade



Item 3.4 Removal of solid fence wall on-grade



3.15.3 Mesh fence and metal railing on roof

MW items	1.56	2.56	3.56
Types of works	A		
Simple comparison	Erection or alteration of ...		
	Mesh fence or metal railing (with or without a solid fence wall as its lower part) on a roof ...		
	Height of the structure (including feature at its top) ≤ 5 m;	Height of the structure (including feature at its top) ≤ 2.5 m;	Height of the structure (including feature at its top) ≤ 1.5 m;
	If the lower part is a solid fence wall:		
	Height of the wall alone ≤ 1.5 m;	(i) Height of the wall alone ≤ 1.1 m;	(i) Height of the wall alone ≤ 300 mm;
		(ii) Density of the wall ≤ 650 kg/m ³ ;	
		(iii) Thickness of the wall ≤ 100 mm;	
		(iv) Aggregate length of additional walls per m ² of the roof area ≤ 0.3 m;	
	Not involve alteration of other structural elements;		
	No additional load to any cantilevered slab;		
		Fence or railing is not used as a protective barrier;	
		Thickness of the supporting roof slab ≥ 150 mm;	
	Not MW item 2.56 or 3.56; and	Not MW item 3.56; and	
	Not DEW item 18.		
Other considerations *See subsection 3.32	• B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with.		
	• B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with.		
	• B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof.		
	• B(C)R 37-38 & PNAP APP-110 – Design and construction requirements of protective barrier. ⁽¹⁾		
	• B(C)R 34 - Not to damage the existing waterproofing of the roof.		
	• Hong Kong Airport (Control of Obstructions) Ordinance, PNAP APP-32 & PNRC 7 - Not exceeding the airport height restrictions. ⁽¹⁾		

MW items	1.56	2.56	3.56
	<ul style="list-style-type: none"> Outline Zoning Plan - Not exceeding the height restrictions.⁽¹⁾ 		
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 		
	<ul style="list-style-type: none"> Not exceed the highest point of building (including features at its top).⁽²⁾ 		
	<ul style="list-style-type: none"> Not to obstruct drainage on the roof. 		
	<ul style="list-style-type: none"> Fence wall to be used as dividing wall (usually for demarcation of ownerships) but not to be used as parapet wall and protective barrier.⁽²⁾ 		
	<ul style="list-style-type: none"> No fence wall ≥ 1.1 m in height, should be constructed within horizontal clearance of 500 mm from retractable awning (either fully extended or retracted).⁽³⁾ 		
	<ul style="list-style-type: none"> No fence wall should be erected within 500 mm from trellis. 		
	<ul style="list-style-type: none"> No part of mesh fence or railing should be projected beyond external wall. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Erection or alteration of fences or railings ≤ 1.1 m in height on a roof may be DEW item 18. For details, please refer to descriptions of the relevant DEW item. 		

⁽¹⁾ For MW item 1.56 only

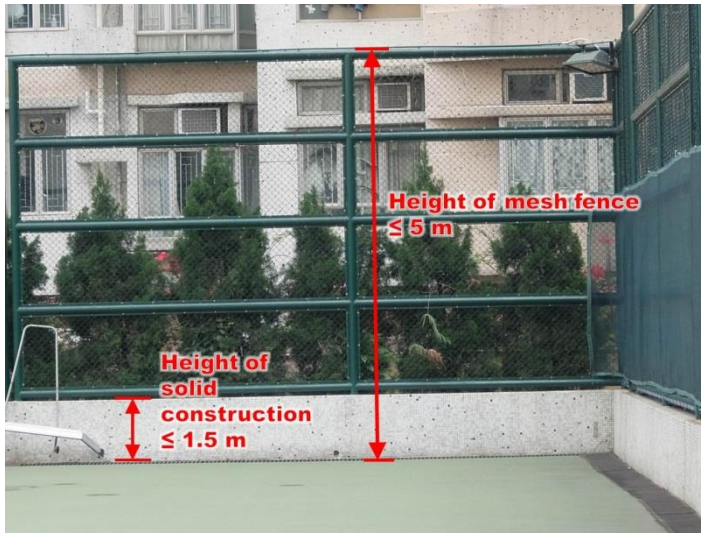
⁽²⁾ For MW items 2.56 and 3.56 only

⁽³⁾ For MW items 1.56 and 2.56 only

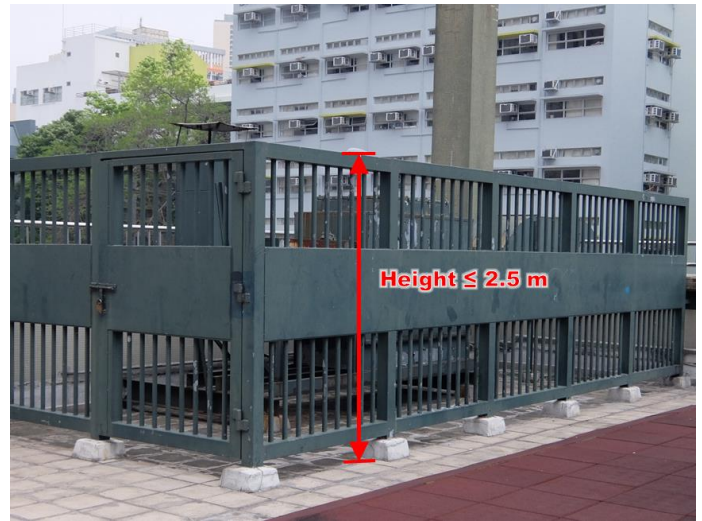
B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW items 2.56 and 3.56 are shown in Appendix VII.

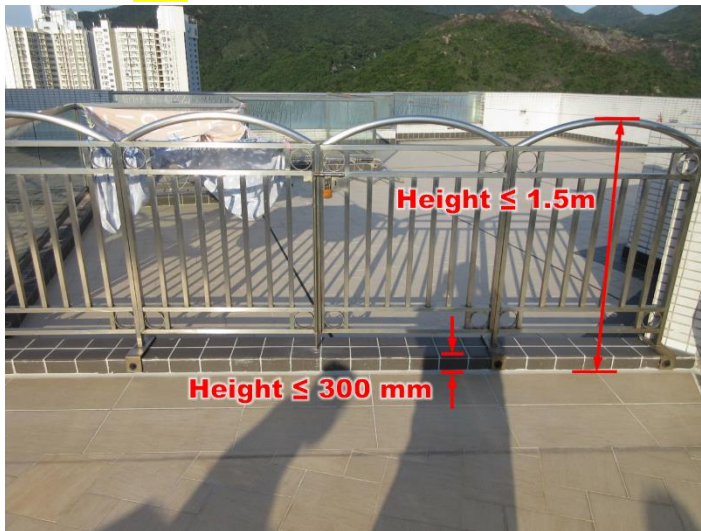
Item 1.56 Erection or alteration of mesh fence on roof



Item 2.56 Erection or alteration of metal railing on roof



Item 3.56 Erection or alteration of metal railing on roof



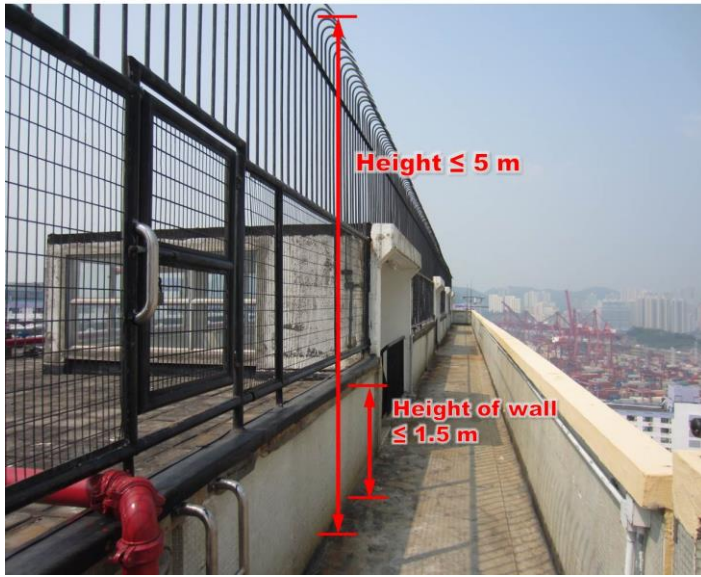
3.15.3 Mesh fence and metal railing on roof

MW items	2.62	3.62
Types of works	A & B	
Simple comparison	Repair of ...	
	Mesh fence or metal railing (with or without a solid fence wall as its lower part) on a roof ...	
	Height of the structure (including feature at its top) \leq 5 m;	Height of the structure (including feature at its top) \leq 2.5 m;
	If the lower part is a solid fence wall:	
	Height of the wall alone \leq 1.5 m;	Height of the wall alone \leq 1.1 m;
	Fence or railing is not used as a protective barrier;	
	Not involve alteration of other structural elements;	
	Not MW item 3.62; and	
	Not DEW item 18.	
Other considerations	• B(C)R 34 - Not to damage waterproofing of the roof.	
	• Not to obstruct drainage on the roof.	
	• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.	
	• Repair of fences or railings \leq 1.1 m in height on a roof may be DEW item 18. For details, please refer to descriptions of the relevant DEW item.	
*See subsection 3.32		

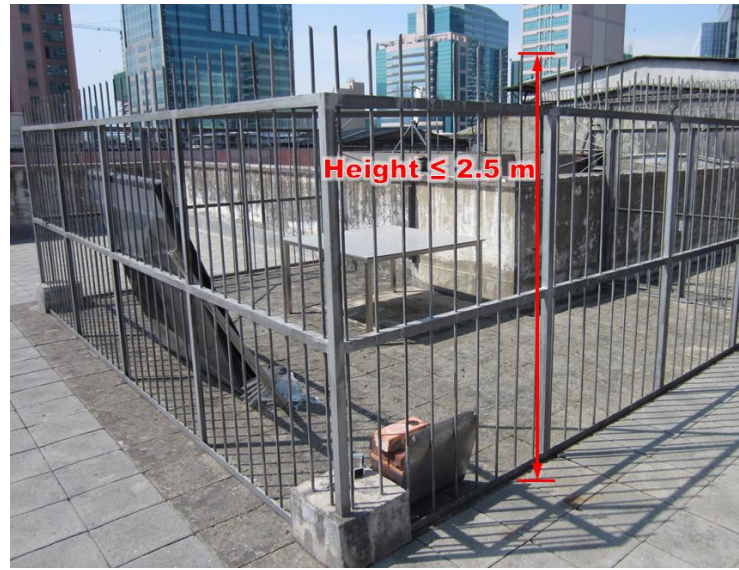
B(C)R represents Building (Construction) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW items 2.62 and 3.62 are shown in Appendix VII.

Item 2.62 Repair of mesh fence / metal railing on roof.



Item 3.62 Repair of metal railing on roof.



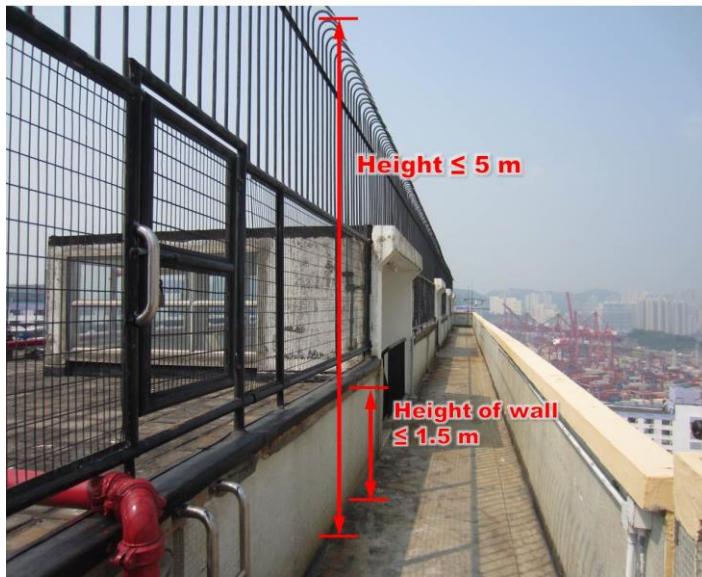
3.15.3 Mesh fence and metal railing on roof

MW items	2.65	3.65
Types of works	A & G	
Simple comparison	Removal of ...	
	Mesh fence or metal railing (with or without a solid fence wall as its lower part) on a roof ...	
	Height of the structure (including feature at its top) \leq 5 m;	Height of the structure (including feature at its top) \leq 2.5 m;
	If the lower part is a solid fence wall :	
	Height of the wall alone \leq 1.5 m;	Height of the wall alone \leq 1.1 m;
	Not involve alteration of other structural elements;	
	Not MW item 3.65; and	
	Not DEW item 18.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 11 & Demolition Code 2004 - Provision of precautionary measures. B(C)R 34 - Not to damage the existing waterproofing of the roof. B(DW)R10 - Not to overload the floor. PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. Not to obstruct drainage on the roof. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. Removal of fences or railings \leq 1.1 m in height on a roof may be DEW item 18. For details, please refer to descriptions of the relevant DEW item. 	

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.65 and 3.65 are shown in Appendix VII.

Item 2.65 Removal of mesh fence / metal railing on roof



Item 3.65 Removal of metal railing on roof



3.15.4 Mesh fence and metal railing on-grade

MW items	1.59	2.57
Types of works	A	
Simple comparison	Erection of ...	
	Mesh fence or metal railing on top of a solid fence wall on-grade ...	
	Other than an unauthorised solid fence wall;	Other than an unauthorised solid fence wall and a solid fence wall falling within the description of DEW item 5 that was erected, altered or repaired without the approval and consent under section 14(1) of the BO;
	Aggregate height of the wall (including fence, railing and feature at its top) ≤ 10 m;	Aggregate height of the wall (including fence, railing and feature at its top) ≤ 5 m;
	Height of the wall alone ≤ 2.5 m;	
		Fence or railing not used as a protective barrier; and
	Not MW item 2.57; and	
	Not DEW item 21.	
Other considerations	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Erection of mesh fences or metal railings on top of solid fence wall ≤ 2.5 m high on-grade resulting in the total height of ≤ 3 m (including fence, railing and feature at its top) may be DEW item 21. For details, please refer to descriptions of the relevant DEW item. 	
*See subsection 3.32		

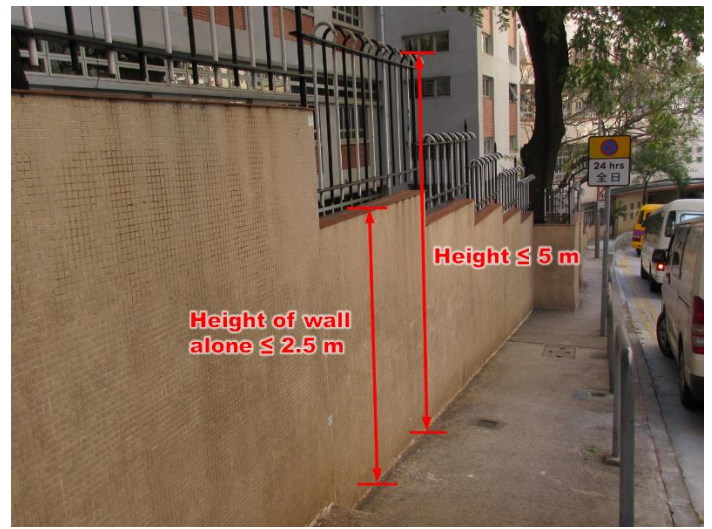
PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.57 are shown in Appendix VII.

Item 1.59 Erection of mesh fence on top of solid fence wall on-grade



Item 2.57 Erection of metal railing on top of solid fence wall on-grade



3.15.4 Mesh fence and metal railing on-grade

MW items	1.8	2.7
Types of works	A	
Simple comparison	Erection or alteration of ...	
	External mesh fence or metal railing (with or without a solid fence wall as its lower part) on-grade ...	
	Height of the structure (including feature at its top) ≤ 10 m;	Height of the structure (including feature at its top) ≤ 5 m;
	If the lower part is a solid fence wall:	
	Height of the wall alone ≤ 3 m;	Height of the wall alone ≤ 2.5 m;
		Fence or railing not used as a protective barrier; and
	Not MW item 2.7; and	
	Not DEW item 16.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 	
	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. 	
	<ul style="list-style-type: none"> PNAP ADV-22 - Control of the felling or transplanting of trees. 	
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. 	
	<ul style="list-style-type: none"> Code of Practice on Working near Electricity Supply Lines - Provision of precautionary measures against damage of underground electricity supply cables. 	
	<ul style="list-style-type: none"> No fence wall of ≥ 1.1 m in height should be constructed within horizontal clearance of 500 mm from retractable awning (either fully extended or retracted). 	
	<ul style="list-style-type: none"> No fence wall should be erected within 500 mm from trellis. 	
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 (1.5 m < Depth ≤ 3 m) or 2.11 (0.3 m < Depth ≤ 1.5 m). Associate spread footing construction may be MW Item 1.11 (Depth ≤ 3 m) or 2.10 (Depth ≤ 1.5 m). 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

MW items	1.8	2.7
	<ul style="list-style-type: none"> Erection or alteration of mesh fences or metal railings ≤ 3 m high on-grade may be DEW item 16. For details, please refer to descriptions of the relevant DEW item. 	

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW item 2.7 are shown in Appendix VII.

Item 1.8 Erection or alteration mesh fence on-grade

Item 2.7 Erection or alteration of mesh fence on-grade



3.15.4 Mesh fence and metal railing on-grade

MW items	1.58	2.58	3.58
Types of works	A & B		
Simple comparison	Repair of ...		
	External mesh fence or metal railing (with or without a solid fence wall as its lower part) on-grade ...		
		Height of the structure (including feature at its top) ≤ 10 m;	Height of the structure (including feature at its top) ≤ 5 m;
		If the lower part is a solid fence wall :	
		Height of the wall alone ≤ 3 m;	Height of the wall alone ≤ 2.5 m;
		Fence or railing is not used as a protective barrier;	
		Not MW item 2.58 or 3.58; and	Not MW item 3.58; and
	Not DEW item 6.		
Other considerations	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Repair of external mesh fences or metal railings ≤ 3 m in height on-grade may be DEW item 6. For details, please refer to descriptions of the relevant DEW item. 		
*See subsection 3.32			

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW items 2.58 and 3.58 are shown in Appendix VII.

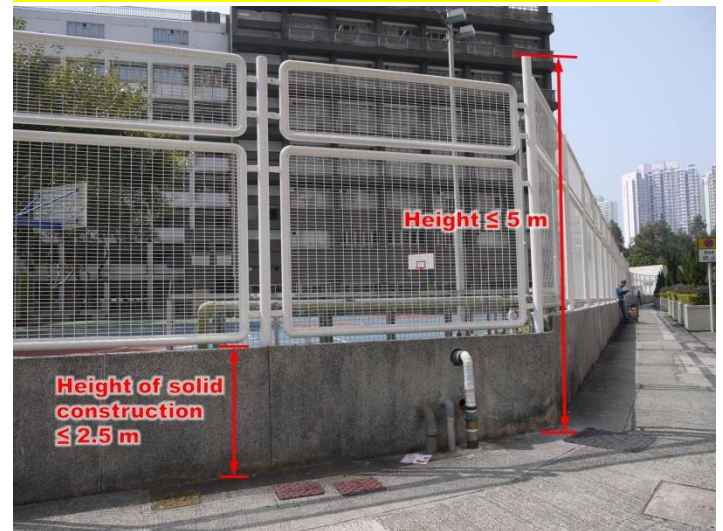
Item 1.58 Repair of external mesh fence on-grade



Item 2.58 Repair of external mesh fence on-grade



Item 3.58 Repair of external mesh fence on-grade



3.15.4 Mesh fence and metal railing on-grade

MW items	1.10	2.67	3.5
Types of works	A & G		
Simple comparison	Removal of ...		
	External mesh fence or Metal railing (with or without a solid fence wall as its lower part) ...		
	On-grade;		
		Height of the structure (including feature at its top) ≤ 10 m;	Height of the structure (including feature at its top) ≤ 5 m;
		If the lower part is a solid fence wall :	
		(i) Height of the wall alone ≤ 3 m;	(i) Height of the wall alone ≤ 2.5 m; and
	Not MW item 2.67 or 3.5; and	Not MW item 3.5; and	
	Not DEW item 6.		
Other considerations	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 		
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Removal of external mesh fences or metal railings ≤ 3 m in height on-grade may be DEW item 6. For details, please refer to descriptions of the relevant DEW item. 		

Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; DEW represents designated exempted works

Recommended design and details for MW items 2.67 and 3.5 are shown in Appendix VII.

Item 1.10 Removal of external mesh fence on-grade



Item 2.67 Removal of external mesh fence on-grade



Item 3.5 Removal of external mesh fence on-grade



3.15.5 Pole on roof

MW items	1.54	2.54	3.54
Types of works	A		
Simple comparison	Erection or alteration of ...		
	Pole on a roof ...		
	Height of the pole (including feature at its top) ≤ 5 m;	Height of the pole (including feature at its top) ≤ 2.5 m;	Height of the pole (including feature at its top) ≤ 1.5 m;
		Weight of the pole (including feature at its top but excluding pedestal) ≤ 100 kg;	
	Not involve alteration of other structural elements;		
	No additional load to cantilevered slabs;		
		Thickness of supporting roof slab ≥ 150 mm;	
		Distance between 2 poles ≥ 2.5 m from each other;	
	Not MW item 2.54 or 3.54; and	Not MW item 3.54; and	
	Not DEW item 19.		
Other considerations *See subsection 3.32	• B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with.		
	• B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with.		
	• B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof.		
	• B(C)R 34 - Not to damage waterproofing of the roof.		
	• Hong Kong Airport (Control of Obstructions) Ordinance, PNAP APP-32 & PNRC 7 - Not exceeding the airport height restrictions. ⁽¹⁾		
	• The wind dynamic effect should be considered if aspect ratio is high. Reference can be made to BS EN 40-3-1:2013 Lighting columns. Design and verification - Specifications for characteristics loads.		
	• Stainless steel drilled-in anchors should be used.		
	• Outline Zoning Plan - Not exceeding the height restrictions. ⁽¹⁾		
	• Not to obstruct drainage on the roof.		
	• Not exceed the highest point of building. ⁽²⁾		
• If the pole is fixed to parapet wall, the wall shall be made of RC and its thickness is			

MW items	1.54	2.54	3.54
	not less than 125 mm. ⁽²⁾		
	<ul style="list-style-type: none"> No part of pole projects beyond external wall. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Erection or alteration of poles ≤ 1.1 m in height on a roof may be DEW item 19. For details, please refer to descriptions of the relevant DEW item. 		

(1) For MW item 1.54 only

(2) For MW items 2.54 and 3.54 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted Works.

Recommended design and details for MW items 2.54 and 3.54 are shown in Appendix VII.

Item 1.54 Erection or alteration of pole on roof



Item 2.54 Erection or alteration of pole on roof



Item 3.54 Erection or alteration of pole on roof



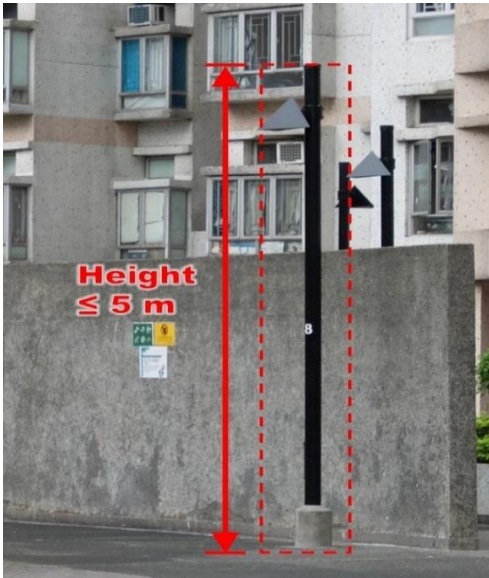
3.15.5 Pole on roof

MW items	2.60	3.60
Types of works	A & B	
Simple comparison	Repair of ...	
	Pole on a roof ...	
	Not involve alteration of other structural elements;	
	Height of the pole (including feature at its top) ≤ 5 m; and	Height of the pole (including feature at its top) ≤ 2.5 m; and
	Not MW item 3.60; and	
	Not DEW item 19.	
Other considerations	• B(C)R 34 - Not to damage the existing waterproofing of the roof.	
	• Not to obstruct drainage on roof.	
	• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected	
	• Repair of poles ≤ 1.1 m in height on a roof may be DEW item 19. For details, please refer to descriptions of the relevant DEW item.	
*See subsection 3.32		

B(C)R represents Building (Construction) Regulations; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.60 and 3.60 are shown in Appendix VII.

Item 2.60 Repair of pole on roof.



Item 3.60 Repair of pole on roof.



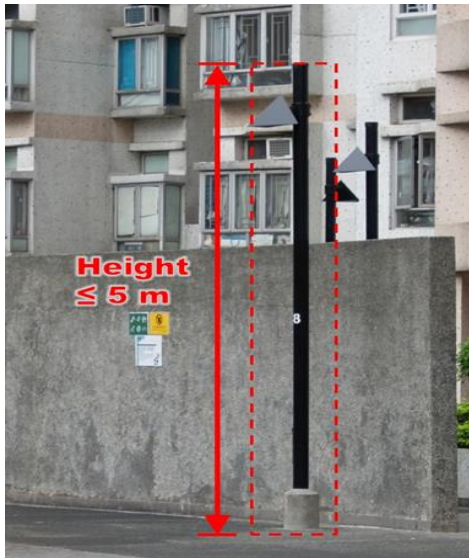
3.15.5 Pole on roof

MW items	2.63	3.63
Types of works	A & G	
Simple comparison	Removal of ...	
	Pole on a roof ...	
	Not involve alteration of structural elements;	
	Height of the pole (including feature at its top) \leq 5 m; and	Height of the pole (including feature at its top) \leq 2.5 m; and
	Not MW item 3.63; and	
	Not DEW item 19.	
Other considerations	<ul style="list-style-type: none"> B(C)R 34 - Not to damage waterproofing of the roof. 	
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 	
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 	
	<ul style="list-style-type: none"> Not to obstruct drainage on the roof. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Removal of poles \leq 1.1 m in height on a roof may be DEW item 19. For details, please refer to descriptions of the relevant DEW item. 	

B(C)R represents Building (Construction) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers and Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.63 and 3.63 are shown in Appendix VII.

Item 2.63 Removal of pole on roof



Item 3.63 Removal of pole on roof



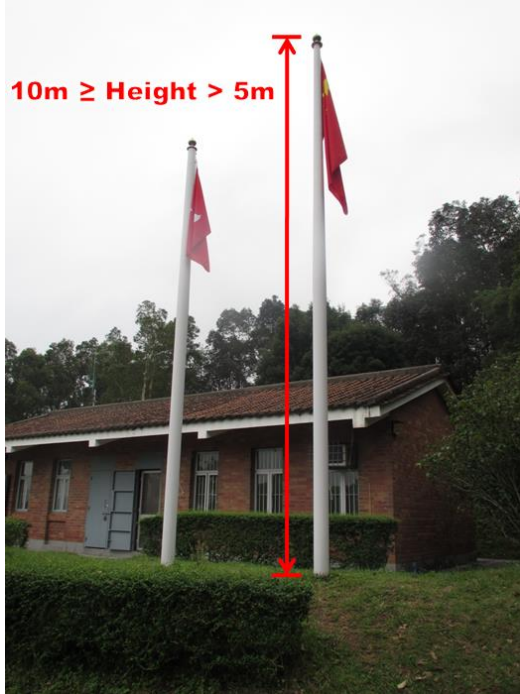
3.15.6 Pole on-grade

MW items	1.53	2.53
Types of works	A	
Simple comparison	Erection or alteration of ...	
	External pole on-grade ...	
	Height of the pole (including feature at its top) \leq 10 m; and	Height of the pole (including feature at its top) \leq 5 m;
		Weight of the pole (including feature at its top but excluding pedestal) \leq 150 kg; and
	Not MW item 2.53; and	
	Not DEW item 17.	
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 	
	<ul style="list-style-type: none"> PNAP ADV-22 - Control of the felling or transplanting of trees. 	
	<ul style="list-style-type: none"> The wind dynamic effect should be considered if aspect ratio is high. Reference can be made to BS EN 40-3-1:2013 Lighting columns. Design and verification - Specifications for characteristics loads. 	
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. 	
	<ul style="list-style-type: none"> Code of Practice on Working near Electricity Supply Lines - Provision of precautionary measures against damage of underground electricity supply cables. 	
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 (1.5 m < Depth \leq 3 m) or 2.11 (0.3 m < Depth \leq 1.5 m). 	
	<ul style="list-style-type: none"> Associate spread footing construction may be MW item 1.11 (Depth \leq 3 m) or 2.10 (Depth \leq 1.5 m). 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Erection or alteration of external poles \leq 3 m in height on-grade may be DEW item 17. For details, please refer to descriptions of the relevant DEW item. 	

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents Designated Exempted Works.

Recommended design and details for MW item 2.53 are shown in Appendix VII.

Item 1.53 Erection or alteration of external pole on-grade



Item 2.53 Erection or alteration of external pole on-grade



3.15.6 Pole on-grade

MW items	1.58	2.59	3.59
Types of works	A & B		
Simple comparison	Repair of ...		
	External pole on-grade ...		
		Height of the pole (including feature at its top) ≤ 10 m; and	Height of the pole (including feature at its top) ≤ 5 m; and
	Not MW item 2.59 or 3.59; and	Not MW item 3.59; and	
	Not DEW item 17.		
Other considerations	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Repair of external poles ≤ 3 m in height on-grade may be DEW item 17. For details, please refer to descriptions of the relevant DEW item. 		
*See subsection 3.32			

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.59 and 3.59 are shown in Appendix VII.

Item 1.58 Repair of external pole on-grade



Item 2.59 Repair of external pole on-grade



Item 3.59 Repair of external pole on-grade



3.15.6 Pole on-grade

MW Items	1.10	2.66	3.66
Types of works	A & G		
Simple comparison	Removal of ...		
	External pole on-grade ...		
		Height of the pole (including feature at its top) \leq 10 m; and	Height of the pole (including feature at its top) \leq 5 m; and
	Not MW item 2.66 or 3.66; and	Not MW item 3.66; and	
	Not DEW item 17.		
Other considerations	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 		
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Removal of external poles \leq 3 m in height on-grade may be DEW item 17. For details, please refer to descriptions of the relevant DEW item. 		

Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.66 and 3.66 are shown in Appendix VII.

Item 1.10 Removal of external pole on-grade



Item 2.66 Removal of external pole on-grade



Item 3.66 Removal of external pole on-grade



3.15.7 Pole on fence wall on-grade

MW items	1.59	2.57
Types of works	A	
Simple comparison	Erection of ...	
	Pole on top of a solid fence wall on-grade ...	
	Other than an unauthorised solid fence wall;	Other than an unauthorised solid fence wall and a solid fence wall falling within the description of DEW item 5 that was erected, altered or repaired without the approval and consent under section 14(1) of the BO;
	Height of the pole (including features on top) \leq 10 m;	Height of the pole (including features on top) \leq 5 m;
	Height of the wall alone \leq 2.5 m;	
		Fence or railing not used as a protective barrier; and
	Not MW item 2.57; and	
	Not DEW item 21.	
Other considerations	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 	
	<ul style="list-style-type: none"> The wind dynamic effect should be considered if aspect ratio is high. Reference can be made to BS EN 40-3-1:2013 Lighting columns. Design and verification. Specification for characteristic loads. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Erection of pole on top of solid fence walls \leq 2.5 m high on-grade resulting in the total height of \leq 3 m (including feature at its top) may be DEW item 21. For details, please refer to descriptions of the relevant DEW item. 	
*See subsection 3.32		

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.57 are shown in Appendix VII.

Item 1.59 Erection of pole on top of a solid fence
wall on-grade



Item 2.57 Erection of pole on top of a solid fence
wall on-grade



3.16 Metal Gate at a Fence Wall or at an Entrance to a Building

3.16.1 Metal gate at a fence wall or an entrance to a building

MW items	1.16	2.16	3.13
Types of works	A		
Simple comparison	Erection, alteration or repair of ...		Erection, alteration, repair or removal of ...
	Metal gate at a fence wall or at an entrance to a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements;		
	Height of the gate ≤ 3.2 m;		
	Weight of at least one leaf of the gate > 300 kg.	Weight of at least one leaf of the gate > 200 kg; and	
		Weight of each leaf of the gate ≤ 300 kg.	Weight of each leaf of the gate ≤ 200 kg; and
		Not DEW item 8.	
Other considerations	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 & FS Code 2011 subsections B5, B7, B8, B9 & B13 - Provision of locking devices that can be readily open from inside without the use of key & control of the minimum width of metal gate if the metal gate is fixed at the entrance of a building as well as the exit of any required staircase. 		
	<ul style="list-style-type: none"> B(P)R 15 - Not to open the gate over streets. 		
	<ul style="list-style-type: none"> B(DW)R 11 & Demolition Code 2004 - Provision of precautionary measures from sudden collapse on cutting the steelworks. 		
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. 		
	<ul style="list-style-type: none"> PNAP APP-146 & PNRC 68 - Design & installation standards of metal gate. 		
	<ul style="list-style-type: none"> PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> Shutter Code 2003 issued by the Electrical & Mechanical Services Department should be complied with if the metal gates are electrically operated. 		
	<ul style="list-style-type: none"> A Safety Guide on Gate Work issued by the Labour Department - Safety tips & key points to note on gate-related work. 		
	<ul style="list-style-type: none"> The wind dynamic effect should be considered if aspect ratio is high. Reference can be made to BS EN 40-3-1:2013 Lighting columns. Design and verification - Specification for characteristic loads. 		
	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. 		

- Erection, alteration, repair or removal of metal gates of ≤ 2.2 m in height & with each leaf ≤ 1.2 m in width & weight ≤ 100 kg may be DEW item 8. For details, please refer to descriptions of the relevant DEW item.

B(P)R represents Building (Planning) Regulations; B(DW)R represents Building (Demolition works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Shutter Code 2003 represents Code of Practice for Installation of Electrically Operated Sliding Gates, Sliding Glass Doors and Rolling Shutters; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommended design and details for MW items 2.16 and 3.13 are shown in Appendix VII.

Item 1.16 Erection, alteration or repair of metal gate



Item 2.16 Erection, alteration or repair of metal gate



Item 3.13 Erection, alteration, repair or removal of metal gate



3.16.1 Metal gate at a fence wall or an entrance to a building

MW items	1.40	2.40	3.33
Types of works	A & G		
Simple comparison	Removal of ...		
	Metal gate at a fence wall or at an entrance to a building ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements;		
	Height of the gate $\leq 3.2\text{m}$;		
	Weight of at least one leaf of the gate $> 300\text{ kg}$.	Weight of at least one leaf of the gate $> 200\text{ kg}$; and	
	Weight of each leaf of the gate $\leq 300\text{ kg}$.	Weight of each leaf of the gate $\leq 200\text{ kg}$; and	
		Not DEW item 8.	
Other considerations	<ul style="list-style-type: none"> • B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelworks. 		
	<ul style="list-style-type: none"> • Demolition Code 2004 - Provision of precautionary measures. 		
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. 		
	<ul style="list-style-type: none"> • Removal of metal gates of $\leq 2.2\text{ m}$ in height & with each leaf $\leq 1.2\text{ m}$ wide & weight $\leq 100\text{ kg}$ may be DEW item 8. For details, please refer to descriptions of the relevant DEW item. 		

B(DW)R represents Building (Demolition works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.40 and 3.33 are shown in Appendix VII.

Item 1.40 Removal of metal gate



Item 2.40 Removal of metal gate



Item 3.33 Removal of metal gate



3.17 Water Tank

3.17.1 Water tank

MW items	1.49	2.3	2.4
Types of works	A, D & E	A & D	A, D & G
Simple comparison	Erection or alteration of ...	Replacement of ...	Removal of ...
	Glass reinforced polyester (GRP) water tank ...		Water tank ...
	On-grade or on a slab (other than a cantilevered slab);	On a roof;	On-grade or on a slab;
	Not involve alteration of other structural elements ;		Not involve alteration of other structural elements ;
		In accordance with the original design;	
	Capacity of the tank $\leq 4.5 \text{ m}^3$;	Capacity of the tank $\leq 9 \text{ m}^3$;	
		Water head of the tank $\leq 2 \text{ m}$; and	
		Distance from the edge of roof $\leq 1.5 \text{ m}$; and	If located on a roof, distance from the edge of the roof $\leq 1.5 \text{ m}$; and
	Not MW item 2.3; and Not DEW item 3.		Not DEW item 4.
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. ⁽¹⁾ B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or used as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. ⁽¹⁾ B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. ⁽¹⁾ B(C)R 33 and 34 - Not to damage the waterproofing of the roof. ⁽¹⁾ B(DW)R 10 - Not to overload the floor. B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. PNAP APP-100 - Structural design of the tank & the fixing arrangement. ⁽¹⁾ Stainless steel drilled-in anchors should be used. 		

MW items	1.49	2.3	2.4
	<ul style="list-style-type: none"> Capacity of the water tank means the effective capacity of the tank disregarding its actual size. 		
	<ul style="list-style-type: none"> “Water tanks” in this MW item include supporting structure of the tank. 		
	<ul style="list-style-type: none"> Hong Kong Airport (Control of Obstructions) Ordinance, PNAP APP-32 & PNRC 7 - Not exceeding the airport height restrictions. ⁽¹⁾ 		
	<ul style="list-style-type: none"> Outline Zoning Plan - Not exceeding the height restrictions. ⁽¹⁾ 		
	<ul style="list-style-type: none"> Not to obstruct drainage on roof. ⁽¹⁾ 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
	<ul style="list-style-type: none"> Replacement or removal of GRP water tanks $\leq 9\text{m}^3$ (distance from the roof edge > 1.5 m) may be DEW item 3 or 4. For details, please refer to descriptions of the relevant DEW items. 		

⁽¹⁾ For MW item 1.49 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors; DEW represents designated exempted works.

Recommend design and details for MW items 2.3 and 2.4 are shown in Appendix VII.

Item 1.49 Erection or alteration of GRP water tank



Item 2.3 Replacement of GRP water tank



Item 2.4 Removal of water tank



Item 2.4 Removal of water tank



3.18 Excavation

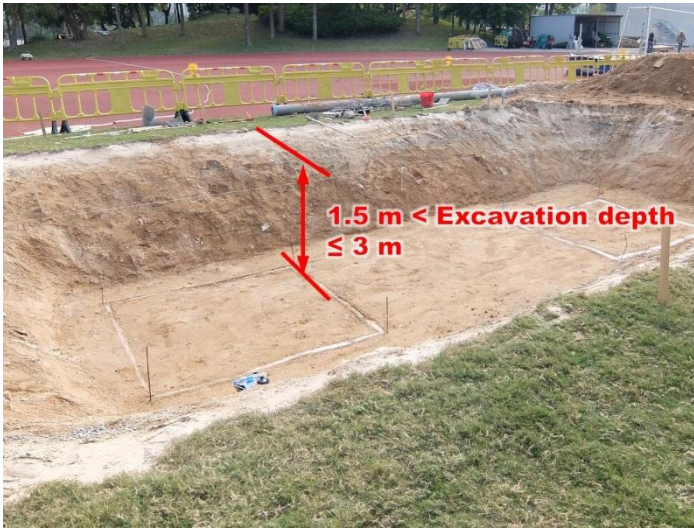
3.18.1 Excavation

MW items	1.12	2.11
Types of works	A	
Simple comparison	Excavation works ...	
	Associated with carrying out of other minor works or DEW ...	
	1.5m < depth of the excavation ≤ 3 m.	0.3 m < depth of the excavation ≤ 1.5 m.
Other considerations	<ul style="list-style-type: none"> • PNAP APP-48 & Supervision code 2009 - Provision of qualified site supervision. 	
	<ul style="list-style-type: none"> • PNAP APP-22 - Dewatering in foundation and basement excavation works. 	
	<ul style="list-style-type: none"> • PNAP APP-57 - Requirements for an Excavation and Lateral Support Plan. 	
	<ul style="list-style-type: none"> • Construction Site (Safety) Regulations 41 - Safe guarding the edges of excavation. 	
	<ul style="list-style-type: none"> • Code of Practice on Working near Electricity Supply Lines - Provision of precautionary measures against damage of underground electricity supply cables. 	
	<ul style="list-style-type: none"> • Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. 	
	<ul style="list-style-type: none"> • PNAP APP-158 - Quality supervision of building works (Stages of excavation and lateral support works). 	
	<ul style="list-style-type: none"> • MTRCL's agreement should be obtained before carrying out the excavation works in Schedule Area 3 (Railway Protection Area). Section 27 of the Railways Ordinance, Cap 519 or section 15 of the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance, Cap 276 will be invoked in case the proposed MW would be incompatible with any works for the construction, Maintenance or improvement of the railway or with the operation thereof. 	
	<ul style="list-style-type: none"> • No additional floor area will be resulted after the excavation work. 	
	<ul style="list-style-type: none"> • No unauthorized excavation of land or slope for development of platform, fencing and drainage works in "Agriculture" zone and conservation zones in statutory town plans. 	
<ul style="list-style-type: none"> • Excavation ≤ 0.3m in depth may be DEW item 9. For details, please refer to descriptions of the relevant DEW item. 		

Supervision Code 2009 represents Code of Practice for Site Supervision 2009; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.11 are shown in Appendix VII.

Item 1.12 Excavation works



Item 2.11 Excavation works



3.19 Metal Wind Guard

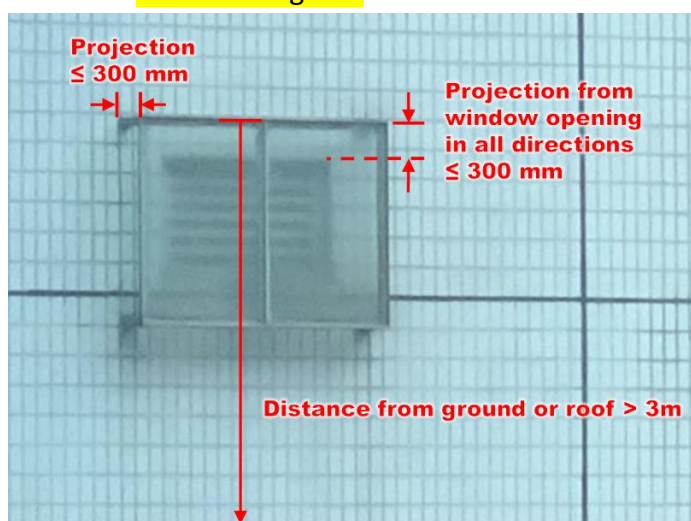
3.19.1 Metal wind guard

MW item	2.41
Types of works	A
Simple comparison	<p>Erection, alteration, repair or removal of ...</p> <p>Metal wind guard for an opening on an external wall ...</p> <p>No additional load to cantilevered slab;</p> <p>The highest point of the wind guard > 3m above ground or roof;</p> <p>Projecting from the wall ≤ 300 mm;</p> <p>Width of the border (not including the corners) between projected image of the wind guard onto the wall and the opening ≤ 300 mm.</p>
Other considerations	<ul style="list-style-type: none"> Stainless steel drilled-in anchors should be used. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.
*See subsection 3.32	<ul style="list-style-type: none"> Erection, alteration, repair or removal of metal wind guards ≤ 3m above ground or roof (but not project over streets or common part of the building) may be DEW item 27.

PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 2.41 are shown in Appendix VII.

Item 2.41 Erection, alteration, repair or removal of metal wind guard



3.20 Green Features (Trellis, Pond, Fountain and Planter)

3.20.1 Trellis on roof

MW items	1.45	2.45	3.44
Types of works	A	A	A & B
Simple comparison	Erection or alteration of ...		Removal of ...
	Trellis located on a roof ...		
	No additional load to cantilevered slab;		
	Not involve alteration of other structure elements;		
	Height of the trellis ≤ 2.5 m;		
	If the works carried out in a common part of the building, at the completion of the works:		Area covered by the trellis $\leq 20\text{m}^2$
	(a) area covered by each trellis $\leq 20\text{ m}^2$; and (b) aggregate of the area covered by each trellis in that common part $\leq 5\%$ of that part;	(a) area covered by each trellis $\leq 5\text{ m}^2$; and (b) aggregate of the area covered by each trellis in that common part $\leq 5\%$ of that part;	
	If the works carried out in a non-common part of the building, at the completion of works:		
	aggregate of the area covered by each trellis in that non-common part $\leq 20\text{ m}^2$ and $\leq 5\%$ of that part;	(a) area covered by each trellis $\leq 5\text{ m}^2$; and (b) aggregate of the area covered by each trellis in that non-common part $\leq 20\text{ m}^2$ and $\leq 5\%$ of that part;	
	Horizontal distance of the trellis from other structures $\geq 500\text{ mm}$;		

MW items	1.45	2.45	3.44
	Length and width (whichever is shorter) of every opening of the overhead frame of the trellis \geq 200 mm; and		
	Not MW item 2.45.		
Other considerations *See subsection 3.32	• B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. ⁽³⁾		
	• B(P)R 30, 31 & 36 - No obstruction to the natural lighting and ventilation. ⁽³⁾		
	• B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. ⁽³⁾		
	• B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof. ⁽³⁾		
	• B(DW)R10 - Not to overload the floor. ⁽²⁾		
	• B(C)R 34 - Not to damage the water proofing of the roof. ⁽³⁾		
	• B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. ⁽²⁾		
	• Demolition Code 2004 - Provision of precautionary measures. ⁽²⁾		
	• PNAP APP 42 para. 22 - No trellis should be located on a refuge roof and prescribed windows/open air shall not be obstructed. ⁽³⁾		
	• PNAP APP-42 para. 22 - Requirements for trellis at garden area or on roof.		
	• Stainless steel drilled-in anchors should be used. ⁽³⁾		
	• Hong Kong Airport (Control of Obstructions) Ordinance & PNAP APP-32 - Not exceeding the airport height restrictions. ⁽¹⁾		
	• Outline Zoning Plan - Not exceeding the height restrictions. ⁽¹⁾		
	• No part exceed the highest point of building. ⁽²⁾		
	• Not to obstruct drainage on roof. ⁽³⁾		
	• Not enclosed on any side & no cover or roof that functions as ceiling. ⁽³⁾		
	• Not project beyond external wall. ⁽³⁾		
• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.			

⁽¹⁾ For MW item 1.45 only

⁽²⁾ For MW item 2.45 only

⁽³⁾ For MW item 1.45 and 2.45 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings

2011; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.45 and 3.44 are shown in Appendix VII.

Item 1.45 Erection or alteration of trellis on roof



Item 2.45 & 3.44 Repair or removal of trellis on roof



Item 2.45 Erection or alteration of trellis on roof



3.20.2 Trellis on grade

MW items	2.44		3.44
Types of works	A		A & B
Simple comparison	Erection or alteration of ...	Removal of ...	Repair of ...
	Trellis in a garden on-grade ...		
	Horizontal distance of the trellis from other structures ≥ 500 mm;		No additional load to cantilevered slab;
	Length and width (whichever is shorter) of every opening of the overhead frame of the trellis ≥ 200 mm;		Not involve alteration of other structural elements;
	Height ≤ 2.5 m; and		
	If the works carried out in private garden, aggregate of the area cover by each trellis ≤ 20 m ² and $\leq 5\%$ of the garden area;	Size of the trellis ≤ 20 m ² .	
	If the works carried out in non-private garden: (a) area of each trellis ≤ 20 m ² ; and (b) aggregate of the area covered by each trellis $\leq 10\%$ of the garden area.		
Other considerations *See subsection 3.32	• B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. ⁽¹⁾		
	• B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. ⁽¹⁾		
	• B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. ⁽¹⁾		
	• Demolition Code 2004-Provision of precautionary measures. ⁽¹⁾		
	• Stainless steel drilled-in anchors should be used. ⁽¹⁾		
	• Code of Practice on Working near Electricity Supply Lines -Precautionary measures against damage of underground electricity supply cables. ⁽¹⁾		

MW items	2.44	3.44
	<ul style="list-style-type: none"> Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Not enclosed on any side & no cover on the roof that functions as a ceiling. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Not project over open spaces or flat roof of other owners' premises. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Associated excavation works may be MW item 1.12 (1.5m < Depth ≤ 3m) or 2.11(0.3m < Depth ≤ 1.5m). 	
	<ul style="list-style-type: none"> Associate spread footing construction may be MW item 1.11 (Depth ≤ 3m) or 2.10 (Depth ≤ 1.5m). ⁽¹⁾ 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

⁽¹⁾ For MW item 2.44 only

B(P)R represents Building (Planning) Regulations; Building (Demolition Works) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.44 and 3.44 are shown in Appendix VII.

Item 2.44 Erection or alteration of trellis on grade



Item 3.44 Repair of trellis on grade



3.20.3 Planter, pond or fountain on roof

MW items	1.52	3.52
Types of works	A	A & B
Simple comparison	Erection or alteration of ... Planter on a roof ... No additional load to cantilevered slab; Not involve alteration of other structural elements; If the roof is an inaccessible roof, no structural element of the roof has a span > 12 m; and Height of the planter: ≤ 600 mm.	Repair or removal of ... ≤ 1.1 m.
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. ⁽¹⁾ B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. ⁽¹⁾ B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. ⁽¹⁾ B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof. ⁽¹⁾ B(DW)R 10 - Not to overload the floor B(C)R 34 - Not to damage the waterproofing of the roof. Demolition Code 2004 - Provision of precautionary measures for removal. Alteration or removal of planter(s) related to Site Coverage of Greenery for claiming for GFA Concession under PNAP APP-151 and APP-152 not allowed. Site Coverage of Greenery of individual building is available in BD website in the order of OP issued date. (https://www.bd.gov.hk/en/resources/codes-and-references/notices-and-reports/GFA.html) PNAP ADV-35 and Introductory Guide on Greening in Buildings - Greening in Building. Hong Kong Airport (Control of Obstructions) Ordinance, PNAP APP-32 & PNRC 7 - Not exceeding the airport height restrictions. ⁽¹⁾ Outline Zoning Plan - Not exceeding the height restrictions. ⁽¹⁾ Not to obstruct drainage on roof. Proper drainage should be provided to avoid water ponding and overloading of the building structure. ⁽¹⁾ 	

- Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common part will be affected.

(1) For MW item 1.52 only

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Concrete Code 2013 represents Code of Practice for Structural Use of Concrete 2013; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; Wind Code 2019 represents Code of Practice on Wind Effects in Hong Kong 2019; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRG represents Practice Notes of Registered Contractors.

Recommend design and details for MW item 3.52 are shown on Appendix VII.

1.52 Erection or alteration of planter on roof



3.52 Repair or removal of planter on roof



3.20.4 Planter, pond or fountain on grade

MW item	2.52
Types of works	A
Simple Comparison	<p>Erection, alteration, repair or removal of ...</p> <p>Outdoor planter, pond or fountain on-grade ...</p> <p>Vertical distance between the highest point and the lowest point of the planter, pond or fountain $\leq 1.5\text{m}$; and</p> <p>Not DEW Item 24.</p>
Other Considerations	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. B(P)R 30, 31 & 36 - No obstruction to the natural lighting and ventilation.
*See subsection 3.32	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. PNAP ADV-35 and Introductory Guide on Greening in Buildings - Greening in Building. Alteration or removal of planter(s) included in Site Coverage of Greenery (SCG) for application of GFA Concession under PNAP APP-151 and APP-152 is not allowed. SCG in private developments can be found in BD's website. (https://www.bd.gov.hk/en/resources/codes-and-references/notices-and-reports/GFA.html). Code of Practice on Working near Electricity Supply Lines -Precautionary measures against damage of underground electricity supply cables. Code of Practice for Avoidance of Damage to Gas Pipes - Provision of precautionary measures against damage to gas pipes. MTRCL's agreement should be obtained before carrying out the excavation works in Schedule Area 3 (Railway Protection Area). Section 27 of the Railways Ordinance, Cap 519 or section 15 of the Mass Transit Railway (Land Resumption and Related Provisions) Ordinance, Cap 276 will be invoked in case the proposed MW would be incompatible with any works for the construction, Maintenance or improvement of the railway or with the operation thereof. Not attach to the building structure. Associated excavation works may be MW item 1.12 ($1.5\text{m} < \text{Depth} \leq 3\text{m}$) or 2.11($0.3\text{m} < \text{Depth} \leq 1.5\text{m}$). Associate spread footing construction may be MW item 1.11 ($\text{Depth} \leq 3\text{m}$) or 2.10 ($\text{Depth} \leq 1.5\text{m}$). Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. For erection or alteration of outdoor planters, ponds or fountains $\leq 600\text{ mm}$ above ground with depth of excavation $\leq 300\text{ mm}$ or for repair or removal of the same \leq

1.1 m above ground with depth of excavation ≤ 300 mm may be DEW item 24. For details, please refer to descriptions of the relevant DEW item.

B(P)R represents Building (Planning) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes of Registered Contractor.

Recommend design and details for MW item 2.52 are shown on Appendix VII.

Item 2.52 Erection, alteration, repair or removal of planter on-grade



Item 2.52 Erection, alteration, repair or removal of pond/fountain on-grade



3.21 Retractable Awning

3.21.1 Retractable awning

MW items	2.43	3.43
Types of works	A & E	A, E & G
Simple comparison	<p>Erection, alteration or repair of ...</p> <p>Retractable awning ...</p> <p>For an opening on an external wall of a building, but only if the opening is:</p> <p>(a) a door opening (other than a door opening that serve as an exit for an escape staircase or leads to a balcony or verandah); or</p> <p>(b) a window opening (other than a window opening for a plant room, lavatory, bathroom or kitchen);</p> <p>Not involve alteration of other structural elements;</p> <p>Not fixed to cantilevered slab;</p> <p>No part of the awning is above the ceiling of the storey on which the opening is located;</p> <p>Distance between the highest point of the awning and ground or roof ≤ 5.5 m;</p> <p>If awning projects over a roof:</p> <p>(a) Projection ≤ 500mm from the external wall when retracted;</p> <p>(b) Projection ≤ 2m from the external wall when fully extended;</p> <p>If awning projects over other places :</p> <p>(a) Projection ≤ 500mm from the external wall when retracted;</p> <p>(b) Projection ≤ 2.5 m from the external wall when fully extended; and</p> <p>The awning is at most 500 mm wider than the opening on both left and right hand side of the opening.</p>	<p>Removal of ...</p> <p>Projecting from an external wall of a building or from a fence wall.</p>
Other	<ul style="list-style-type: none"> B(P)R7(4) - Not project at a height less than 2.5 m above ground level. ⁽¹⁾ 	

MW items	2.43	3.43
considerations	<ul style="list-style-type: none"> B(P)R 29-33 & 36 - No obstruction to the natural lighting & ventilation. ⁽¹⁾ B(DW)R 5 - Not having electric cables or apparatus remained electrically charge. ⁽²⁾ 	
<p>*See subsection 3.32</p>	<ul style="list-style-type: none"> B(P)R 35A, PNAP APP-27, Annex 2 of Appendix E of PNAP ADM-2 & PNAP APP-98 - Not positioning the retractable awning directly above any aperture of gas water heater, fresh air intake of mechanical ventilation system, permanent vent for internal bathroom, or any outlet for ventilation fan, no matter the awning is fully or partly extended or retracted. ⁽¹⁾ B(DW)R 11 - Provision of precautionary measures from sudden collapse on cutting the steelwork. ⁽²⁾ Stainless steel drilled-in anchors should be used. ⁽¹⁾ Adequate design/provision to avoid accumulation of water above the awning. ⁽¹⁾ The awning shall be fixed on structural elements such as RC wall, load bearing wall, column or beam. ⁽¹⁾ No retractable awning should be constructed within a horizontal clearance of 500 mm from a fence wall ≥ 1.1 m in height, either fully extended or retracted. ⁽¹⁾ Not project beyond edge of roof (if applicable). ⁽¹⁾ The PRC should advise the owner and the user that the awning should be used according to the manufacturer's manual in particular that the awning should be retracted under strong wind. Lease conditions shall be complied with. The awning shall not project over government land (other than street), outside lot boundary, and over open space and flat roof of other owners. ⁽¹⁾ Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

⁽¹⁾ For MW item 2.43 only

⁽²⁾ For MW item 3.43 only

B(P)R represents Building (Planning) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 2.43 and 3.43 are shown in Appendix VII.

Item 2.43 Erection or alteration of retractable awning



Item 2.43 Erection or alteration of retractable awning over street with carriageway



Item 2.43 Erection or alteration of retractable awning over street with footpath only



Item 2.43 Erection or alteration of retractable awning over street with carriageway



Item 2.43 Erection or alteration of retractable awning over roof



Item 3.43 Removal of retractable awning over roof



3.22 Structure providing Access for Maintenance

3.22.1 Structure providing access for maintenance

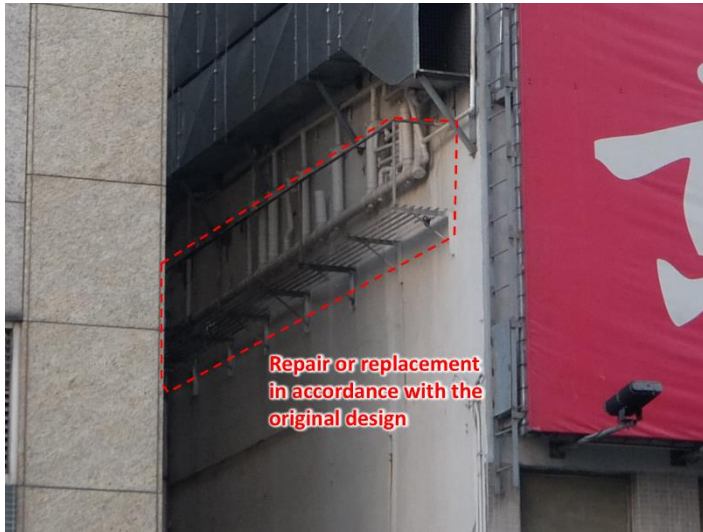
MW items	2.50	2.51	3.51
Type of works	A, B & E	A & E	A, B & E
Simple comparison	Repair, replacement or removal of ...	Erection or alteration of ...	Repair or removal of ...
	External metal structure providing access for maintenance ...	External cat-ladder ...	External cat-ladder ...
	For repair or replacement, in accordance with the original design.		
		Not DEW item 28.	
Other consideration	<ul style="list-style-type: none"> B(C)R 34 - Access for maintenance to be provided to every flat roof. PNAP APP-110 - Protective Barrier. External Maintenance Code 2021 Appendix D - Statutory occupational safety requirements for cat ladder. ⁽¹⁾ 		
*See subsection 3.32	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. Erection, alteration, repair or removal of cat-ladders ≤ 3 m above ground or roof (but not projecting over street) may be DEW item 28. For details, please refer to descriptions of the relevant DEW item. 		

(1) For MW items 2.51 and 3.51 only

B(C)R represents Building (Construction) Regulations; External Maintenance Code 2021 represents Code of Practice on Access for External Maintenance 2021; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommend design and details for MW items 2.50, 2.51 and 3.51 are shown in Appendix VII.

Item 2.50 Repair, replacement or removal of external metal structure providing access for maintenance



Item 2.51 Erection or alteration of external cat ladder



Item 3.51 Repair or Removal of external cat ladder



3.23 Slope Repair

3.23.1 Slope repair

MW items	3.53		
Types of works	A, B & F		
Simple comparison	Repair of ...		
	Pointing in a masonry retaining wall ...	Surface drainage channel, catch pit or sand trap connected to (a) a natural, formed or man-made slope; or (b) a retaining wall ...	Hard cover of natural, formed or man-made slope ...
	Not involve replacement or removal of masonry blocks; and		
	Not involve excavation of a depth > 0.3 m.		
Other considerations	<ul style="list-style-type: none"> • PNAP APP-79 & GEOGUIDE 5 Guide to Slope Maintenance & Layman’s Guide to Slope Maintenance issued by CEDD –Standards of good practice for the maintenance of man-made slopes and retaining walls, including man-made features provided to natural hillsides. 		
	<ul style="list-style-type: none"> • PNAP APP-88, PNRC 34 & Code of Practice on Monitoring and Maintenance of Water Carrying Services Affecting Slopes issued by ETWB– leak detection, inspection and repair of buried water carrying services affecting slope. 		
	<ul style="list-style-type: none"> • PNAP ADV-8 - Registration of Slopes and Retaining Walls. 		
	<ul style="list-style-type: none"> • PNAP ADV-23 - Improvement of Visual Appearance and Landscape Treatment for Man-made Slopes and Retaining Walls. 		
	<ul style="list-style-type: none"> • Guidelines on Safe Access for Slope Maintenance (GEO Report No. 136) issued by GEO. 		
	<ul style="list-style-type: none"> • Check the maintenance responsibility of the slope (eg. Lease document or Slope Maintenance Responsibility Information System (SMRIS)) and to ascertain the extent of the land they are required to maintain. 		
	<ul style="list-style-type: none"> • When anything considered to be unusual or abnormal is observed during the routine maintenance inspections or during the repair works (e.g. signs of water leakage, widening of cracks, abnormal ground settlement, bulging or distortion of masonry walls): private owners should be notified promptly and arrangement for an Engineer Inspection for Maintenance by a Registered Professional Engineer (Geotechnical) should be made immediately. 		
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		

PNAP represents Practice Notes for Authorized Person, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractor; ETWB represents Environment, Transport and Works Bureau; GEO represents Geotechnical Engineering Office.

Recommended design and details for MW item 3.53 are shown in Appendix VII.

Item 3.53 Repair of pointing in masonry retaining wall



Item 3.53 Repair of hard cover of natural, formed or man-made slope



Item 3.53 Repair of surface drainage channel or catchpit



Item 3.53 Repair of sand trap



3.24 Sub-division of Flat

3.24.1 Sub-division of flat

MW items	1.41		
Types of works	A		
Simple comparison	Erection of ...	Laying of ...	Erection or alteration of ...
	Non-load bearing block wall ...	Solid floor screeding ...	Aboveground drain ...
	<p>In a domestic flat:</p> <p>(a) that is subdivided into, or that as a result of the works will be subdivided into 3 or more rooms and at least 3 of which are -</p> <p>(i) resulted from, or are affected by, an alteration of the layout of the flat;</p> <p>(ii) provided with a lavatory basin, sink, water-closet fitment, shower or bath; and</p> <p>(iii) intended as, or having regard to the size and layout of the rooms, are likely to be adapted as, places for sleeping; and</p> <p>(b) in which the number of rooms falling within the description of para.(a)(ii) and (iii) is, or as a result of the works will be, greater than that as shown on the approved plan.</p> <p>No additional load to cantilevered slabs.</p>		
Other considerations	<ul style="list-style-type: none"> • B(P)R 30, 31 & 36 - No obstruction to windows providing natural lighting & ventilation. • B(P)R 41 & FS Code 2011 subsections B5, B7, B8, B10 & B13 - Control of minimum number & width of exit routes or exit doors and relevant requirements. • B(P)R 41A, 41B, 41C & 41D & FS Code 2011 Code Clause D8.4-No part of the floor served by firemen's lift should be more than 60 m from the door of the lift lobby measured along actual passages. • B(C)R 35 & FS Code 2011 subsections C6 to C7, E4 to E9 - Requirements of fire resisting construction. • B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. • B(P) R 45 - Provision of Kitchen. • B(P)R 35A - Provision for flue aperture for gas water heater. • B(SSFPDWL)R 11 - Proper disposal of soil. • B(SSFPDWL)R 24, 25 & 30 - Provision of traps for soil & waste fitment and anti-syphonage pipe. • B(SSFPDWL)R 28 - Control of bends in soil & waste pipes. • B(SSFPDWL)R 34 - Control of the materials for pipes. • B(SSFPDWL) R 31 - Ventilation pipe carry up to a height > 1 m above roof. 		
*See subsection 3.32			

	<ul style="list-style-type: none">• BFA Code 2008 - Barrier Free Access should not be affected.
	<ul style="list-style-type: none">• PNAP APP-86 - Design & construction of non-loadbearing partition walls.
	<ul style="list-style-type: none">• PNAP APP-133 - Using cast iron pipes of acceptable performance requirements / standards.
	<ul style="list-style-type: none">• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(SSFPDWL)R represents Building (Standard of Sanitary fittings, Plumbing Drainage Works and Latrines) Regulations; FS Code 2011 represents Code of Practice for Fire Safety for Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; BFA Code 2008 represents The Design Manual - Barrier Free Access 2008; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Item 1.41 Subdivision of domestic flat



3.25 Internal Staircase

3.25.1 Internal staircase

MW items	1.1	1.32	3.1
Types of works	A	A & G	
Simple comparison	Erection or alteration of ...	Removal of ...	
	Internal staircase ...	Whole of internal staircase on the lowest storey of a building ...	
	Not used as a MOE or MOA;		
	Not involve alteration of other structural elements, except a simply supported beam that: (a) Not of pre-stressed construction; & (b) Not used to support any column, flat slab or ribbed beam; and		
	No additional load to cantilevered slab.		Height of the staircase ≤ 1.5m.
	Not MW item 3.1.		
Other considerations	<ul style="list-style-type: none"> B(C)R 37 & PNAP APP-110- Provision of protective barrier if level difference > 600 mm is resulted after completion of works. See MW item 1.6. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsections C3 & C4 - Control of compartment volume and fire resisting construction. ⁽¹⁾ B(P)R 72, PNAP APP-41 & BFA Code 2008 Div. 7 & 8 -Design and construction of staircase and handrails. ⁽¹⁾ B(C)R 35 & FS Code 2011 subsection C10 - Provision of vertical barrier or smoke curtain at the edge of void. ⁽¹⁾ Demolition Code 2004 - Provision of precautionary measures. Not the access for maintenance to roof, flat roof or canopy, etc. ⁽²⁾ Associated formation of slab openings may be MW item 1.2 (1m² < Opening ≤ 4.5 m²) or 2.1 (Opening ≤ 1 m²). 		

⁽¹⁾ For MW item 1.1 only

⁽²⁾ For MW item 1.32 only

B(P)R represents Building (Planning) Regulations; B(C)R Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; BFA Code 2008 represents Design Manual - Barrier Free Access 2008; Demolition Code represents Code of Practice for Demolition of Buildings 2004; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; PNRC represents Practice Notes for Registered Contractors. MOE represents means of escape; MOA represents means of access for firefighting and rescue.

Recommended design and details for MW item 3.1 are shown in Appendix VII.

Item 1.1 Erection or alteration of internal staircase



Item 1.32 Removal of internal staircase



Item 3.1 Removal of internal staircase



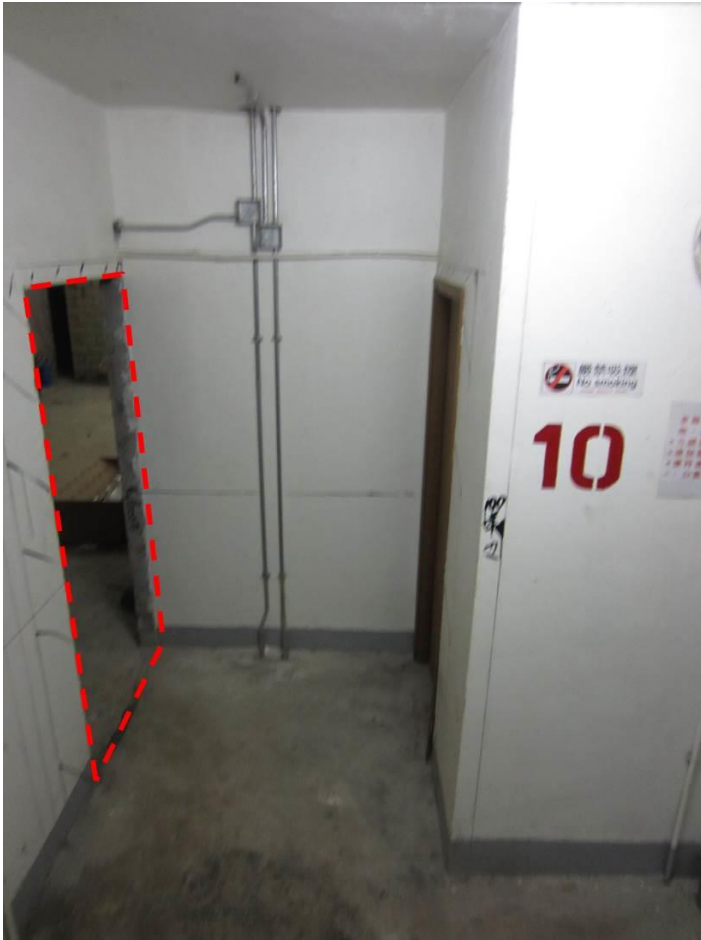
3.26 Opening to Staircase/Lobby

3.26.1 Opening to staircase/lobby

MW items	1.42
Types of works	A
Simple comparison	Formation or alteration of opening to ...
	Enclosure (other than a load bearing wall) of staircase or its protected lobby ...
	Used as a MOE or MOA; and
	Not involve alteration of other structural elements.
Other considerations	<ul style="list-style-type: none"> • B(P)R 41 & FS Code 2011 subsections B5, B8, B10, B11, B13 & B14- Control of minimum number and width of exit routes and exit doors and relevant requirements.
	<ul style="list-style-type: none"> • B(P)R 41A, 41B, 41C, 41D & FS Code 2011 Clauses D8.4 & D11.1 - No part of the floor served by a firemen’s lift is more than 60 m from the door of firemen’s lift lobby measured along actual passages and walls and doors of fire lift lobby should have FRR not less than that of the elements of construction.
	<ul style="list-style-type: none"> • B(C)R 35 & FS Code 2011 subsection C9, E4 to E9 - Protection of required staircase.
	<ul style="list-style-type: none"> • B(P)R 72 & BFA Code 2008 Divisions 9 and 10 - Corridors, Lobbies, Paths and Doors for use by person with a disability.
	<ul style="list-style-type: none"> • PNAP APP-21 - Provision of measures for public safety when carrying out demolition works.
	<ul style="list-style-type: none"> • Agreement from the IO, co-owners or management office (if applicable) should be sought in case the common part will be affected.

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; BFA 2008 represents Design Manual - Barrier Free Access 2008; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; MOE represents means of escape; MOA represents means of access for firefighting and rescue.

Item 1.42 Formation or alteration of opening to an enclosure of a staircase



3.27 Partition Wall inside Flat

3.27.1 Partition wall inside flat

MW items	1.43	3.39	3.40
Types of works	A		
Simple comparison	Erection of ...		
	Non-load bearing block wall ...		
	Domestic flat or non-domestic flat;	Domestic flat;	Non-domestic flat;
	No additional load to cantilevered slab;		
	Not involve alteration of other structural elements;		
	Aggregate length of additional wall per m ² of the floor area of the flat:		
	Domestic flat > 0.1 m; Non-domestic flat > 0.2 m; and	> 0.1 m, but ≤ 0.3 m;	> 0.2 m, but ≤ 0.4 m;
		Density of the wall ≤ 650 kg per m ³ ;	
		Height of the wall ≤ 3 m;	
		≤ 3.5 m;	
		Thickness of the wall ≤ 75 mm;	
		≤ 100 mm;	
Thickness of floor slab supporting the wall ≥ 125 mm;			
Thickness of floor screeding of the floor slab supporting the wall ≤ 25 mm.			
Not MW item 3.39 or 3.40.			
Other considerations *See subsection 3.32	• B(P)R 30,31 & 36 - Provision for natural lighting and ventilation for habitable room, office, kitchen and toilet.		
	• B(P)R 41 & FS Code 2011 subsections B5 & B8 - Control of minimum no. and width of exit routes & exit doors and relevant requirements.		
	• B(P)R 41A, 41B, 41C and 41D & FS Code 2011 Clause D8.4 - No part of floor should be more than 60m from the door of fireman's lift lobby measured along actual passages.		
	• B(C)R 35 & FS Code 2011 subsections C4 to C7, C9, E4 to E9 - Requirements of fire resisting construction.		
	• B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab.		
	• B(P)R45 - Provision of kitchen for domestic premises.		

MW items	1.43	3.39	3.40
	<ul style="list-style-type: none"> Requirements stipulated in B(P)R 72 and BFA Code 2008 affecting the associated provision of barrier free access should be complied with, if applicable. 		
	<ul style="list-style-type: none"> B(P)R 35A - Provision of room-sealed gas water heater in bathroom. 		
	<ul style="list-style-type: none"> PNAP APP-159 - Provision of en suite toilet for small workshop unit in Industrial building is not permitted. 		
	<ul style="list-style-type: none"> PNAP APP-86 — Design & construction of non-loadbearing partition walls. 		
	<ul style="list-style-type: none"> PNAP APP-117 - Structural requirements for alteration and addition Works in existing buildings in particular the structural adequacy of existing works and details of existing structural elements. 		

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(SSPDWL)R represents Building (Standards of Sanitary fittings, Plumbing, Drainage Works and Latrines) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and imposed Loads 2011; BFA Code 2008 represents Design manual: Barrier Free Access 2008; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 3.39 and 3.40 are shown in Appendix VII.

Item 1.43 Erection of non-load bearing block wall in domestic or non-domestic flat



Item 3.39 Erection of non-load bearing block wall in domestic flat



Item 3.40 Erection of non-load bearing block wall in non-domestic flat



3.28 Thickening of floor slabs

3.28.1 Thickening of floor slab

MW items	1.44	3.41	3.42	
Type of works	A			
Simple comparison	Thickening of floor slab by laying solid screeding ...			
	Domestic flat or non-domestic flat;	Domestic flat;	Non-domestic flat;	
	No additional load to cantilevered slab;			
		Thickness of the floor slab ≥ 125 mm;		
		If non-load bearing block wall is erected in a flat,		
		(a) Aggregate length of the additional wall per m ² of the floor area of the flat:		
		< 0.1 m;		< 0.2 m;
		(b) Comply with conditions in :		
		MW item 3.39 (a) to (f)		MW item 3.40 (a) to (e)
	Density of the screeding ≤ 1200 kg per m ³ ;			
Thickness of the screeding from the structural floor level;				
> 25mm	If the density of the screeding ≤ 650 kg per m ³ ; or			
	> 25mm but ≤ 75 mm; or > 25mm but ≤ 150 mm; (If the aggregate area of the screeding is not more than 1.5m ² within a floor area of 10m ² of the flat and the nearest horizontal distance between each of the area of screeding is not less than 2m.)	> 25mm but ≤ 125 mm; or > 25mm but ≤ 200 mm; (If the aggregate area of the screeding is not more than 2.5m ² within a floor area of 10m ² of the flat and the nearest horizontal distance between each of the area of screeding is not less than 2m.)		
	If the density of the screeding > 650 kg per m ³ ;			
	> 25mm but ≤ 45 mm; or > 25mm but ≤ 100 mm; (If the aggregate area of the screeding is not more than 1m ² within a floor area of 10m ² of the flat and the	> 25mm but ≤ 75 mm; or > 25mm but ≤ 150 mm; (If the aggregate area of the screeding is not more than 2m ² within a floor area of 10m ² of the flat and the		

		nearest horizontal distance between each of the area of screeding is not less than 2m.)	nearest horizontal distance between each of the area of screeding is not less than 2m.)
	Not MW Item 3.41 or 3.42.		
Other considerations *See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - minimum 2 m headroom for exit routes. 		
	<ul style="list-style-type: none"> B(P)R 24 - Height of Storey. 		
	<ul style="list-style-type: none"> B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. 		
	<ul style="list-style-type: none"> Requirements stipulated in B(C)R 37 & 38, B(P)R 3A and PNAP APP-110 - existing protective barrier of insufficient height (< 1.1 m) resulted after completion of works. 		
	<ul style="list-style-type: none"> PNAP APP-117 - Structural Requirements for alteration and addition works in existing buildings in particular the structural adequacy of existing works and details of existing structural elements. 		
	<ul style="list-style-type: none"> Requirements stipulated in B(P)R 72 and BFA Code 2008 affecting the associated provision of barrier free access should be complied with, if applicable. 		
	<ul style="list-style-type: none"> If embedded drainage pipes are laid in the floor screeding, the works involve MW item 2.30. 		

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(SSPDWL)R represents Building (Standards of Sanitary fitments, Plumbing, Drainage Works and Latrines) Regulations; FS Code 2011 represents code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011 ; BFA Code 2008 represents Design Manual : Barrier Free Access 2008; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW items 3.41 and 3.42 are shown in Appendix VII.

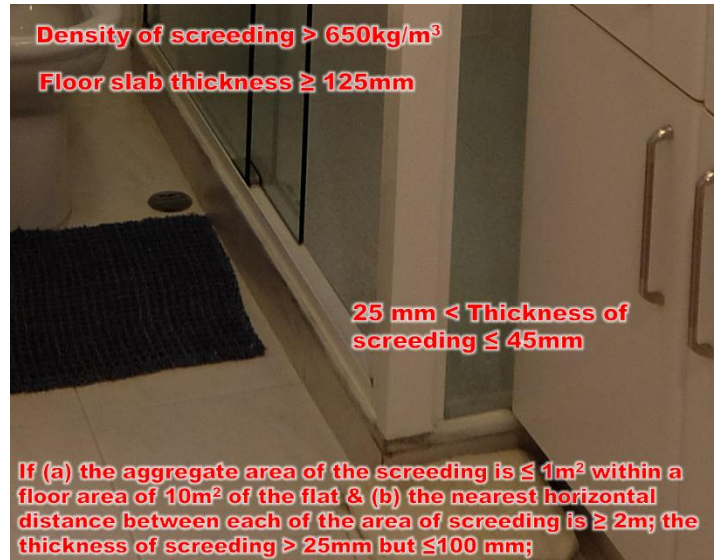
Item 1.44 Thickening of floor slab by solid screeding



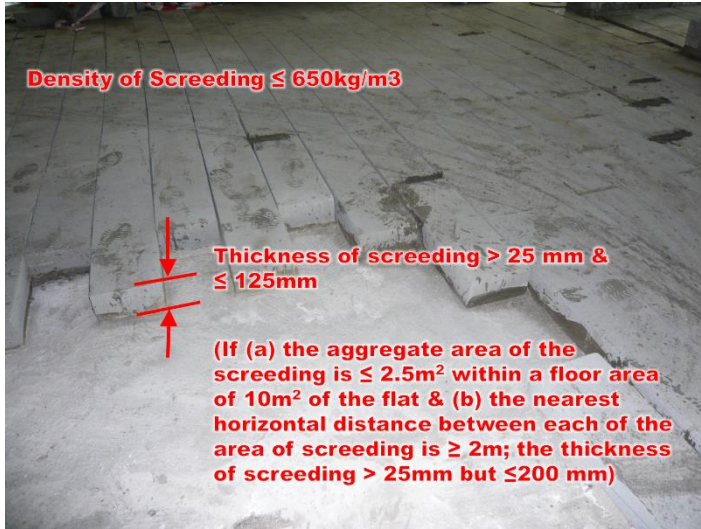
Item 3.41 Thickening of floor slab by solid screeding in domestic flat



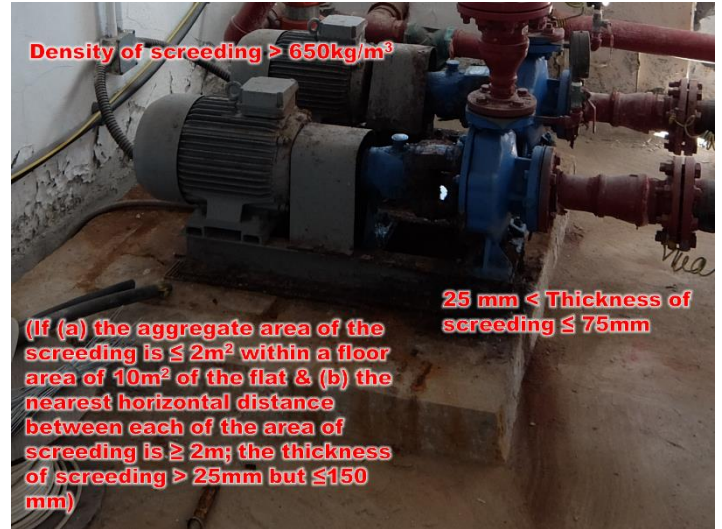
Item 3.41 Thickening of floor slab by solid screeding in domestic flat



Item 3.42 Thickening of floor slab by solid screeding in non-domestic flat



Item 3.42 Thickening of floor slab by solid screeding in non-domestic flat



3.29 Internal Wall Panels

3.29.1 Internal wall panels

MW items	1.31	2.33
Types of works	A & F	
Simple comparison	Erection, Repair or Removal of ...	
	Panel fixed by metal dowels and fixings onto a wall inside a building ...	
	The highest point of the panel > 10 m from the adjoining floor.	The highest point of the panel > 3 m but ≤ 10 m from the adjoining floor.
Other considerations	<ul style="list-style-type: none"> B(C)R 28 - Proper specification of non-combustible material, fixings, strength & durability for cladding. 	
	<ul style="list-style-type: none"> Demolition Code 2004 - Provision of precautionary measures. 	
*See subsection 3.32	<ul style="list-style-type: none"> FS Code 2011 subsection E13 - Linings of internal wall. PNAP APP-21 - Provision of measures for public safety when carrying out demolition works. Fire resistance of wall, if required, shall not be affected. 	

B(C)R represents Building (Construction) Regulations; Demolition Code 2004 represents Code of Practice for Demolition of Buildings 2004; FS Code 2011 represents Code of Practice for Fire Safety for Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW item 2.33 are shown in Appendix VII.

Item 1.31 Erection, Repair or removal of panel on a wall inside a building



Item 2.33 Erection, Repair or removal of panel on a wall inside a building



3.30 Lift, Stairlift or Lifting platform

3.30.1 Lift, stairlift or lifting platform

MW items	1.3	1.33
Types of works	A	A & G
Simple comparison	Building works associated with ...	
	Installation or alteration of ...	Removal of ...
	Service lift ...	
	No additional load to cantilevered slab;	
	Not involve alteration of other structural elements except a simply supported beam that:	
	(i) not of pre-stressed construction; and	
	(ii) not used to support any column, flat slab or ribbed beam;	
	Rated load of the lift ≤ 250 kg;	
Internal floor area of the lift car ≤ 1 m ² ; and		
Internal height of the lift car ≤ 1.2 m.		
Other considerations	<ul style="list-style-type: none"> B(C)R 40, Lifts and Escalators Code 2011 & PNAP APP-29 - Construction of lift well, lift pit, machine room, etc. for the service lift. ⁽¹⁾ 	
	<ul style="list-style-type: none"> B(C)R 35 & FS Code 2011 subsection C8 - Provision of fire resisting construction to the vertical shafts. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Associated minor works for formation of slab openings may be MW item 1.2 (< 1 m² Opening ≤ 4.5 m²) or 2.1 (Opening ≤ 1 m²). ⁽¹⁾ 	

⁽¹⁾ For MW item 1.3 only

B(C)R represents Building (Construction) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Lifts and Escalators Code 2011 represents Code of Practice for Building Works for Lifts and Escalators 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Items 1.3 and 1.33 Building works associated with installation, alteration or removal of services lift



3.30.1 Lift, stairlift or lifting platform

MW items	1.4	1.34
Types of works	A	A & G
Simple comparison	Building works associated with ...	
	Installation or alteration of ...	Removal of ...
	Stairlift or lifting platform ...	
	No additional load to cantilevered slab; Not involve alteration of other structural elements except a simply supported beam that: (i) not of pre-stressed construction; and (ii) not used to support any column, flat slab or ribbed beam.	
Other considerations	<ul style="list-style-type: none"> B(P)R 72, PNAP APP-41 & BFA Code 2008 Div. 13 & 19 - Provision of clear signs of stairlift or lifting platform for use by persons with a disability & provision of vertical transportation to persons with a disability. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Existing provision under BFA Code 2008 not contravened. ⁽²⁾ 	
	<ul style="list-style-type: none"> B(P)R 72 & BFA Code Chapter 5.5 - Requirements of vertical lifting platform.⁽¹⁾ 	
	<ul style="list-style-type: none"> Stairlift or lift platform shall not be located inside the required staircase. ⁽¹⁾ 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	

⁽¹⁾ For MW item 1.4 only

⁽²⁾ For MW item 1.34 only

B(P)R represents Building (Planning) Regulations; BFA Code 2008 represents Design Manual - Barrier Free Access 2008; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Items 1.4 and 1.34 Building works associated with installation, alteration or removal of stairlift and lifting platform



3.31 Ventilation Duct and Associated Supporting Frame

3.31.1 Ventilation duct or associated supporting frame inside building

MW items	1.46	2.46
Types of works	A, E & H	
Simple comparison	Erection or alteration of ...	
	Metal ventilation duct or associated supporting frame inside a building ...	
	No additional load to cantilevered slab;	
	Smallest cross sectional dimension of the duct > 900 mm;	
	Largest cross sectional dimension of the duct > 1800 mm.	Largest cross sectional dimension of the duct ≤ 1800 mm.
Other considerations	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. B(C)R 35 & FS Code 2011 subsections C8, E6 & E8 - Protection of opening for passage of ventilation ducts through fire barriers for fire separation of compartments, vertical shafts and different usage. Location of fire barriers can be found in approved building plans. MW item 2.42 for erection/alteration of fire damper is relevant. B(P)R 41A, 41B, 41C, 41D & FS Code 2011 subsection D17 - Protection of firefighting and rescue stairway. B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the existing slab. B(V)R 4 - Requirements of ventilating system. PNAP APP-24 para. 10 - Building ventilation system intake or exhaust and the like shall be located not closer than 5 m to the opening of any railway vent shaft. PNAP ADV-17 - Noise Annoyance Prevention - Design of Pump Room and Ventilation System. Sample drawings showing the schematic layout for metal ventilation ducts with the smallest cross-sectional dimension more than 900 mm and the typical structural details of the associated supporting frames are given in Appendix A4 and Appendix B5 of PNAP ADV-33 respectively. Ventilation duct works completed under MW should be properly identified on site by incorporate tags/colours so as to facilitate future investigation/ enforcement action. Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
*See subsection 3.32		

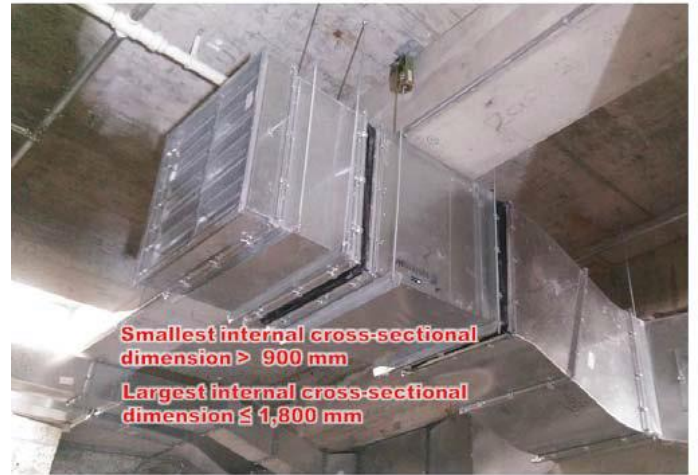
B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(V)R represents Building (Ventilating Systems) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers.

Recommended design and details for MW item 2.46 are shown in Appendix VII.

Item 1.46 Erection or alteration of metal ventilation duct inside building



Item 2.46 Erection or alteration of metal ventilation duct inside building



3.31.2 External metal ventilation ducts or associated supporting frame projecting from an external wall or from a fence wall on-grade or located on or hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab)

MW items	1.47	3.48
Types of works	A & E	
Simple comparison	Erection or alteration of ...	
	External metal ventilation duct or associated supporting frame ...	
	No additional load to cantilevered slab;	
	For duct projecting from an external wall or a fence wall on-grade, projection of the duct or frame \leq 750 mm from the wall;	For duct located on or hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab), the largest cross sectional dimension of the duct \leq 750 mm;
		(a) For duct or frame located on a balcony, verandah or canopy (other than a cantilevered slab): (i) the largest cross-sectional dimension of the duct \leq 600 mm (ii) the highest point of the duct or frame \leq 1.5 m above the balcony, verandah or canopy. (b) For duct or frame hung underneath the soffit of a balcony, verandah or canopy (other than a

MW items	1.47	3.48	
			cantilevered slab), the largest cross-sectional dimension of the duct ≤ 600 mm;
			The highest point of the duct or frame > 3 m above ground or roof.
	Not MW item 3.48; and		
	Not DEW item 23.		
Other considerations	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(P)R 30, 31 & 36 - No obstruction to the natural lighting & ventilation. 		
	<ul style="list-style-type: none"> B(P)R 7(5) - Duct or associated frame shall not project at a height < 2.5 m above ground & no part of the duct or frame projects beyond the edge of balcony, verandah or canopy. 		
	<ul style="list-style-type: none"> B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the balcony, verandah or canopy. 		
	<ul style="list-style-type: none"> B(V)R4 - Requirements of ventilation system. 		
	<ul style="list-style-type: none"> PNAP APP-24 para. 10 - Building ventilation system intake or exhaust and the like shall be located not closer than 5 m to the opening of any railway vent shaft. 		
	<ul style="list-style-type: none"> PNAP ADV-17 - Noise Annoyance Prevention, Design of Pump Room and Ventilation System. 		
	<ul style="list-style-type: none"> Stainless steel drilled- in anchors should be used. 		
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 		
<ul style="list-style-type: none"> Erection or alteration of metal ventilation ducts and associated supporting frames projecting from an external wall of a building or located on or hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab) ≤ 3m above ground or roof below may be DEW item 23. For details, please refer to descriptions of the relevant DEW item. 			

B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(V)R represents Building (Ventilating Systems) Regulations; FS Code represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized

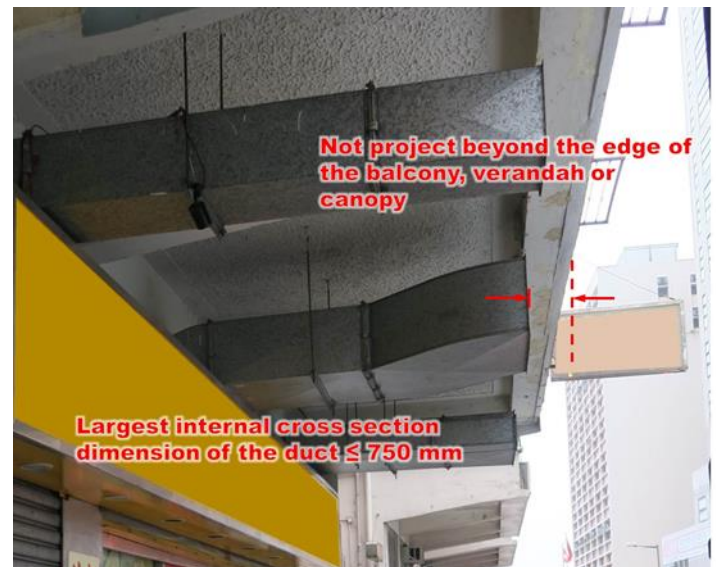
Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW item 3.48 are shown in Appendix VII.

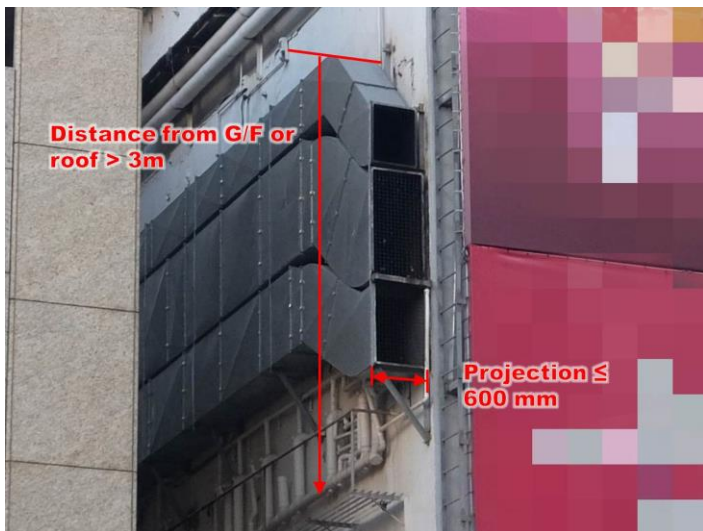
Item 1.47 Erection or alteration of external ventilation duct or associated supporting frame on external wall



Item 1.47 Erection or alteration of external ventilation duct or associated supporting frame hung underneath the soffit of a balcony



Item 3.48 Erection or alteration of external ventilation duct or associated supporting frame on external wall



Item 3.48 Erection or alteration of external ventilation duct or associated supporting frame hung underneath the soffit of a balcony



3.31.2 External metal ventilation ducts or associated supporting frame projecting from an external wall or from a fence wall on-grade or located on or hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab)

MW items	1.5	2.2	2.31	3.49
Types of works	A, E & G			
Simple comparison	Removal of ...			
	Ventilation duct or associated supporting frame ...			
			Projecting from an external wall of a building or from a fence wall on-grade;	
			> 750 mm.	≤ 750 mm;
	Located on or hung underneath the soffit of a cantilevered slab, span of the slab > 1 m;	Located on or hung underneath the soffit of a cantilevered slab, span of the slab ≤ 1 m;		Hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab);
				Located on a balcony, verandah or canopy, the highest point of the duct or frame ≤ 2 m above the balcony, verandah and canopy; and
	Not MW Item 3.49; and			
	Not DEW item 23.		Not DEW item 23.	
Other considerations	• B(C)R 34 - Not to damage waterproofing layer			
	• B(DW)R 11 - Precautionary measure for sudden collapse on cutting of steel works.			
	• PNAP APP-21- Provision of measures for public safety when carry out demolition works.			
	• Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected.			
	• Removal of metal ventilation ducts and associated metal supporting frames projecting from an external wall or located on or hung underneath the soffit of a balcony, verandah or canopy (other than a cantilevered slab) ≤ 3 m above			

MW items	1.5	2.2	2.31	3.49
	adjoining ground or roof may be DEW item 23. For details, please refer to descriptions of the relevant DEW item.			

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents Designated Exempted Works.

Recommended design and details for MW items 2.2, 2.31 and 3.49 are shown in Appendix VII.

Item 1.5 Removal of ventilation duct or associated supporting frame underneath a cantilevered slab



Item 2.2 Removal of ventilation duct or associated supporting frame hung underneath a cantilevered slab



Item 2.31 Removal of ventilation duct or associated supporting frame projecting from an external wall



Item 3.49 Removal of ventilation duct or associated supporting frame projecting from an external wall



3.31.3 External metal ventilation ducts and associated supporting frame located on-grade or on a roof

MW items	1.47	2.47	3.47
Types of works	A & E		
Simple comparison	Erection or alteration of ...		
	External metal ventilation duct or associated supporting frame on-grade or on a roof of a building ...		
	No additional load to cantilevered slabs;		
		The distance between the highest point of the duct or frame and the adjoining ground or roof	
		≤ 2.5 m	≤ 1.5 m.
	Not MW Item 2.47 or 3.47; and	Not MW Item 3.47 ; and	
	Not DEW Item 22.		
Other considerations	<ul style="list-style-type: none"> B(P)R 41 and FS Code 2011 subsection B5 - General requirements of exit routes shall be complied with. B(P)R 30,31 and 36 - No obstruction to the natural lighting and ventilation. 		
*See subsection 3.32	<ul style="list-style-type: none"> B(P)R 41 & FS Code 2011 subsections B6 & B18 - If the roof is designated as refuge floor or use as refuge, the respective requirements for refuge floor stipulated in the FS Code shall be complied with. B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads and the minimum imposed load for checking the structural adequacy of the roof. B(C)R 34 - Not to damage the waterproofing of the roof. B(V)R 4 - Requirements of ventilation system. PNAP APP-24 para. 10 - Building ventilation system intake or exhaust and the like in any building shall be located not closer than 5 m to the opening of any railway vent shaft. PNAP ADV-17 - Noise Annoyance Prevention, Design of Pump Room and Ventilation System. Stainless steel drilled-in anchors should be used. No part of a duct exceeds the highest point of the building. ⁽²⁾ Hong Kong Airport (Control of Obstructions) Ordinance & PNAP APP-32 - Not exceeding the airport height restrictions. ⁽¹⁾ Outline Zoning Plan - Not exceeding the height restrictions. ⁽¹⁾ Not to obstruct drainage of a roof. Agreement from the IO, co-owners or management office (if applicable) in case common part will be affected. 		

MW items	1.47	2.47	3.47
	<ul style="list-style-type: none"> Erection or alteration of metal ventilation ducts and associated metal supporting frames on grade or on roof (≤ 900 mm for adjoining ground or roof) may be DEW item 22. For details, please refer to descriptions of the relevant DEW item. 		

(1) For MW item 1.47 only

(2) For MW items 2.47 and 3.47 only

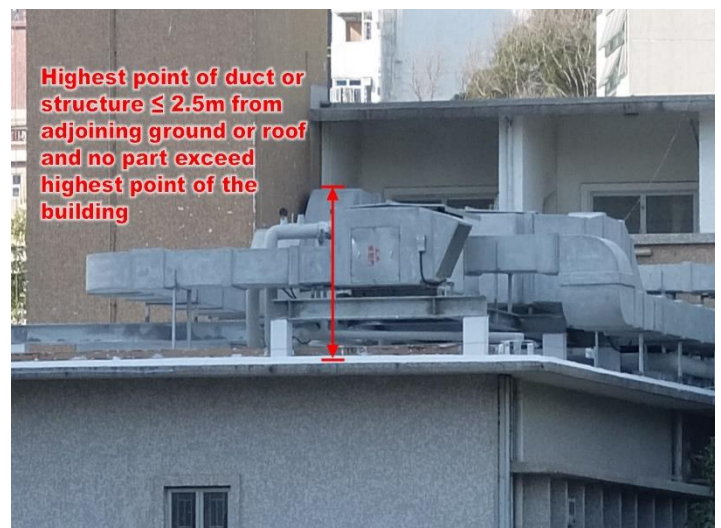
B(P)R represents Building (Planning) Regulations; B(C)R represents Building (Construction) Regulations; B(V)R represents Building (Ventilation System) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; Loading Code 2011 represents Code of Practice for Dead and Imposed Loads 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.47 and 3.47 are shown in Appendix VII.

Item 1.47 Erection or alteration of external metal ventilation duct or associated supporting frame on roof



Item 2.47 Erection or alteration of external metal ventilation duct or associated supporting frame on roof



Item 3.47 Erection or alteration of external metal ventilation duct or associated supporting frame on roof



3.31.3 External metal ventilation ducts and associated supporting frame located on-grade or on a roof

MW items	2.2	3.2
Types of works	A, E & G	
Simple comparison	Removal of ...	
	Ventilation duct or associated supporting frame ...	
	Located: (a) on-grade; or (b) on a roof of a building;	Located: (a) on-grade; or (b) on a roof (other than a cantilevered slab);
		Height of the duct or associated frame \leq 2 m.
	Not MW Item 3.2; and Not DEW Item 12.	
Other considerations	<ul style="list-style-type: none"> B(DW)R 5 - Not having the electric cables or the apparatus remained electrically charge. 	
	<ul style="list-style-type: none"> B(DW)R 10 - Not to overload the floor. 	
	<ul style="list-style-type: none"> B(DW)R 11 - Provision of precautionary measures for sudden collapse on cutting of steelworks. 	
	<ul style="list-style-type: none"> B(C)R 34 - Not to damage the waterproofing of the roof. 	
	<ul style="list-style-type: none"> PNAP APP-21- Provision of measures for public safety when carry out demolition works. 	
	<ul style="list-style-type: none"> Not to obstruct drainage on roof. 	
	<ul style="list-style-type: none"> Agreement from the IO, co-owners or management office (if applicable) should be sought in case common part will be affected. 	
	<ul style="list-style-type: none"> Removal of ventilation ducts or associated supporting frames \leq 1 m in height on-grade or on a roof (other than a cantilevered slab) may be DEW item 12. For details, please refer to descriptions of the relevant DEW item. 	

B(C)R represents Building (Construction) Regulations; B(DW)R represents Building (Demolition Works) Regulations; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; DEW represents designated exempted works.

Recommended design and details for MW items 2.2 and 3.2 are shown in Appendix VII.

Item 2.2 Removal of ventilation duct or associated supporting frame on roof



Item 3.2 Removal of ventilation duct or associated supporting frame on roof



3.31.4 Fire damper in ventilation system

MW item	2.42
Types of works	H
Simple comparison	Erection or alteration of ... Fire damper in ventilation system.
Other considerations	<ul style="list-style-type: none"> FSD Circular Letter No. 4/96 Part XI Section 2- Fire damper used in Mechanical Ventilation system. B(C)R 35 & FS Code 2011 subsections C8, E6 & E8 - Protection of openings for passage of ventilation ducts through fire barrier for fire separation of compartments, vertical shafts and different usage. Location of fire barrier can be found in approved building plans. PNAP ADV 17 - Noise Annoyance Prevention, Design of Pump Room and Ventilation System. B(V)R 5 & 5A and PNAP APP13 - Newly installed fire dampers, shall be inspected and certified by RSC(V) that they are in safe and efficient working order in accordance with FS Code 2011 clause E8.3. When submitting Certificate of Completion of installation of fire damper (Form MW04), an inspection certificate (Part C of PNAP APP-13 Appendix B) of fire damper by RSC(V) should be enclosed.

B(C)R represents Building (Construction) Regulations; B(V)R represents Building (Ventilating System) Regulations; FS Code 2011 represents Code of Practice for Fire Safety in Buildings 2011; PNAP represents Practice Notes for Authorized Persons, Registered Structural Engineers & Registered Geotechnical Engineers; FSD represents Fire Services Department.

Recommended design and details for MW item 2.42 are shown in Appendix VII.

Item 2.42 Erection or alteration of fire damper in ventilation system



3.32 General Structural Requirements

3.32.1 For minor works involving erection, alteration, strengthening or repair works, the following requirements should be observed:

- B(C)R Part 3 & Loading Code 2011 - Requirements for the design of loads.
- Concrete Code 2013 - Design, material specifications, construction and workmanship requirements of concrete and reinforcement.
- Steel Code 2011 - Design, material specifications, construction and workmanship requirements for fabrication and erection of steel works.
- Wind Code 2019 - Requirements for the design of wind load.
- PNAP ADV-15 & PNRC 41 - Control of fixing of reinforcement.
- Standards/Technical Criteria Acceptable to the Building Authority can be referred to PNAP APP-53 Appendix A.
- Inspect and ensure the parent supporting structure is capable of bearing the loads and stresses which may be increased or altered as a result of the minor works, in particular for those buildings completed over 20 years.

3.32.2 Tempered glass may be used for canopies, protective barriers, windows/window walls, etc. under MW items 1.6, 1.27, 1.60, 1.61, 2.5, 2.8, 3.3, 3.6 and 3.25. As tempered glass is susceptible to spontaneous breakage, quality control and supervision of the heat soak process are required when tempered glass is used.

3.32.3 For Class I MW, the AP should undertake the quality control and supervision of the tempered glass. For Classes II & III MW, since the works pose lower risk, quality control and supervision may be undertaken by a PRC. The control and supervision requirements are summarized as follows:

Quality Control and supervision for Tempered Glass	Requirements under Minor Works Control System			
	Class I MW	Class II MW	Class III MW	Forms required to be submitted
Declaration statement on: (i) Quality Assurance Certification (ii) Quality Assurance Scheme	signed by AP or RSE	signed by PRC	signed by PRC	MW02, MW04, MW05
Compliance report on heat soak process	signed by AP or RSE	signed by PRC	signed by PRC	MW02, MW04, MW05
Quality supervision plan	prepared by AP or RSE	prepared by PRC	prepared by PRC	MW01, MW03
Quality supervision report	prepared by AP or RSE	prepared by PRC	prepared by PRC	MW02, MW04, MW05
Quality control supervisor	AP / RSE or T3 under AP / RSE's stream and PRC or T1 under RC's stream	PRC or T1 under RC's stream	PRC or T1 under RC's stream	-
Frequency of supervision of heat soak process of tempered glass panes	AP/RSE: 30% ⁽¹⁾ & PRC: 100%	100%	100%	-

⁽¹⁾ 30% of the number of tempered glass used in the project

3.32.4 Every glass panel should be inspected to ensure that it is free from visual defects before installation. Supervision of the installation of all fixings used to connect the glass to handrails, balustrades or frames should be provided to ensure that they are properly installed; and where the works involve repair or replacement in accordance with the original design, that they are constructed in accordance with the approved plans. Apart from glass and fixings, the sealant and handrail should also be inspected. Special attention should be paid to the installation of free-standing glass barriers to ensure that the recommended installation procedures are strictly followed. Details are provided in PNAP APP-110 "Protective Barrier".

Appendix VII

Recommended Design and Details for Class II and Class III Minor Works

**Summary table of recommended design and details
for Class II and Class III minor works**

Class II minor works			
2.1			Existing item with updated notes
2.1			Existing item with updated notes
2.2		Existing item with revised recommended design and updated notes	
2.3	Existing item without amendment		
2.4		Existing item with revised recommended design and updated notes	
2.5			Existing item with updated notes
2.6		Existing item with revised recommended design and updated notes	
2.7		Existing item with revised recommended design and updated notes	
2.8			Existing item with updated notes
2.9			Existing item with updated notes
2.10		Existing item with revised recommended design and updated notes	
2.11			Existing item with updated notes
2.12		Existing item with revised recommended design and updated notes	
2.13			Existing item with updated notes
2.14			Existing item with updated notes
2.15		Existing item with revised recommended design and updated notes	
2.16		Existing item with revised recommended design and updated notes	
2.17		Existing item with revised recommended design and updated notes	
2.18		Existing item with revised recommended design and updated notes	
2.19		Existing item with revised recommended design and updated notes	
2.20		Existing item with revised recommended design and updated notes	
2.21		Existing item with revised recommended design and updated notes	
2.22		Existing item with revised recommended design and updated notes	
2.23		Existing item with revised recommended design and updated notes	
2.24	Existing item without amendment		
2.25			Existing item with updated notes
2.26		Existing item with revised recommended design and updated notes	
2.27			Existing item with updated notes
2.28		Existing item with revised recommended design and updated notes	
2.29		Existing item with revised recommended design and updated notes	
2.30			Existing item with updated notes
2.31		Existing item with revised recommended design and updated notes	
2.32			Existing item with updated notes
2.33			Existing item with updated notes
2.34		Existing item with revised recommended design and updated notes	

2.35		Existing item with revised recommended design and updated notes	
2.36		Existing item with revised recommended design and updated notes	
2.37		Existing item with revised recommended design and updated notes	
2.38			Existing item with updated notes
2.39			Existing item with updated notes
2.40			Existing item with updated notes
2.41			New MW item
2.42			New MW item
2.43			New MW item
2.44			New MW item
2.45			New MW item
2.46			New MW item
2.47			New MW item
2.48			New MW item
2.49			New MW item
2.50			New MW item
2.51			New MW item
2.52			New MW item
2.53			New MW item
2.54			New MW item
2.55			New MW item
2.56			New MW item
2.57			New MW item
2.58			New MW item
2.59			New MW item
2.60			New MW item
2.61			New MW item
2.62			New MW item
2.63			New MW item
2.64			New MW item
2.65			New MW item
2.66			New MW item
2.67			New MW item
2.68			New MW item

- Existing item without amendment
- Existing item with revised recommended design and updated notes
- Existing item with updated notes
- New MW item

Class III minor works			
3.1			Existing item with updated notes
3.2		Existing item with revised recommended design and updated notes	
3.3			Existing item with updated notes
3.4			Existing item with updated notes
3.5		Existing item with revised recommended design and updated notes	
3.6			Existing item with updated notes
3.7			Existing item with updated notes
3.8		Existing item with revised recommended design and updated notes	
3.9	(Repealed)		
3.10	(Repealed)		
3.11		Existing item with revised recommended design and updated notes	
3.12			Existing item with updated notes
3.13		Existing item with revised recommended design and updated notes	
3.14	(Repealed)		
3.15	(Repealed)		
3.16		Existing item with revised recommended design and updated notes	
3.17		Existing item with revised recommended design and updated notes	
3.18			Existing item with updated notes
3.19		Existing item with revised recommended design and updated notes	
3.20			Existing item with updated notes
3.21			Existing item with updated notes
3.22			Existing item with updated notes
3.23		Existing item with revised recommended design and updated notes	
3.24			Existing item with updated notes
3.25		Existing item with revised recommended design and updated notes	
3.26			Existing item with updated notes
3.27		Existing item with revised recommended design and updated notes	
3.28	(Repealed)		
3.29		Existing item with revised recommended design and updated notes	
3.30			Existing item with updated notes
3.31		Existing item with revised recommended design and updated notes	
3.32			Existing item with updated notes
3.33			Existing item with updated notes

3.34	Existing item without amendment			
3.35	Existing item without amendment			
3.36			Existing item with updated notes	
3.37			Existing item with updated notes	
3.38			Existing item with updated notes	
3.39		Existing item with revised recommended design and updated notes		
3.40		Existing item with revised recommended design and updated notes		
3.41		Existing item with revised recommended design and updated notes		
3.42		Existing item with revised recommended design and updated notes		
3.43				New MW item
3.44				New MW item
3.45				New MW item
3.46				New MW item
3.47				New MW item
3.48				New MW item
3.49				New MW item
3.50				New MW item
3.51				New MW item
3.52				New MW item
3.53				New MW item
3.54				New MW item
3.55				New MW item
3.56				New MW item
3.57				New MW item
3.58				New MW item
3.59				New MW item
3.60				New MW item
3.61				New MW item
3.62				New MW item
3.63				New MW item
3.64				New MW item
3.65				New MW item
3.66				New MW item

- Existing item without amendment
- Existing item with revised recommended design and updated notes
- Existing item with updated notes
- New MW item

GENERAL NOTES FOR BAMBOO SCAFFOLDS :-

The contractor is recommended to refer to the following documents regarding their use :

1. Schedule 3 of the Construction Sites (Safety) Regulations for the requirements of working platform.
2. Code of Practice for Bamboo Scaffolding Safety issued by the Labour Department.
3. Guidelines on the Design and Construction of Bamboo Scaffolds issued by the Buildings Department.
4. Guidelines for the Removal of Typical Unauthorized Building Works and General Maintenance of External Walls issued by the Buildings Department.

REMARKS :-

After the erection of the bamboo scaffold, the contractor needs to fill in the bamboo notification form (can be found in document (3) above) and fax to the Site Monitoring Section of the Buildings Department.

BELOW ARE THE COMMONLY USED BAMBOO SCAFFOLDS FOR REFERENCE.

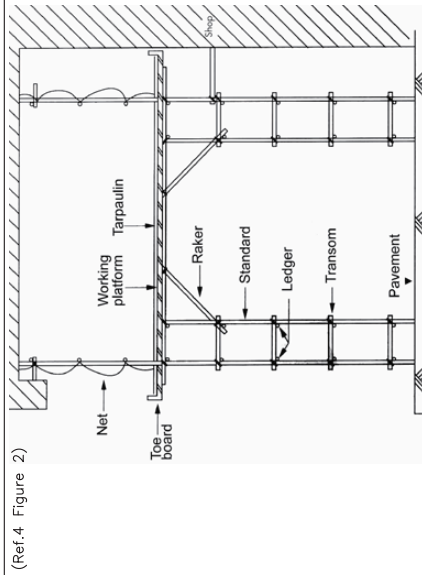


Figure 1 : Double row bamboo scaffold and working platform over pavement

- Notes:
1. Bamboo for the construction of scaffold and catchfan shall have an effective diameter not less than 40mm.
 2. The bamboo deck at corners of the sheet or at spacing not less than 1.5m apart whichever is less.

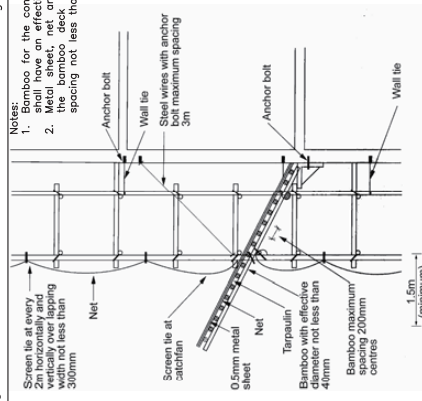


Figure 3 : Typical detail for bamboo catchfan and screen cover

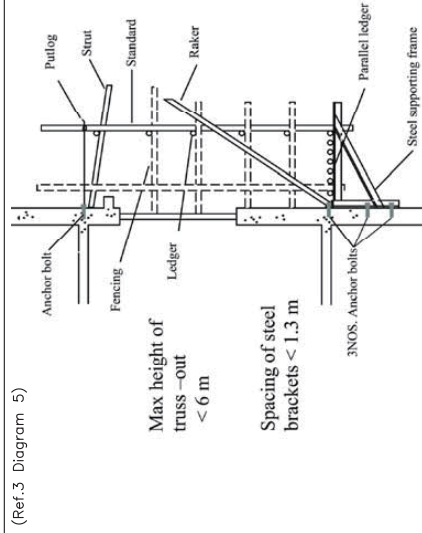


Figure 2 : Truss-out bamboo scaffold

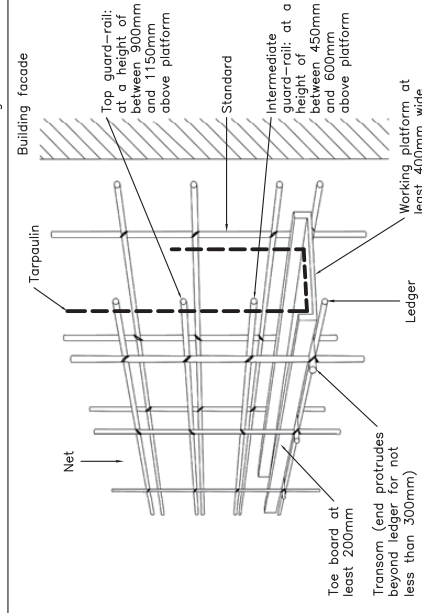
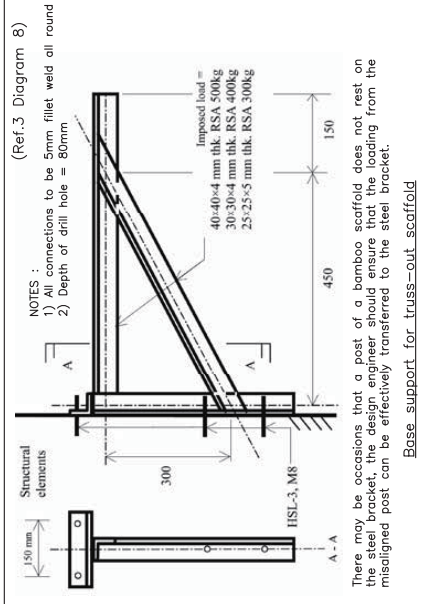


Figure 4 : Working platform on a double-row bamboo scaffold



Base support for truss-out scaffold

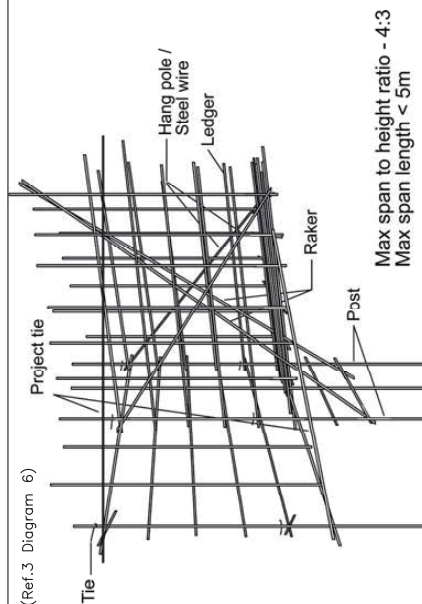


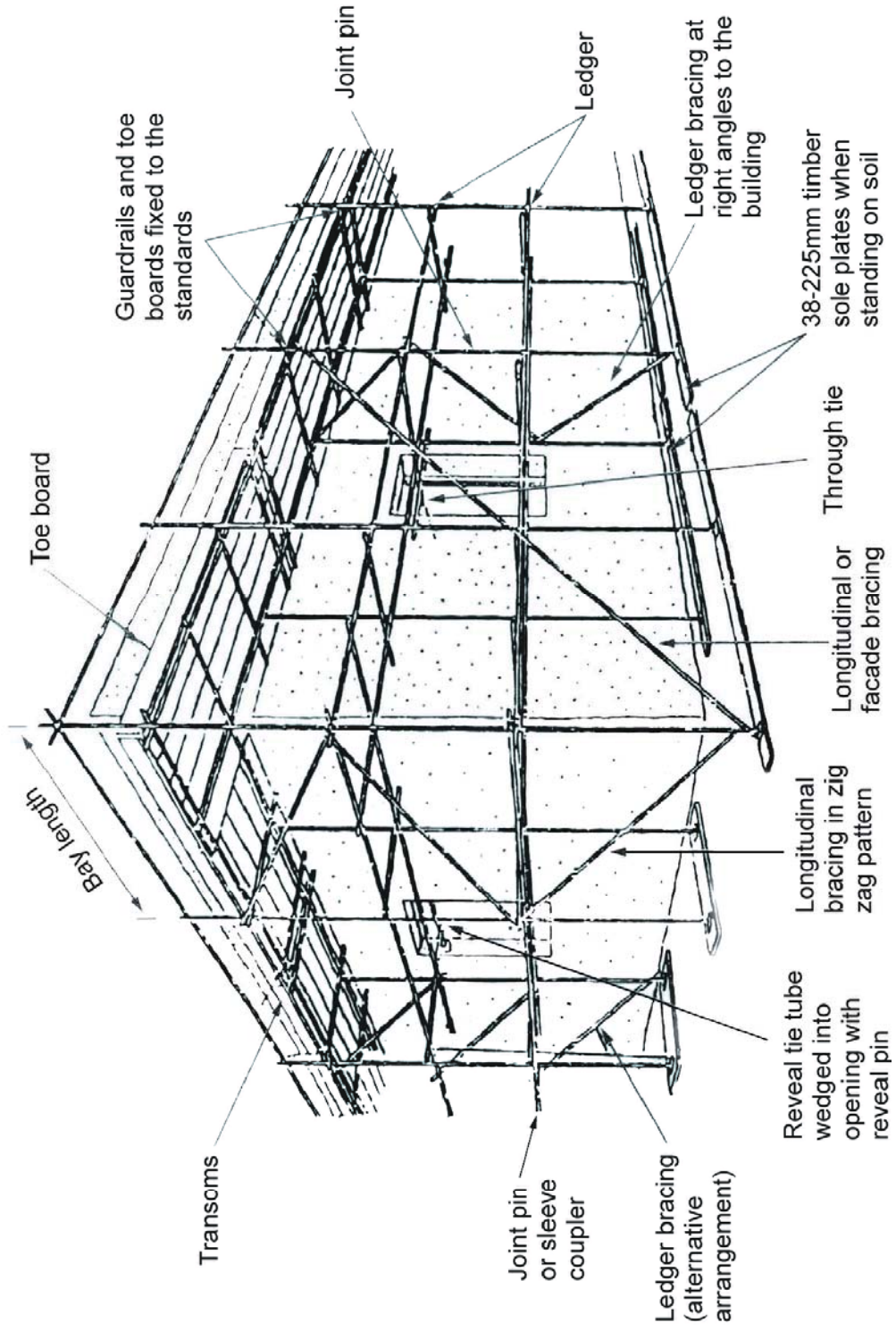
Figure 5 : Bamboo scaffold for signboard

GENERAL NOTES FOR METAL SCAFFOLDS :

The contractor is recommended to refer to the following documents regarding their use :

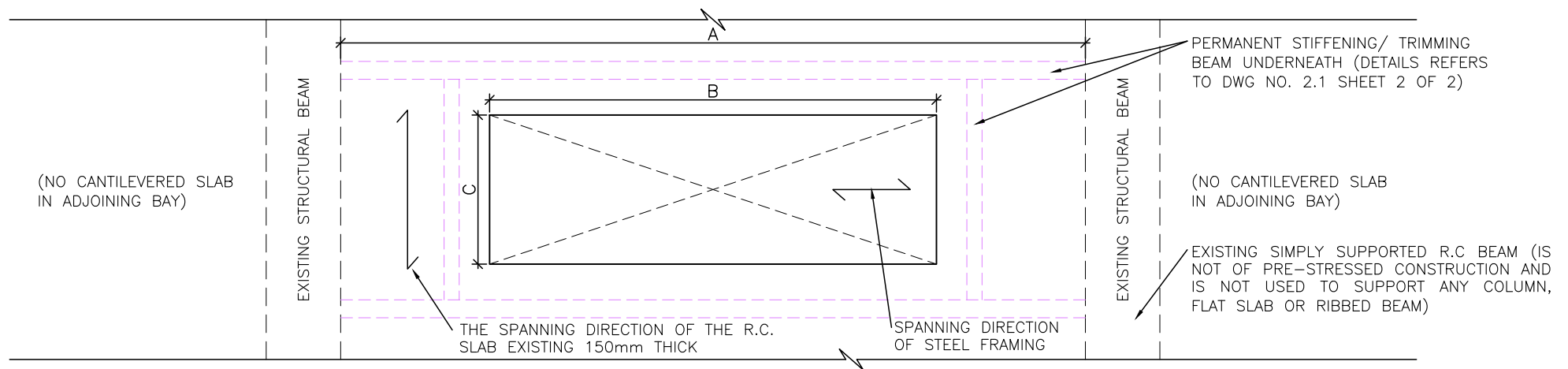
1. Schedule 3 of the Construction Sites (Safety) Regulations for the requirements of working platform.
2. Code of Practice for Metal Scaffolding, Safety issued by the Labour Department.
3. Guidelines for the Removal of Typical Unauthorized Building Works and General Maintenance of External Walls issued by the Buildings Department.

BELOW IS THE COMMONLY USED METAL SCAFFOLDS FOR REFERENCE.



DRAWING NO. GN-2

GENERAL NOTES FOR METAL SCAFFOLDING



SLAB OPENING LAYOUT PLAN

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for Fire Safety in Building 2011
- All structural steel to be grade S275 J0/JOH to BS EN 10210-1 for hollow sections and BS EN 10025 for other sections and BS EN 10029 for plate and shall be hot dip galvanized to BS EN ISO 1461 : 2009 with min. thickness 85 μ m.
- All welds should be comply with BS EN 1011-1:2009 and all welding works to be carried out by qualified welder.
- All connections to be 3mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$; (Electrode Class 50) and all electrodes to BS EN ISO 2560 : 2009
- All anchor bolts to be Hilti HSC-AR M10x40 or equivalent and shall be installed according to the manufacturer's specification.
- Concrete shall comply with CS1 : 2010
- All steel members shall be protected with "UNITHERM 38091" or equivalent fire resistance paint of the thickness according to the manufacturer's recommendations to provide with FRR not less than that of parent structure.

DESIGN DIMENSIONS :

A = 3m, B = 2m, C = 0.5m

DESIGN LOADS :

- Original Dead Load = 3.60 kN/m²;
- Original Finish = 1.00 kN/m²;
- Original Live Load = 2.50 kN/m²

PREPARATION WORKS :

- The contractor is required to submit the method statement to the Building Authority prior to the commencement of demolition works.
- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition and submit structural design/ justification prior to the commencement of works.
- Spanning direction(s) of existing slab to be checked from existing design drawing.
- The existing parent structure must be checked to the satisfaction of structural adequacy prior to the installation of minor works item.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Prior to the commencement of works, the contractor is recommended to refer to Section 4 (Method of Demolition) of the Code of Practice for Demolition of Buildings for details of works.
- Temporary Propping System shall be used to support the operation of concrete breaking or other loading during the demolition process on a suspended slab.

WORKING PROCEDURES :

- Erect the permanent stiffening/ trimming beam and temporary proppings.
- Break-off the existing concrete slab into small piece using mechanical hand-held tools to expose the reinforcing bars.
- Cut the exposed reinforcement and form the edge of the new opening. Scrap the surface of concrete edge for receiving the new concrete.
- Pour concrete after erecting formwork and reinforcing bar.
- 48 hours after concrete casting, remove the formwork and back propping the slab with proper curing works. Remove the back propping until full strength of concrete is reached.
- Arrange construction waste disposal.
- Make good and reinstate the affected areas of the parent structure and clean the site.

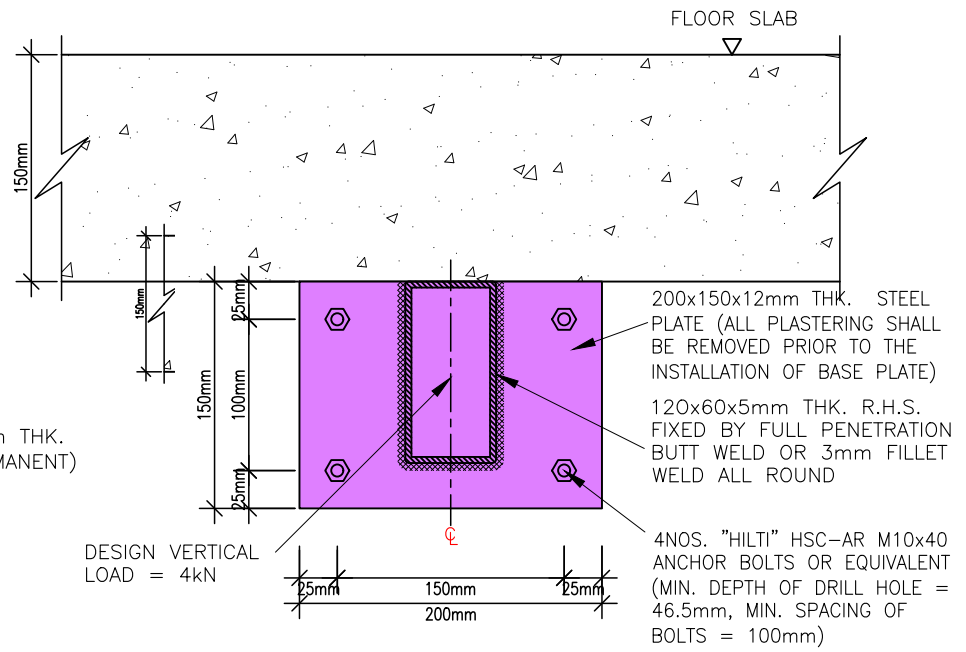
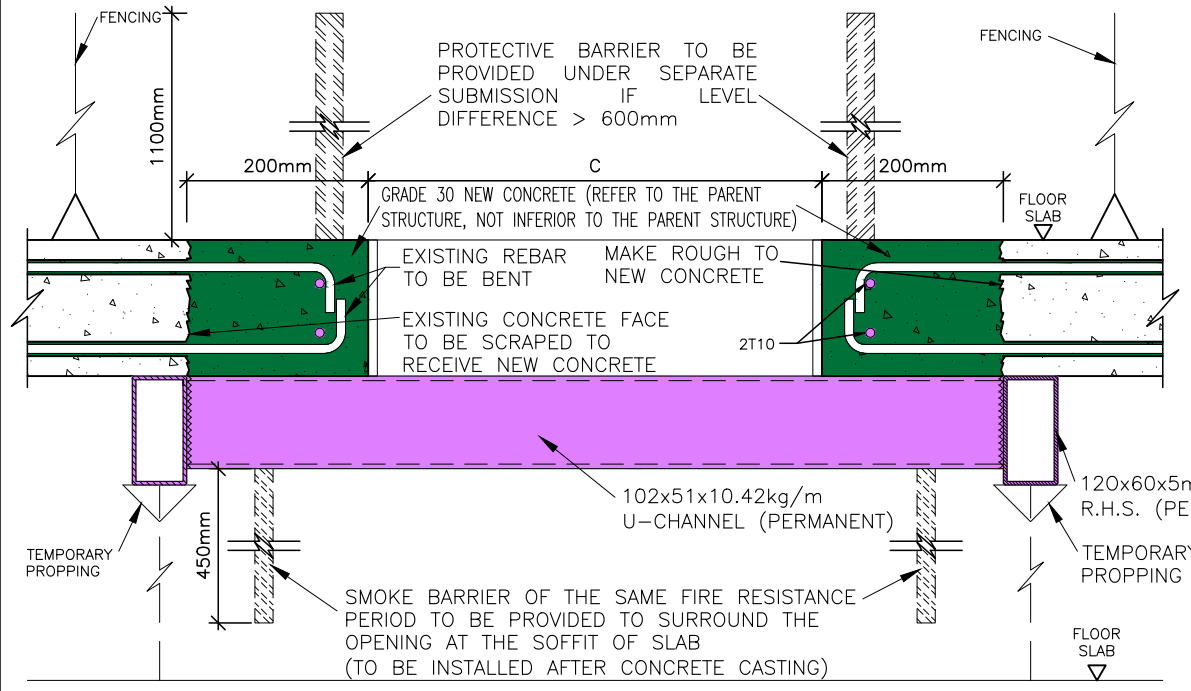
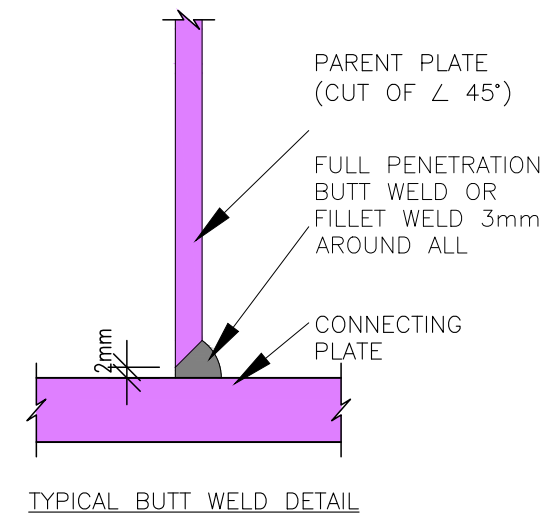
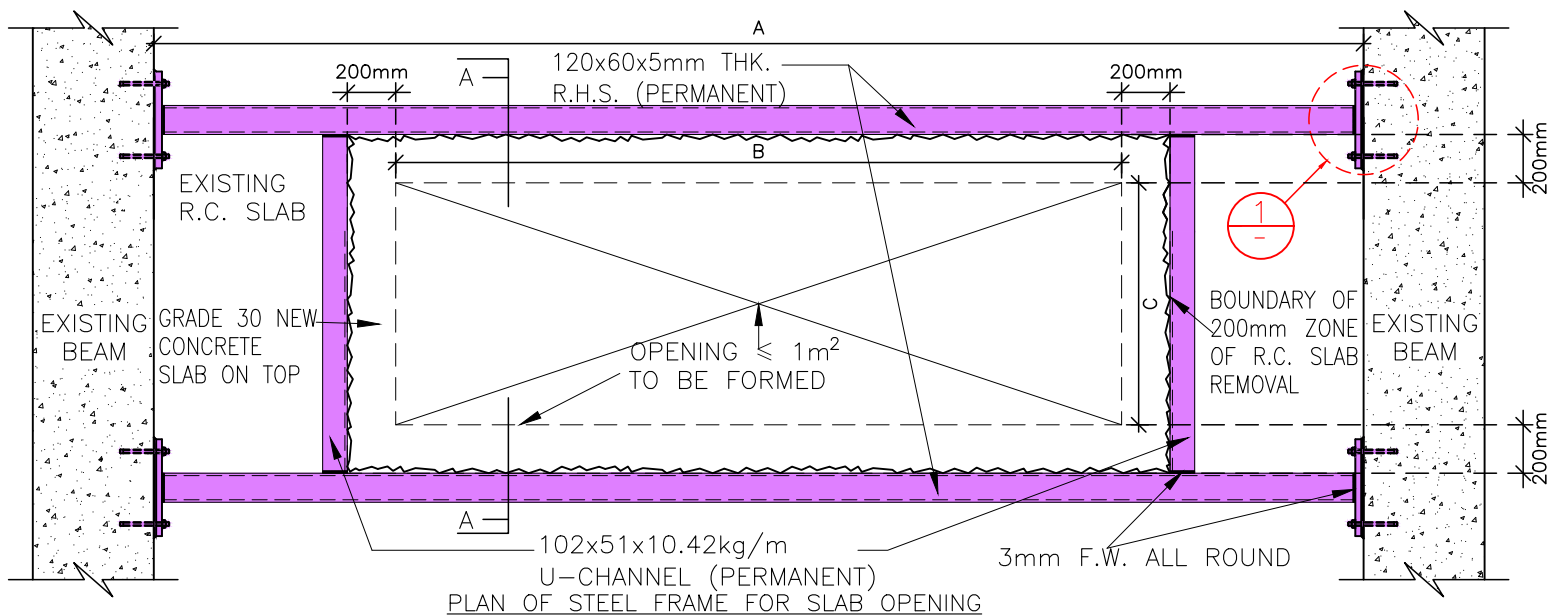
Remarks : This case excludes the DEW item 1

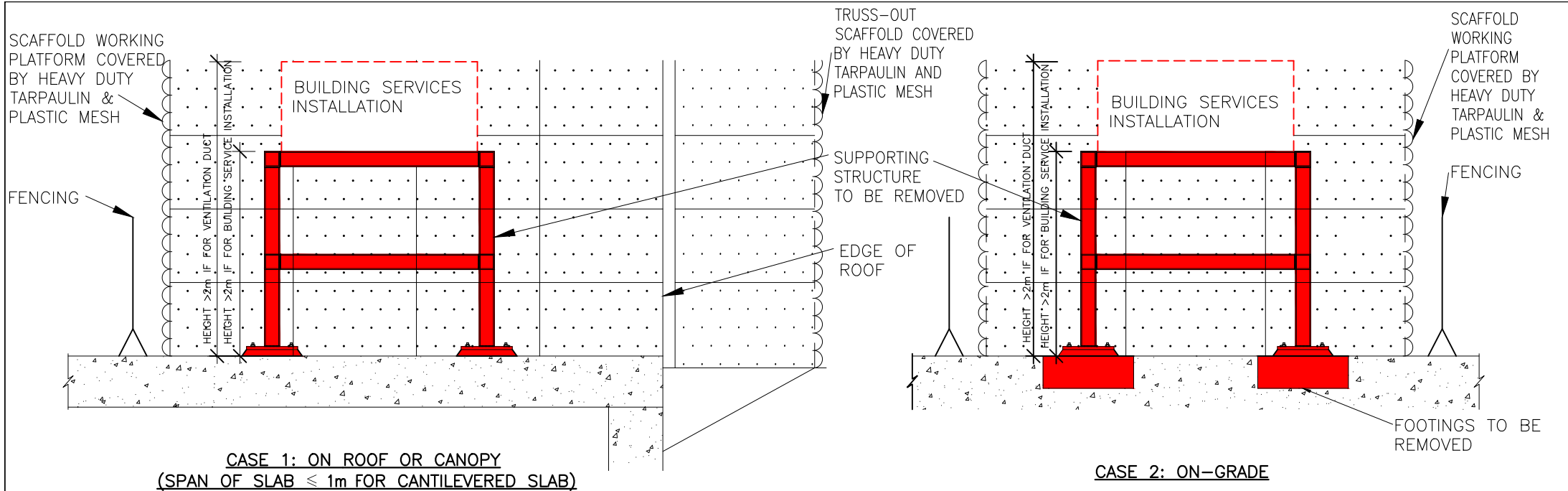
DRAWING TITLE :

MINOR WORKS ITEM 2.1

FORMATION OF OPENING IN A SLAB

SHEET 1 OF 2





**CASE 1: ON ROOF OR CANOPY
(SPAN OF SLAB ≤ 1m FOR CANTILEVERED SLAB)**

CASE 2: ON-GRADE

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.
5. Works procedures should be submitted to the Buildings Department prior to the commencement of works.

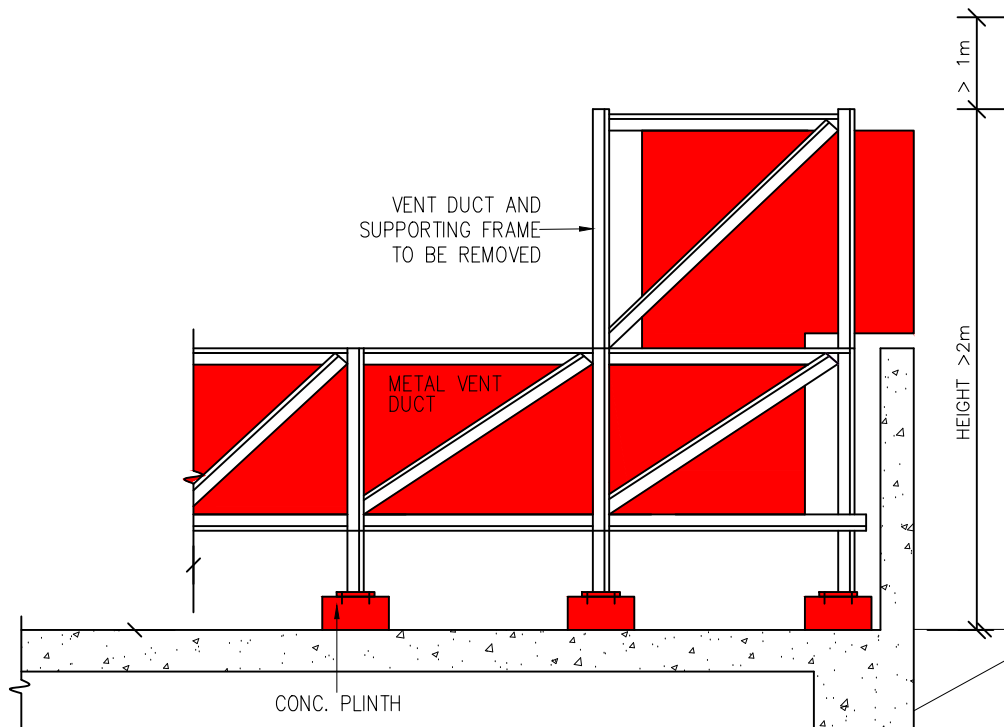
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. No accumulation of demolished parts should be stored on roof.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

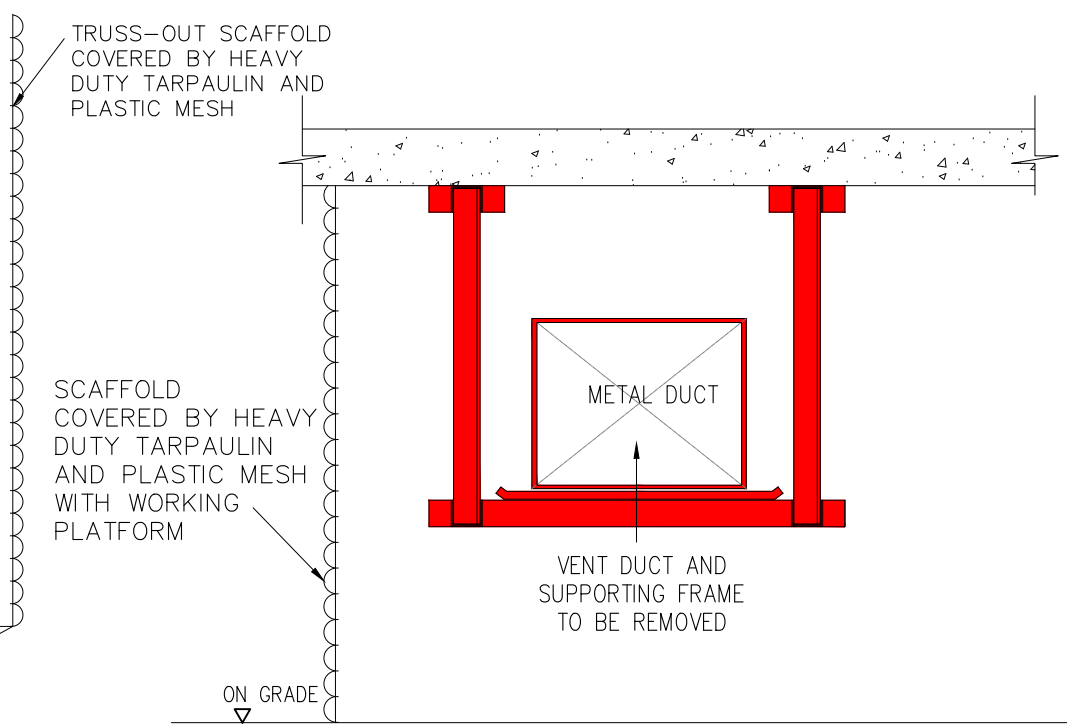
WORKING PROCEDURES :

- A. For removal of supporting structure, metal casing and ventilation duct,
 1. Dismantle the metal casing.
 2. Disconnect electric or water supply of all building services installation and remove the installation prior to any removal works.
 3. Dismantle the steel members of supporting structure, metal casing or ventilation duct by oxy-acetylene torch or hand-held tools to small pieces.
 4. Demolish the concrete plinth or concrete mass of supporting structure by hand-held hydraulic breaker.
 5. Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal. The disposal of demolition waste shall be at designated facilities provided in waste disposal (charges for disposal of construction waste) regulation.
 6. Make good and reinstate the affected areas (including the waterproofing) where necessary.
 7. Remove the bamboo scaffold and clean the site.
- B. For removal of footings (For on-grade situation):
 1. Carry out excavation and backfilling work in accordance with minor works item 2.11.
 2. Break down the concrete footings into small pieces for construction waste disposal.
 3. Backfill and reinstate the top surface.

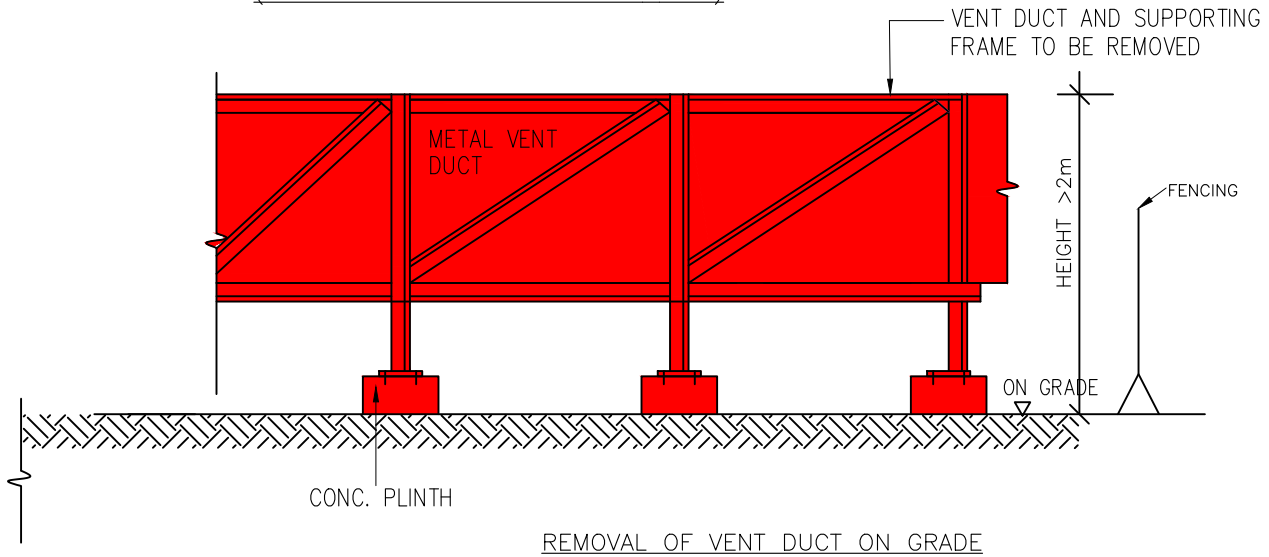
Remarks: This case excludes MW item 3.2, 3.49, DEW 12 OR DEW 23



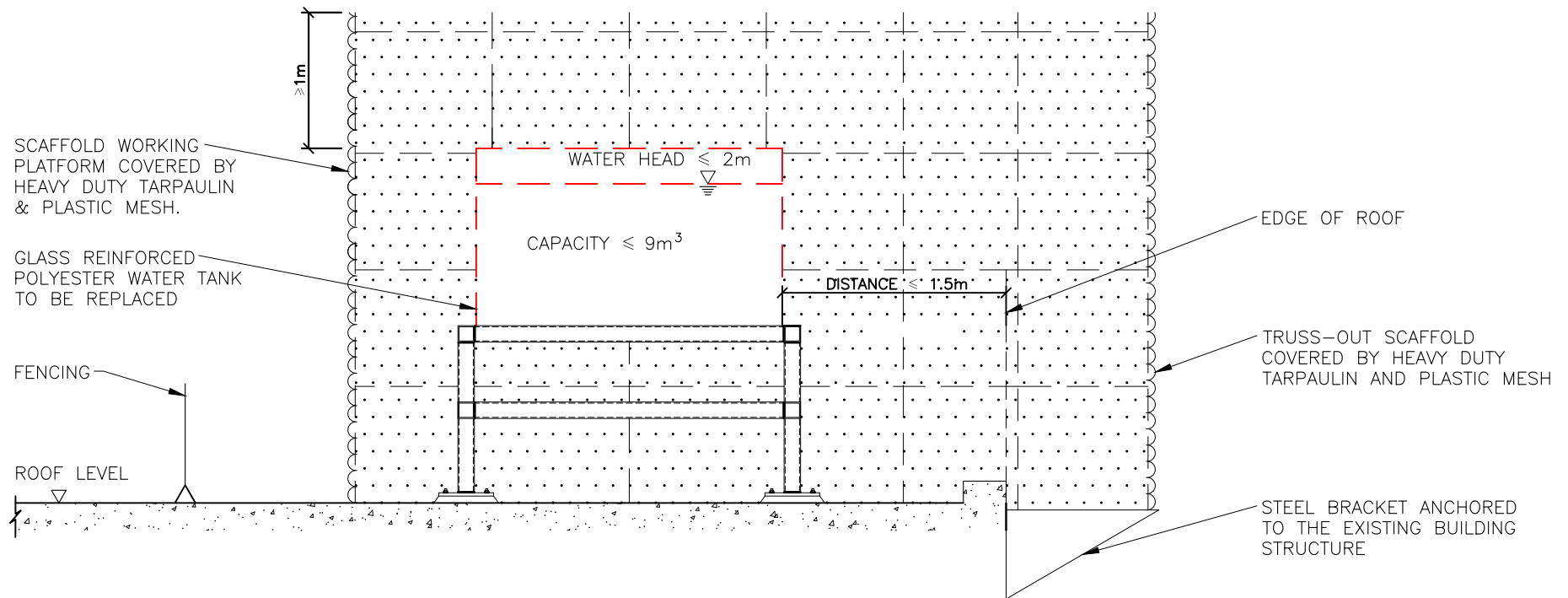
REMOVAL OF VENT DUCT ON A BALCONY, VERANDAH, CANOPY, OR ROOF (SPAN OF CANTILEVERED SLAB $\leq 1m$)



REMOVAL OF VENT DUCT HUNG UNDERNEATH THE SOFFIT OF BALCONY, VERANDAH, CANOPY (SPAN OF CANTILEVERED SLAB $\leq 1m$)



REMOVAL OF VENT DUCT ON GRADE



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

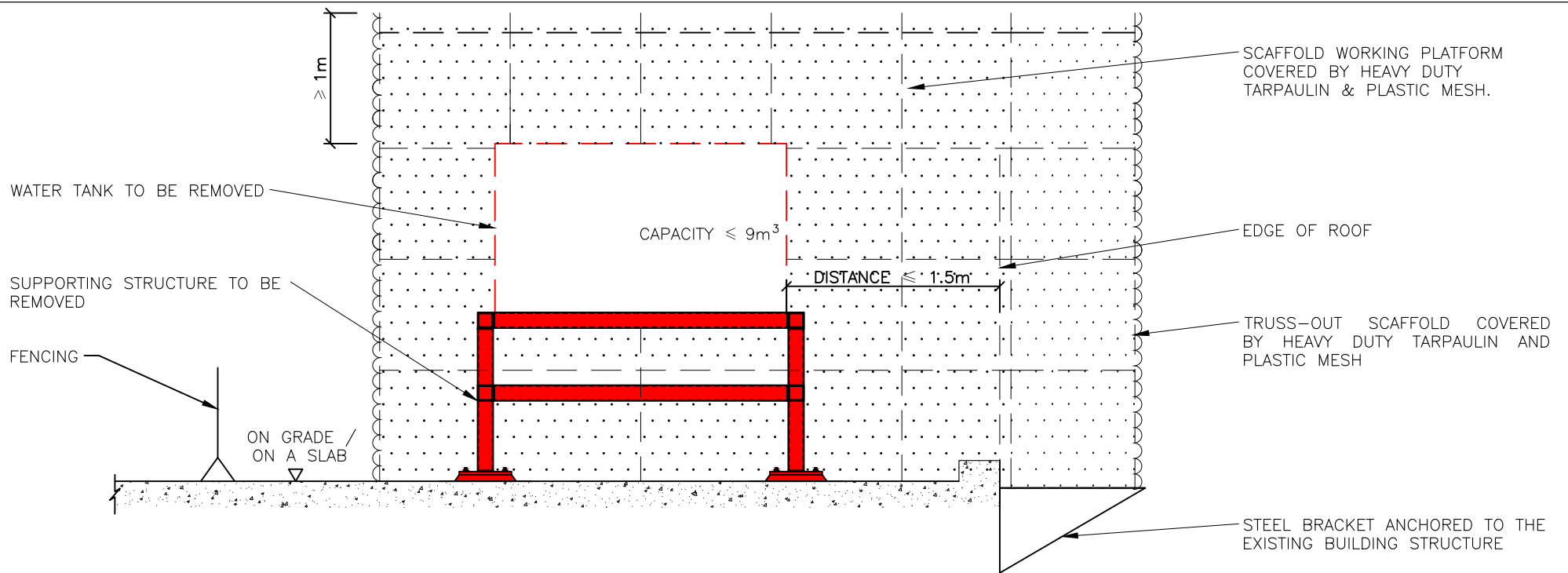
1. Obtain the original design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Fabrication and installation method should be strictly in accordance with the manufacturer's specification.
4. Replacement of the water tank should be in accordance with the original design.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all pipe works and cables connected to the water tank.
2. Remove the panels of the existing glass reinforced polyester water tank.
3. Reinstall the panels of the new glass reinforced polyester water tank in accordance with the original design.
4. Reconnect all pipe works and cables to the newly installed water tank.
5. Carry out test and commissioning to the newly installed water tank.
6. Remove scaffold and clean the site.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings / information for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

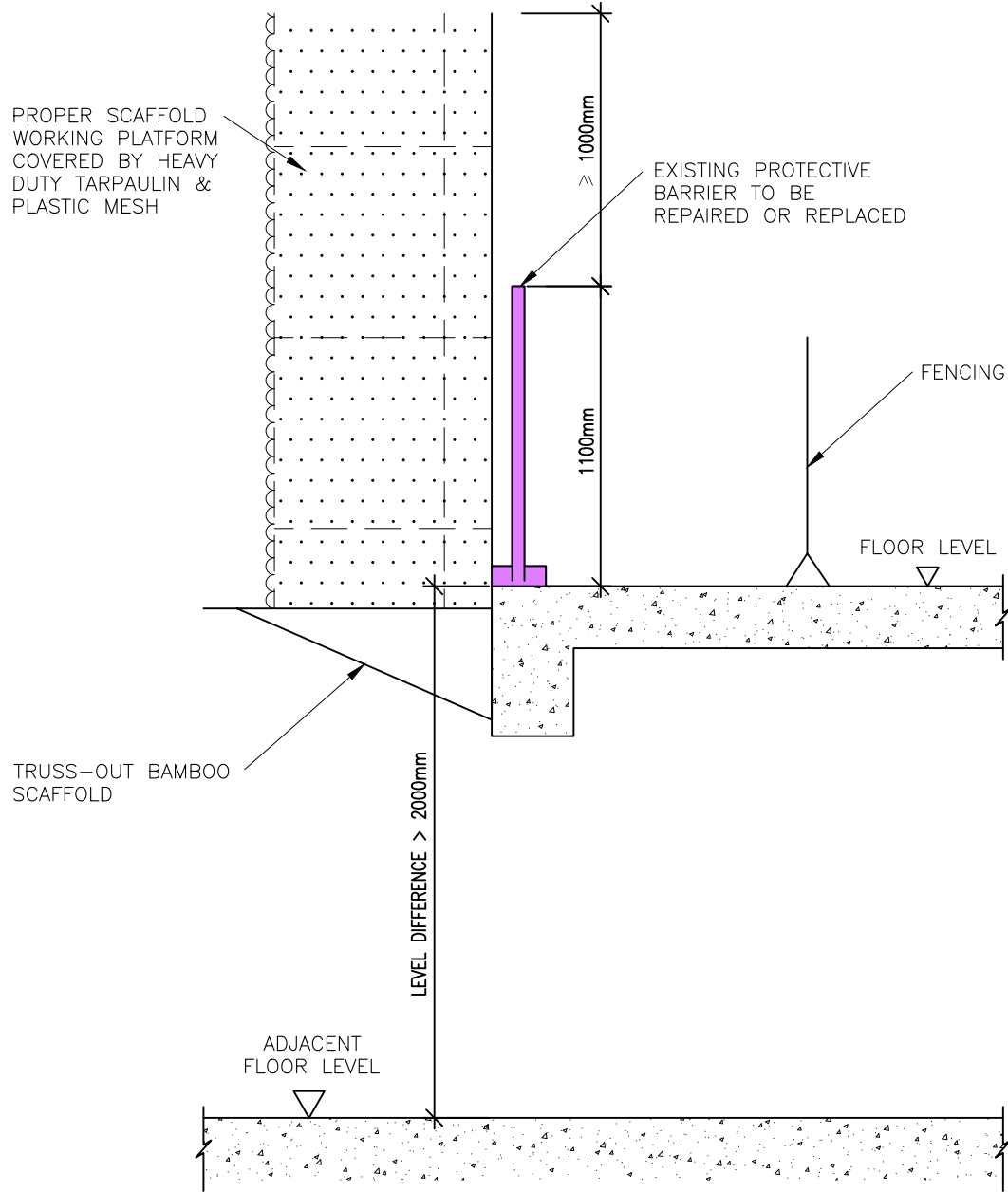
1. Remove the existing water tank and associated pipe work and cable if necessary. (Ensure all water pipes and electrical cable or wires have been disconnected prior to any removal works.)
2. Cut the supporting structure into manageable size pieces by hand-held tools or machine and retrieve for construction waste disposal.
3. Make good and reinstate the affected areas (including waterproofing) where necessary.
4. Dismantle the bamboo scaffold and clean the site.

Remarks : This case excludes The DEW item 4

DRAWING TITLE :

REMOVAL OF WATER TANK LOCATED ON THE ROOF OR ON A SLAB OF A BUILDING

MINOR WORKS ITEM 2.4



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the original design drawings/ information for reference prior to the commencement of works
2. Carry condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold

WORKING PROCEDURES :

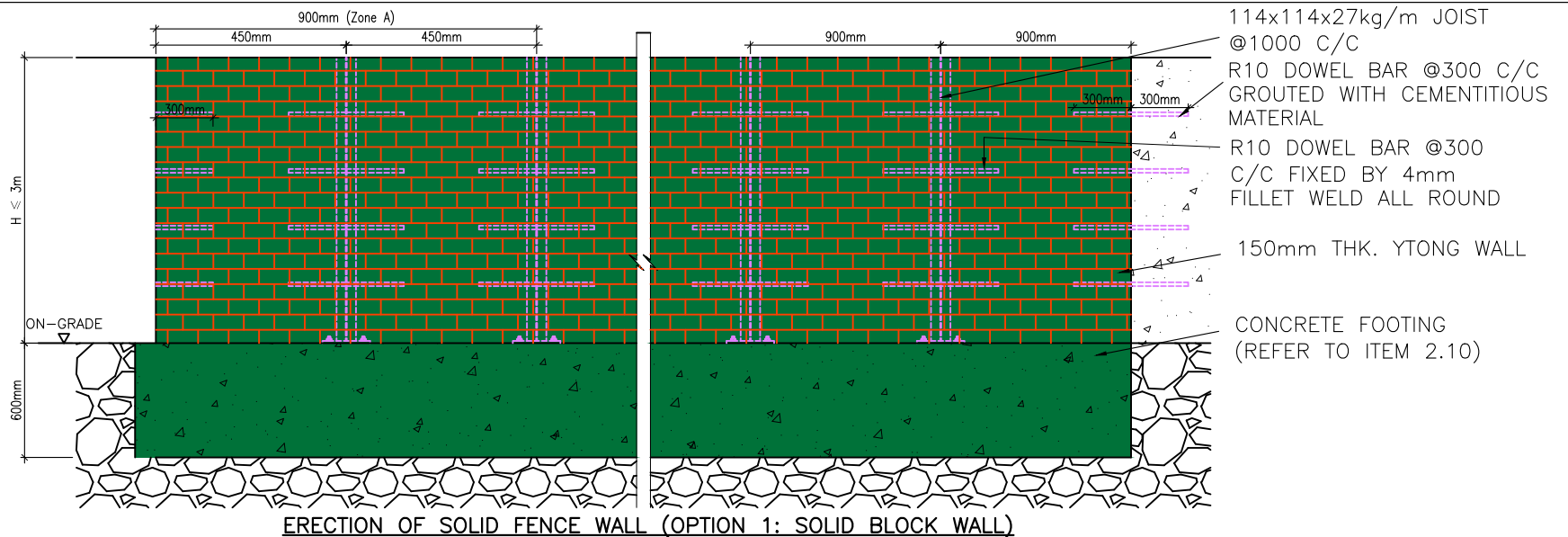
A. Repair

1. Remove the defective member of the protective barrier and replace with a new one in accordance with the original design.
2. Make good and reinstate the affected areas of the parent structure.
3. Remove the bamboo scaffold and clean the site.
4. All rubbish generated shall be disposed as construction waste.

B. Replacement

1. Remove the protective barrier.
2. Reinstall the protective barrier in accordance with the original design.
3. Make good and reinstate the affected areas of the parent structure.
4. Remove the bamboo scaffold and clean the site.
5. All rubbish generated shall be disposed as construction waste.

Note : If tempered glass is to be used, quality control and supervision of heat soak process are required. They shall be undertaken by the required minor works contractor.



ERECTION OF SOLID FENCE WALL (OPTION 1: SOLID BLOCK WALL)

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for Foundations 2017
 - BS 5628: Part 1: 2005 Code of Practice for the Use of Masonry. Structural Use of Unreinforced Masonry
 - Specifications and Method Statements for YTONG AAC Block Wall
- All structural steel to be grade S275 JO to BS EN 10029 for steel plate and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461 : 2009
- All connections to be 4 mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011-1:2009 and all electrodes to BS EN ISO 2560 : 2009
- All anchor bolts to be Hilti HST 3-R M24 or equivalent and shall be installed according to the manufacturer's specification.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm^2 and the density of 650 kg/m^3 .
- Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm^2 by site tests.
- All concrete works shall comply with CS1 :2010
- Concrete grade and the minimum cover shall be grade 30 and 75 mm respectively.
- Existing concrete grade is assumed to be Grade 30 with 75 mm concrete cover.
- Steel reinforcement to be high yield type II deformed bar with the characteristic strength of 500 N/mm^2 and comply with CS2:2012
- Minimum anchorage and lap length are 700mm unless otherwise specified.
- Minimum allowable ground pressure to be 50 kN/m^2 .

DESIGN LOADS :

- Assume the wall without return corners and length of wall / height of wall ≥ 10
- Wind Load = 1.63 kN/m^2 with force coeff. 3.4 (Zone A) and 2.1 (Other than Zone A) (effective height $\leq 3 \text{ m}$)
Assume topography factor, $S_t=1.0$; Wind directionality factor, $S_\theta=0.85$; Size factor, $S_s=1.0$

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- The structural adequacy of the supporting parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

WORKING PROCEDURES FOR SOLID BLOCK WALL :

- Erection
 - Excavation and formation of spread footing shall take reference MW item 2.11 and MW item 2.10 respectively.
 - Drill holes to the footing structure for anchor bolts installation.
 - Install anchor bolts and erect the steel post.
 - Drill hole to the existing wall structure.
 - Install dowel bar as per the drawing.
 - Erect the block wall.
 - Make good and reinstate the affected areas of the parent building and clean the site.
- Alteration
 - Break down the wall into small pieces for construction waste disposal.
 - Replace the existing dowel bar by new dowel bar with same size.
 - Alter the block wall.
 - Make good and reinstate the affected areas of the parent building and clean the site.

Remarks :

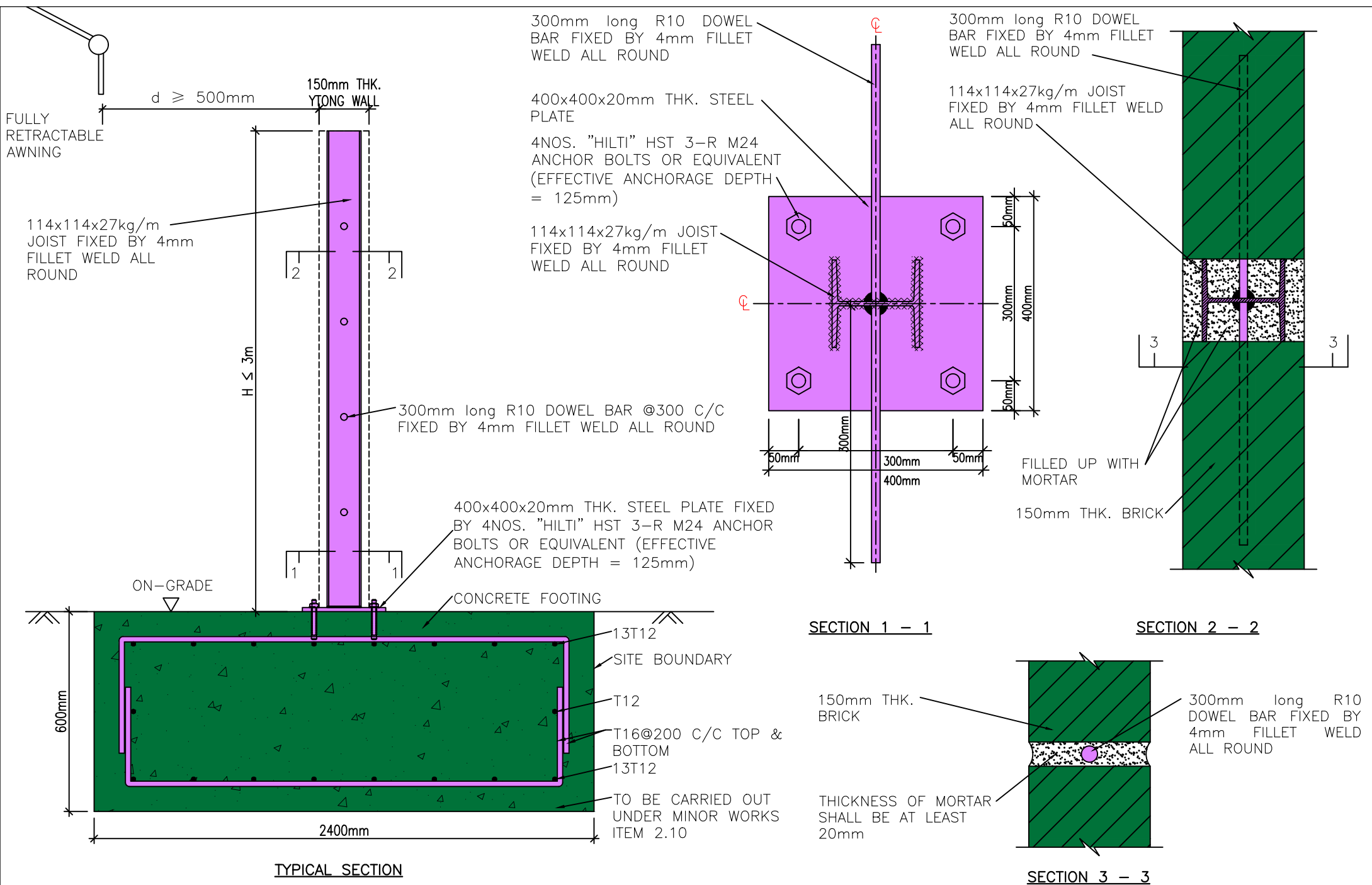
- For excavation works for the footings, please refer to MW item 2.11.
- For construction of spread footings, please refer to MW item 2.10.
- If the height of the wall is more than 1.1m, no part of it is covered by any retractable awning or within an horizontal distance of 500mm from the retractable awning.
- This case excludes DEW item 5.

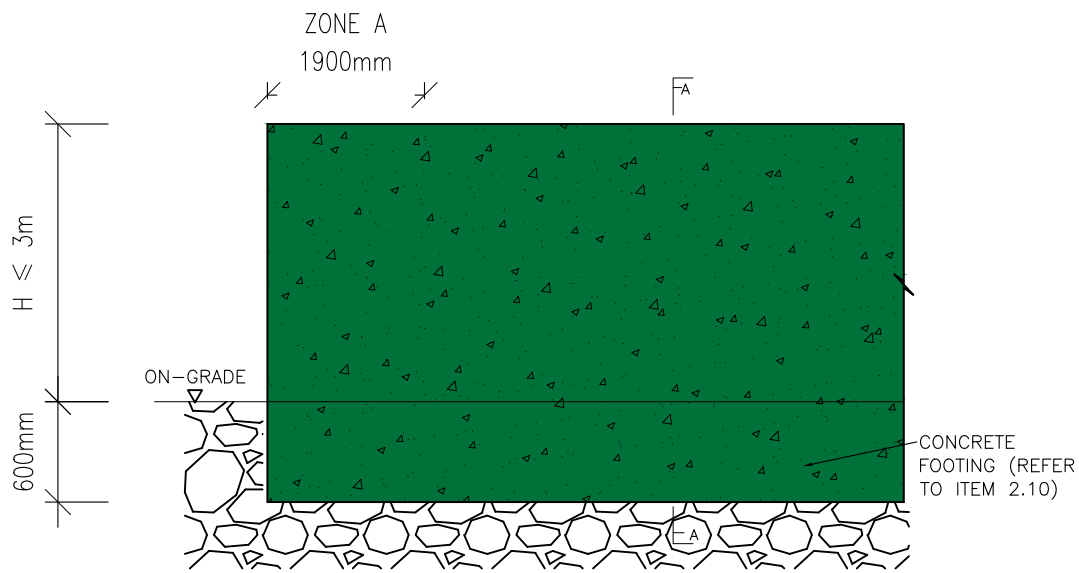
DRAWING TITLE :

MINOR WORKS ITEM 2.6

ERECTION OR ALTERATION OF SOLID FENCE WALL

SHEET 1 OF 3





**ERECTION OF SOLID FENCE WALL
(OPTION 2: REINFORCED CONCRETE WALL)**

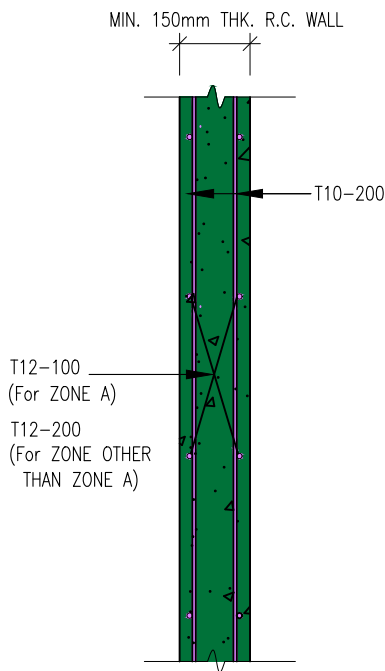
Working Procedures For R.C. Wall

A. Erection

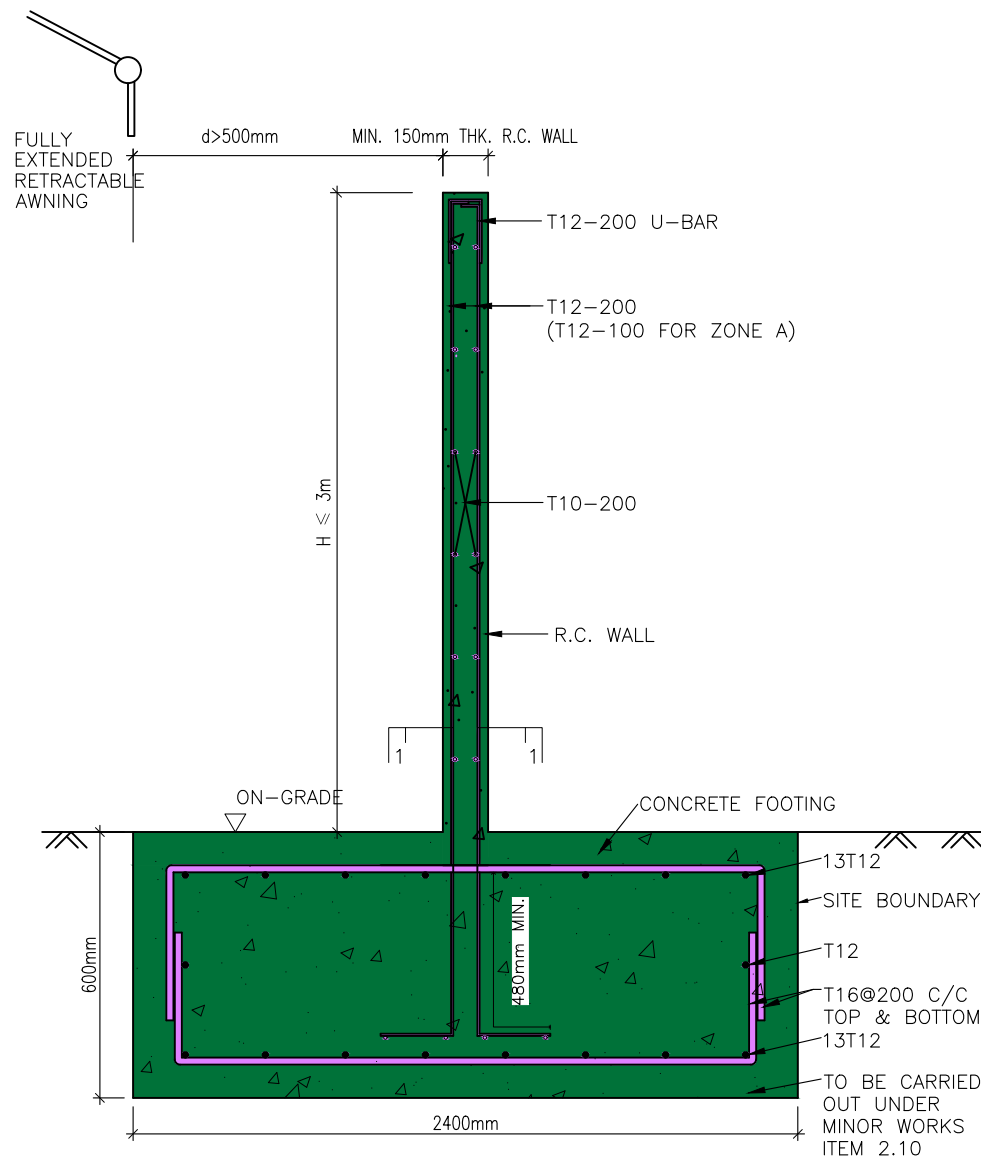
1. Excavate and construct the spread footing by taking reference to MW Item 2.11 and MW Item 2.10 respectively.
2. Erect formwork and fix reinforcement bar for the wall.
3. Cast concrete to form the wall.
4. 24 hr after the casting, remove the formwork.
5. Make good and reinstate the affected areas of the parent building and clean the site.

B. Alteration

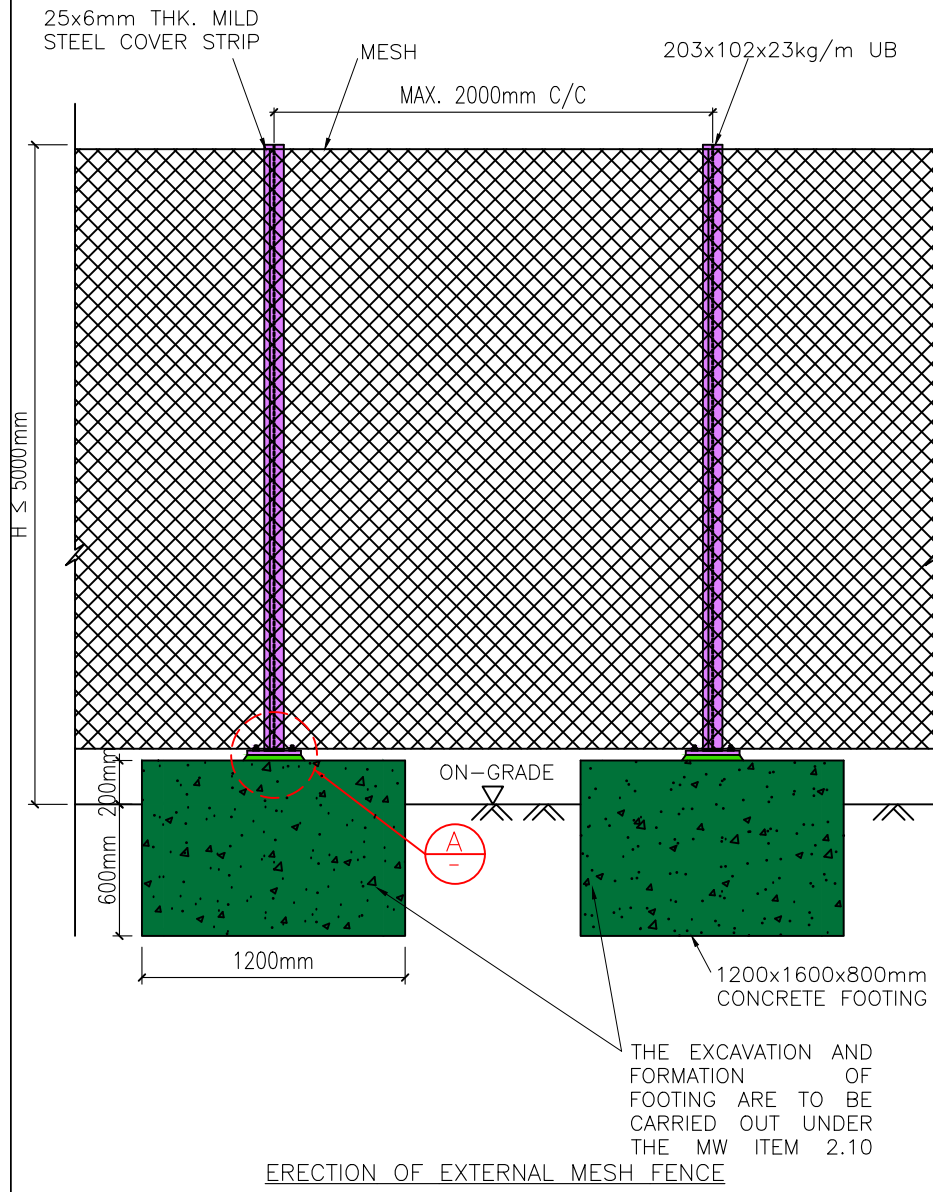
1. Remove the unwanted part by breaking into small pieces by hand held tools.
2. Excavate and construct the spread footing by taking reference to MW Item 2.11 and MW Item 2.10 respectively.
3. Erect formwork and fix reinforcement bar for the wall.
4. Cast concrete to form the wall.
5. 24 hr after the casting, remove the formwork.
6. Make good and reinstate the affected areas of the parent building and clean the site.



SECTION 1 - 1



SECTION A-A



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for Foundations 2017
- All structural steel to be grade S275 JOH/JO to BS EN 10029 for plate and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461 : 2009
- All connections to be 4 mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011-1:2009 and all electrodes to BS EN ISO 2560: 2009
- All anchor bolts to be Hilti HST3-R M16 or M20 or equivalent and shall be installed according to the manufacturer's specification.
- All concrete works shall comply with CS1: 2010
- Concrete grade and cover shall be grade 30 and 75 mm respectively.
- Steel reinforcement shall comply with CS2:2012 and shall be bent in accordance with BS 4466.
- Minimum anchorage and lap length are 700mm unless otherwise specified.
- Minimum allowable ground pressure to be 50 kN/m^2 .
- Type of steel mesh to be No. 10 gauge 50mm mesh chain link.
- The works shall not obstruct or affect any means of escape, means of access and drainage.

DESIGN LOADS :

- Dead Load = 0.5 kN/m^2
- Wind Load = 1.77 kN/m^2 (Effective height = 5m) with force coeff. of 1.75 and solidity ratio of 0.15 (mesh fence only).
- Wind Load = 1.77 kN/m^2 (Effective height = 5m) with force coeff. of 2 (railing only). Assume topography factor, $St=1.0$; Wind directionality factor, $S\theta=0.85$; size factor, $S_s=1.0$

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

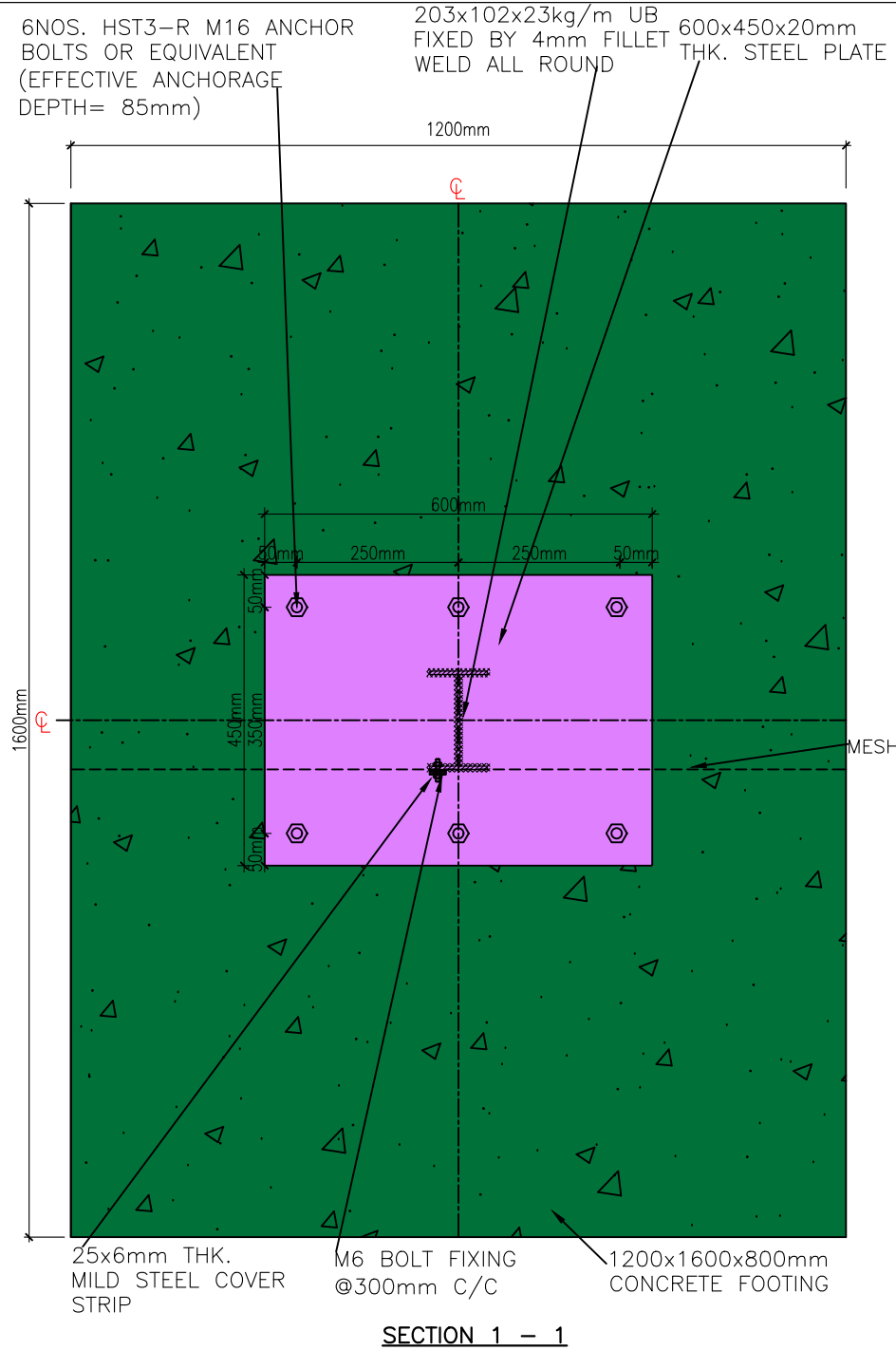
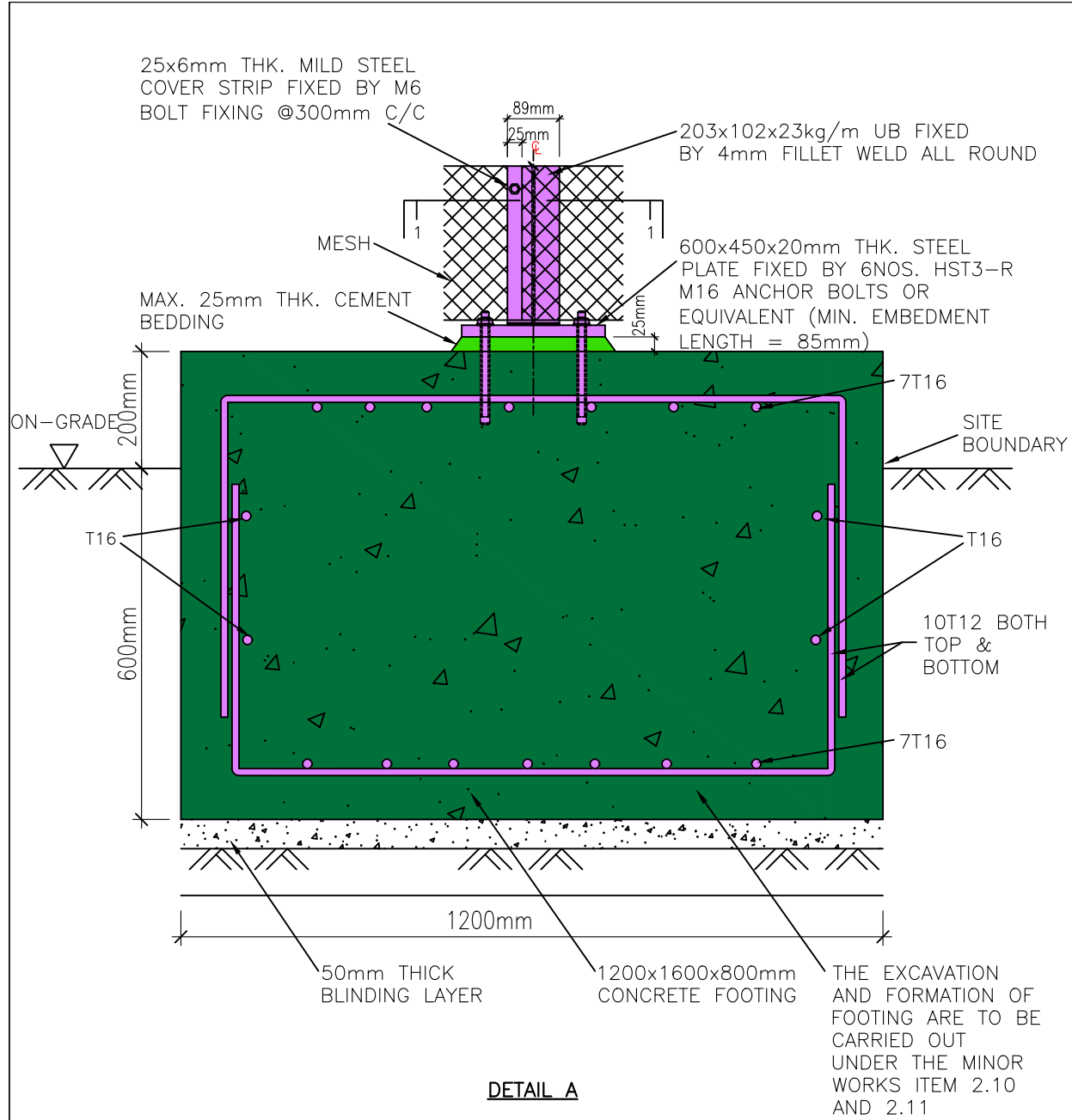
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

WORKING PROCEDURES :

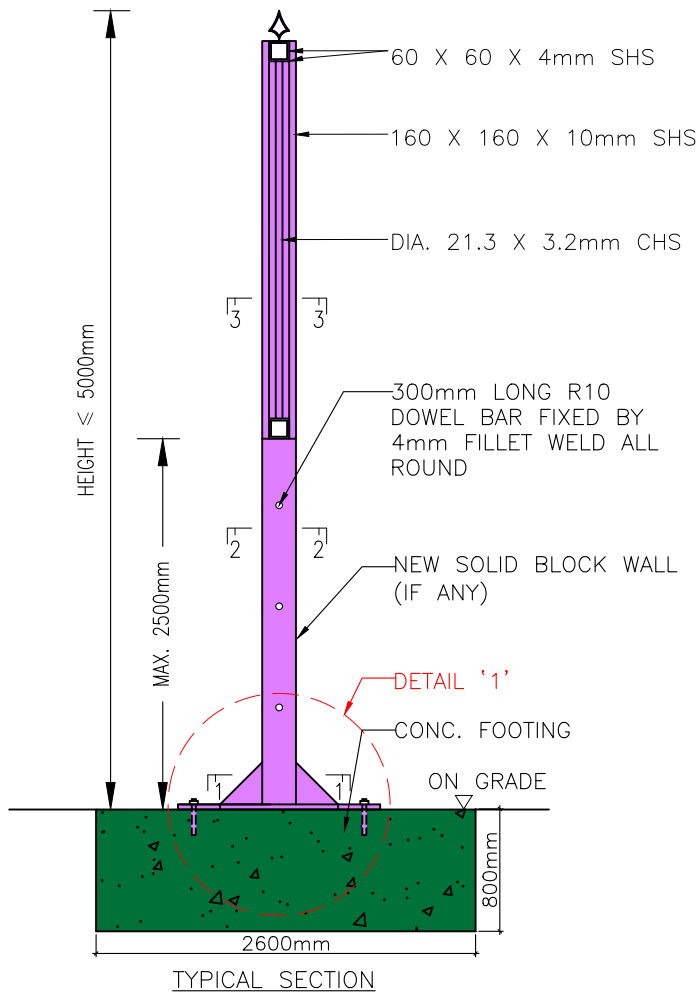
- A. Erection
- Excavation and construction of spread footing shall take reference on item 2.11 and item 2.10 respectively.
 - Drill holes to the footing structure for anchor bolts installation.
 - Install anchor bolts.
 - Erect UB Post and fix line wire panel, or railing or block wall and railing as per drawing
 - Make good and reinstate any affected areas of the adjoining street works and clean the site.
- B. Alteration
- Break down the UB Post and other defective parts into small pieces for construction waste disposal.
 - Replace the existing bolts and wire panel by new bolts and panel with same size or other parts in accordance with original design.
 - Make good and reinstate the affected areas of the adjoining street works and clean the site.

Remarks :

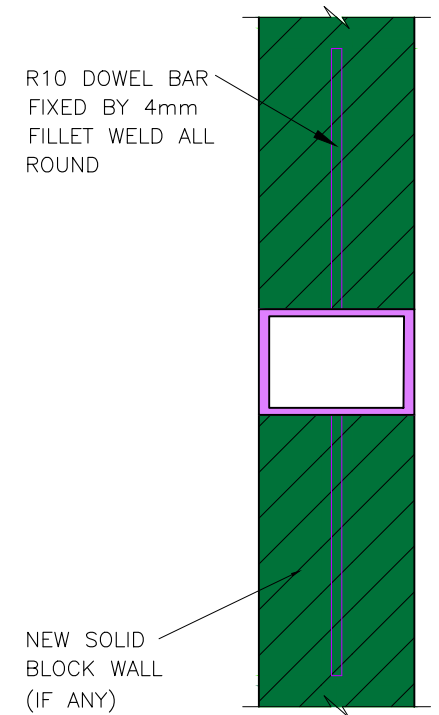
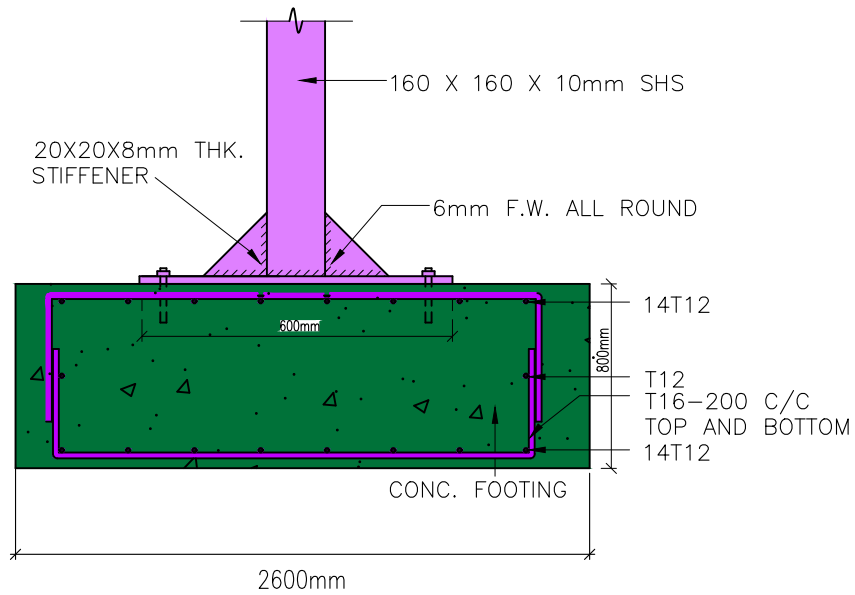
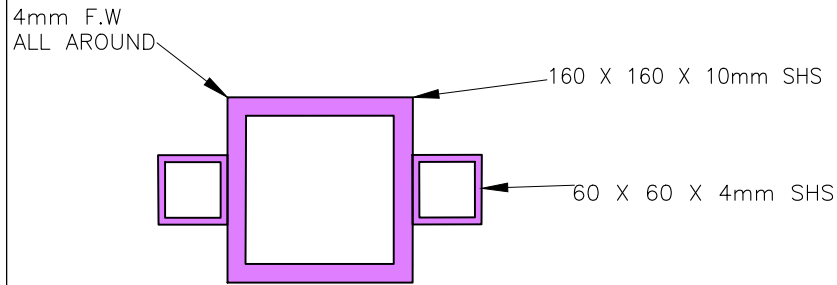
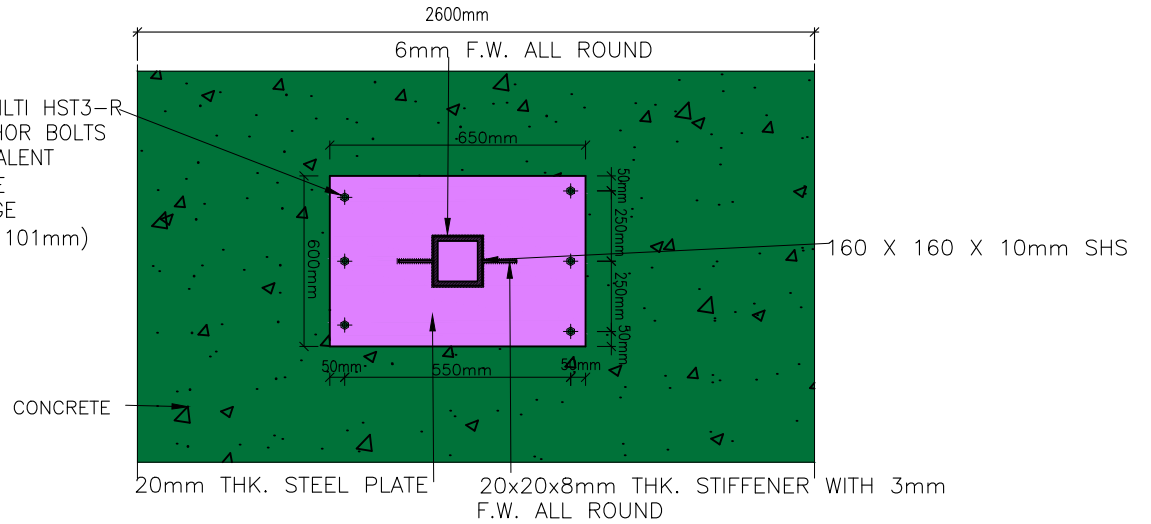
- For excavation works & construction of spread footings, please refer to MW items 2.11 & 2.10 respectively.
- This case excludes the DEW Item 16 or 21.
- The fence or railing is not used as a protective barrier.
- In case of fence or railing with a height more than 1.1m, no part of it is covered by a retractable awning or is within a horizontal clearance of 500mm from a retractable awning when the awning is fully extended.

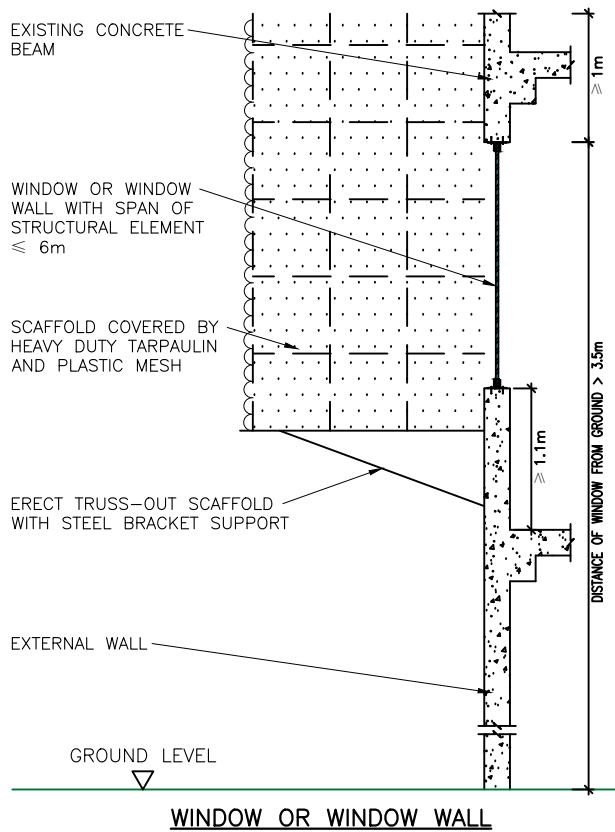




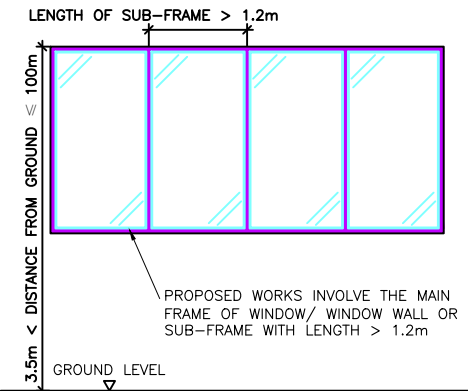


6 NOS. HILTI HST3-R
M20 ANCHOR BOLTS
OR EQUIVALENT
(EFFECTIVE
ANCHORAGE
DEPTH = 101mm)



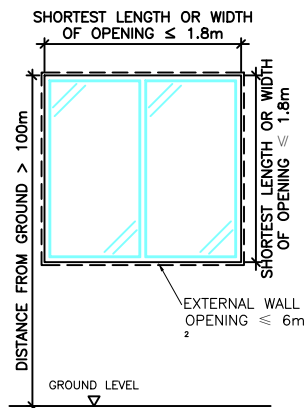


WINDOW OR WINDOW WALL



CONDITION DIAGRAM 1

(3.5m < DISTANCE FROM GROUND ≤ 100m)



CONDITION DIAGRAM 2

(DISTANCE FROM GROUND > 100m)

Note: Does not apply if works involve repair or replacement of window/window wall only in accordance with original design.

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- The requirements of PNAP APP-116 and PNRC 47 should be followed for the standards and details of aluminium windows and fixing of hinges.
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - British Standard BS 6262 – Glazing for Buildings
 - Code of practice for structural use of glass 2018
- All structural steel plates and angles to be Grade S275J0 to BS EN 10029 and BS EN 10056 respectively. All steelworks shall be hot dip galvanized to BS EN ISO 1461.
- All anchor bolts to be HILTI HSC-AR M10x40 or equivalent @ 250 mm c/c or equivalent and shall be installed according to the manufacturer's specifications.
- All glass panels to be tempered glass with ultimate design strength of 80 N/ mm² and strength reduction factor = 1.0. All glass should be flat clear / tinted / coated glass. The glass surface treatment shall not be ceramic fritted / enamelled painted / patterned(embossed) / sand blasted / acid etched.
- For the size of glass panel > 2.5m² and the distance between any point of glass panel and floor / ground on either size of the panel > 5m, the thickness of glass panel = 12mm +1.52mm PVB + 12mm tempered glass. For other, the thickness of glass panel = 19mm.
- Non-structural silicone sealant to be Dow Corning 791 or equivalent.
- Structural silicone sealant to be Dow Corning 795 or equivalent. Maximum allowable design strength is 138 N/mm².
- Existing concrete grade is assumed to be Grade 20 with the min. cube strength of 20N/mm².
- The works do not result in any additional load to any cantilevered slab.
- Size of glass should be 2mm smaller than the opening size to allow thermal expansion.
- Proposed works do not involve the alteration of any other structural elements, except a simply supported beam that:
 - is not of pre-stressed construction; and
 - is not used to support any column, flat slab or ribbed beam
- If rivets or screws is used, stainless steel rivets or screws shall be used for better corrosion resistance. Measures against bi-metallic action shall be provided.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

- Obtain the original design drawings/ information for reference prior to the commencement of works.
- Inform the utilities company or sector if the works to be involved.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

DESIGN LOADS/ ASSUMPTION :

- Dead Load = 26.5 kN/m³
- Wind Load = 3.05 kN/m² with total pressure coeff. of 1.4 (height above ground level max. 150m)
- 19mm THK. tempered glass and its fixing is designed for glass span of 2.1m, spanning one-way
- The structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES

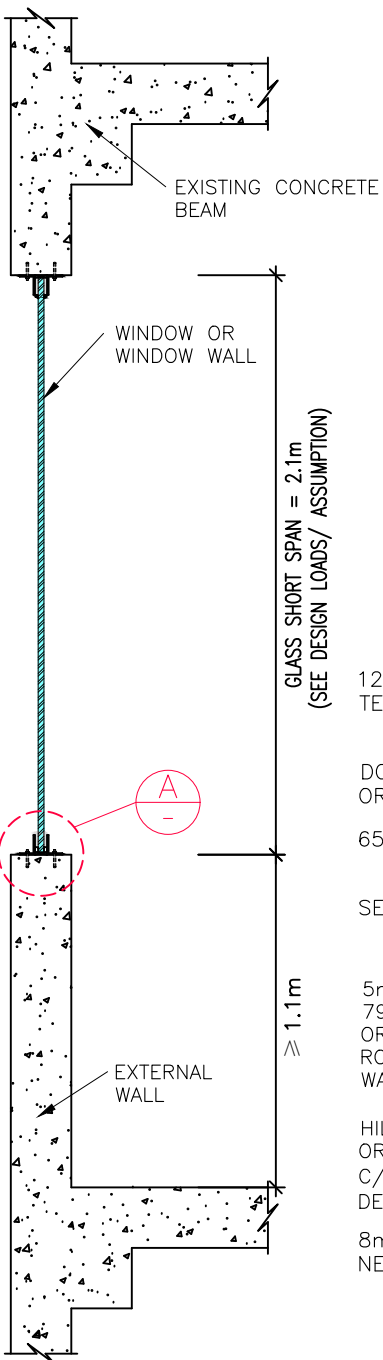
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

- Installation**
 - Setting out the level and alignment of the window frame onto the wall.
 - Place the window frame into correct setting out.
 - Fix the angle and neoprene pad in accordance with the original design.
 - Seal up the gap between the edge of opening and window frames by using non-shrink cementitious grout.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration**
 - Temporary fix the window frame to a rigid point by using proper stainless steel wire/ nylon.
 - Break off the concrete surrounding of the original window frame by hand-held hydraulic breaker. Allow 25mm to 75mm between the edge of opening and window frames.
 - Cut off the original steel angle.
 - Remove the original window glass and install the new window frames and glass according to the new design.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Repair or Replacement**
 - Temporary fix the window frame to a rigid point by using proper stainless steel wire/ nylon rope.
 - Remove the defective parts and repair in accordance with original design.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

Remarks:

- For making opening on non-loadbearing external wall, please refer to minor works item 1.15, 2.13, 2.14 or 3.11 where appropriate.
- For removal of existing window or window wall, please refer to minor works item 2.9.



HILTI HSC-AR M10x40 OR EQUIVALENT @ 250 C/C MAX (MIN. HOLE DEPTH = 47mm)

SETTING BLOCKS

12mm +1.52mm PVB + 12mm THK. TEMPERED GLASS

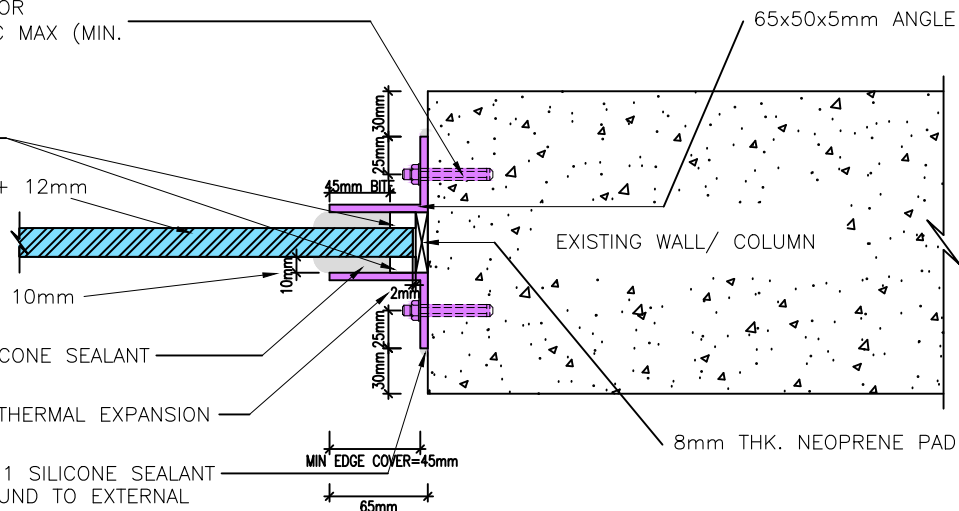
GLUELINE THICKNESS = 10mm

DOW CORNING 795 SILICONE SEALANT OR EQUIVALENT

2mm ALLOWANCE FOR THERMAL EXPANSION

5mm DOW CORNING 791 SILICONE SEALANT OR EQUIVALENT ALL ROUND TO EXTERNAL WALL

SIDE EDGE FIXING DETAILS



12mm +1.52mm PVB +12mm THK. TEMPERED GLASS

DOW CORNING 795 SILICONE SEALANT OR EQUIVALENT

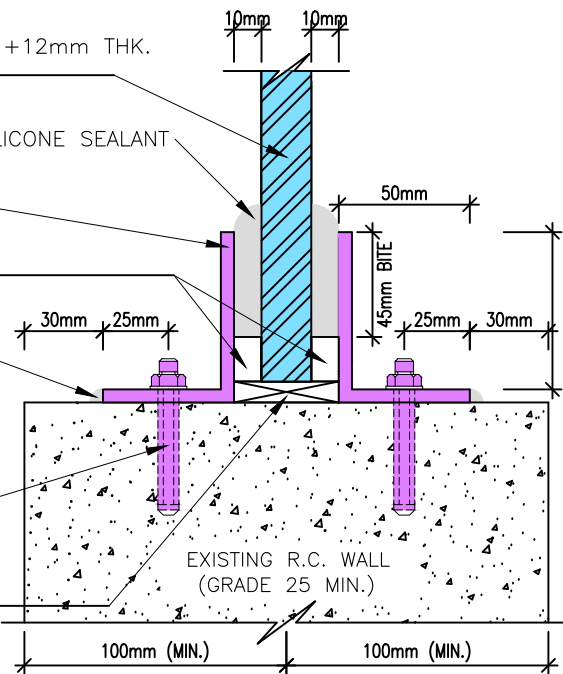
65x50x5mm ANGLE

SETTING BLOCKS

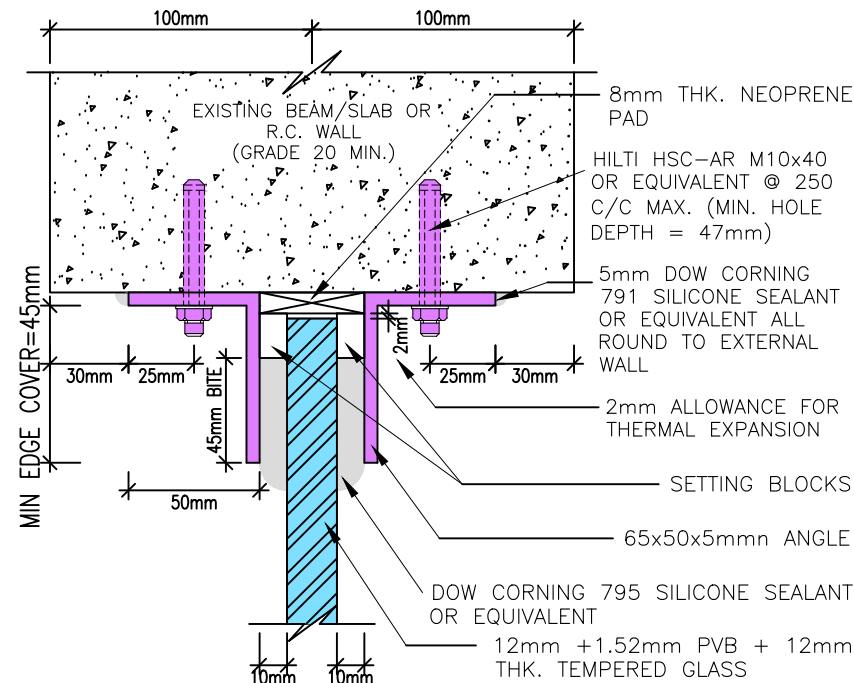
5mm DOW CORNING 791 SILICONE SEALANT OR EQUIVALENT ALL ROUND TO EXTERNAL WALL

HILTI HSC-AR M10x40 OR EQUIVALENT @ 250 C/C MAX.(MIN. HOLE DEPTH = 47mm)

8mm THK. NEOPRENE PAD



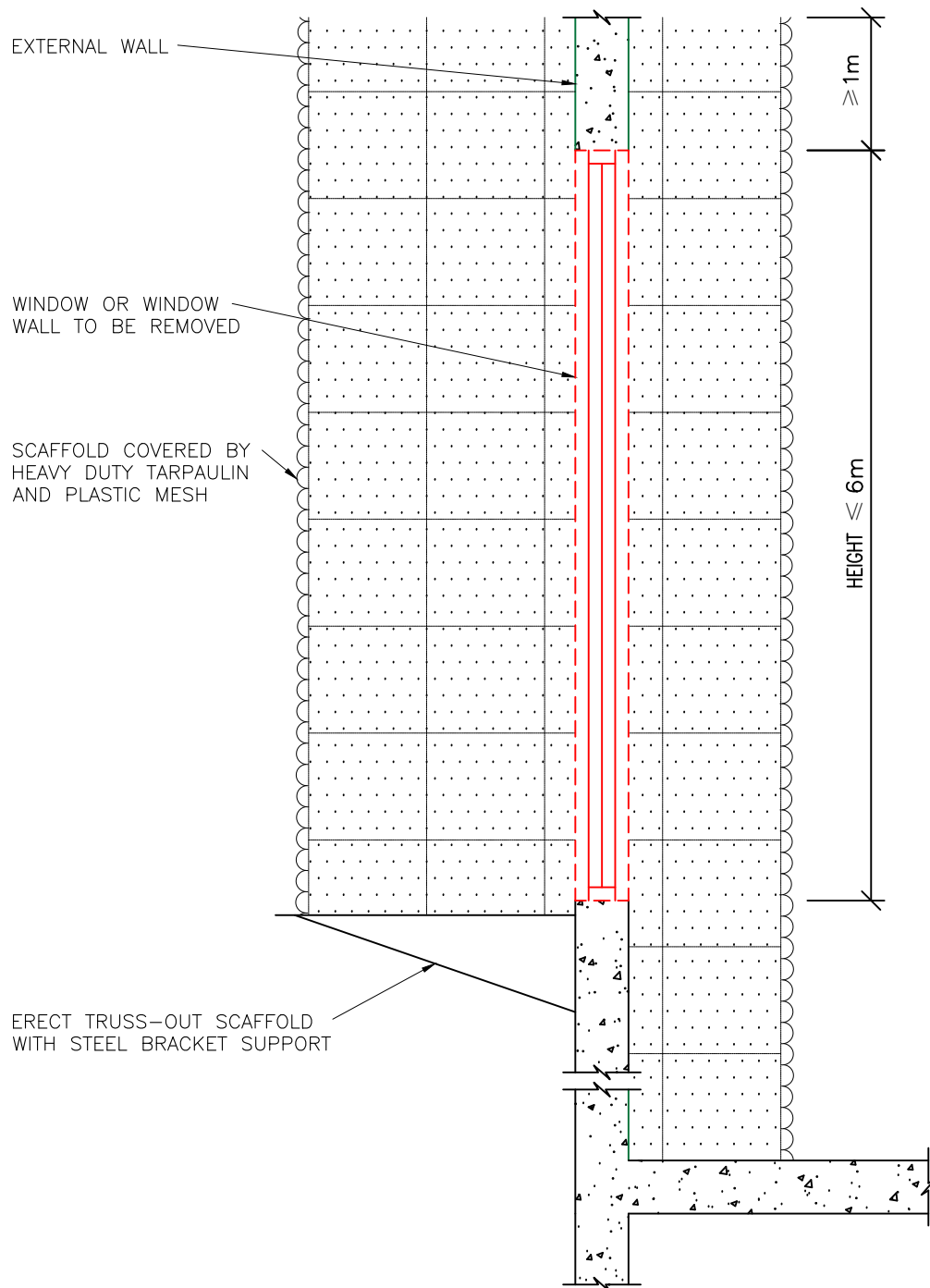
MIN EDGE COVER=45mm



SECTION OF WINDOW/ WINDOW WALL

DETAIL A : BOTTOM EDGE FIXING DETAILS

TOP EDGE FIXING DETAILS



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove all glazing manually.
2. Remove all openable window frames manually by mechanical tool where appropriate.
3. Remove the main frame/ mullion/ transom using mechanical hand held tool.
4. All members shall be cut into small pieces for construction waste disposal. The disposal of waste shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
5. Provide temporary protection to the wall opening for subsequent works where necessary
6. Dismantle bamboo scaffold and clean the site.

Remarks:

1. This case excludes minor works item 3.7.
2. For window erection to the opening, please refer to minor works item 2.8.
3. For non-load bearing block wall erection to the opening, please refer to minor works item 2.14 or 3.11 where appropriate.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for Foundations 2017
 - Geoguide 1 : Guide to Retaining Wall Design, 2nd Edition
4. All structural steel to be grade S275.
5. All concrete works shall comply with CS1:2010.
6. Steel reinforcement shall comply with CS2:2012 and shall be bent in accordance with BS BS8666:2005
7. Minimum anchorage and lap length are 700mm unless otherwise specified.
8. Minimum allowable ground pressure to be 50 kN/m².
9. Minimum concrete grade to be grade C30 with 75mm concrete cover.
10. All reinforcement to be grade 500.

Design Dimensions :

A = 0.6m, B = 1.4m, C = 0.2m, maximum allowable vertical load = 72kN

Design Loads :

1. Surcharge = 5 kN/m²

Design Soil Parameter :

c = 0 kPa, ϕ = 30°, Ka = 0.35, Kp = 3.00

PREPARATION WORKS :

1. Obtain and investigate all underground utilities drawings/ information prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior commencement of works.
3. Obtain the original design of the approved structure for reference if any required reinstatement works.
4. Inform underground utilities companies(if required) and MTRCL (if the works carried out within Schedule area 3 in Schedule 5 of BO) before commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. For trench excavation with depth greater than 1.2m, adequate support must be installed at a timely manner and ahead of excavation as far as practicable. For excavation depth less than 1.2m, shoring may not be required for ground that is found to be self-supporting. However, if external loads are likely to be present, or if there is doubt as to the stability of the trench sides due to the presence of weak ground or high groundwater, especially in inclement weather, the trench sides should be supported even if the excavation depth is less than 1.2m. Design and installation of shoring support shall be referred to the "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003) which provides good technical guidelines on good practice of shoring support and drainage measures for trench excavations.
3. Shoring support is required if the depth of trench is more than 1.2m. Erection method shall be referred to "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003)
 - A. The sizes of the structural members (e.g timber boards, struts and walings) and the spacings between struts depend on the actual excavation depth, ground conditions and other factors affecting the loading on the shoring system.
 - B. Half timber board shoring may be adequate for moderately firm to firm soil provided that the groundwater level is below the bottom of the trench.
4. There is no over-excavation, excessive temporary cutting slopes and stockpiling of materials adversely affecting the adjoining ground, structure or building. In case of any undue ground settlement or undue deflection of adjoining buildings/ structures, works should be suspended immediately and notify BA for the remedial proposal.
5. Other precautionary measures related to excavations works are referred to MW item 1.12 (1.5m<Depth≤3m) or 2.11 (0.3m<Depth≤1.5m)

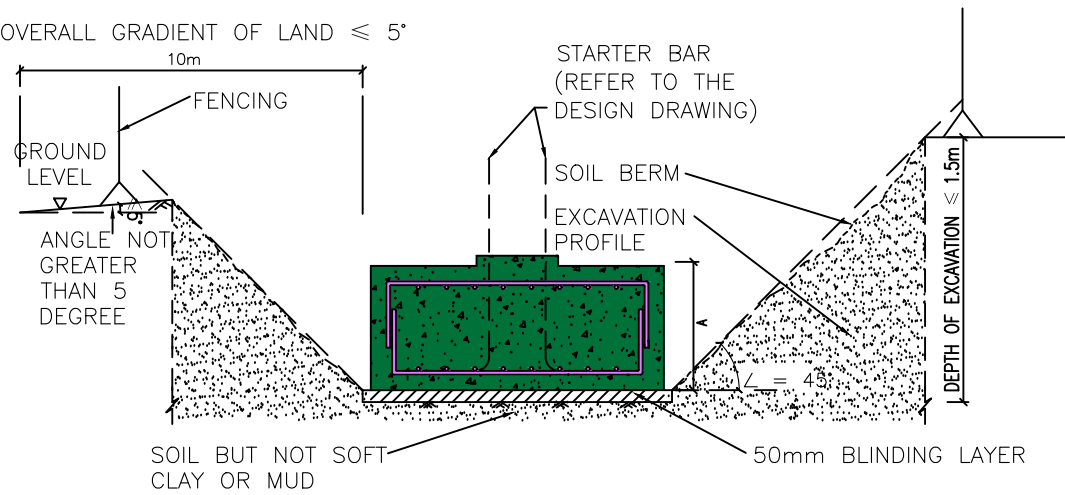
WORKING PROCEDURES :

1. For excavation shoring works, please refer to minor work item 2.11.
2. Laying blinding layer.
3. Erect formwork and fix reinforcing bar for the spread footing.
4. Concrete casting to the spread footing.
5. 24 hours after concrete casting, remove the formwork and carry out backfilling works.

REMARKS :

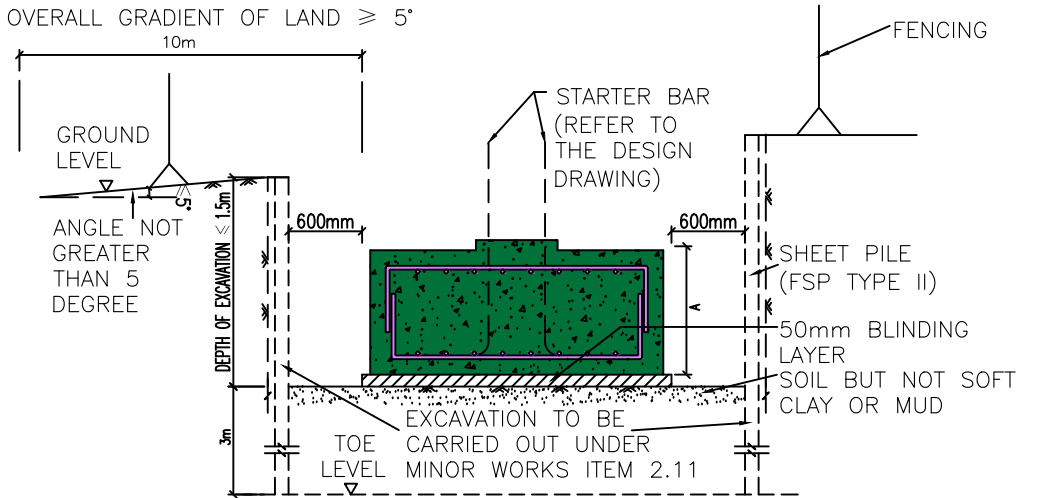
1. There is no slope steeper than 15 degrees within the hatched area shown in sheet 3
2. There is no retaining wall or terrace wall higher than 1.5m, or below a line drawn down from the base of the footing that is 45 degrees to the horizontal, within the hatched area.
3. The allowable pressure imposed by the footing on the ground is not more than 100 kPa or (if the footing is located below the ground water level) 50 kPa.
4. The footing is not found on soft clay or mud.
5. For shoring details, please refer to minor works item 2.11.

OVERALL GRADIENT OF LAND $\leq 5^\circ$

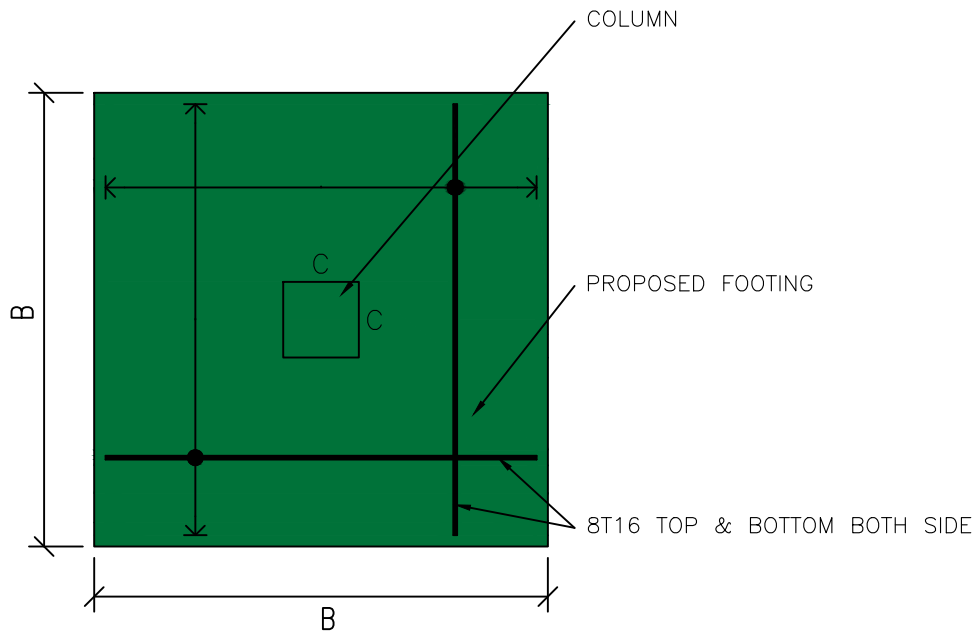


SECTION OF SPREAD FOOTING (OPEN CUT METHOD)

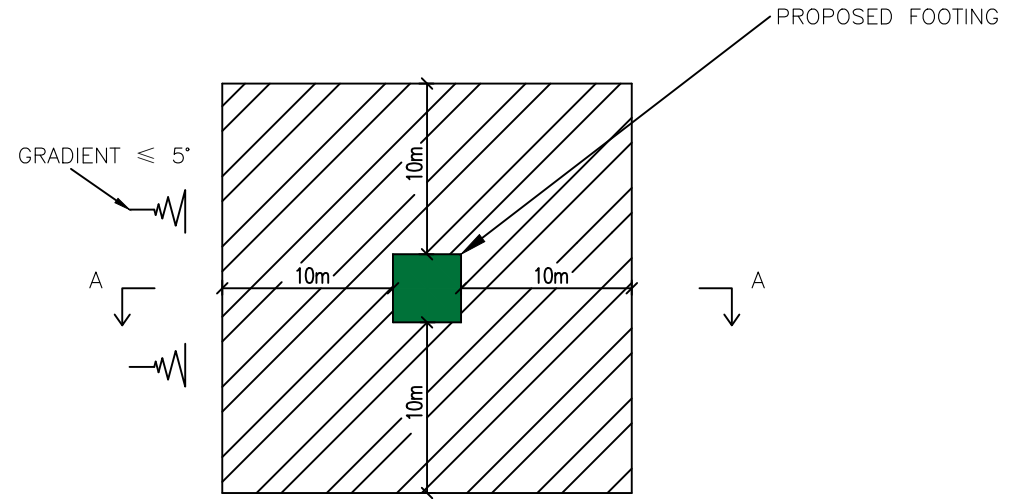
OVERALL GRADIENT OF LAND $\geq 5^\circ$



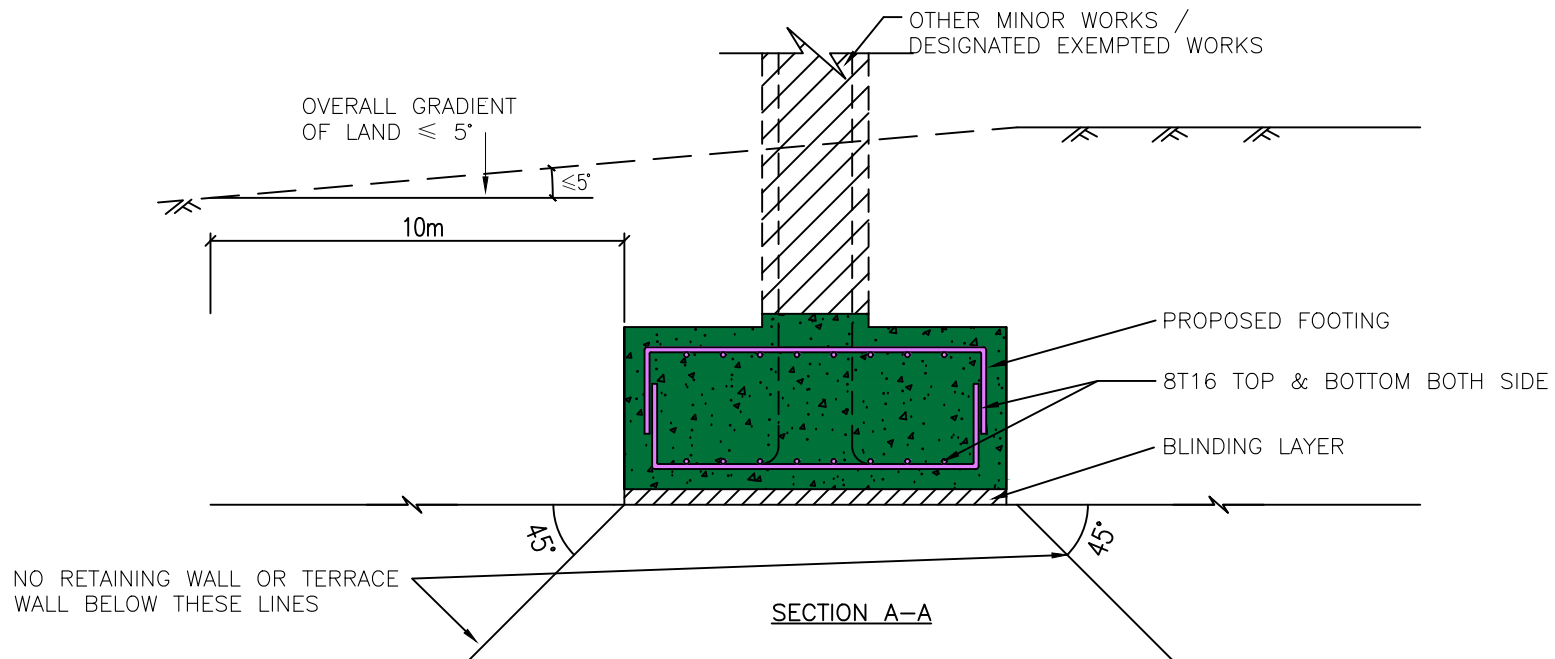
SECTION OF SPREAD FOOTING (SHEET PILE)

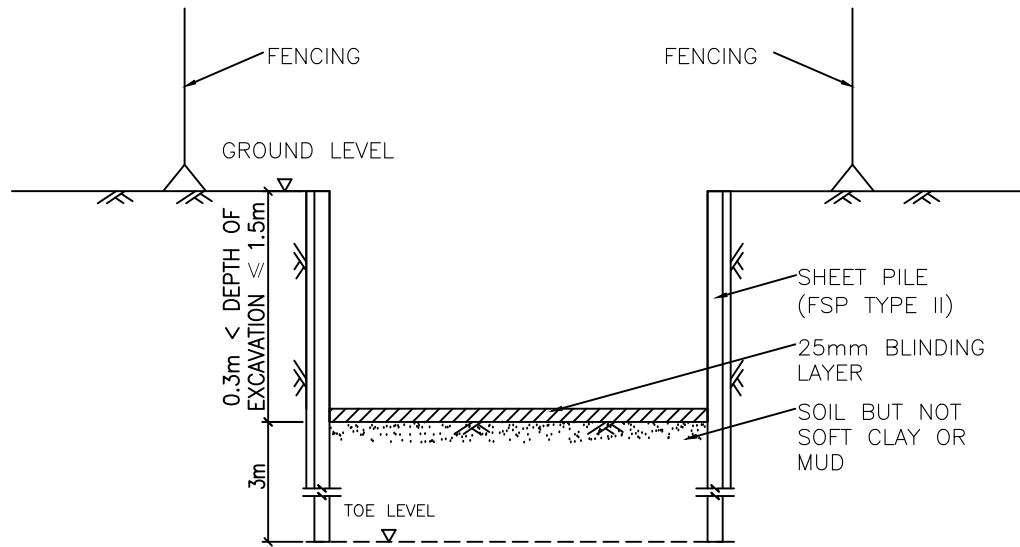


REINFORCEMENT
DIAGRAM FOR FOOTING

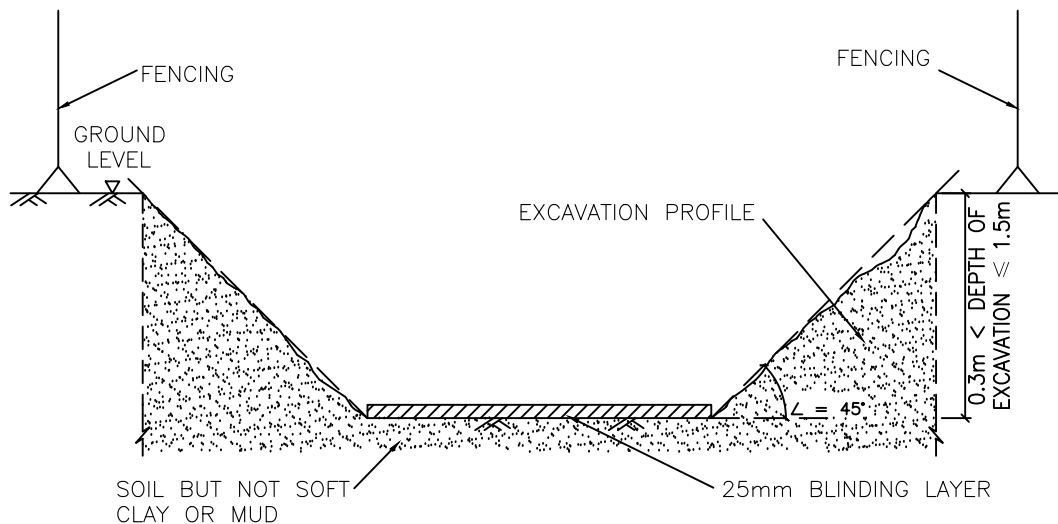


GENERAL GRADIENT OF THE AREA BOUNDED BY LINES
10m AWAY FROM THE FOOTING





SHORING OPTION



OPEN CUT OPTION (FOR DEPTH \leq 1.5m)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011
 - Geoguide 1 : Guide to Retaining Wall Design, 2nd Edition
3. All structural steel to be grade S275.
4. Minimum allowable ground pressure to be 50 kN/m².
5. All backfill material shall be homogenous, free from vegetation or other deleterious material and well compacted.

Design Loads : Surcharge = 5 kN/m²

Design Soil Parameter : C = 0 kPa, ϕ = 30°, Ka = 0.35, Kp = 3.00

PREPARATION WORKS :

1. Obtain and investigate all underground utilities drawings/ information prior to the commencement of works.
2. Inform underground utilities companies(if required) and MTRCL (if the works carried out within Schedule area 3 in Schedule 5 of BO) before commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Arrange for diversion or disconnection of underground utilities (if required) prior to the commencement of works.
3. For trench excavation with depth greater than 1.2m, adequate support must be installed at a timely manner and ahead of excavation as far as practicable. For excavation depth less than 1.2m, shoring may not be required for ground that is found to be self-supporting. However, if external loads are likely to be present, or if there is doubt as to the stability of the trench sides due to the presence of weak ground or high groundwater, especially in inclement weather, the trench sides should be supported even if the excavation depth is less than 1.2m. Design and installation of shoring support shall be referred to the "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003) which provides good technical guidelines on good practice of shoring support and drainage measures for trench excavations.

WORKING PROCEDURES :

1. If it is determined that temporary support to the excavated trench is required, provide the necessary support and shoring ahead of the excavation.
2. Excavate to the required depth.
3. Compact the soil base and lay plain concrete (25mm thick) as blinding layer.
4. Carry out the required work in the excavated trench (i.e. underground drain, footings and etc., please refer to the relevant minor works item for working procedures).
5. Carry out the backfilling works and reinstatement works to the top surface.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

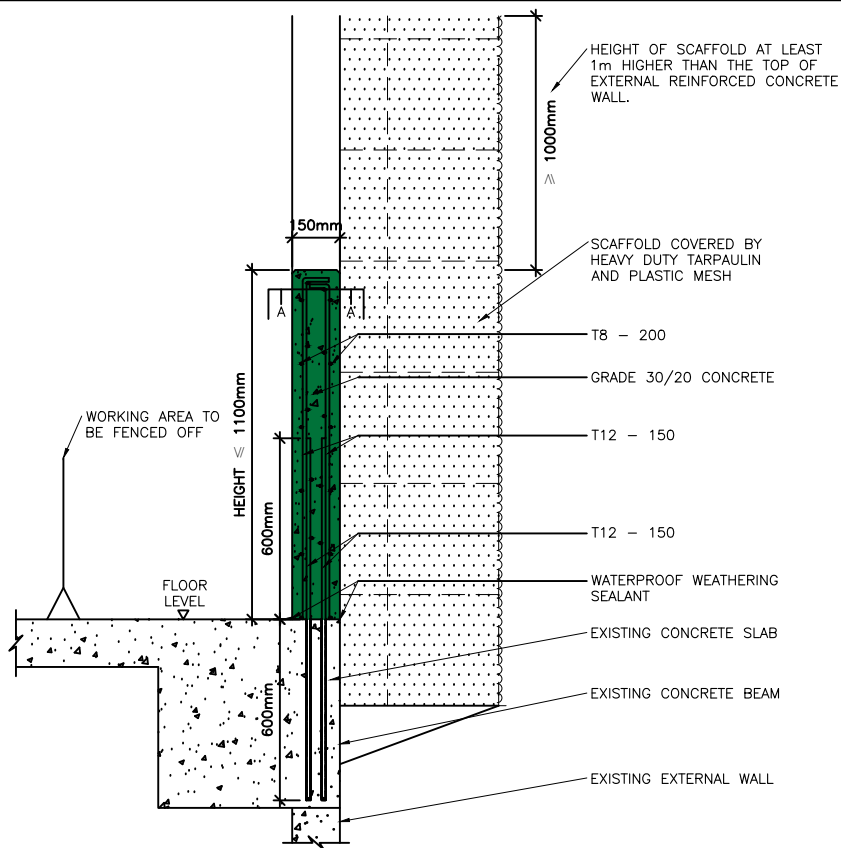
WORKING PROCEDURES :

1. Disconnect all utilities prior to the removal of enclosure or cabinet of the telecommunication services.
2. Remove the enclosure or cabinet of the telecommunication services by releasing all fixing bolts if necessary.
3. Remove the telecommunication equipment.
4. Demolish the structure using mechanical hand held tools to cut the members into small pieces for construction waste disposal.
5. After removal of the structure, make good and reinstate the affected areas (including waterproofing) of the parent building.
6. Remove the bamboo scaffold and clean the site.

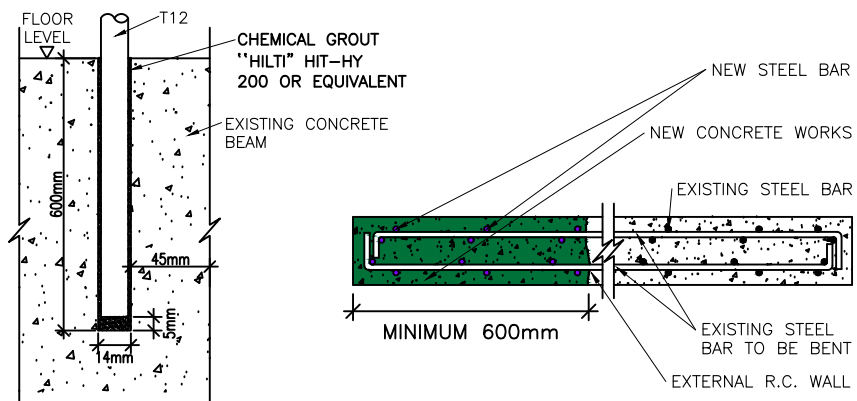
Remarks: This case excludes MW item 3.8.

MINOR WORKS ITEM 2.12

DRAWING TITLE : REMOVAL OF RADIO BASE STATION FOR TELECOMMUNICATIONS SERVICES
IN THE FORM OF AN ENCLOSURE OR EQUIPMENT CABINET TOGETHER WITH
ITS SUPPORTING STRUCTURE LOCATED ON A ROOF OF A BUILDING



TYPICAL DETAIL OF 150 THK. RC WALL (HEIGHT ≤ 1100mm)



DETAIL OF DRILL HOLE

SECTION A-A (FOR ALTERATION)

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice on Wind Effects in Hong Kong 2019
- All anchors bolt to be Hilti HIT-HY200 or equivalent + T12 Rebar and shall be installed according to the manufacturer's specification.
- All concrete works shall comply with CS1:2010.
- Existing concrete grade and minimum concrete cover to be Grade 30 and 40mm respectively.
- Steel reinforcement shall comply with CS2:2012 with min. yield stress of 500 N/mm² and shall be bent in accordance with BS 8666:2005.
- All existing reinforcement for the parent members should not be damaged.
- Minimum anchorage and lap length are 600mm unless otherwise specified.

DESIGN LOAD :

Wind Load = 2.86 kN/m² with force coefficient of 3.4 (effective height=100m)
 Assume topography factor, St=1.0; Wind directionality factor, Sθ=0.85; size factor, Ss=1.0

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- The existing parent structure must be checked to the satisfaction of structural adequacy prior to installation of minor works item.

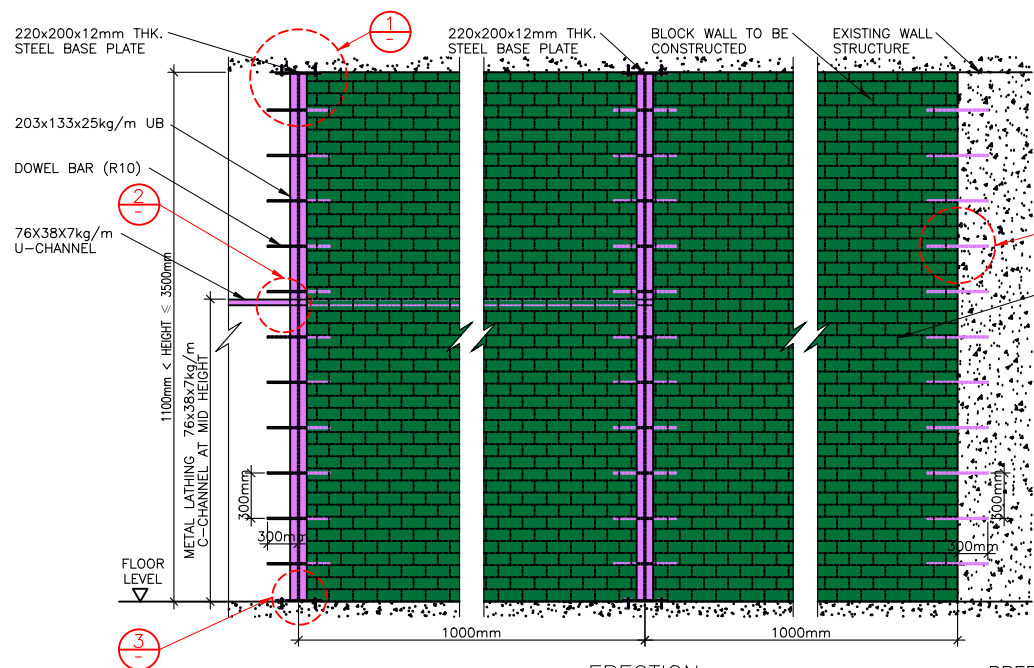
SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

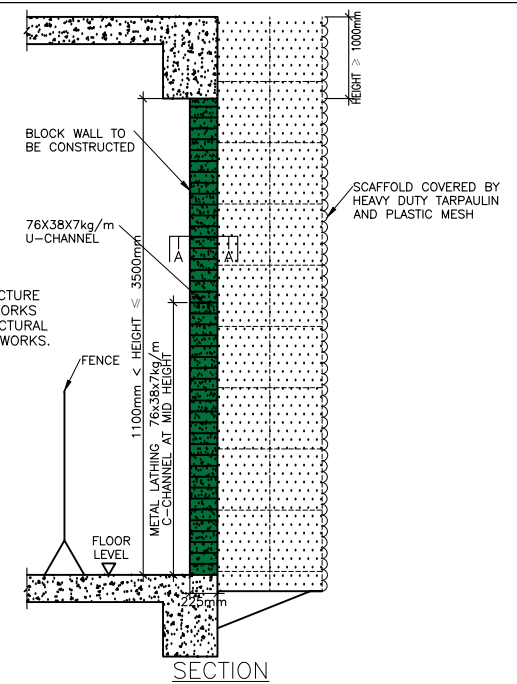
WORKING PROCEDURES :

- Erection
 - Erect formwork and fix reinforcing bar for the external reinforced concrete wall.
 - Preparation of hole for anchoring rebar to follow strictly with the manufacturer's recommendation and instruction.
 - Concrete casting to the external reinforced concrete wall.
 - 24 hours after concrete casting, remove the formwork. Concrete curing until full strength is reached.
 - Make good and reinstate the affected areas of the parent structure.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration
 - Saw cut and hack off finishes/ concrete at the area requiring alteration using mechanical hand held tools to expose the steel bars.
 - Bend the existing steel bars and fix the new bars to form a new edge of the wall.
 - Pour concrete after erect formwork and fix new reinforcing bar.
 - 24 hours after concrete casting, remove the formwork. Concrete curing until full strength is reached.
 - Make good and reinstate the affected areas of the parent structure.
 - Dismantle the bamboo scaffold and clean the site.
- Removal
 - Break down the concrete top down into small pieces using mechanical hand held tools to expose the steel bars.
 - Cut the exposed steel bars into manageable size for construction waste disposal.
 - Repeat the above steps 1 and 2 until the complete removal of the reinforced concrete wall.
 - Make good and reinstate the affected areas of the parent structure.
 - Dismantle the bamboo scaffold and clean the site.

Remark: This case excludes MW Item 3.45 and 3.46.



THE STRUCTURAL ADEQUACY OF THE PARENT STRUCTURE DUE TO THE ADDITIONAL INSTALLATION OF MINOR WORKS MUST BE CHECKED PRIOR TO THE SATISFACTION OF STRUCTURAL REQUIREMENT PRIOR TO CARRYING OUT OF MINOR WORKS.



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for Structural Use of Steel 2011
 - BS 5628 Code of Practice for the Use of Masonry : Part 1:2005 Structural Use of Unreinforced Masonry
 - Code of Practice for Demolition of Buildings 2004
 - Specifications and Method Statements for YTONG AAC or equivalent Block Wall
- All structural steel to be grade S275 J0 to BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 3 mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HSC-AR M12x60 or equivalent and shall be installed according to the manufacturer's specification.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm^2 and the density of 650 kg/m^3 .
- Existing concrete grade is assumed to be Grade 20.
- Mortar Designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm^2 by site tests.

DESIGN LOADS :

- Live Load
 - 0.75 kN/m applied at a height of 1.1m above F.G.L.
 - 1.0 kN/m^2 applied between the floor to height of 1.1m above F.G.L.
 - 0.5 kN applied on any part of between the floor to height of 1.1m above F.G.L.
- Wind Load
 2.86 kN/m^2 with force coeff. 1.4 (effective height = 100m) whichever shall produce the more adverse effect.
 Assume topography factor, $St=1.0$; Wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$

PREPARATION WORKS :

- Obtain the existing design drawings/ information of the signboard for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

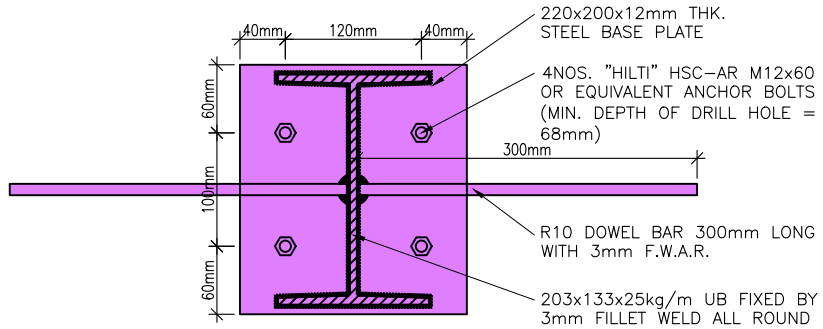
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

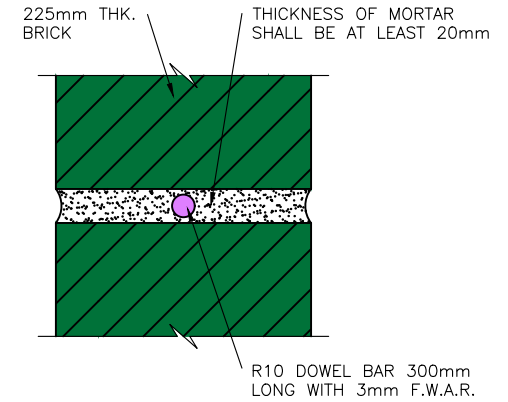
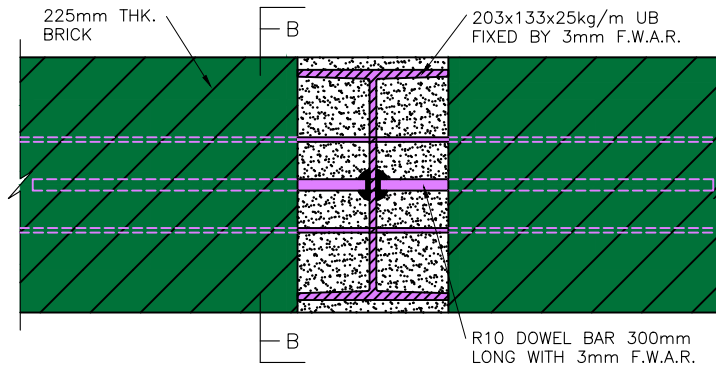
- Erection
 - Install the external block wall as per the drawing.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration (for exhaust fan installation at top opening size 300x300mm)
 - Mark up the opening to be made for exhaust fan installation (right underneath beam).
 - Saw cut the rendering/ plastering.
 - Break out the brick work of the setting out area using hand held hammer.
 - Erect the brick work as per the drawings.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Removal
 - Remove the brickwork using mechanical hand-held tools from top to bottom.
 - Remove the top 300mm wall layer first and repeat layer by layer.
 - Cut down the steel posts into small pieces for construction waste disposal.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

Remark : This case excludes minor works item 3.45 or 3.46

MINOR WORKS ITEM 2.14	<p>DRAWING TITLE :</p> <p style="text-align: center;">ERECTION, ALTERATION OR REMOVAL OF EXTERNAL NON-LOAD BEARING BLOCK WALL OF A BUILDING</p>	SHEET 1 OF 2
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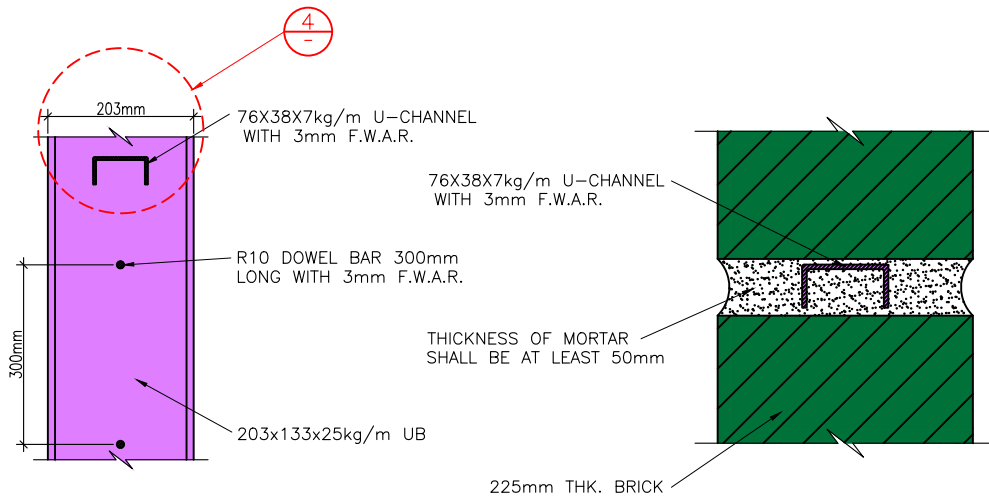


DETAIL 1 (DETAIL 3 IS SIMILAR)



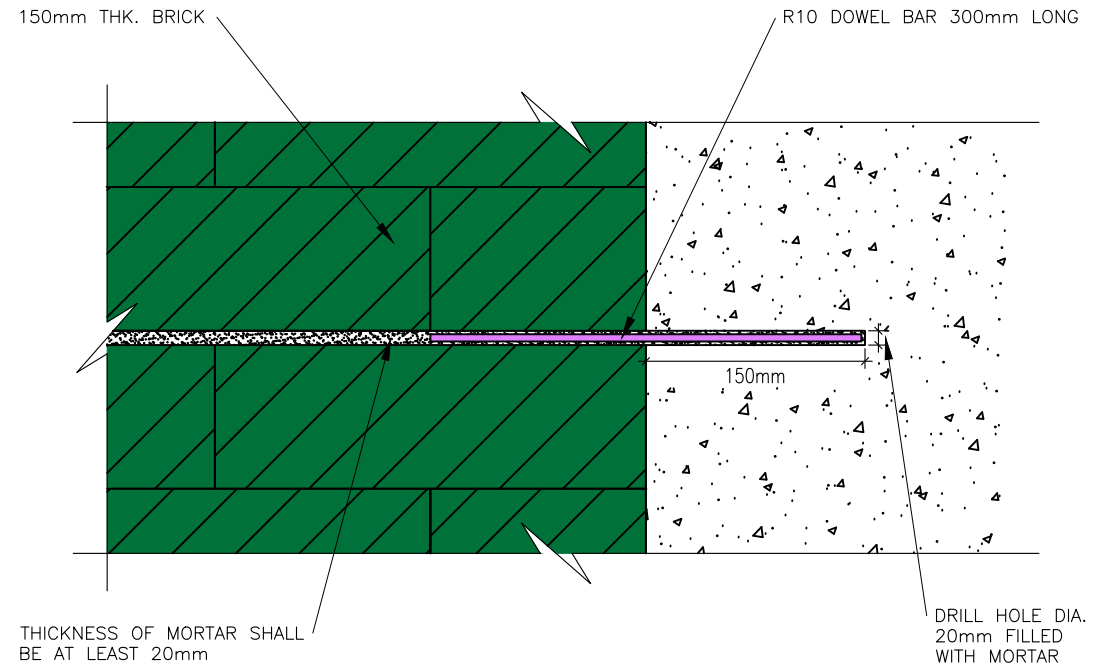
SECTION A-A

SECTION B-B

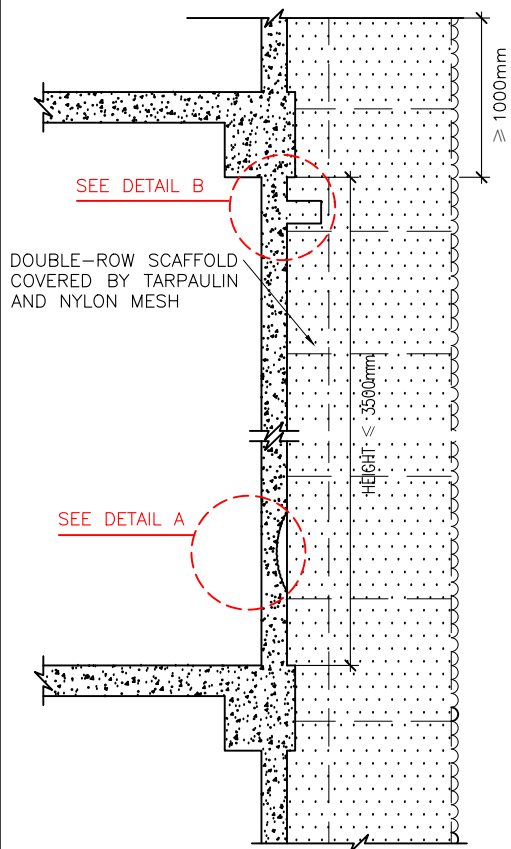


DETAIL 2

DETAIL 4 (WITH BRICKWORK)



DETAIL 5

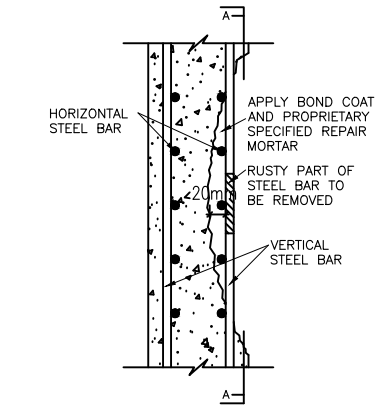


DOUBLE-ROW SCAFFOLD COVERED BY TARPAULIN AND NYLON MESH

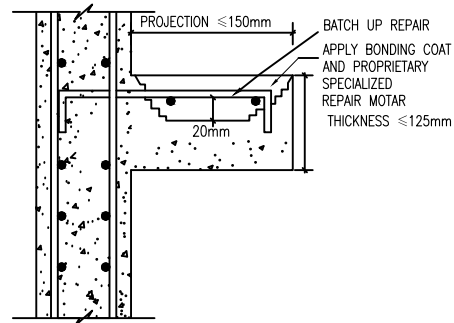
SEE DETAIL B

SEE DETAIL A

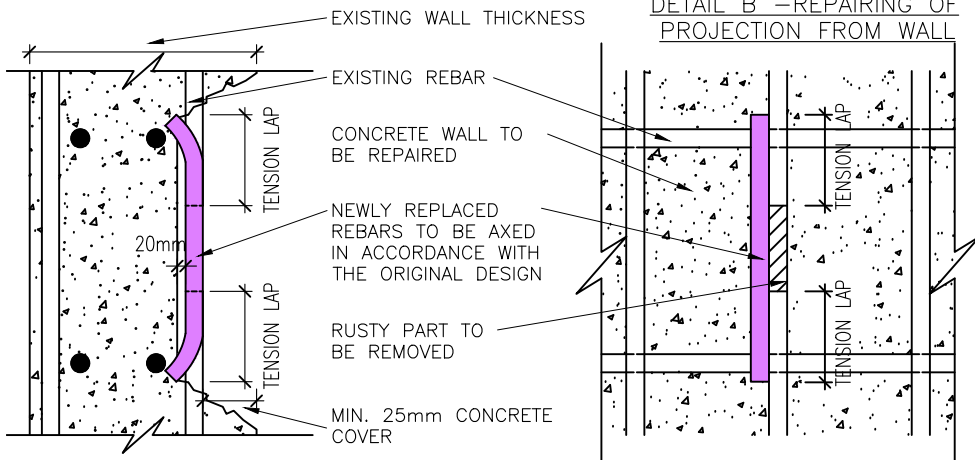
REPAIR OF EXTERNAL R.C. WALL



DETAIL A – REPAIRING OF DETERIORATED REBAR AT R.C. WALL



DETAIL B – REPAIRING OF PROJECTION FROM WALL



REPLACEMENT OF DETERIORATED REBAR AT R.C. WALL

SECTION A-A

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
3. All concrete works shall comply with CS1:2010
4. Concrete grade and the minimum cover shall be grade 30 and 25 mm respectively.
5. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2:2012
6. Minimum anchorage and lap length are 52 x diameter of the existing rebar unless otherwise specified.
7. Minimum FRR for the external wall to be repaired = 1 hr unless otherwise specified in the approved plan

PREPARATION WORKS :

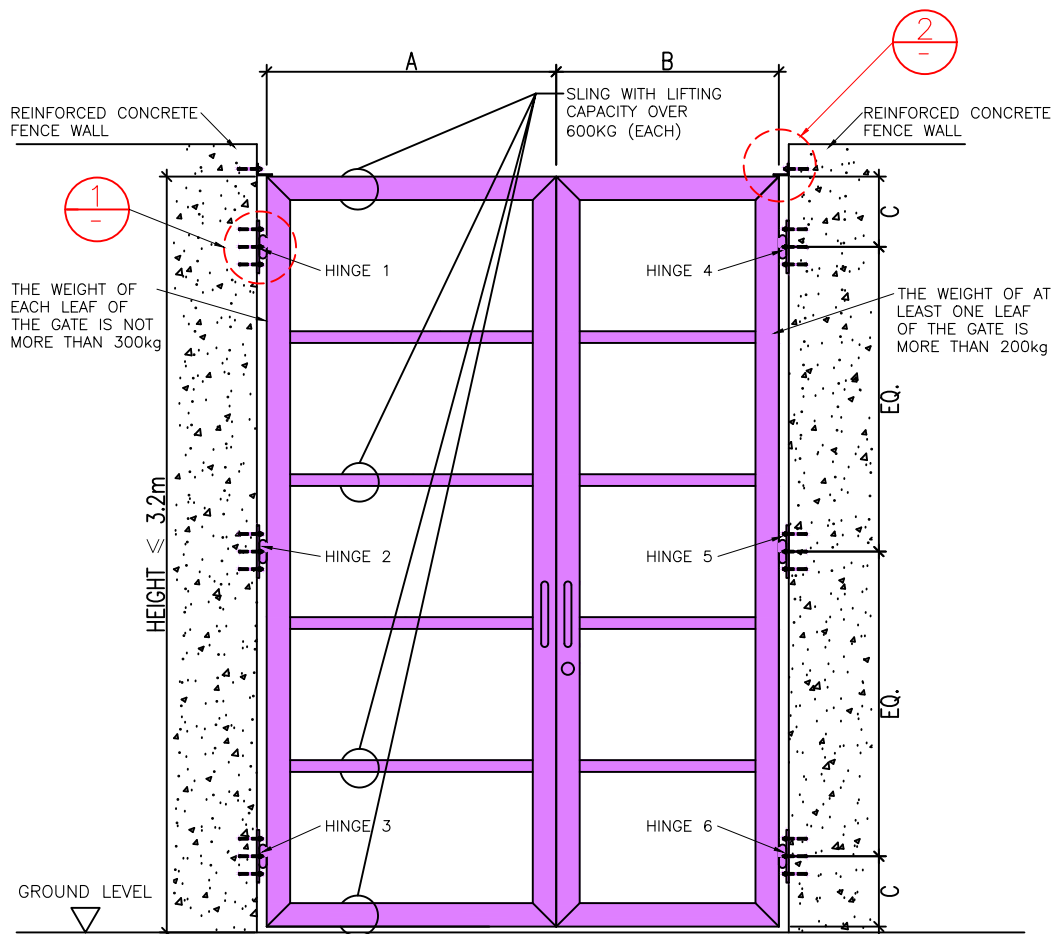
1. Obtain existing design drawings/ information for reference prior to the commencement of works. (To check the fire-resisting of the concrete wall and reinforced concrete details.)
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
2. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions.
3. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
4. Apply procedure 1 to 3 to both vertical and horizontal rebars.
5. Make good and reinstate the affected areas of the parent building.
6. Remove the bamboo scaffold and clean the site.
7. Proof tests such as hammer tapping and pull off tests shall be carried out to ensure the quality of the repair.



ERECTION OF METAL GATE AT A FENCE WALL OR AT AN ENTRANCE TO A BUILDING

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
- All structural steel to be grade S275 JO to BS EN 10029 for plates, BS EN 10056 for angles and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 5 mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HSC-AR M10x40 or equivalent and shall be installed according to the manufacturer's specification.
- Concrete grade of the existing reinforced concrete wall shall be Grade 30 with a minimum thickness of 200mm.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN DIMENSIONS :

A = 2m, B = 1.2m, C = 300mm

DESIGN LOADS :

- Dead Load = 300kg/Leaf
- Wind Load = 1.77 kN/m^2 with pressure coeff. 2.0 (effective height = 5m)
Assume topography factor, $St=1.0$; Wind directionality factor, $S\theta=0.85$; size factor, $S_s=1.0$

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition to ensure it is structurally capable to hold the metal gate prior to the commencement of works.
- Disconnect the electric locking device (if any) prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department.

WORKING PROCEDURES :

A. Erection

- Install the metal gate as per the drawing.
- Check the gate to ensure if it can operate smoothly.
- Make good and reinstate the affected areas of the parent structure and clean the site.

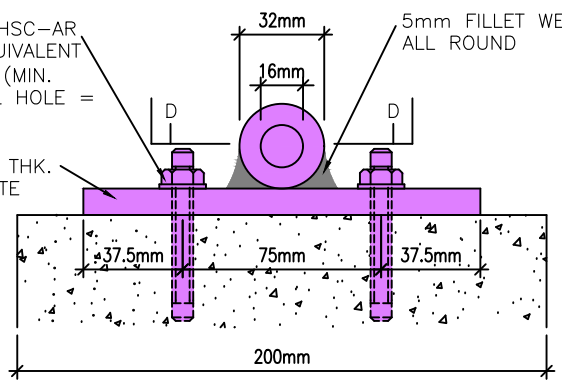
B. Alteration or Repair

- Fix the lifting device(s) onto a secure point above the metal gate.
- Temporary remove the metal gate by using lifting device(s).
- Alter or repair the member(s) of the metal gate.
- Reinstate the metal gate by the lifting device(s).
- Make good and reinstate the affected areas of the parent structure and clean the site.

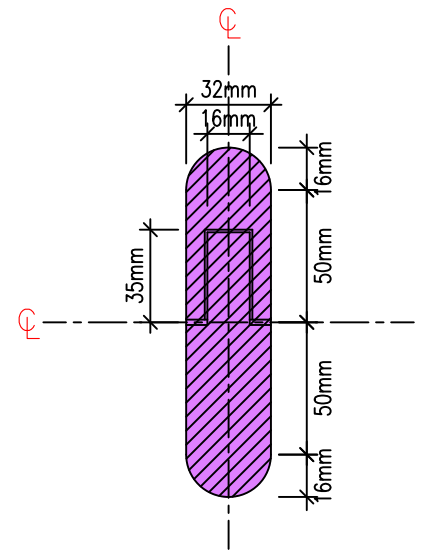
6 NOS. "HILTI" HSC-AR M10x40 OR EQUIVALENT ANCHOR BOLTS (MIN. DEPTH OF DRILL HOLE = 46.5mm)

225x150x10mm THK. MILD STEEL PLATE

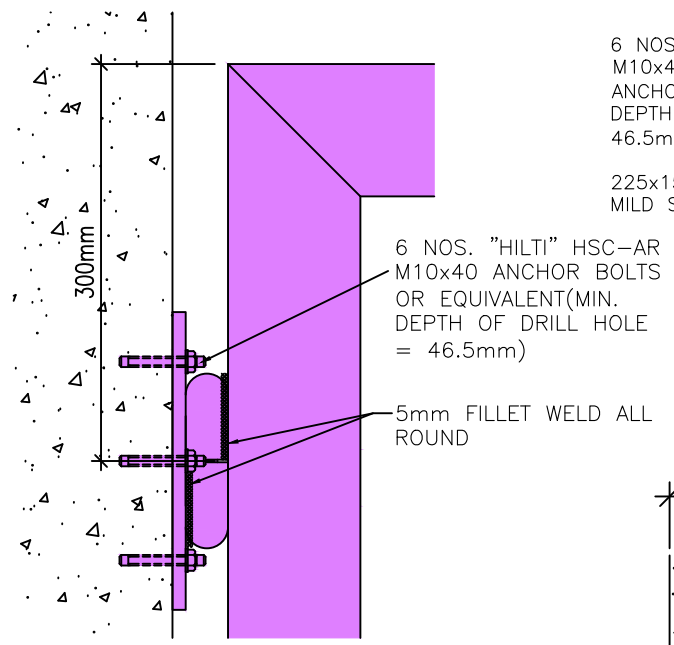
5mm FILLET WELD ALL ROUND



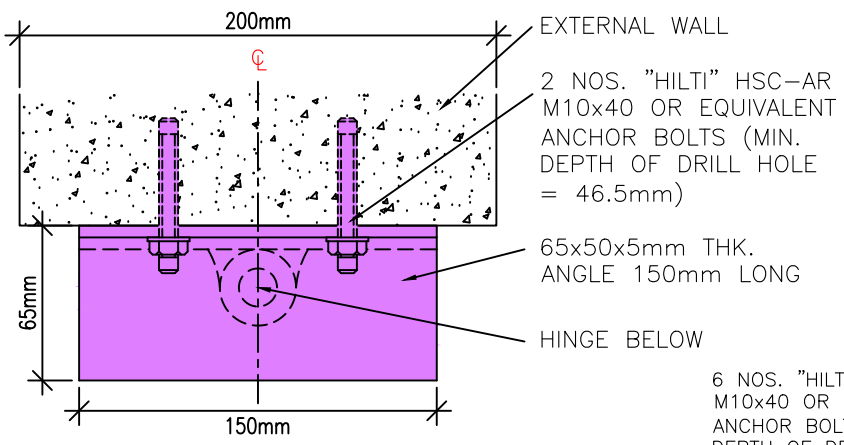
SECTION A-A



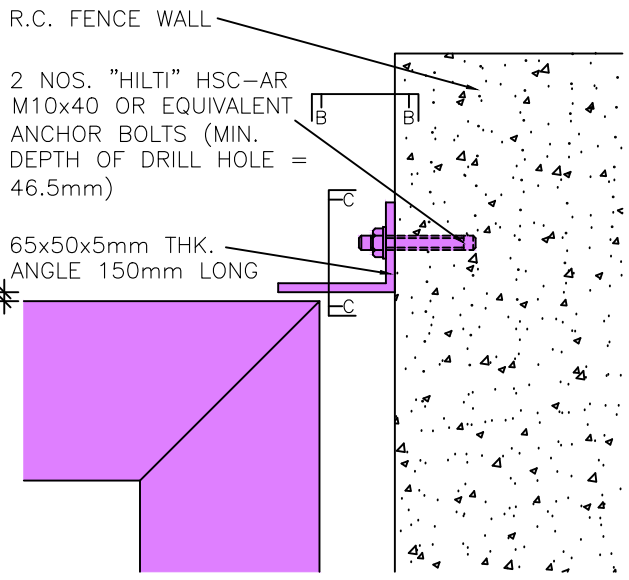
SECTION D - D



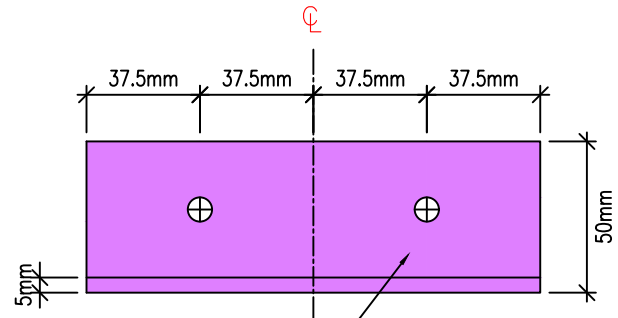
DETAIL 1



SECTION B-B



DETAIL 2 : RESTRRAINT AGAINST VERTICAL MOVEMENT

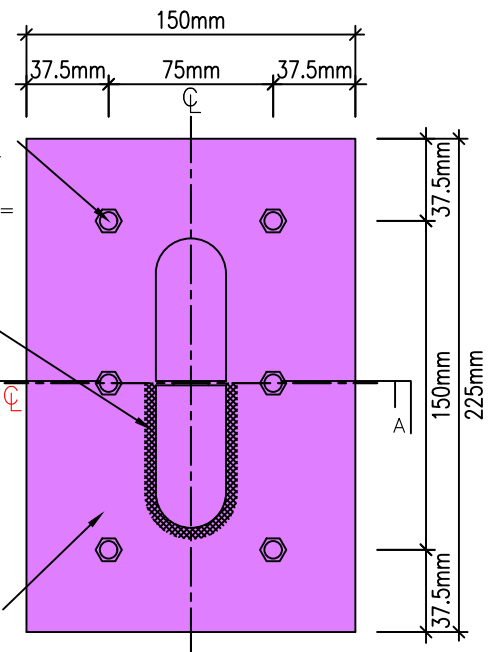


SECTION C-C

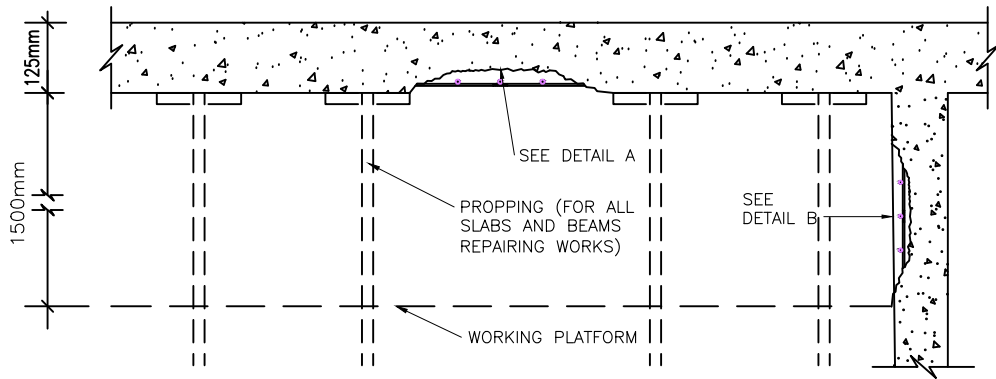
6 NOS. "HILTI" HSC-AR M10x40 OR EQUIVALENT ANCHOR BOLTS (MIN. DEPTH OF DRILL HOLE = 46.5mm)

5mm FILLET WELD ALL ROUND

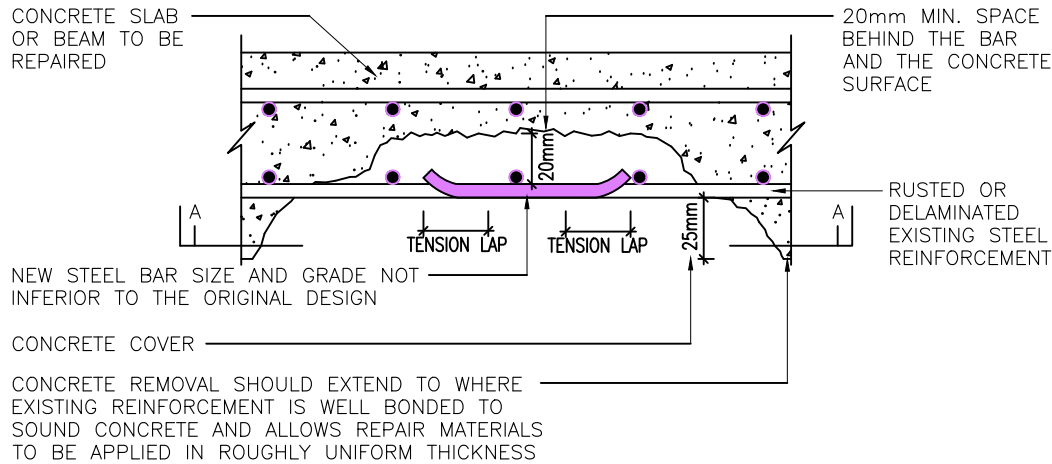
225x150x10mm THK. MILD STEEL PLATE



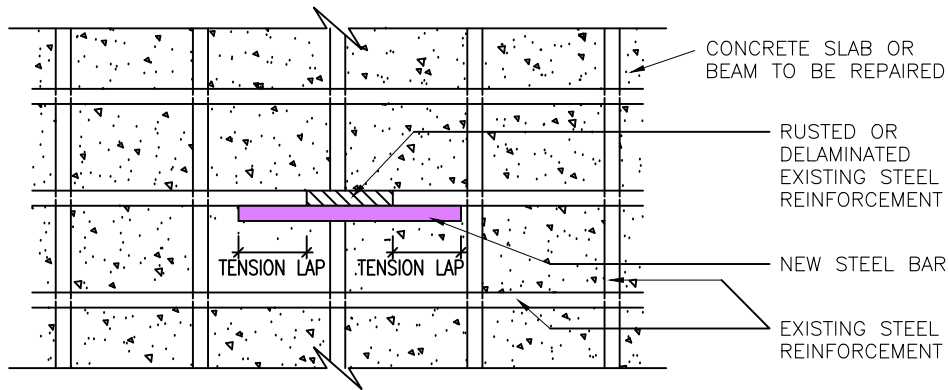
HINGE DETAIL



REPAIR OF A SLAB OR BEAM



DETAIL A – CONCRETE SLAB OR BEAM TO BE REPAIRED



SECTION A-A

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Concrete 2013
 - Code of Practice for Fire Safety in Buildings 2011
 - Concrete shall comply with CS1: 2010
 - BS 5975 Code of Practice for Falsework

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference of FRR, concrete cover, concrete strength, steel bar dimension & etc. prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. All props should be adequately supported. Points of contact between props and underlying structural slabs/ beams should comprise of base plates resting on distributing members to ensure not exceeding their design capacities.

SAFETY AND PRECAUTIONARY MEASURES :

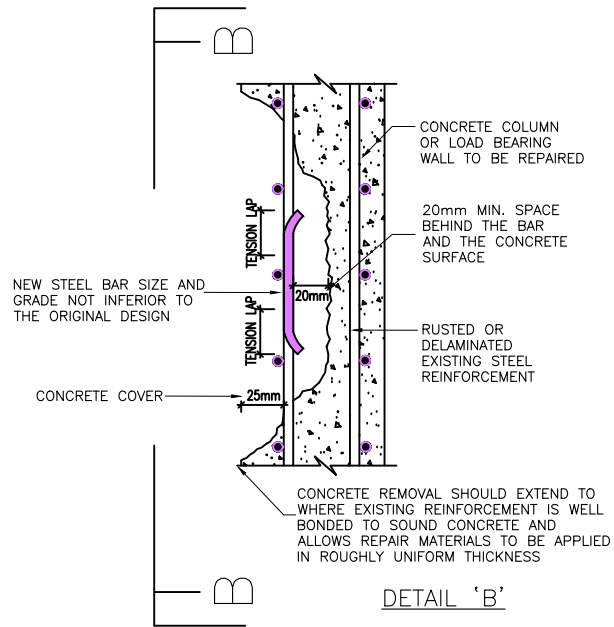
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Erect propping system according to the supplier's instruction to the beam/ slab to be repaired.
3. Working platform details shall refer to the drawing no. GN-2.

WORKING PROCEDURES :

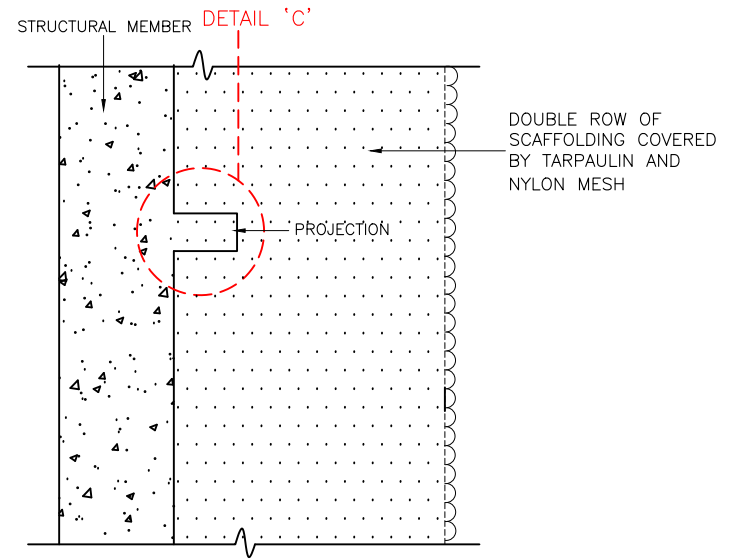
1. Saw cut and hack off finishes/ concrete at the repair area by hand held mechanical tools to expose the steel bar and sound concrete substrate.
2. Remove rust on steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, (i.e. Loss of sectional area of a reinforcement is greater than 10%) replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with supplier's instructions.
3. Apply bond coat and proprietary repair mortar system with strength not inferior to the original design according to the manufacturer's instructions.
4. Formworks may be used where necessary.
5. Remove the formworks after the period specified by the supplier of repair mortar.
6. Remove the proppings and working platform and clean the site.
7. Proof test such as hammer test and pull off test shall be carried out to ensure the quality of the repair.

REMARKS:

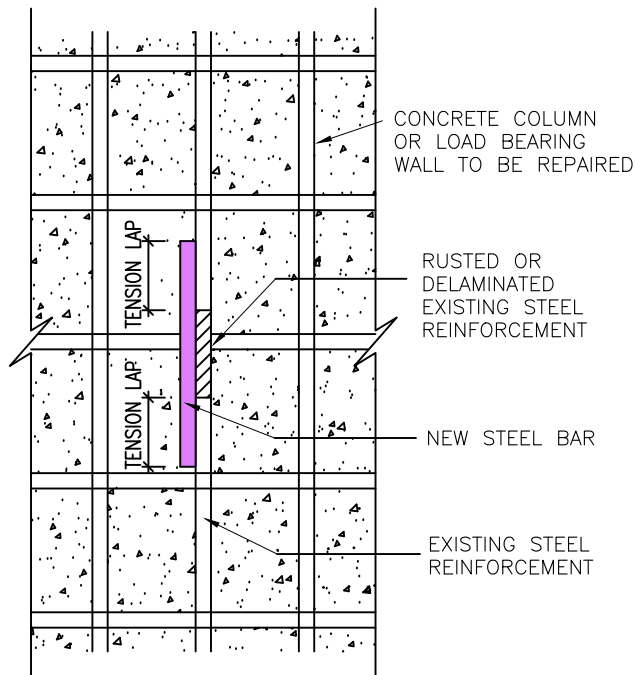
1. This item only involves patch repair works.
2. This works do not involve recasting or replacement of any structural elements
3. The works do not involve dismantling the whole of the floor or roof
4. The works do not involve the removal of core from the structural elements or concrete projection by drilling.



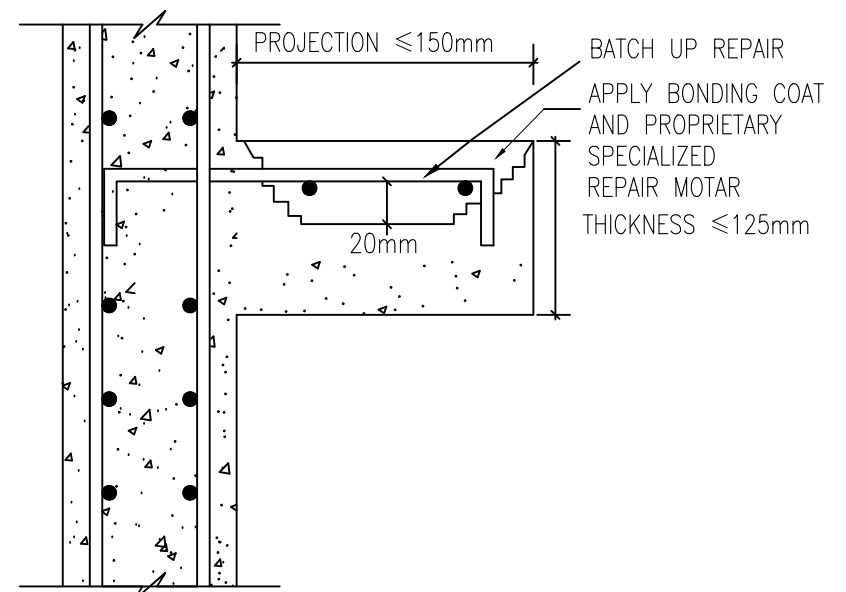
DETAIL 'B'



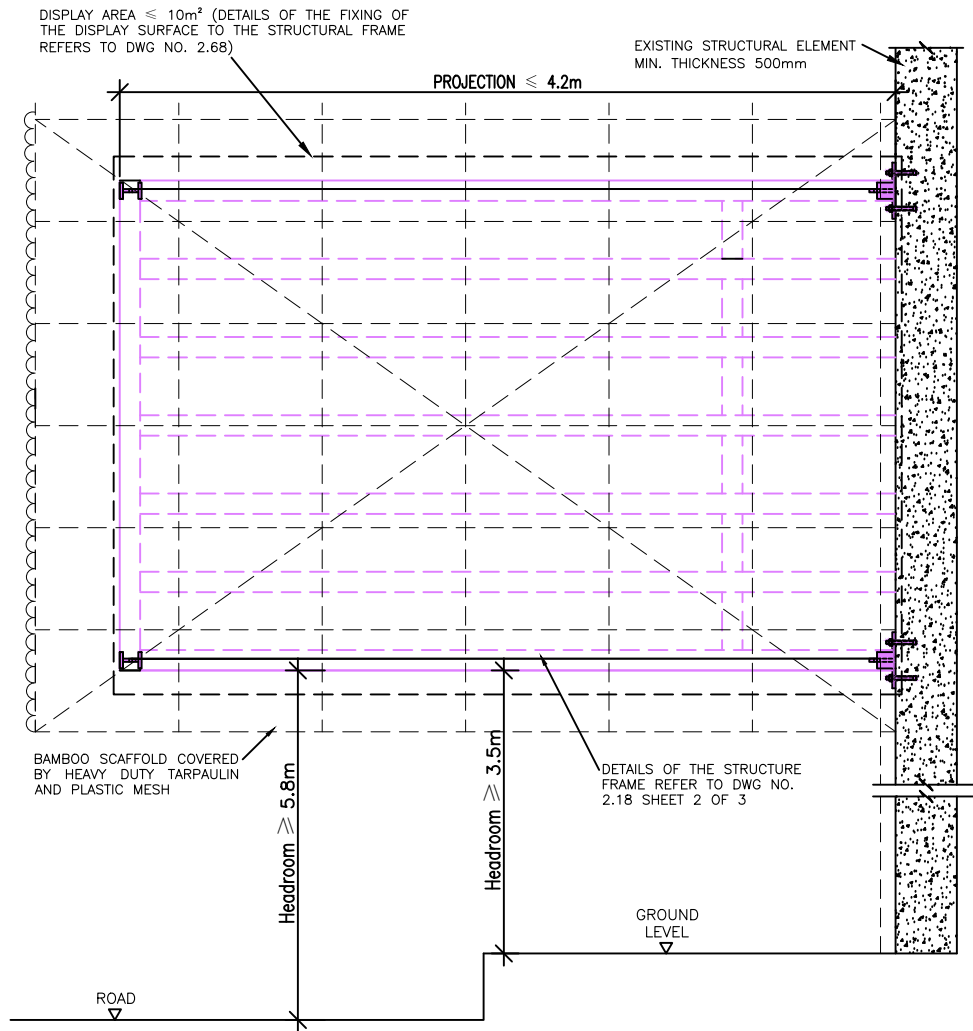
REPAIR OF CONCRETE PROJECTION



SECTION B-B



DETAIL 'C'



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulation
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for Structural Use of Steel 2011
 - Code of Practice in Access for External Maintenance 2021
- All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461:2009
- All connections to be 5mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ unless otherwise specified to BS EN 1011-1:2009 and all electrodes to BS EN ISO 2560:2009.
- All anchor bolts to be Hilti HSA-R-M20 or equivalent and shall be installed according to the manufacturer's specification.
- Existing concrete grade of column is assumed to be Grade 20 with a minimum thickness of 500mm.
- All removal of existing concrete shall be carried out by using handheld tools only.
- All existing reinforcement should not be damaged.
- All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint with thickness of 1.5mm ($H_p/A = 175$) or equivalent.
- All banners should be made of non-combustible material.
- Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011".
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 0.20 kN/m^2
- Live Load = 0.50 kN/m^2
- Wind Load = 1.98 kN/m^2 with pressure coeff. 1.8 (Effective height = 10m).
Assume topography factor, $St=1.0$; Wind directionality factor, $S\theta=0.85$; size factor, $S_s=1.0$

PREPARATION WORKS:

- Obtain the existing design drawings/ information of the signboard and the affected structural elements for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- If the signboard consists of light emitting diodes or other lighting disconnect the power to the signboard before the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the supporting parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
- Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

SAFETY AND PRECAUTIONARY MEASURES :

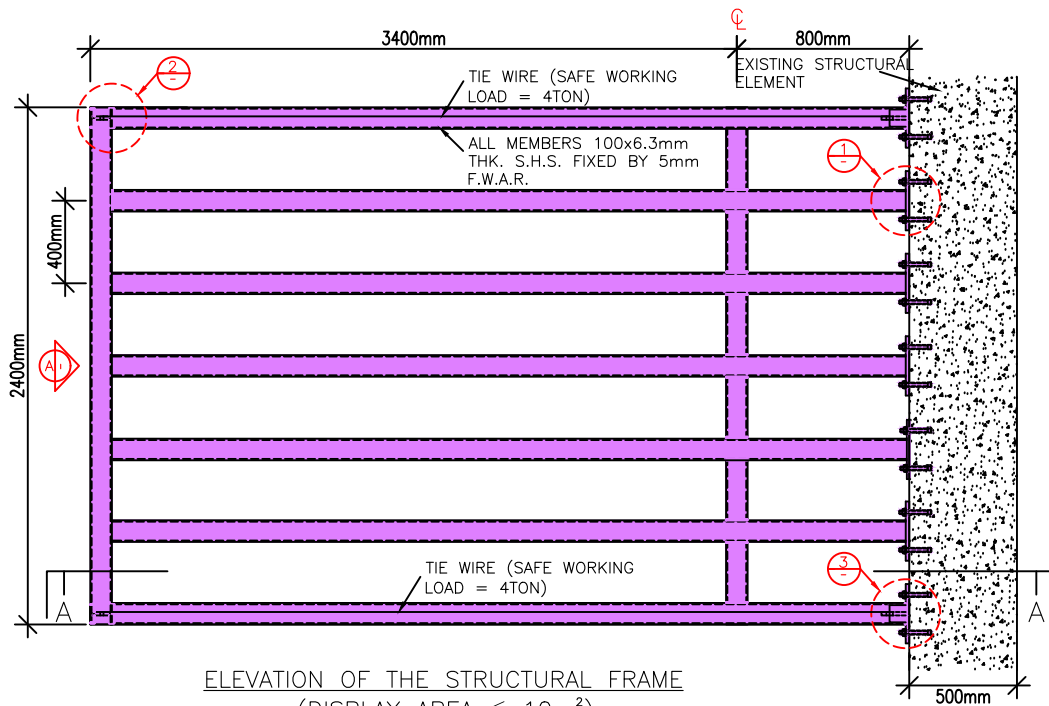
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 5 Bamboo scaffold for signboard

WORKING PROCEDURES :

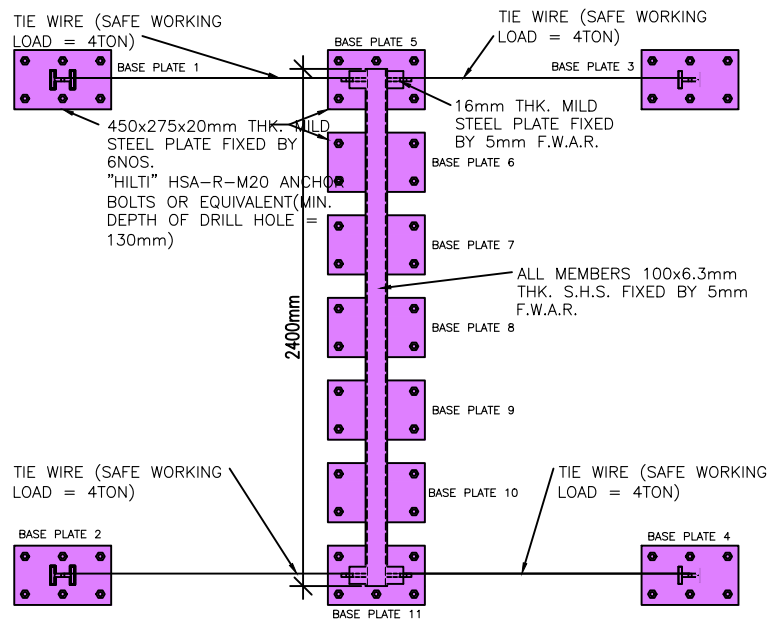
- Erection
 - Install the signboard as per the drawing.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration
 - Remove the display surface/ loose parts from the signboard.
 - Remove the defective member and replace with a new member having the same size of the existing member.
 - Check the connection between sign board and the structural element and carry out any repair work where necessary.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

Remarks :

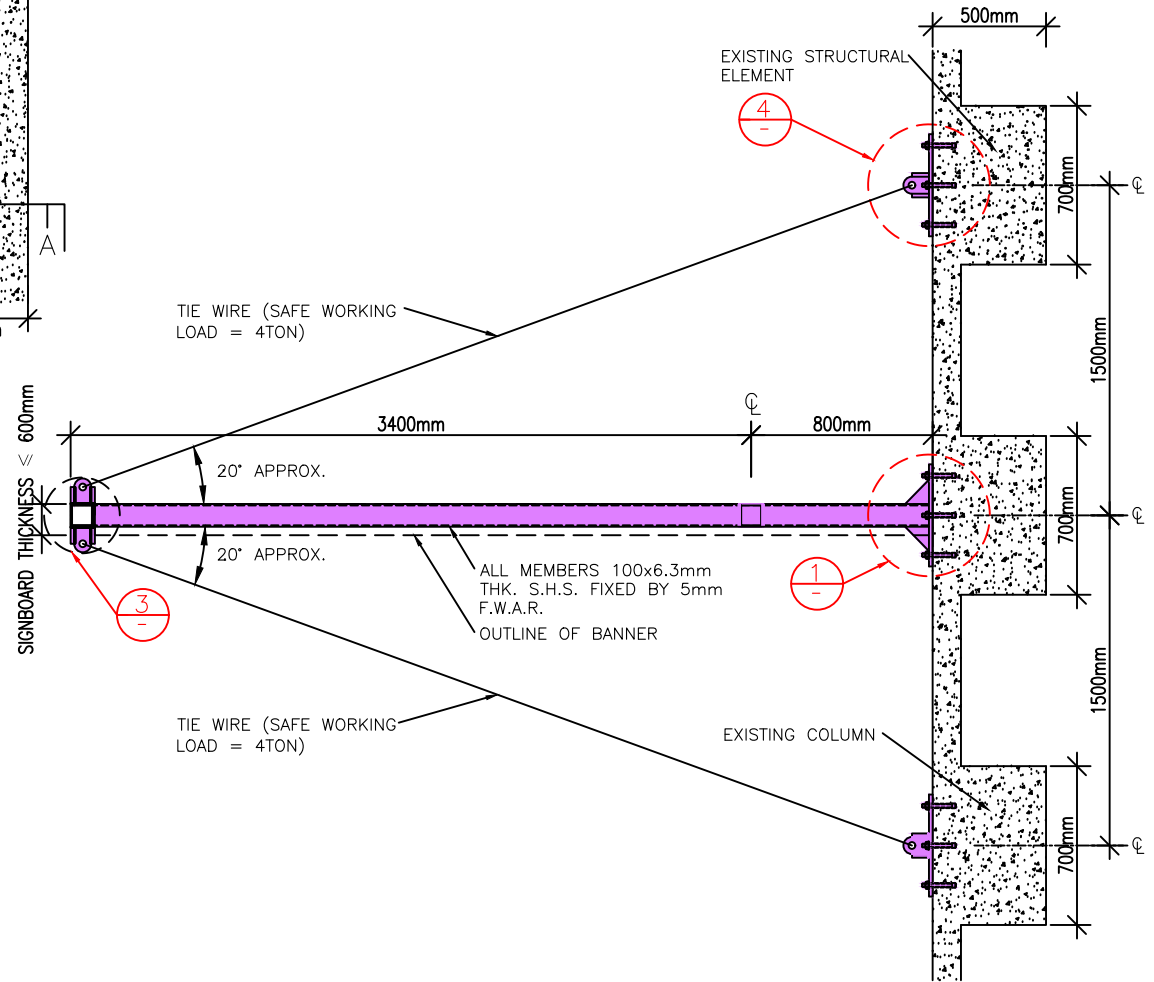
- This case excludes minor works item 3.16.
- The signboard does not consist of stone.



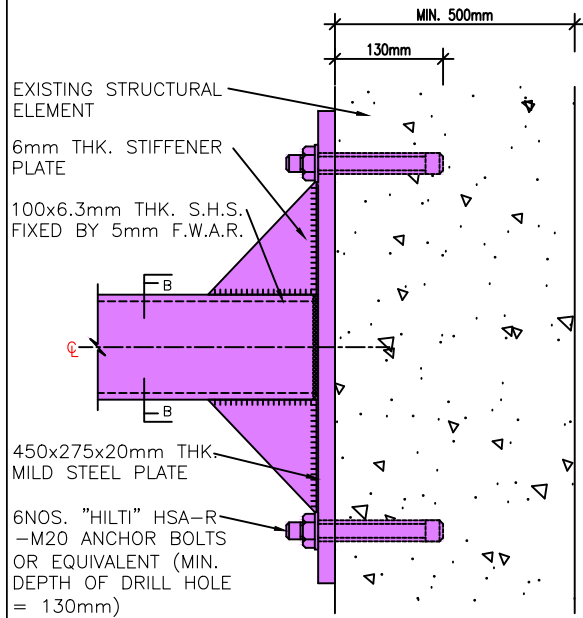
ELEVATION OF THE STRUCTURAL FRAME
(DISPLAY AREA $\leq 10m^2$)



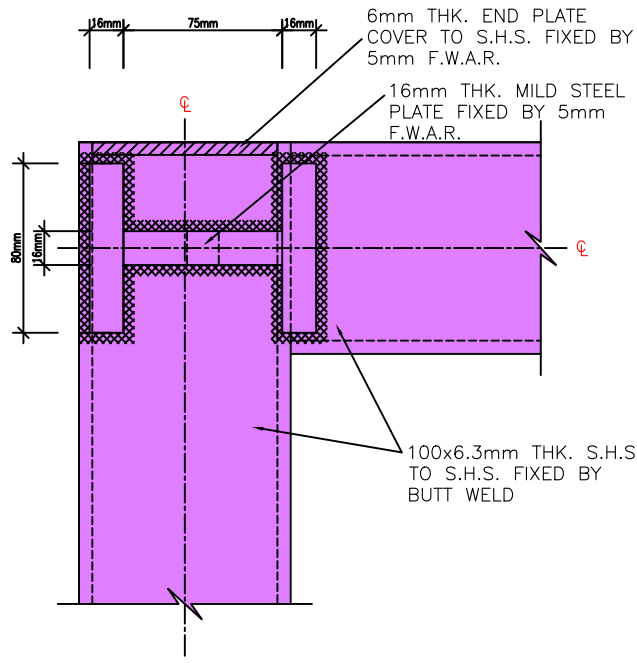
ELEVATION A



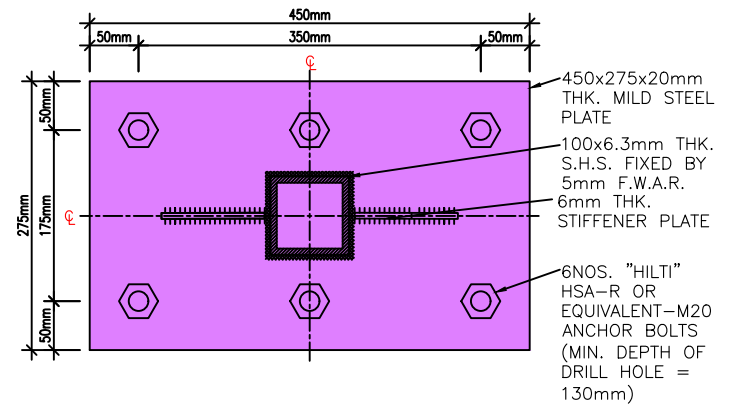
SECTION A - A



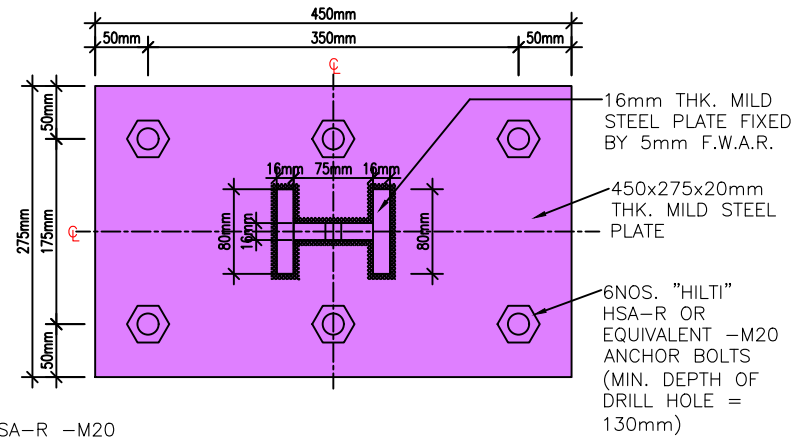
DETAIL 1



DETAIL 2

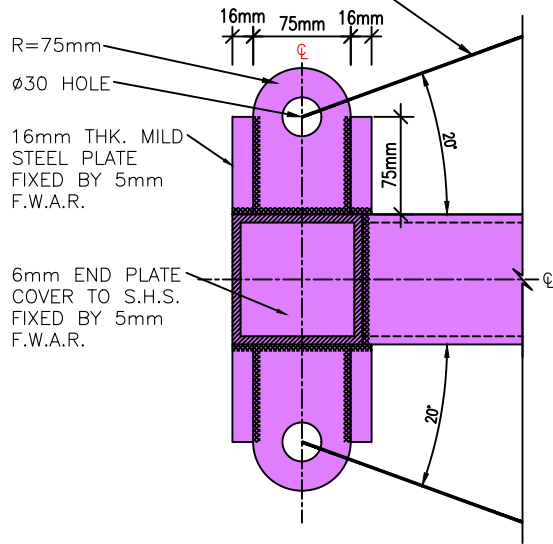


SECTION B-B

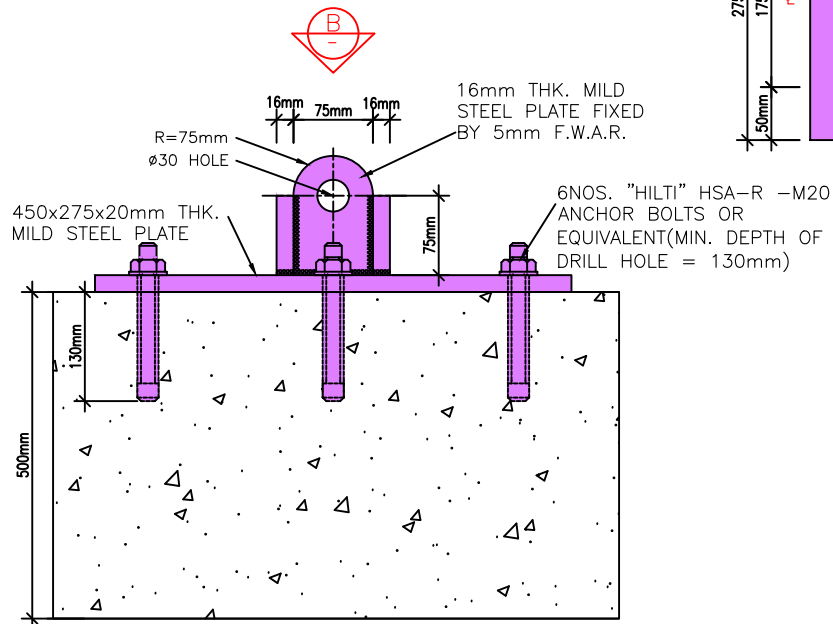


ELEVATION B

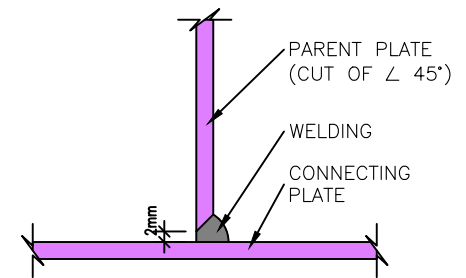
DESIGN FORCE : $F = 30\text{kN}$ (AXIAL)
TIE WIRE (SAFE WORKING LOADING = 4TON)



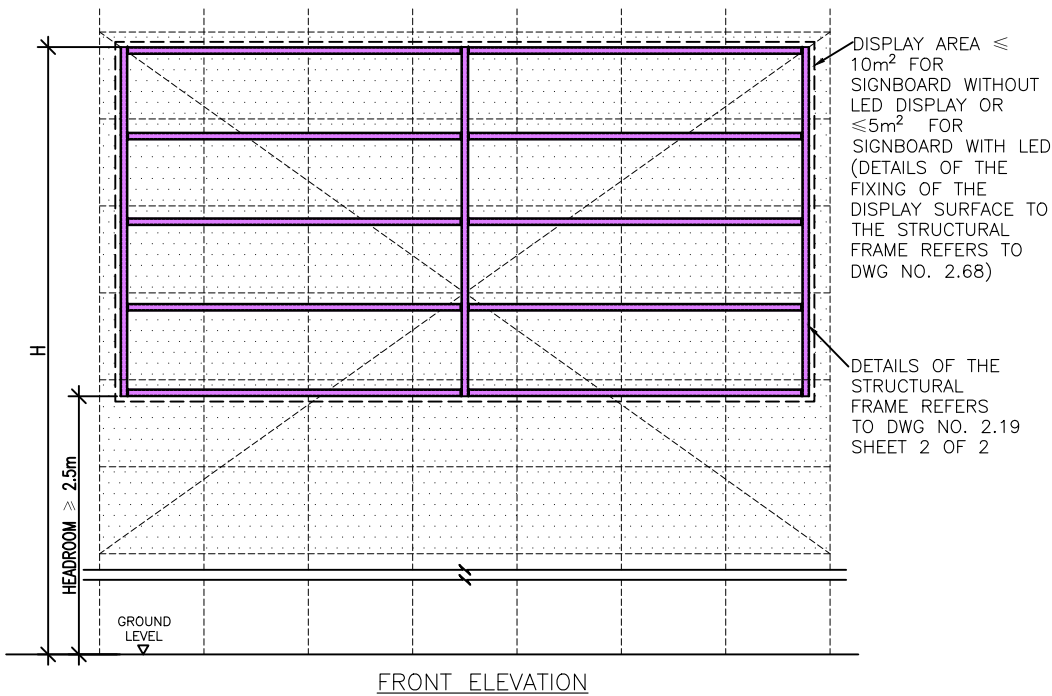
DETAIL 3



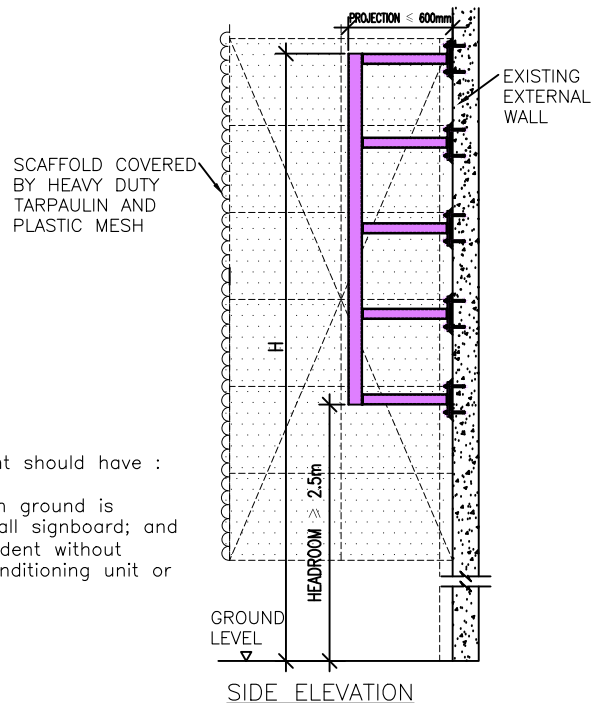
DETAIL 4



BUTT WELD DETAIL



FRONT ELEVATION



SIDE ELEVATION

Wall signboards at overhead of shopfront should have :

- (i) a minimum clearance of 2.5m from ground is maintained below any part of the wall signboard; and
- (ii) the signboard is structurally independent without supporting any roller shutter, air-conditioning unit or storage.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for Structural Use of Steel 2011
 - Code of Practice in Access for External Maintenance 2021
3. All structural steel to be grade S275 JO/JOH BS EN 10210 for hollow sections and BS EN 10029 for plates, and shall be hot dip galvanized to BS EN ISO 1461.
4. All connections to be 4mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ unless otherwise specified BS EN 1011-1:2009 and all electrodes to BS EN ISO 2560:2009.
5. All anchor bolts to be Hilti HSA-R-M12 or equivalent and shall be installed according to the manufacturer's specification.
6. Existing concrete grade of wall is assumed to be Grade 20 with a minimum thickness 150mm.
7. All removal of existing concrete shall be carried out by using handheld tools only.
8. All existing reinforcement should not be damaged.
9. All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint or equivalent with thickness of 1.5mm ($H_p/A = 175$).
10. Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011".
11. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

1. Dead Load = 0.2 kN/m^2
2. Live Load = 1.00 kN/m
3. Wind Load = 2.86 kN/m^2 with total pressure coeff. of 1.4 (Effective height = 100m)
Assume topography factor, $S_t=1.0$; Wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard and the effected structural element for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structural adequacy of the supporting parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
5. Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

SAFETY AND PRECAUTIONARY MEASURES :

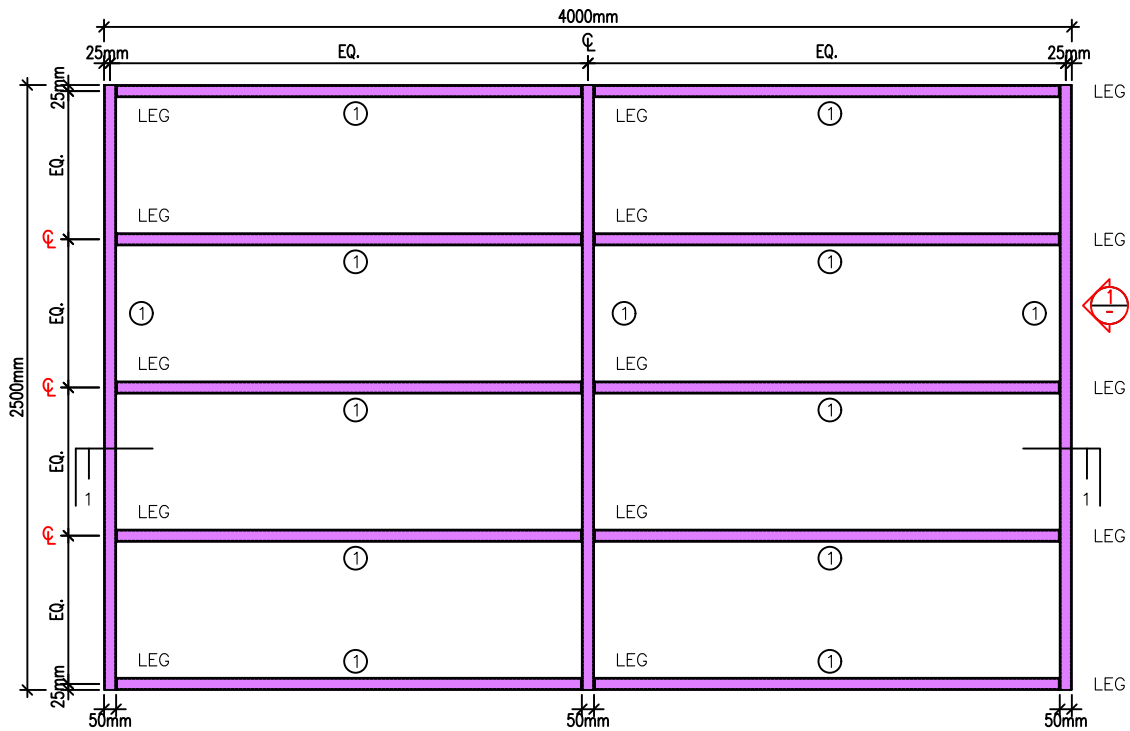
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

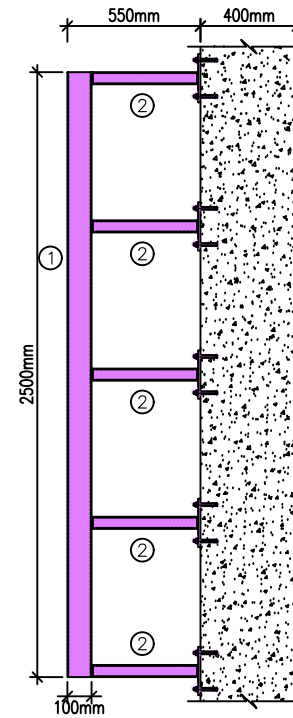
- A. Erection
 1. Install the signage as per drawing.
- B. Alteration
 1. Remove defective members and replace with a new member by using the same size as per the existing member.
 2. Check the connection on between signboard and the wall, repair if necessary.
 3. Dismantle bamboo scaffold and clean the site.

REMARKS :

1. This case excludes item 10 of the Designated Exempted Works or minor works item 3.17.
2. The signboard does not consist of stone if $H > 6\text{m}$.
3. Display area $\leq 5\text{m}^2$ if the signboard has LED display.

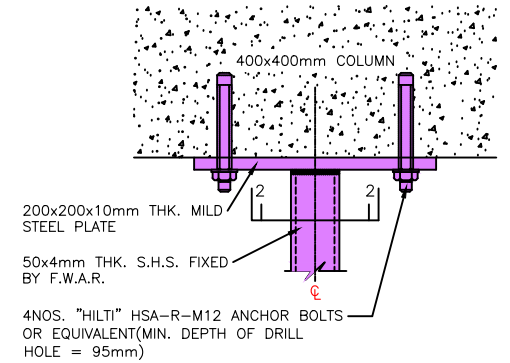


STRUCTURAL FRAME ELEVATION (IF NO LIGHT EMITTING DIODES DISPLAY AREA $\leq 10m^2$)
(IF WITH LED, DISPLAY AREA $\leq 5m^2$)

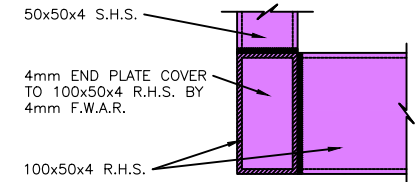


ELEVATION 1

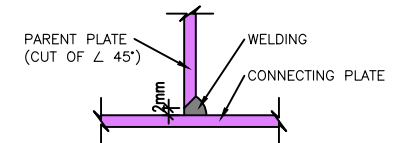
MEMBER SCHEDULE	
①	100x50x4mm THK. R.H.S. FIXED BY FILLET WELD
②	50x4mm THK. S.H.S. FIXED BY FILLET WELD



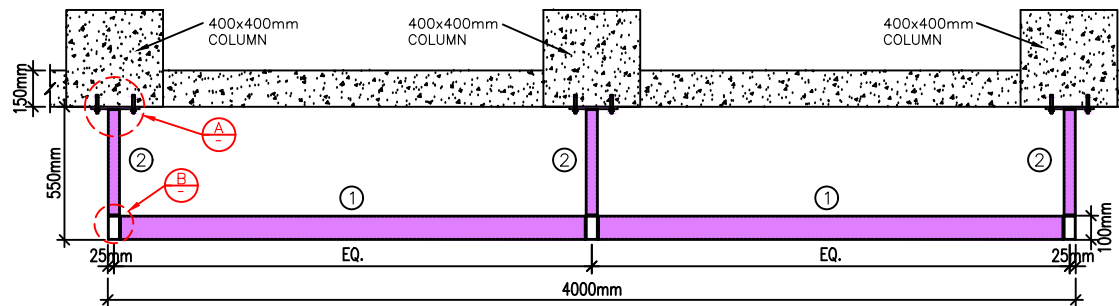
DETAIL A



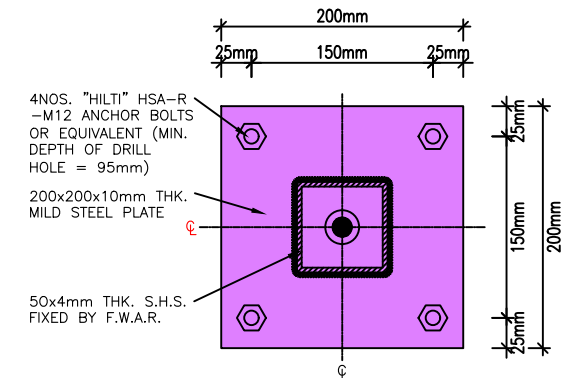
DETAIL B



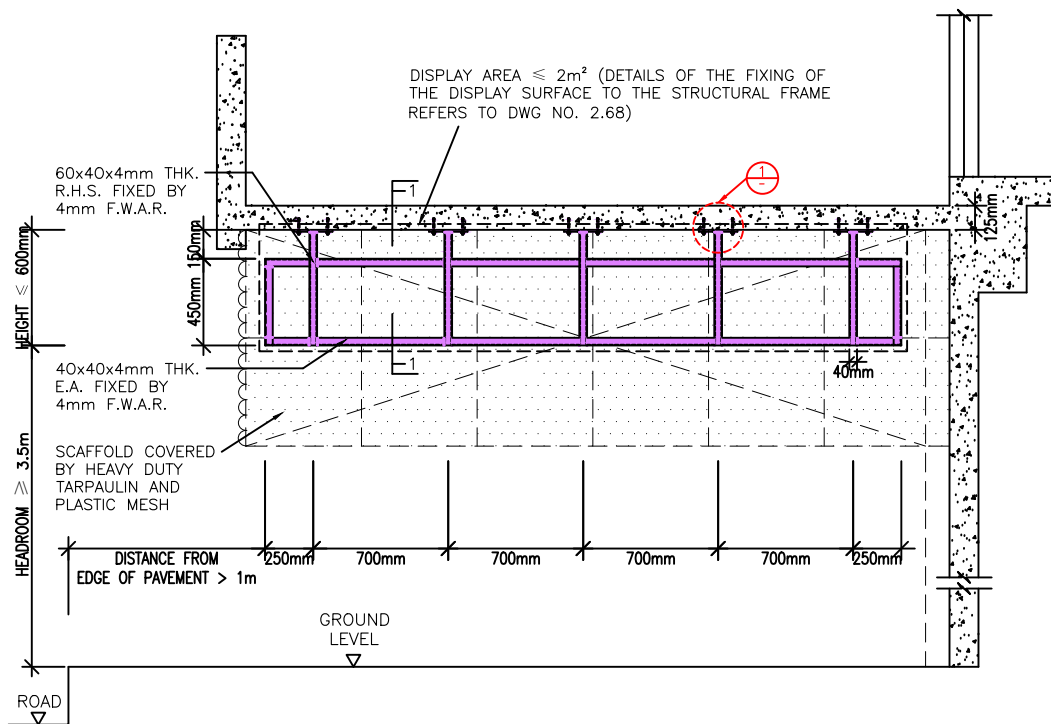
BUTT WELD DETAIL



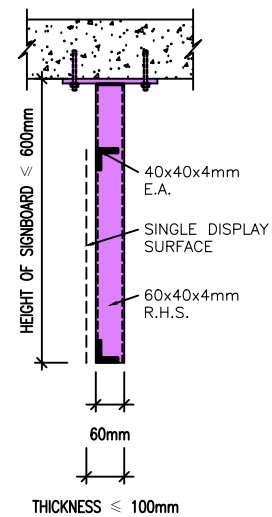
SECTION 1 - 1



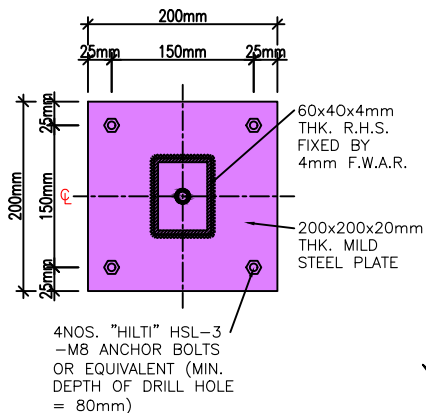
SECTION 2 - 2



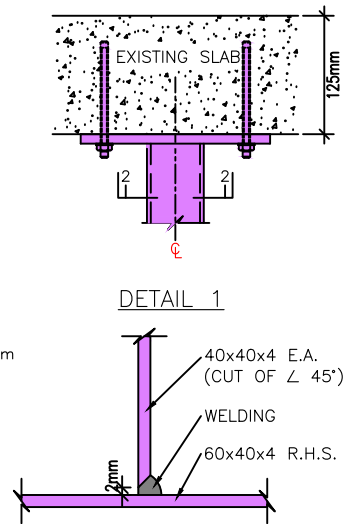
ERECTION OR ALTERATION OF SIGNBOARD



SECTION 1 - 1



SECTION 2 - 2



BUTT WELD DETAIL

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice in Access for External Maintenance 2021
- All structural steel to be grade S275 JOH/JO to BS EN 10210 for hollow sections and BS EN 10056 for angles and BS EN 10029 for steel plate and shall be hot dip galvanized to BS EN ISO 1461 : 2009
- All connections to be 4 mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560:2009
- All anchor bolts to be Hilti HSL-3 M8 or equivalent and shall be installed according to the manufacturer's specification.
- The existing concrete grade of reinforced concrete slab is assumed to be Grade 20 with a minimum thickness of 125 mm.
- Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011"
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 250kg
- Wind Load = 1.98kN/m² with pressure coeff. of 1.8 (Effective height = 10m)

PREPARATION WORKS:

- Obtain the existing design drawings/ information of the signboard for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- If the signboard consists of light emitting diodes or other lighting, disconnect the power to the signboard before commencement works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the supporting parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
- Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 1 Double row bamboo scaffold and working platform over pavement

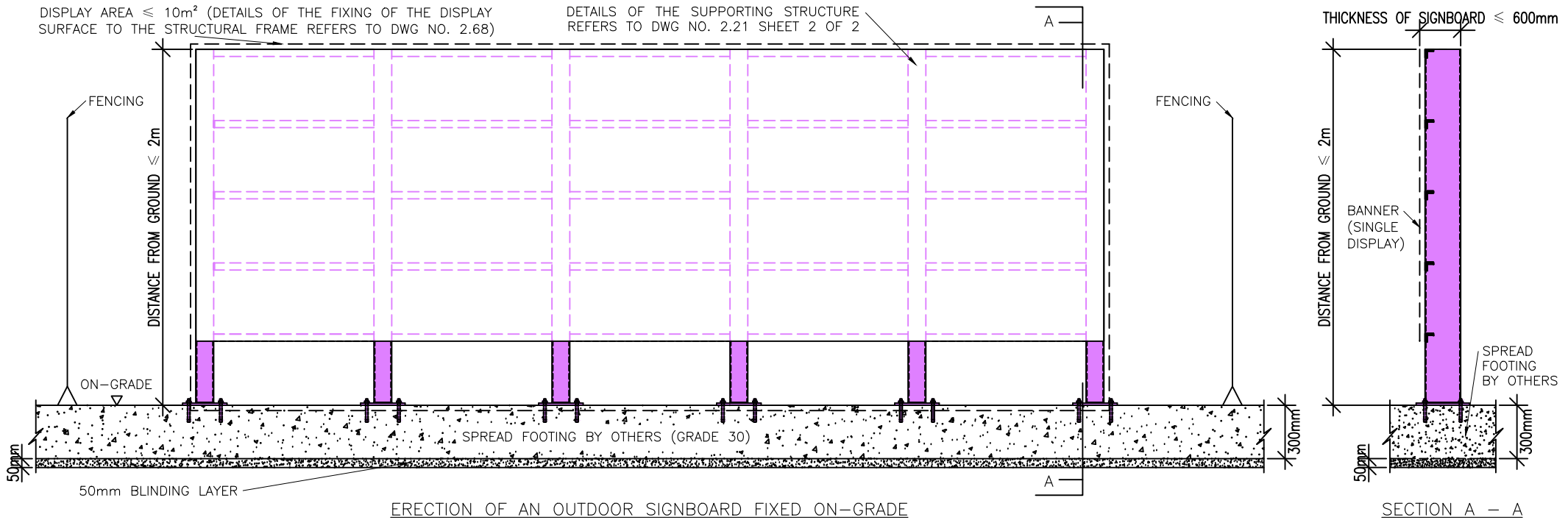
WORKING PROCEDURES :

- Erection**
 - Install the signboard as per drawing.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration**
 - Remove the display surface/ loose parts from the signboard.
 - Remove the defective member and replace with a new one having the same size as the existing member.
 - Check the connection between the sign board and the balcony/canopy, repair if necessary.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

Remarks : The signboard does not consist of stone and does not project beyond the edge of a balcony or canopy.

DISPLAY AREA $\leq 10\text{m}^2$ (DETAILS OF THE FIXING OF THE DISPLAY SURFACE TO THE STRUCTURAL FRAME REFERS TO DWG NO. 2.68)

DETAILS OF THE SUPPORTING STRUCTURE REFERS TO DWG NO. 2.21 SHEET 2 OF 2



ERECTION OF AN OUTDOOR SIGNBOARD FIXED ON-GRADE

SECTION A - A

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for Foundations 2017
 - Code of Practice in Access for External Maintenance 2021
- All structural steel to be grade S275 JOH/JO to BS EN 10210 for hollow sections and BS EN 10056 for angles and BS EN 10029 for steel plate and shall be hot dip galvanized to BS EN ISO 1461 : 2009
- All connections to be 4 mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HSL-3 G M20/30 or equivalent and shall be installed according to the manufacturer's specification.
- Existing concrete grade and thickness is assumed to be Grade 20 and 200mm minimum respectively. New concrete grade and cover to be Grade 30 and 75mm respectively. Reinforcement to be high yield deformed bar with $F_y = 460 \text{ N/mm}^2$
- All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint or equivalent with thickness of 1.5mm ($H_p/A = 175$) or equivalent.
- All banners should be made of non-combustible material and fixed on the horizontal members accordingly.
- Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011".
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 1kN/m^2
- Wind Load = 1.77kN/m^2 with pressure coeff. 2.0 (Effective height = 5m)
- Allowable bearing capacity of soil is assumed to be 50kN/m^2

PREPARATION WORKS :

- Obtain the existing design drawings/ information of the signboard for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the supporting structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
- Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

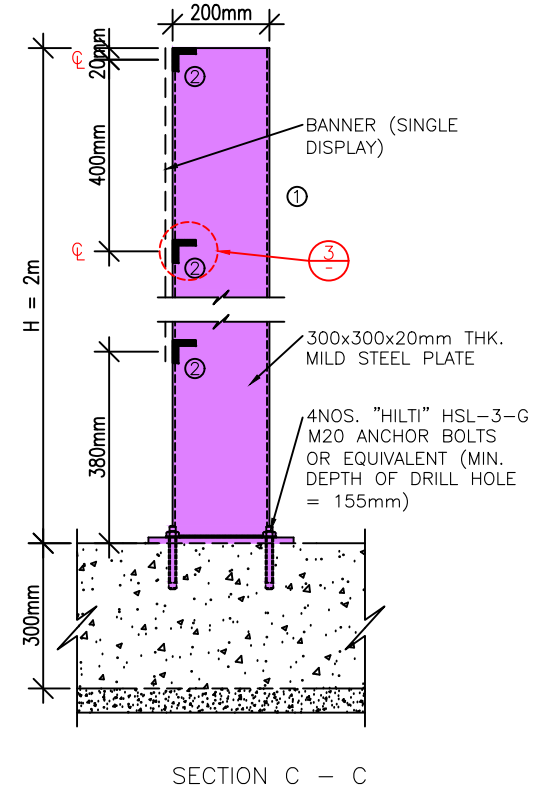
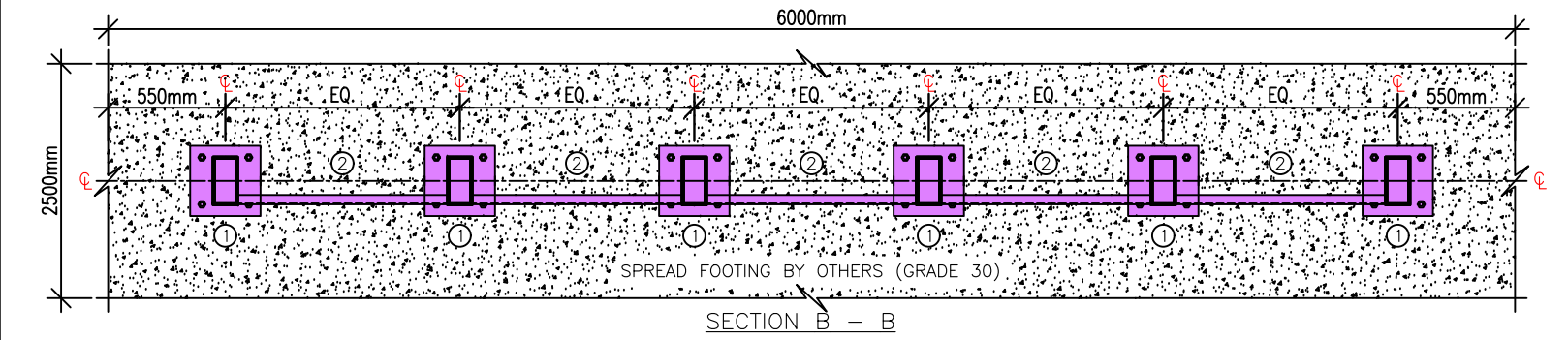
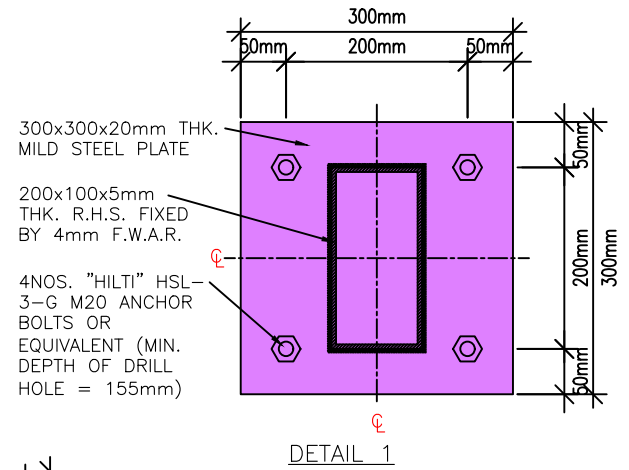
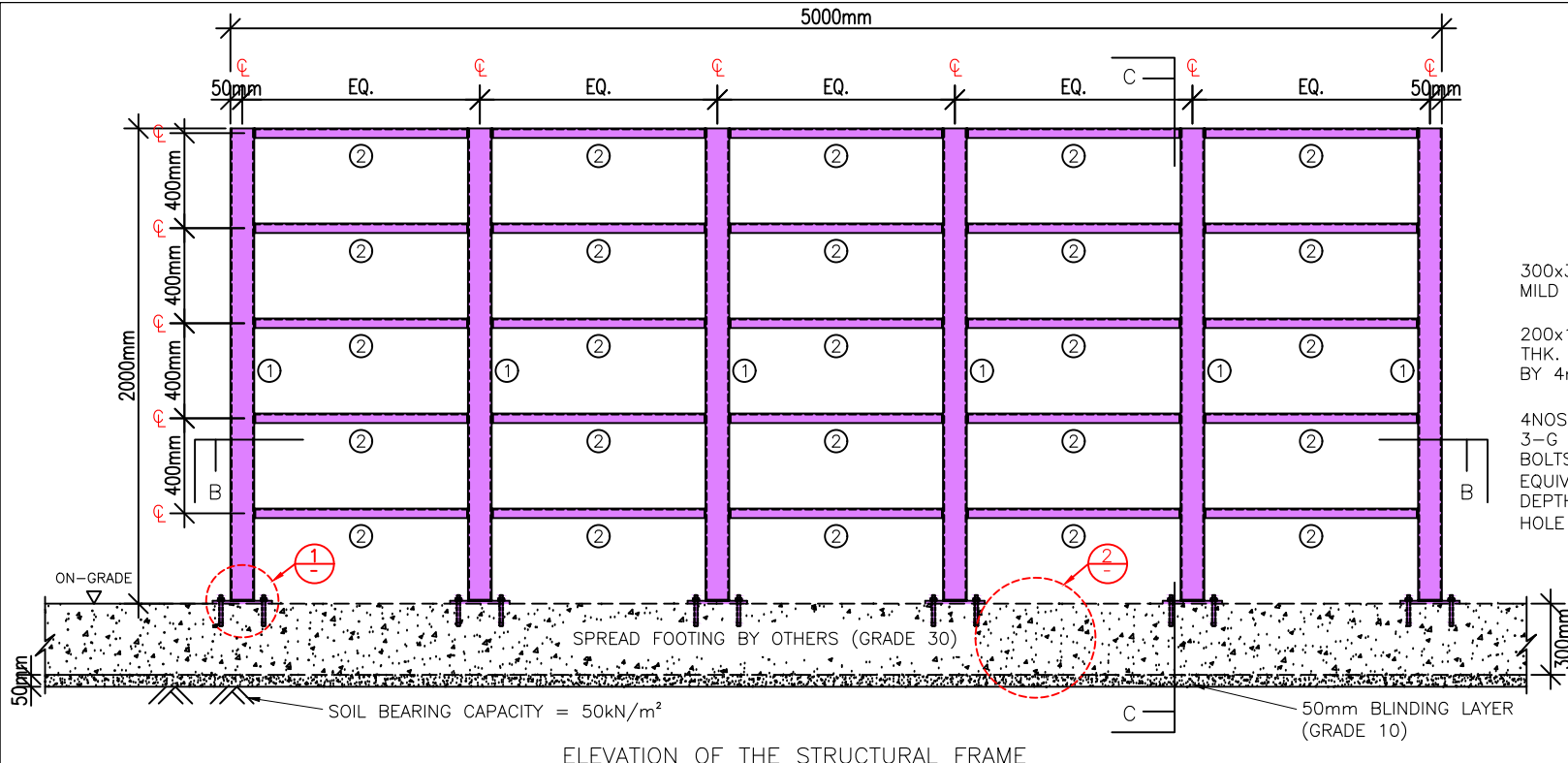
SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

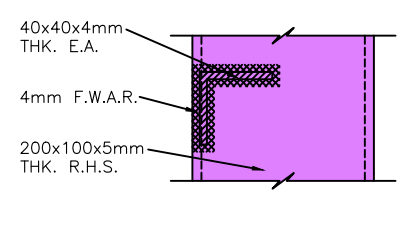
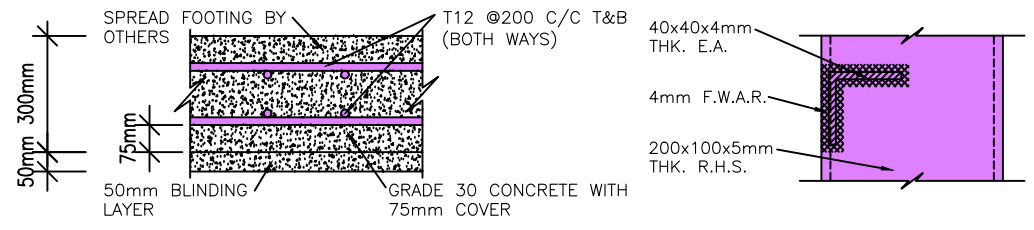
WORKING PROCEDURES :

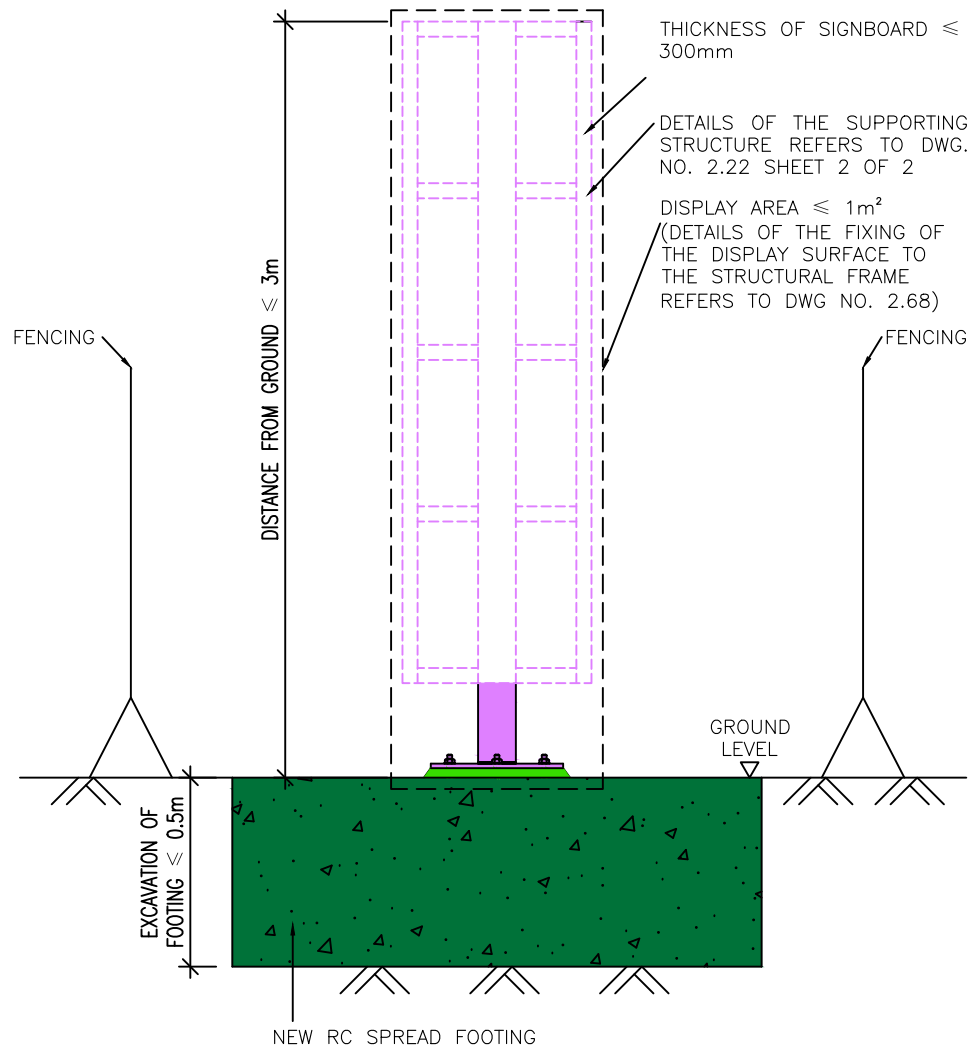
- Erection
 - Install the signboard as per drawing.
 - Make good and reinstate the affected areas.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration
 - Remove the display surface/ loose parts from the signboard.
 - Remove the defective member and replace with a new member having the same size of the existing member.
 - Check the connection between the sign board and the footing, repair if necessary.
 - Make good and reinstate the affected areas.
 - Dismantle the bamboo scaffold and clean the site.

REMARKS : For excavation and spread footing, please refer to MW item 2.10 and 2.11



MEMBER SCHEDULE	
①	200x100x5mm THK. R.H.S. FIXED BY 4mm FILLET WELD ALL ROUND
②	40x4mm THK. E.A. FIXED BY 4mm FILLET WELD ALL ROUND





ERECTION

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for Foundations 2017
 - Code of Practice in Access for External Maintenance 2021
- All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections and BS EN 10029 for steel plate and shall be hot dip galvanized to BS EN ISO 1461:2009
- All connections to be 4 mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HSL-GR M20 or equivalent and shall be installed according to the manufacturer's specification.
- All concrete works shall comply with CS1: 2010:2009
- Steel reinforcement shall comply with CS2: 2012 and shall be bent in accordance with BS 4466.
- Minimum anchorage and lap length are 700mm unless otherwise specified.
- Minimum allowable bearing pressure of soil to be 50 kN/m².
- All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint or equivalent with thickness of 1.5mm ($H_p/A = 175$).
- All banners should be made of non-combustible material.
- Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011"
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 1.00kN
- Wind Load = 1.63kN/m² with pressure coeff. 2.0 (Effective height = 3m)
Assume topography factor, $S_t=1.0$; Wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$

PREPARATION WORKS:

- Obtain the existing design drawings/ information of the signboard for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- If the signboard consists of light emitting diodes or other lighting disconnect the power to the signboard before the commencement of works.

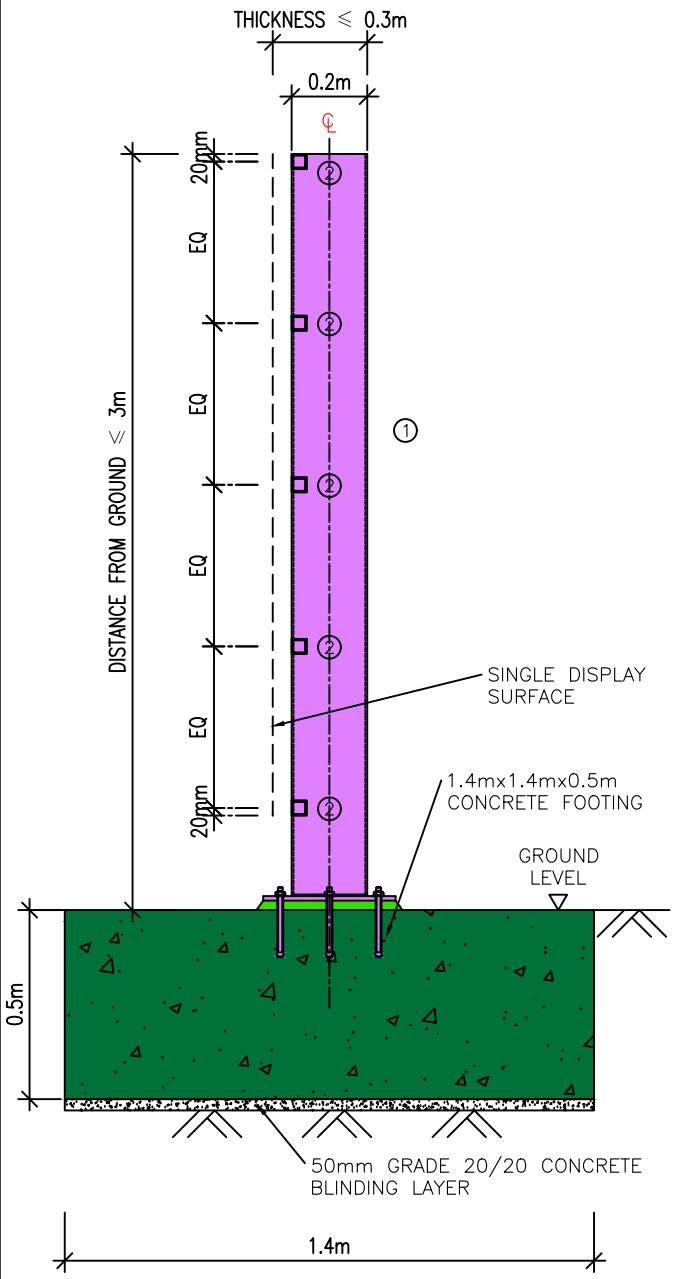
SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- For trench excavation reference shall be made to "guide to trench excavation" published by utilities technical liaison committee – Highway Office and GEO.

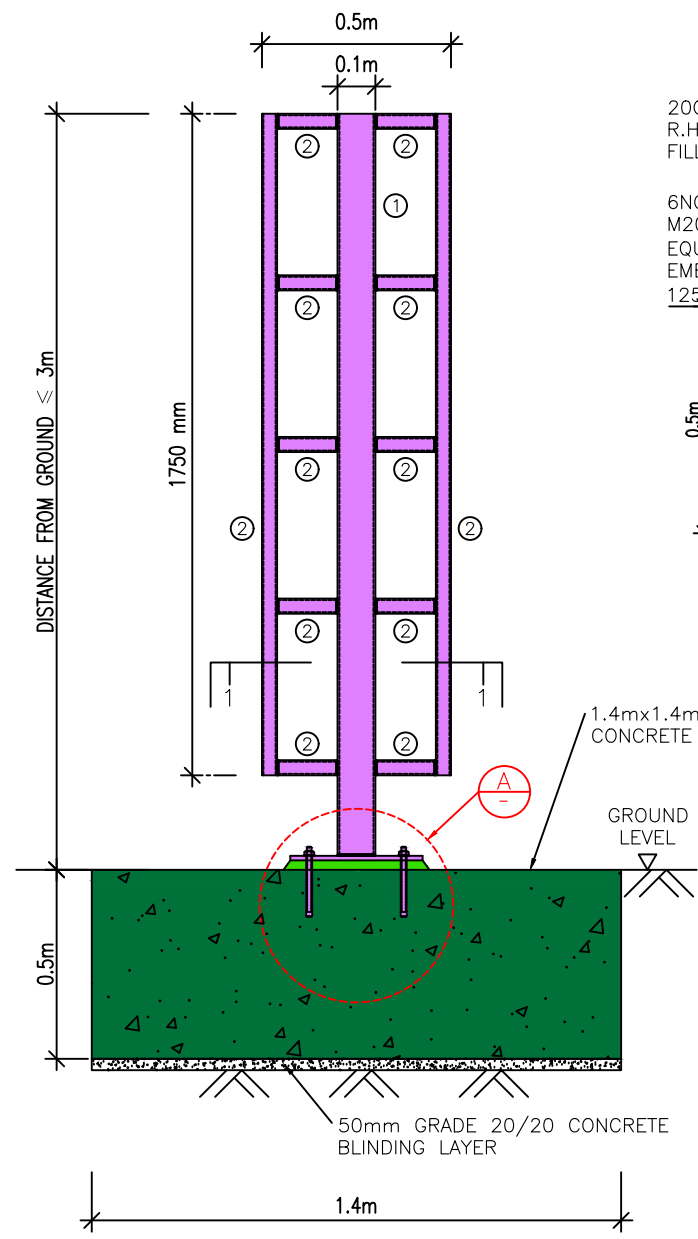
WORKING PROCEDURES :

- Erection
 - Excavate and construct the spread footing.
 - Install the signboard as per the drawing.
 - Make good and reinstate the affected areas, if any, and clean the site.
- Alteration
 - If necessary, excavate and construct additional spread footing.
 - Remove the display surface/ loose parts from the signboard.
 - Remove the defective member and replace with a new member having the same size of the existing.
 - Make good and reinstate the affected areas, if any, and clean the site.

REMARKS : Reference shall be made to MW item 2.10 and 2.11 for the construction of spread footing and excavation.

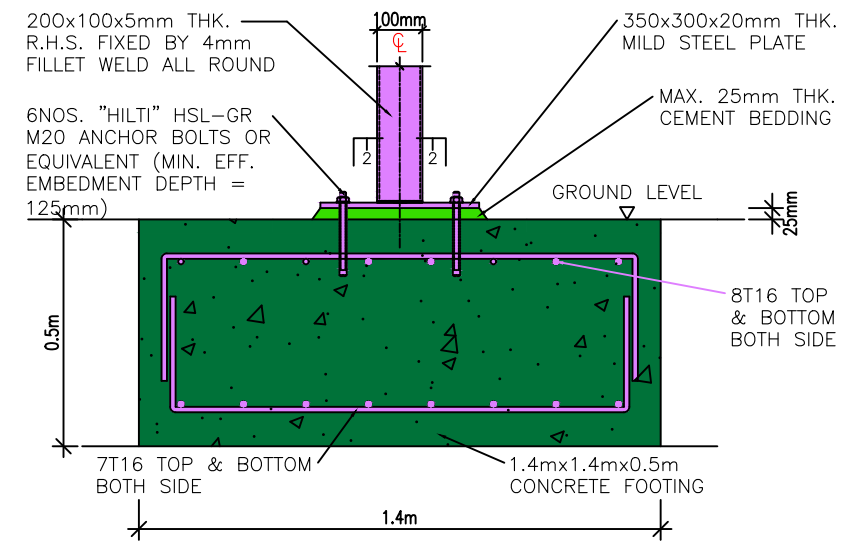


SIDE VIEW

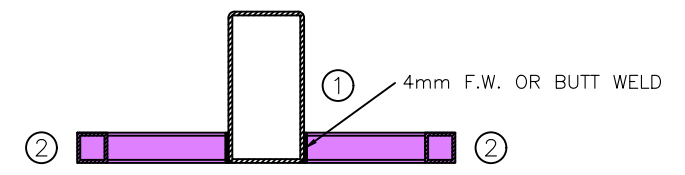


SUPPORTING FRAME ELEVATION

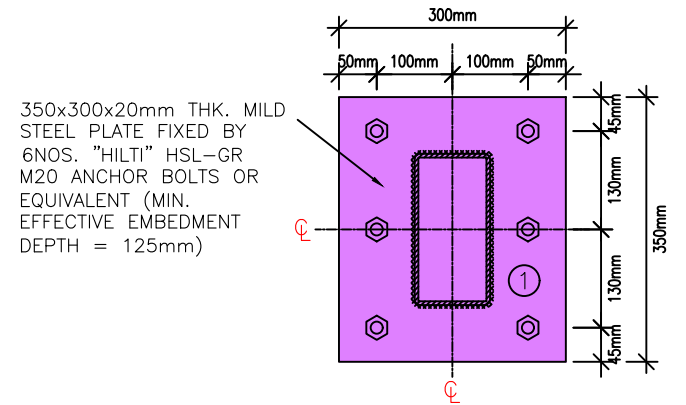
MEMBER SCHEDULE	
①	200x100x5mm THK. R.H.S. FIXED BY 4mm FILLET WELD ALL ROUND
②	40x4mm THK. S.H.S. FIXED BY 4mm FILLET WELD ALL ROUND



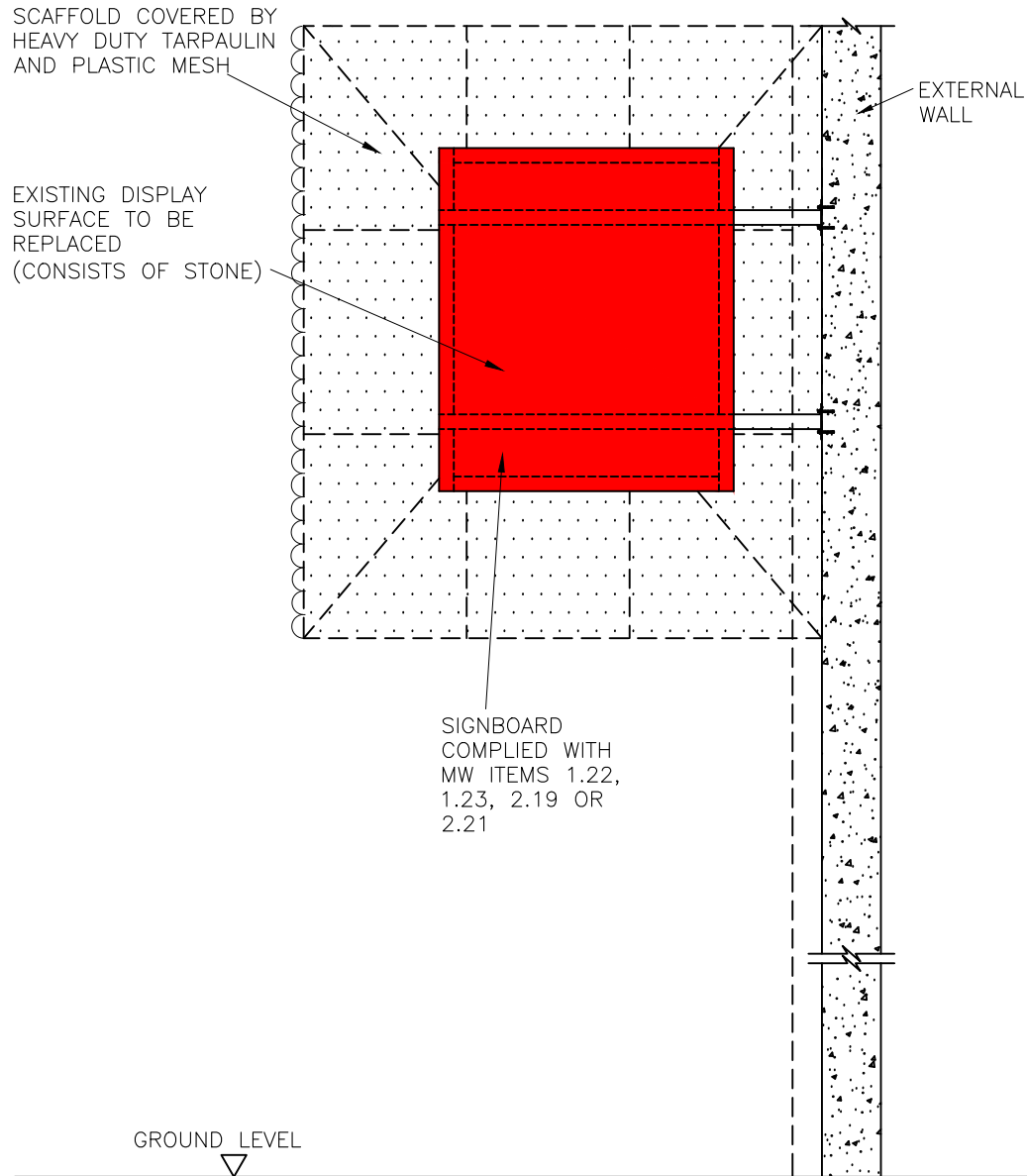
DETAIL A



SECTION 1-1



SECTION 2-2



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the original design drawings/ information for reference prior to the commencement of works
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Check the catalogue of the new display surface to ensure it is suitable for replacement.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 5 Bamboo scaffold for signboard

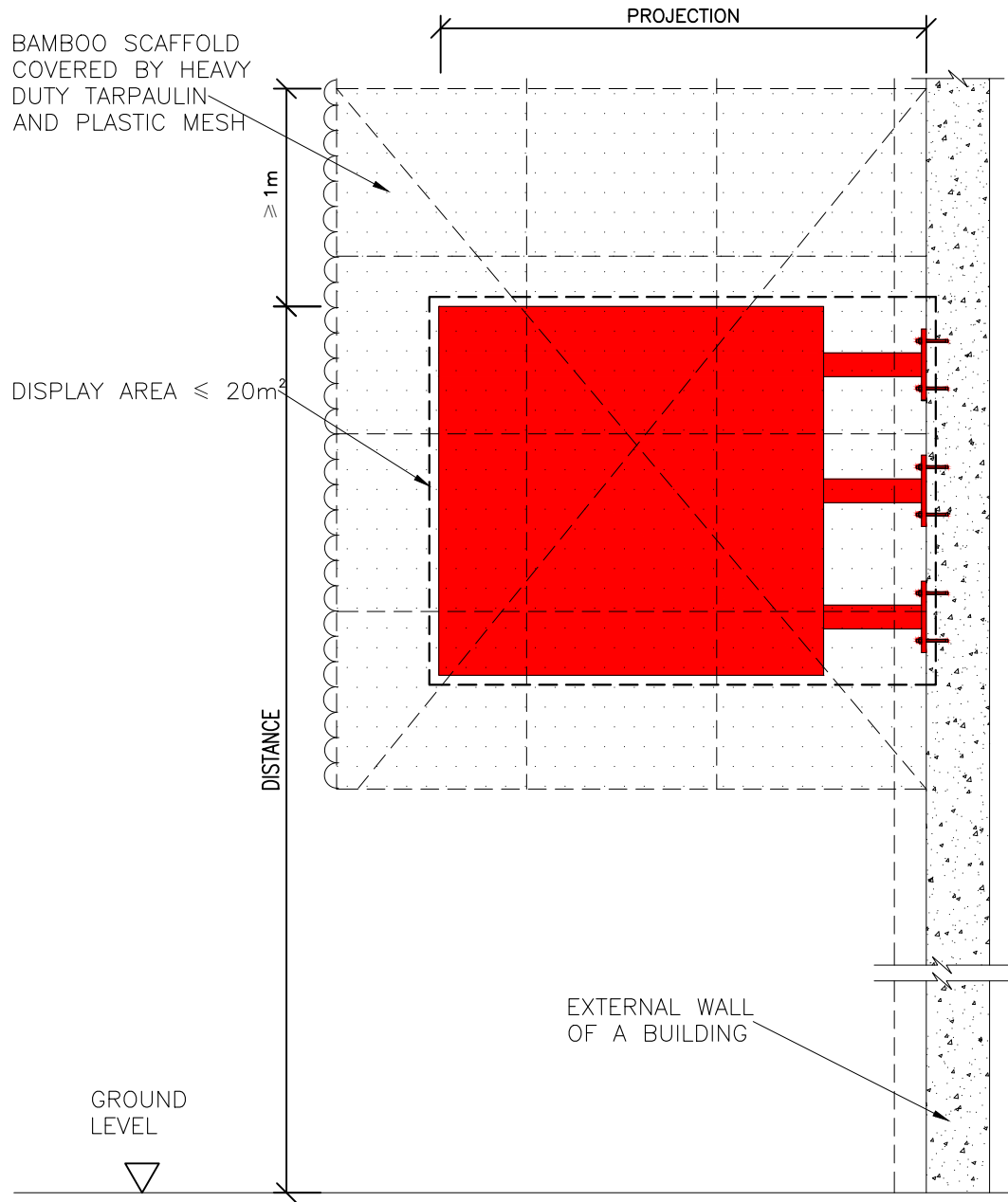
WORKING PROCEDURES :

1. Remove the display surface and re-install the new surface using the same fixing method.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.

MINOR WORKS ITEM 2.23

DRAWING TITLE :

REPLACEMENT OF THE DISPLAY SURFACE OF SIGNBOARD REFERRED TO IN ITEM 1.22, 1.23, 2.19 OR 2.21



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the signboard consists of light emitting diodes, disconnect the power connected to the signboard before commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

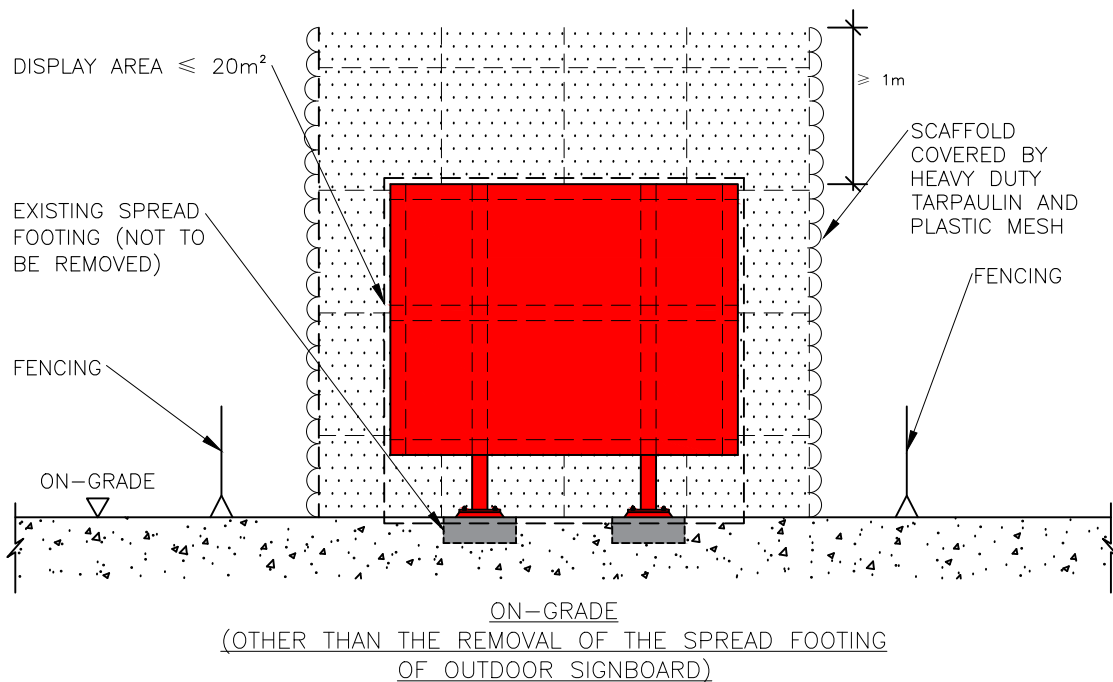
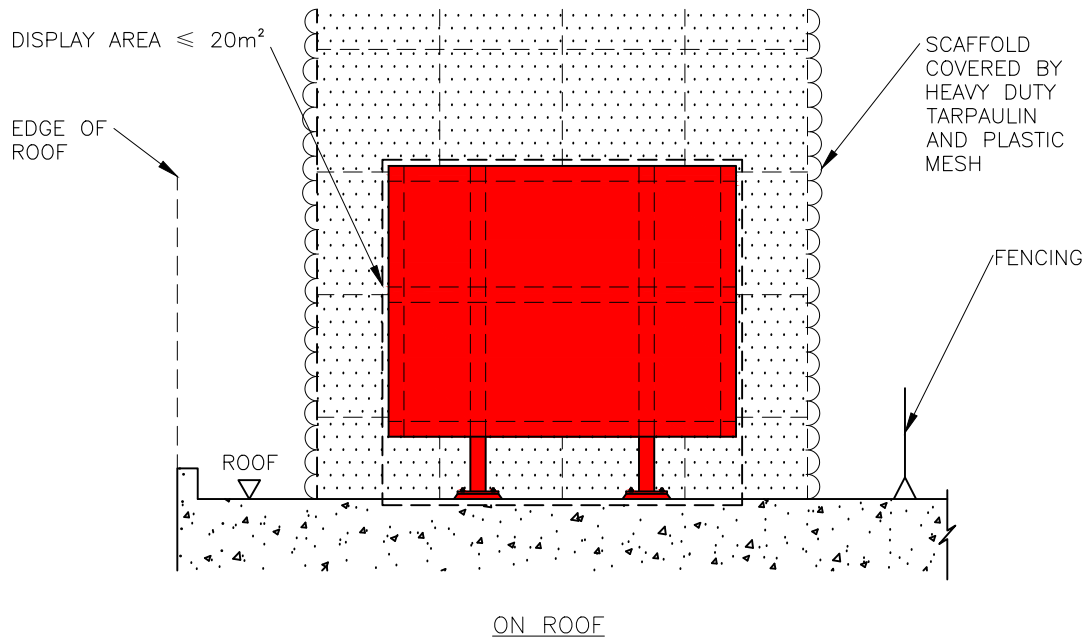
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 5 Bamboo scaffold for signboard.

WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. The removal works shall be commenced from the outmost side to the supporting ends at the parent structure.
4. Make good and reinstate the affected areas of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

Remarks: This case excludes MW item 3.18



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard for reference.
2. If the signboard consists of light emitting diodes or other lighting, disconnect all the power connected to the signboard before the commencement of any works.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

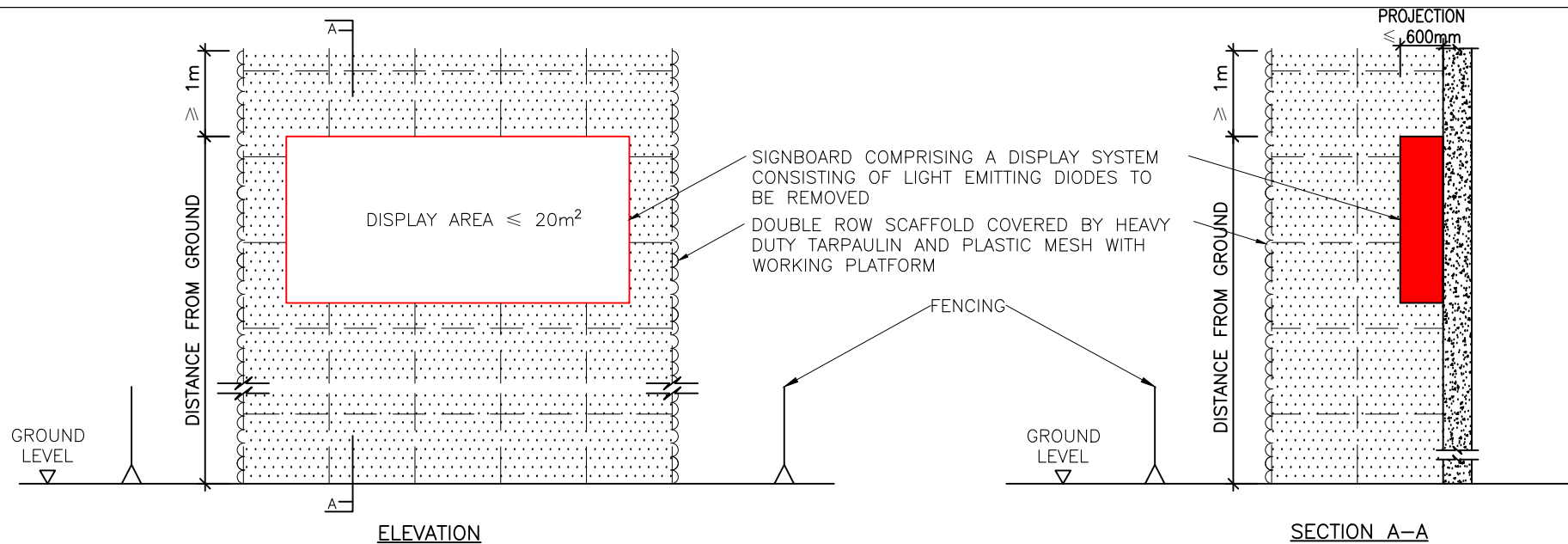
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove the display board.
2. Remove the remaining structures of the signboard by cutting into smaller size using hand held tools for subsequent construction waste disposal.
3. Make good and reinstate the affected areas.
4. Dismantle the bamboo scaffold and clean the site.

Remarks: This case excludes MW item 3.19 or 3.22.



CASE 1

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the signboard consists of light emitting diodes or other lighting disconnect the power connected to the signboard before the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. The removal works shall be commenced from the top to the bottom.
4. Make good and reinstate the affected areas of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

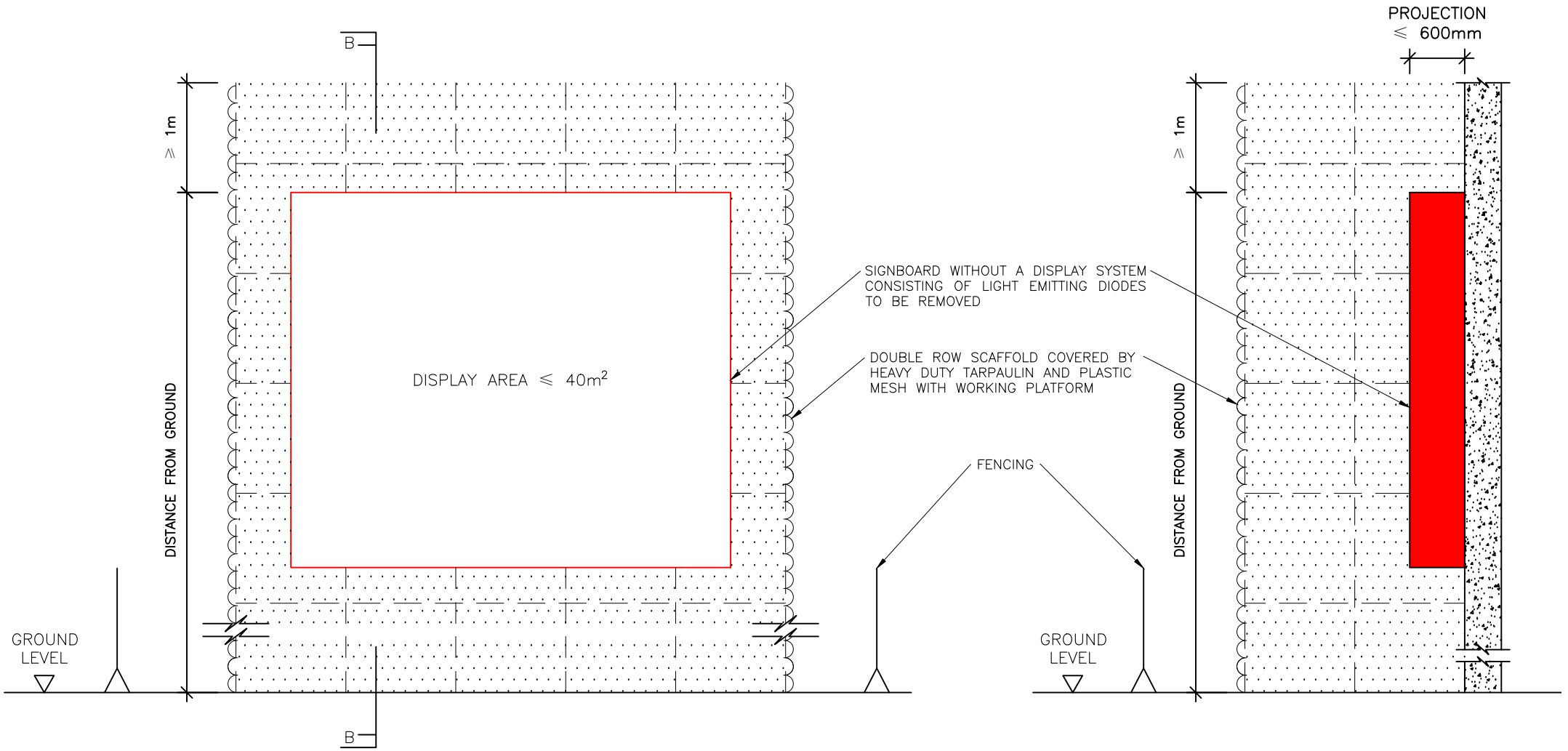
Remarks: This case excludes DEW item 11 and MW item 3.20.

DRAWING TITLE :

MINOR WORKS ITEM 2.26

REMOVAL OF WALL SIGNBOARD

SHEET 1 OF 2



ELEVATION

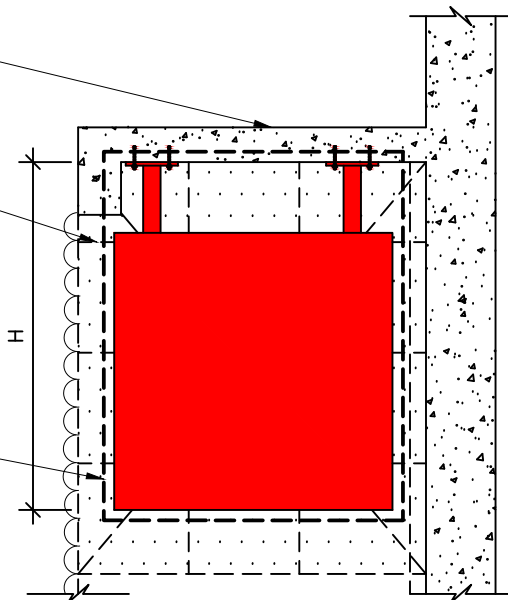
SECTION B-B

CASE 2

BALCONY OR CANOPY
(OTHER THAN A
CANTILEVERED SLAB)

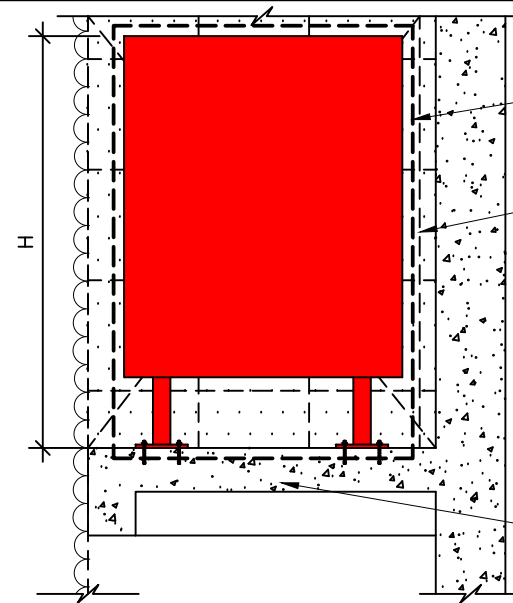
SCAFFOLD COVERED BY
HEAVY DUTY TARPULIN
AND PLASTIC MESH

DISPLAY AREA >
 2m^2 OR $H > 1\text{m}$



CASE 1: HUNG UNDERNEATH

OR



CASE 2: LOCATED ON

DISPLAY AREA >
 5m^2 OR $H > 1\text{m}$

SCAFFOLD COVERED BY
HEAVY DUTY TARPULIN
AND PLASTIC MESH

BALCONY OR CANOPY
(OTHER THAN A
CANTILEVERED SLAB)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference.
2. If the signboard consists of light emitting diodes or other lighting disconnect all the power connected to the signboard before the commencement of any works on site.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the hanging down signboard by cutting the member into smaller size from the bottom to the top for construction waste disposal or remove the supporting frame of the signboard in case 2 by cutting the member into smaller size from the top to the bottom for construction waste disposal.
3. Make good and reinstate the affected areas (including waterproofing) of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

Remarks : This case excludes MW item 3.21.

MINOR WORKS ITEM 2.27

DRAWING TITLE :

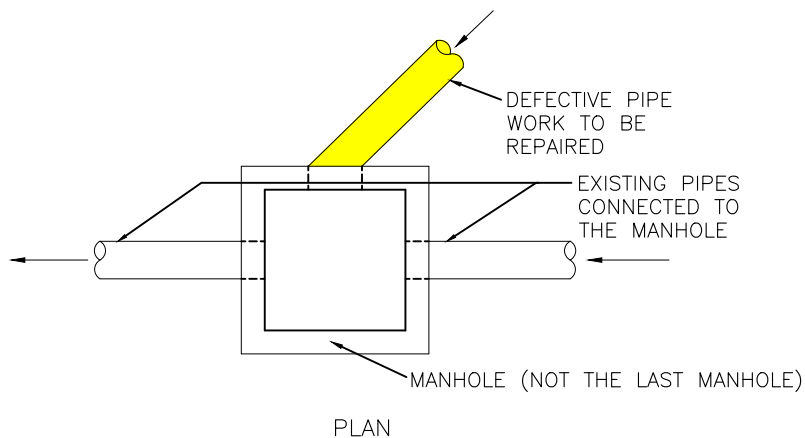
REMOVAL OF SIGNBOARD LOCATED ON OR HUNG UNDERNEATH THE SOFFIT OF
A BALCONY OR CANOPY (OTHER THAN A CANTILEVERED SLAB)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS:

1. Obtain and investigate all drawings/ information of underground utilities prior to the commencement of works.
2. Obtain the existing design drawings/ information for reference prior to the commencement of works.
3. Carry out condition survey of the adjoining structures/retaining walls/slopes and existing site condition prior to the commencement of works.
4. If the works would involve suspension of the drainage system, inform the affected parties in advance.
5. Temporary diversion shall be considered if suspension is not possible.
6. Excavation works to be carried out within scheduled area no. 3 and/or railway protection area are subject to prior agreement from MTRCL before the works can commence.



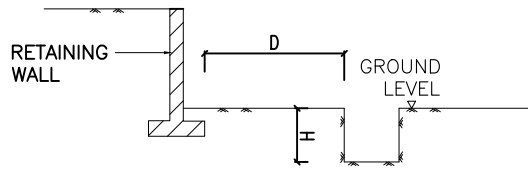
REPAIR OF UNDERGROUND DRAIN

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. For trench excavation with depth greater than 1.2m, adequate support must be installed at a timely manner and ahead of excavation as far as practicable. For excavation depth less than 1.2m, shoring may not be required for ground that is found to be self-supporting. However, if external loads are likely to be present, or if there is doubt as to the stability of the trench sides due to the presence of weak ground or high groundwater, especially in inclement weather, the trench sides should be supported even if the excavation depth is less than 1.2m. Design and installation of shoring support shall be referred to the "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003) which provides good technical guidelines on good practice of shoring support and drainage measures for trench excavations.
3. There is no over-excavation, excessive temporary cutting slopes and stockpiling of materials adversely affecting the adjoining ground, structure or building, in case of any undue ground settlement or undue deflection of adjoining building/structures, works should be suspended immediately and notify BA for the remedial proposal.
4. Other precautionary measures related to excavation works are referred to the Recommended Design and details for MW item 1.12($1.5 < \text{depth} \leq 3\text{m}$) or 2.11($0.3\text{m} < \text{Depth} \leq 1.5\text{m}$)

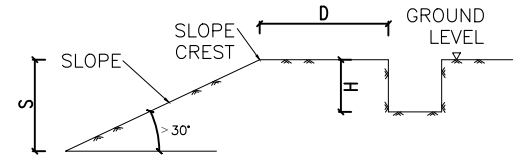
WORKING PROCEDURES :

1. Identify the location of the defective drain by inspection, testing or cctv.
2. Carry out excavation in accordance with minor works item 2.11.
3. Suspend the drainage system or divert the drain to be removed.
4. Remove the defective pipe work.
5. Install new drain pipe and seal up the connection at the manhole using waterproof cement mortar.
6. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent:water =1:99) and pack into plastic bag for construction waste disposal.
7. Remove all building waste and clean the drainage system before recommissioning
8. Carry out water test to the new drain pipe for any leakage. All drain tests are to be carried out in accordance with the method and procedure as set out.
9. Backfilling and reinstate the top surface.
10. The works are not carried out on any slope with gradient of more than 15 degree.



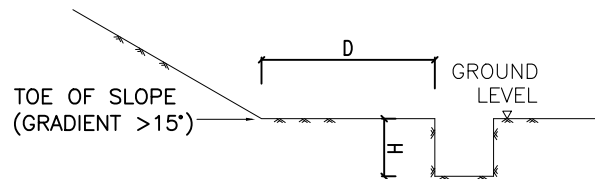
$$H \leq 1.5\text{m}, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.28(b)



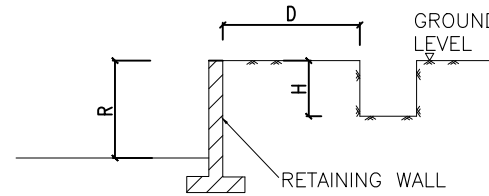
$$H \leq 1.5\text{m}, S \leq 3\text{m}, D \geq 1.5S$$

CONDITIONAL DIAGRAM UNDER 2.28(f)



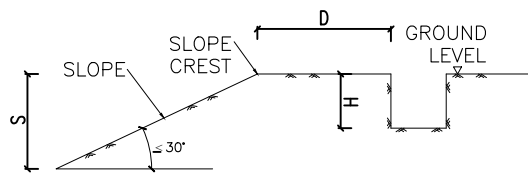
$$H \leq 1.5\text{m}, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.28(c)



$$H \leq 1.5\text{m}, R \leq 3\text{m}, D \geq 1.5R$$

CONDITIONAL DIAGRAM UNDER 2.28(g)



$$H \leq 1.5\text{m}, D \geq S$$

CONDITIONAL DIAGRAM UNDER 2.28(e)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance building (standard of sanitary fitments, plumbing, drainage works and latrines) regulation and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS:

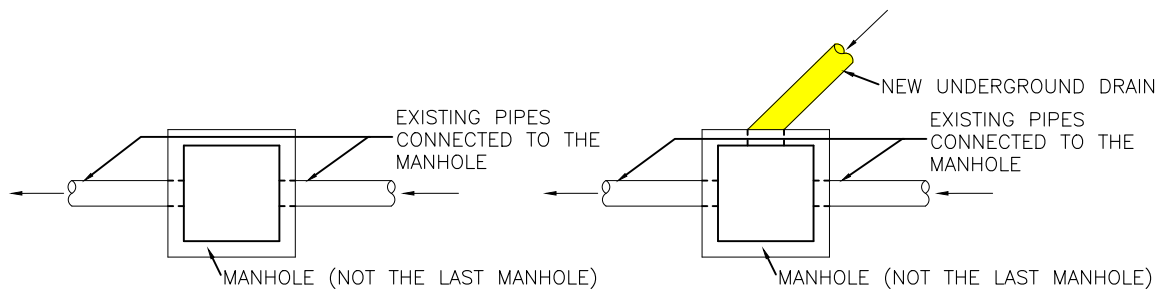
1. Obtain and investigate all underground utilities drawings/ information prior to the commencement of works.
2. Obtain the existing design drawings/ information for reference prior to the commencement of works.
3. Carry out condition survey of the adjoining structures/retaining wall/slopes and existing site condition prior to the commencement of works.
4. If the works would involve suspension of the drainage system, inform the affected parties in advance.
5. Temporary diversion shall be considered if suspension is not possible.
6. Excavation works to be carried out within scheduled area no. 3 and/or railway protection area are subject to prior agreement from MTRCL before the works can commence.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. For trench excavation with depth greater than 1.2m, adequate support must be installed at a timely manner and ahead of excavation as far as practicable. For excavation depth less than 1.2m, shoring may not be required for ground that is found to be self-supporting. However, if external loads are likely to be present, or if there is doubt as to the stability of the trench sides due to the presence of weak ground or high groundwater, especially in inclement weather, the trench sides should be supported even if the excavation depth is less than 1.2m. Design and installation of shoring support shall be referred to the "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003) which provides good technical guidelines on good practice of shoring support and drainage measures for trench excavations.
3. There is no over-excavation, excessive temporary cutting slopes and stockpiling of materials adversely affecting the adjoining ground, structure or building, in case of any undue ground settlement or undue deflection of adjoining building/structures, works should be suspended immediately and notify BA for the remedial proposal.
4. Other precautionary measures related to excavation works are referred to the Recommended Design and details for MW item 1.12(1.5<depth≤3m) or 2.11(0.3m<Depth≤1.5m)

WORKING PROCEDURES :

1. Carry out excavation in accordance with minor works item 2.11.
2. Install the new pipe work and seal up the connection at the manhole using waterproof cement mortar.
3. Carry out water test to the new drain pipe for any leakage.
4. Remove all building waste and clean the drains. All drain to be carried out in accordance with the method and procedure as set out BS 1610 : 2015 Backfilling and reinstate the top surface.



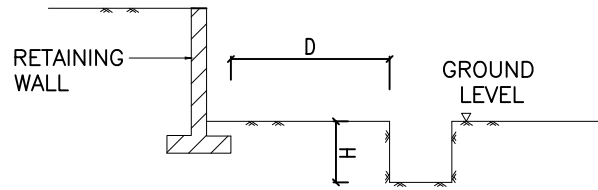
BEFORE
AFTER
PLAN
ADDITION/ ALTERATION OF UNDERGROUND DRAIN

DRAWING TITLE :

MINOR WORKS ITEM 2.29

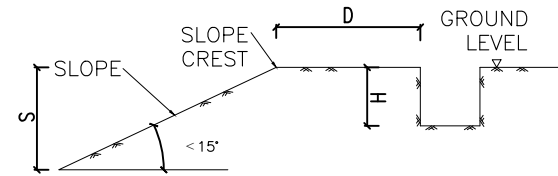
ADDITION OR ALTERATION OF UNDERGROUND DRAIN

SHEET 1 OF 2



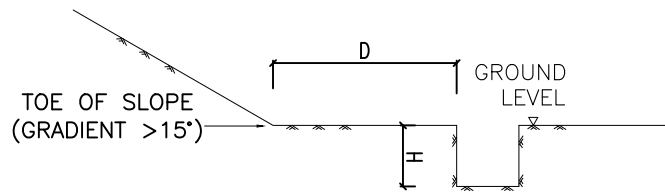
$$H \leq 1.5m, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.29(b)



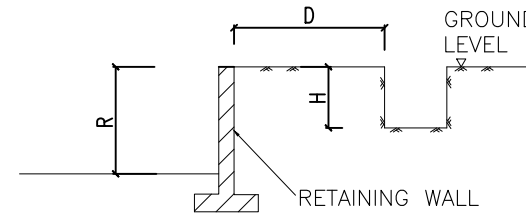
$$H \leq 1.5m, S \leq 3m, D \geq S$$

CONDITIONAL DIAGRAM UNDER 2.29(e)



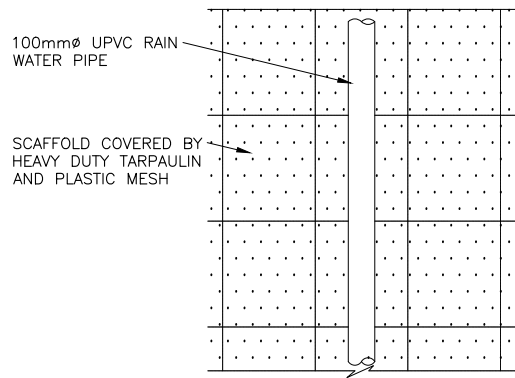
$$H \leq 1.5m, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.29(c)

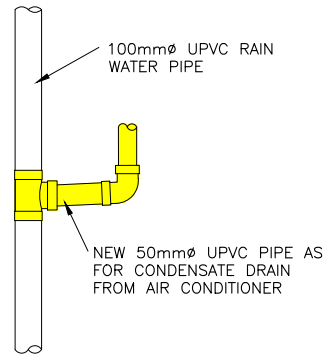


$$H \leq 1.5m, R \leq 3m, D \geq 1.5R$$

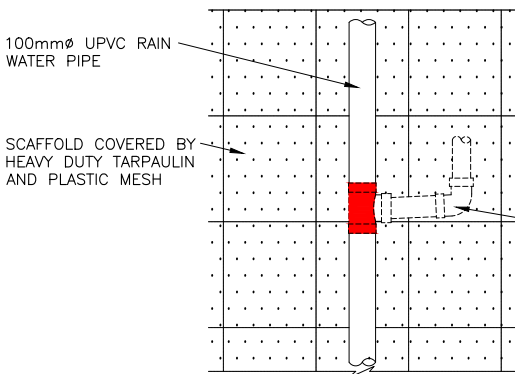
CONDITIONAL DIAGRAM UNDER 2.29(f)



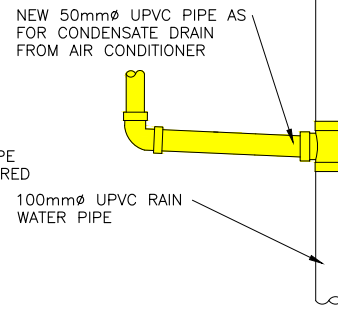
BEFORE
ERECTION



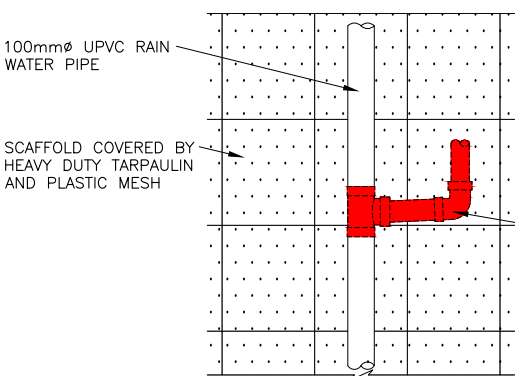
AFTER



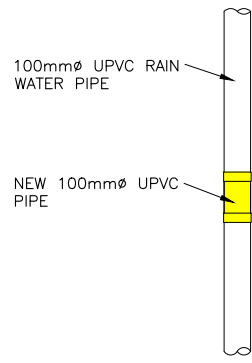
BEFORE
ALTERATION



AFTER



BEFORE
REMOVAL



AFTER

MATERIAL SPECIFICATION :

Plastic rainwater pipes and fittings to be UPVC to BS 4514, BS EN1329-1 and BS EN 12200-1. Plastic soil and ventilating pipes and fittings to be UPVC to BS 4514, BS EN1329-1 and BS EN 12200-1. Plastic waste pipes and fittings to be ABS, MUPVC, PP or PE based to BS5255. Plastic flushing water service pipes and fittings to be UPVC to BS 4514, BS EN1329-1 and BS EN 12200-1.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. The requirements of PNAP APP-93 and APP-164 should be followed for the planning and design of drainage works.
3. The principals of PNAP APP-105 and APP-164 should be observed for protecting the structure against penetration of moisture or water at the design stage.

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the works would involve suspension of the drain system, inform the affected parties in advance.
4. Temporary diversion shall be considered if suspension is not possible.

SAFETY AND PRECAUTIONARY MEASURES

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES

- A. Erection**
 1. Install the pipe work and fitting as per drawing.
 2. Water test the pipe works to make sure that the work is properly done.
 3. Make good and reinstate the works area affected by the works.
 4. Remove the bamboo scaffold and clean the site.
 5. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.
- B. Alteration**
 1. Install the pipe work and fitting as per drawing.
 2. Water test the pipe works to make sure that the work is properly done.
 3. Make good and reinstate the works area affected by the works.
 4. Remove the bamboo scaffold and clean the site.
 5. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.
- C. Removal**
 1. Remove the pipe work and fitting as per drawing.
 2. Make good and reinstate the works area affected by the works.
 3. Remove the bamboo scaffold and clean the site.
 4. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.

REMARKS :

1. This item excludes minor works item 3.23 and works that involve repair or replacement of an internal branch pipe or sanitary fitment.
2. No pipeworks of residential premises shall protrude into the private premises of the floor below.
3. The nominal diameter of every soil pipe from water closet fittings or slop sinks shall be not less than the diameter of the outlet of any of the fittings it serves.
4. No water-borne piping will be embedded in structural elements, otherwise the guidelines in Appendix A of PNAP APP-105 should be followed for demonstration of the nil adverse effect to the performance of structural members.

MINOR WORKS ITEM 2.30

DRAWING TITLE :

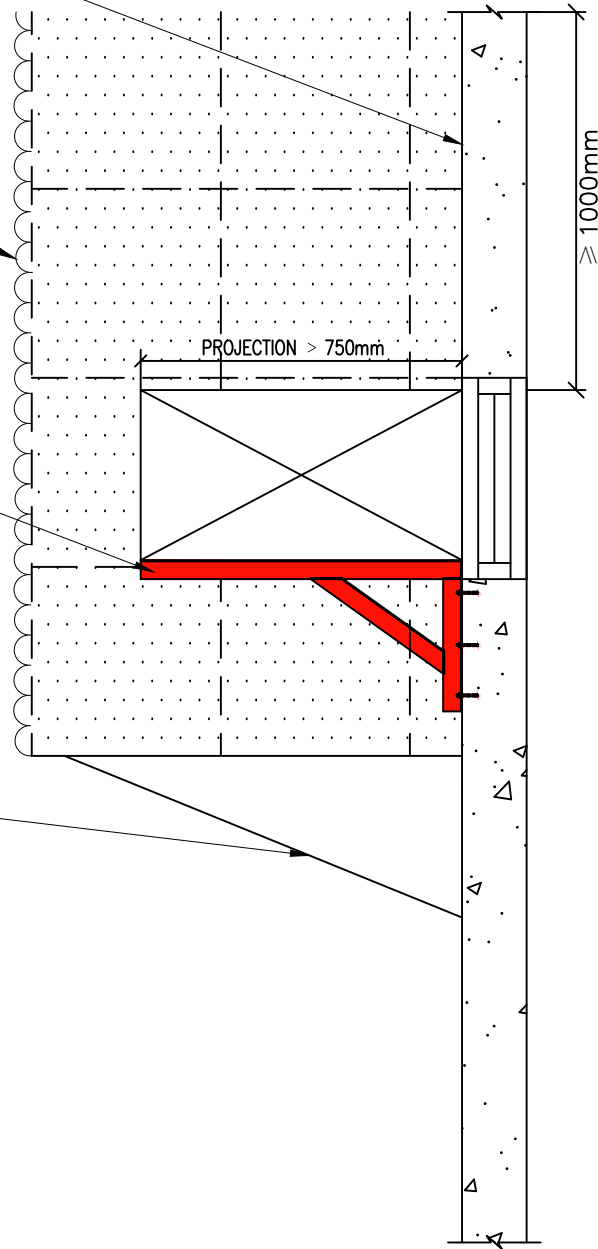
ERECTION, REPAIR, ALTERATION OR REMOVAL OF ABOVEGROUND DRAIN

EXTERNAL WALL CONSTRUCTED BY BRICKWALL/CONCRETE

SCAFFOLD COVERED BY HEAVY DUTY TARPULIN AND PLASTIC MESH

SUPPORTING FRAME (NOT CONSTRUCTED OF CONCRETE) TO BE REMOVED

ERECT TRUSS OUT SCAFFOLD WITH STEEL BRACKET SUPPORT



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Temporarily stabilize some individual member using nylon rope if the members are considered not easy to handle.
2. Obtain the existing design drawings/ information for reference prior to the commencement of works.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Inform the utilities company or sector if the works to be involved are related to them.
5. Works procedures should be submitted to the Buildings Department prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

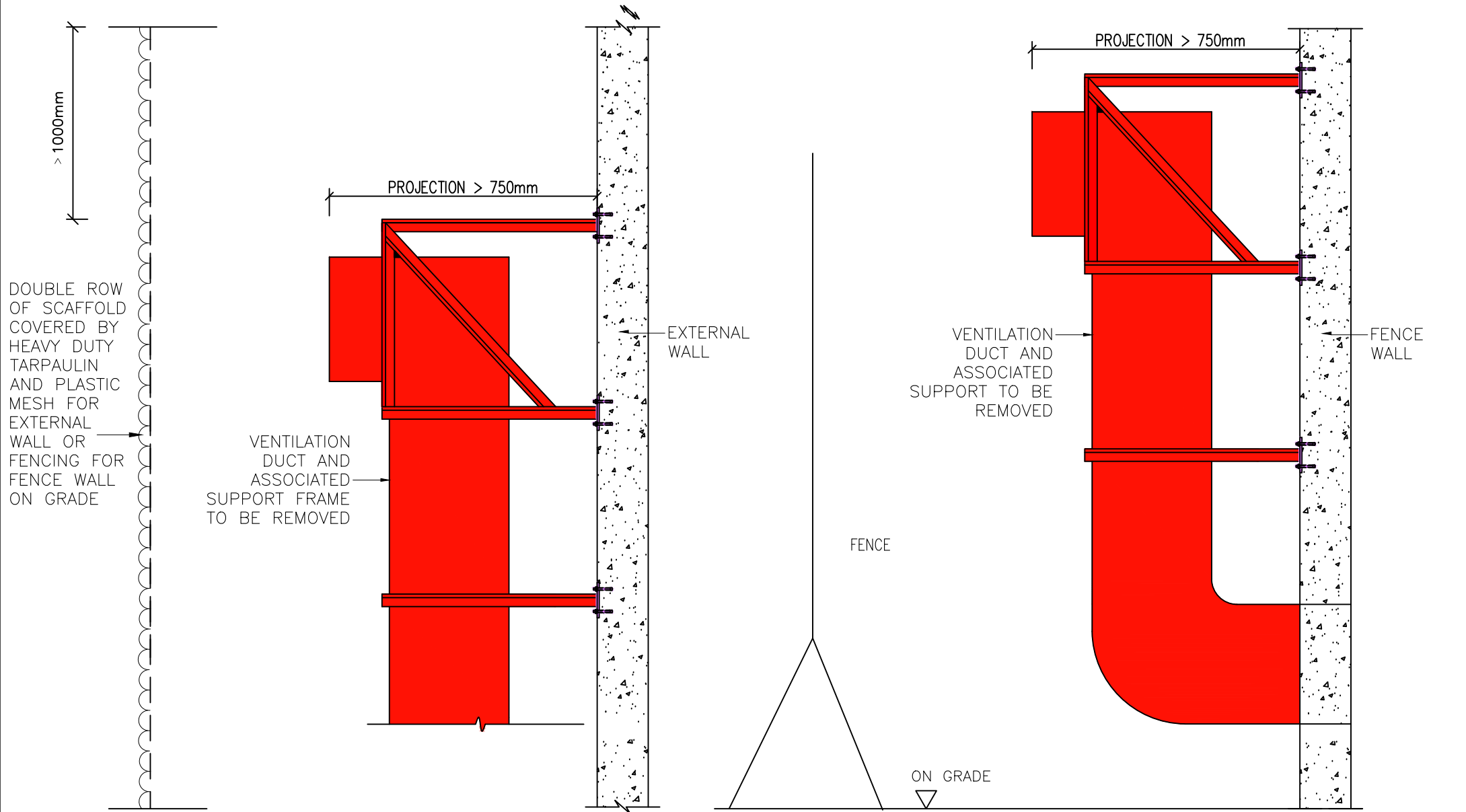
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

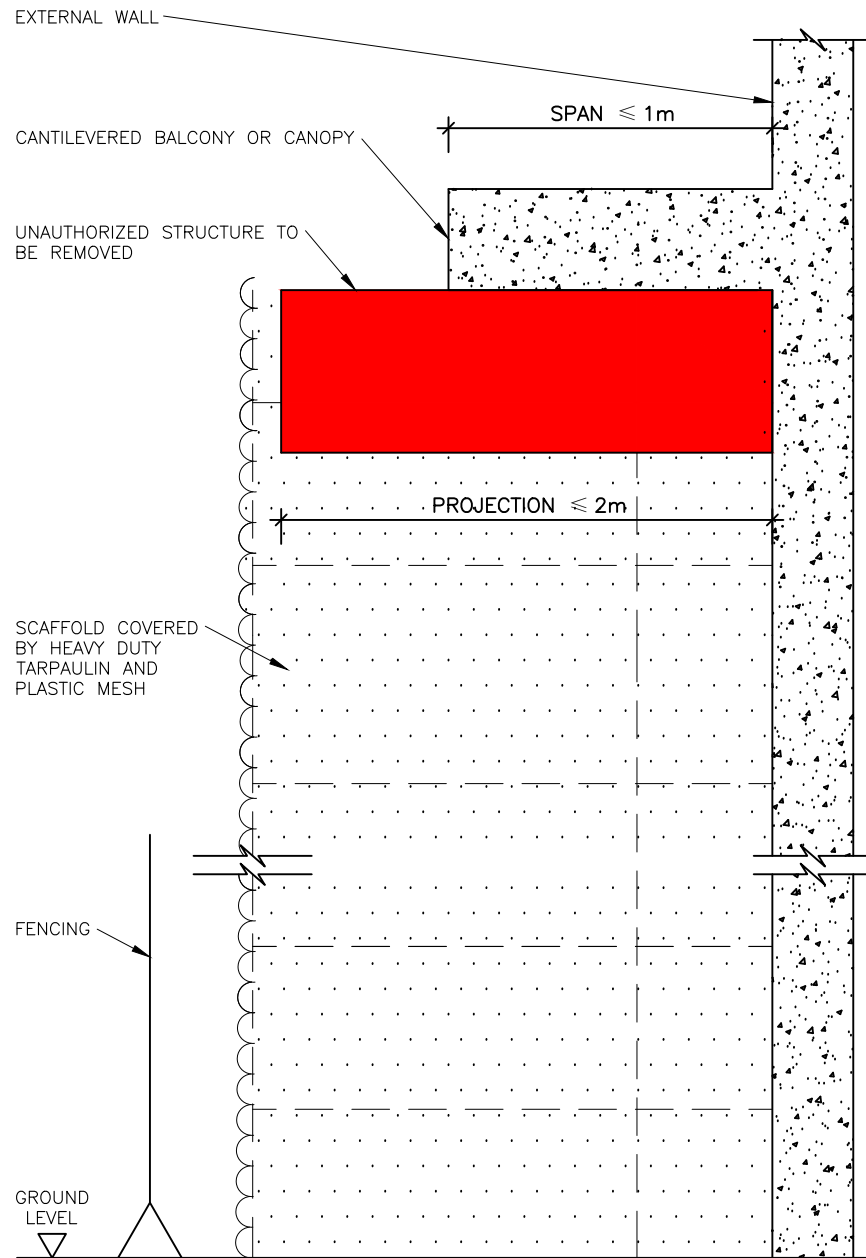
WORKING PROCEDURES :

1. Remove the air conditioning unit, light fitting, antenna, transceiver and any associated air ducts or rack including all the associated cables, duct works and etc.
2. Remove the architectural projection, canopy, ventilation duct and supporting frame using mechanical hand held tools to cut the members into pieces and collect into the main building access for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

REMARK:

1. The projection, canopy, frame or rack is not constructed of concrete.
2. For demolition works of cantilevered structure over street with span greater than 1.2m, a Technical Competent Person T5 shall be appointed by the prescribed registered contractor to oversee the entire process and carry out full time inspection.





GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

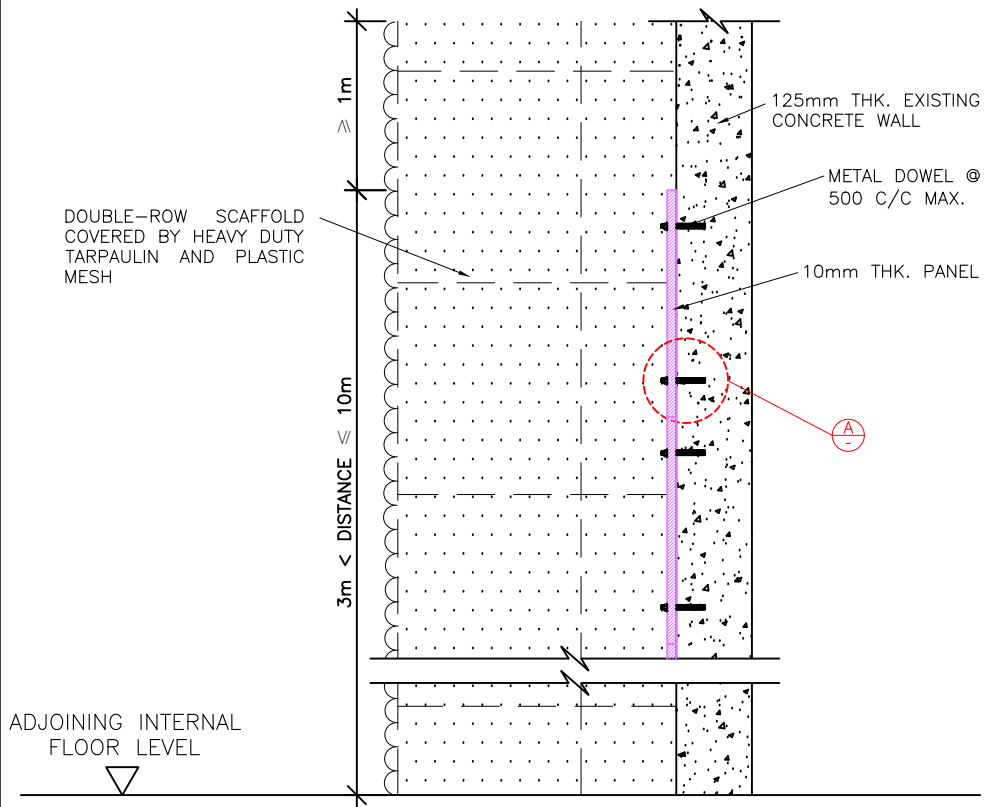
1. Obtain the existing design drawings / information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

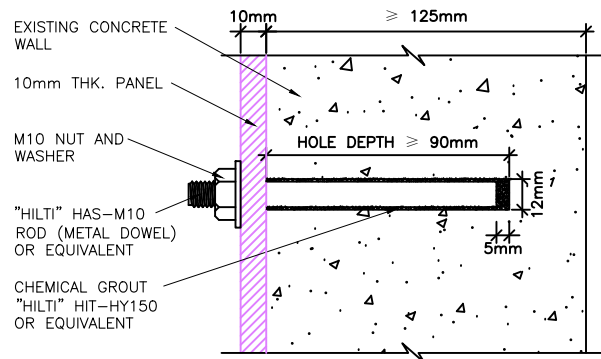
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Demolish the structure using mechanical hand held tools.
2. The member of the unauthorized structure shall be cut into small pieces for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided under the Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
4. After removal of the unauthorized structure, make good and reinstate the affected areas of the parent building.
5. Remove the bamboo scaffold and clean the site.



ERECTION



DETAIL A

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
3. All anchor bolts to be Hilti HAS M10 or equivalent and shall be installed according to the manufacturer's specification.
4. Existing concrete grade of wall is assumed to be Grade 20 with a minimum thickness of 125mm.
5. Interface of two different metal (e.g steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOAD :

1. Dead Load = 0.25 kN/ Dowel

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

A. Erection

1. Drill holes to the required depth and diameter and install the dowels in accordance with supplier's instruction.
2. Install the stone panel and fix the screws.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

B. Repair

1. Remove the screws and the broken stone panel.
2. Install the stone panel and fix the screws.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

C. Removal

1. Remove the screws and stone panel.
2. Use mechanical tools to hack off the concrete surrounding the screw to 50mm depth from the surface.
3. Use saw cut machine to cut off the dowel bars (the cut end should have a depth of at least 25mm from the concrete surface.)
4. Fill the screw holes by using waterproof cement mortar.
5. Make good and reinstate the affected areas of the site.
6. Dismantle the bamboo scaffold and clean the site.

MINOR WORKS ITEM 2.33

DRAWING TITLE :

ERECTION, REPAIR OR REMOVAL OF PANEL FIXED BY METAL DOWELS AND FIXINGS ONTO A WALL INSIDE A BUILDING

ROOF FINISHES TO BE LAID/REPAIRED/REMOVED
(THE THICKNESS OF THE FINISHES IS NOT MORE THAN THE ORIGINAL DESIGN)

WATER PROOFING LAYER SHALL BE REINSTATED OR REPAIRED

SCAFFOLD COVERED BY TARPAULIN AND PLASTIC MESH

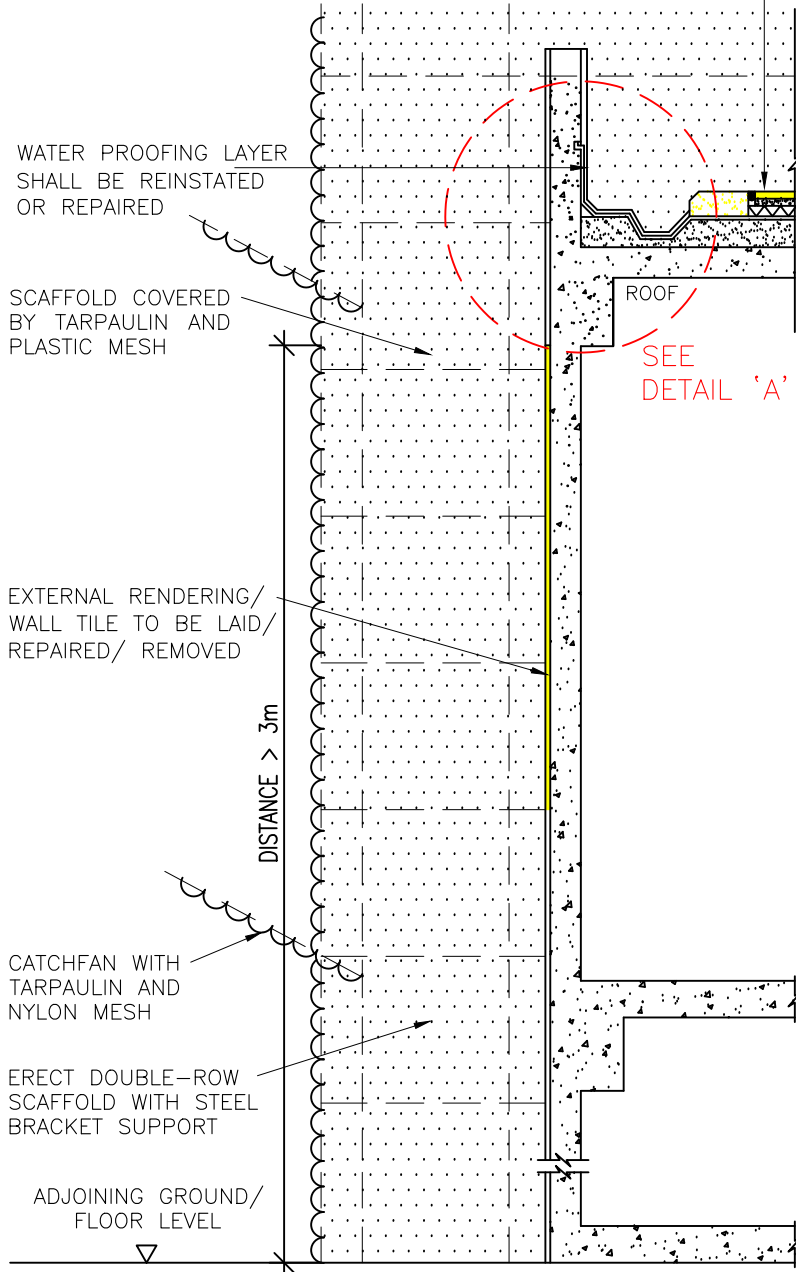
EXTERNAL RENDERING/ WALL TILE TO BE LAID/ REPAIRED/ REMOVED

DISTANCE > 3m

CATCHFAN WITH TARPAULIN AND NYLON MESH

ERECT DOUBLE-ROW SCAFFOLD WITH STEEL BRACKET SUPPORT

ADJOINING GROUND/ FLOOR LEVEL



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS:

1. Normally, total thickness of external wall rendering should not exceed 20mm. Nevertheless, additional steel lathing for top up rendering will be required if the total thickness of rendering is more than 20mm but not exceeding 40mm.
2. Waterproof system at roof shall be reinstated according to the original design.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 3 Typical detail for bamboo catchfan and screen cover
 - Figure 4 Working platform on a double-row bamboo scaffold
3. Covered walkway shall be provided for areas with passage when considered necessary.

WORKING PROCEDURES :

A) Rendering

a. Laying

1. Remove existing finishing from wall and clean the surfaces.
2. Apply spatterdash to the wall.
3. Apply 20mm thick rendering (cement : sand = 1:3 or other proprietary rendering in accordance with manufacture's instruction) to the wall.
4. Make good and reinstate the affected areas of the parent building.
5. Retrieve the construction waste for disposal.
6. Dismantle the bamboo scaffold and clean the site.

b. Repair

1. Carry out hammer tapping test to identify the loose/ defective areas.
2. Use saw cutting machine to saw cut the edge of the render to be repaired and hack off such area using hand-held breaker and retrieve for construction waste disposal.
3. Apply 20mm thick rendering (cement : sand = 1:3 or other proprietary rendering in accordance with manufacture's instruction) to the wall.
4. Make good and reinstate the affected areas of the parent building.
5. Arrange construction waste disposal.
6. Dismantle the bamboo scaffold and clean the site.

c. Removal

1. Use saw cutting machine to saw cut the edge of the rendering area to be removed.
2. Hack off such area using hand-held breaker and retrieve for construction waste disposal.
3. Make good and reinstate the affected areas of the parent building.
4. Arrange construction waste disposal. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
5. Dismantle the bamboo scaffold and clean the site.

B) Wall tile

a. Laying

1. Apply rendering as per A)a.
2. Soak the tiles into water for at least 24 hours before installation.
3. Use cement slurry as the adhesive to adhere tiles to the rendering (thickness of cement slurry should be less than 3mm).
4. Use cement slurry (cement : sand = 1:3) as grout filler to fill up the joints between tiles.
5. Make good and reinstate the affected areas of the parent building.
6. Retrieve the construction waste for disposal.
7. Dismantle the bamboo scaffold and clean the site.

b. Repair

1. Carry out hammer tapping test to identify the defective tile areas with hollow sound.
2. Remove tile or rendering as per B)c or A)c respectively.
3. Carry out items B)a.1 to B)a.7 for the rest of the works.

c. Removal

1. Use saw cutting machine to cut off the edge of the tiling area to be removed.
2. Use hand-held mechanical breaker to remove the tile and retrieve for construction waste disposal.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

C) ROOF FINISHES

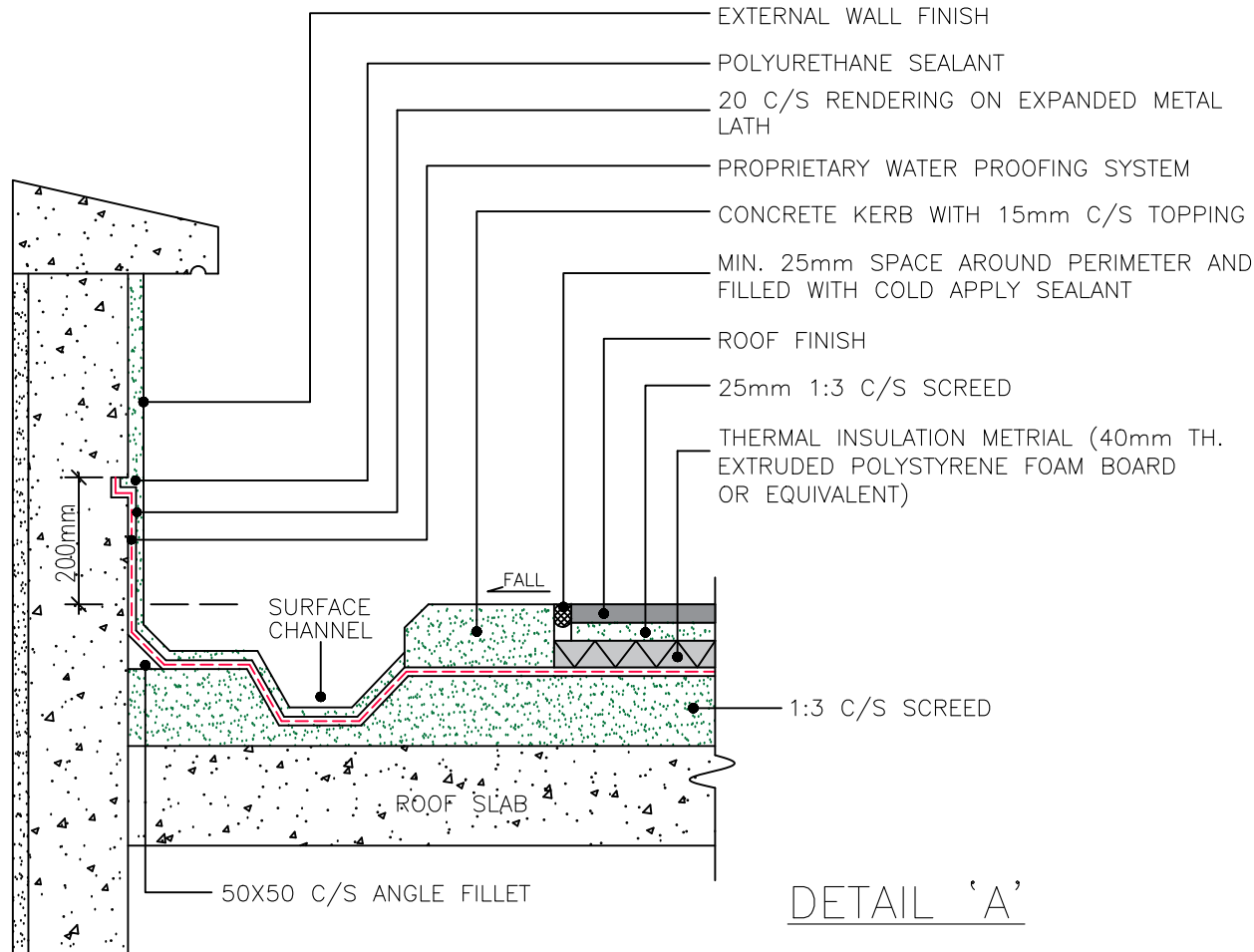
a. Laying and repair

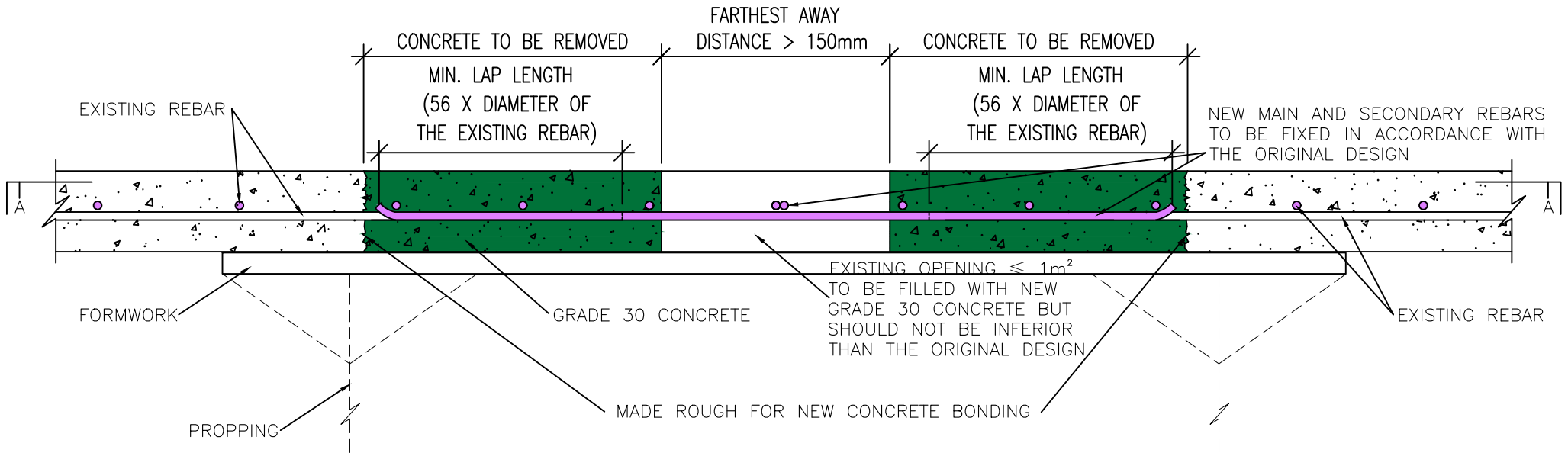
1. Remove existing roof finishes and clean the surfaces.
2. Apply or repair the water proofing in accordance with manufacturer's recommendation.
3. Lay screeding and finishes with fall to avoid water ponding.
4. Make good and reinstate the affected areas of the parent building.
6. Dismantle all temporary works and clean the site.

b. Removal

1. Use hand held tools to remove the roof finishing.
2. Repair or relay the waterproofing in accordance with manufacturer's recommendations.
3. Clean the site.

Note: The works do not fall into DEW item 7.





GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
3. All concrete works shall comply with CS1:2010.
4. Concrete grade and the minimum cover shall be grade 30 and 25 mm respectively but should not be inferior than the original design.
5. Steel reinforcement to be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2:2012.
6. Minimum anchorage and lap length are 56 x diameter of the existing rebar unless otherwise specified.
7. Minimum FRR for the slab to be reinstated should not less than the original design.

PREPARATION WORKS :

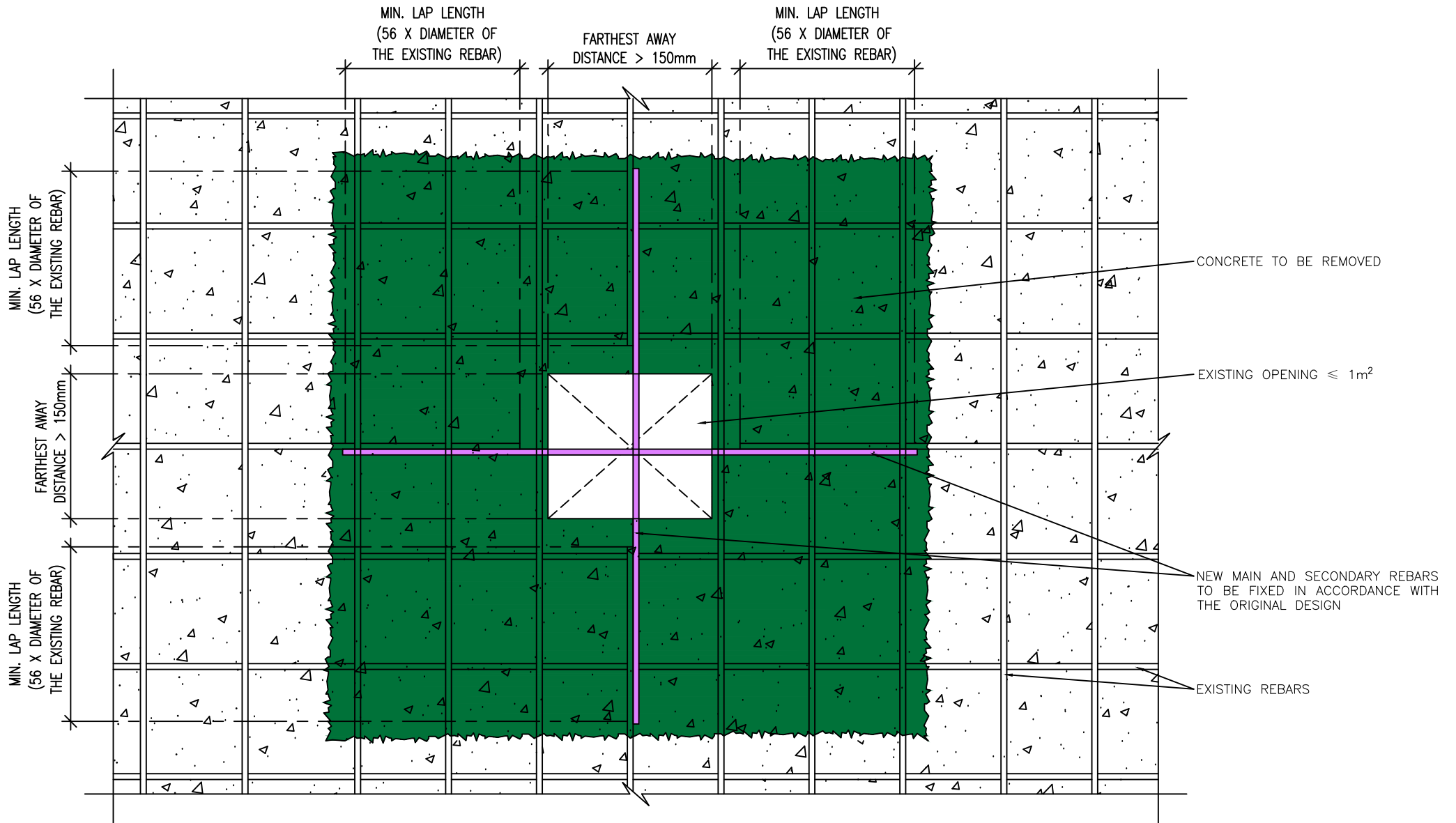
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

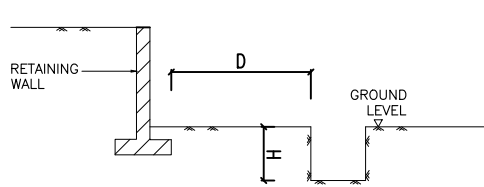
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Prior to the commencement of works, the contractor is recommended to refer to Section 4 (Method of Demolition) of the Code of Practice for Demolition of Buildings for details of works.
3. Erect steel proppings as temporary support as per the manufacturers' instructions.

WORKING PROCEDURES :

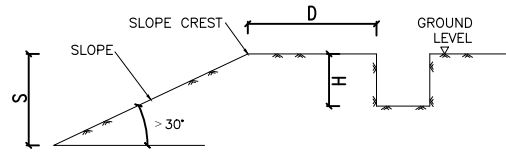
1. Break-off the existing concrete slab into small piece using mechanical hand-held tools to expose the reinforcing bars for lapping.
2. Fix the new reinforcing bars with the designed lapping distance.
3. Pour concrete after erect formwork and proppings.
4. 28 days after concrete casting, remove the formwork and the proppings.
5. Arrange construction waste disposal.
6. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas of the parent structure and clean the site.





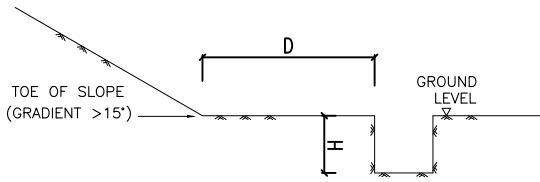
$$H \leq 1.5\text{m}, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.36(b)



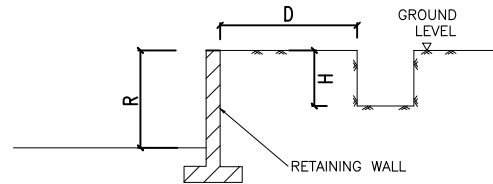
$$H \leq 1.5\text{m}, S \leq 3\text{m}, D \geq 1.5S$$

CONDITIONAL DIAGRAM UNDER 2.36(f)



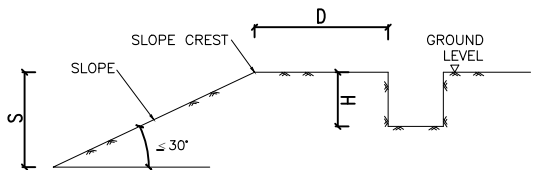
$$H \leq 1.5\text{m}, D \geq H$$

CONDITIONAL DIAGRAM UNDER 2.36(c)



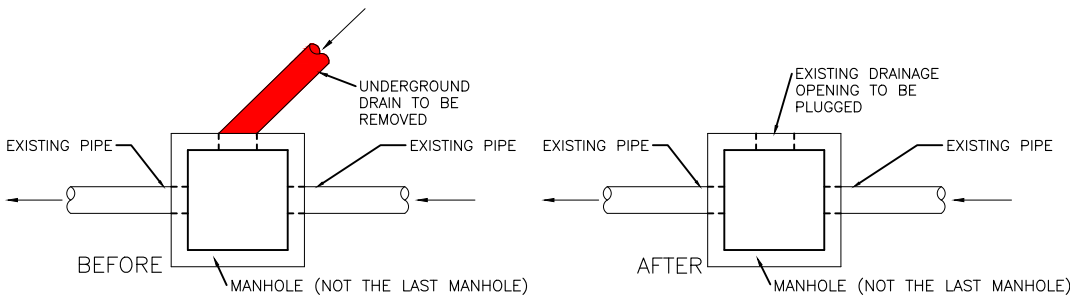
$$H \leq 1.5\text{m}, R \leq 3\text{m}, D \geq 1.5R$$

CONDITIONAL DIAGRAM UNDER 2.36(g)



$$H \leq 1.5\text{m}, D \geq S$$

CONDITIONAL DIAGRAM UNDER 2.36(e)



PLAN OF MANHOLE
REMOVAL OF UNDERGROUND DRAIN

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS:

1. Obtain and investigate all underground utilities drawings/ information prior to the commencement of works.
2. Obtain the existing design drawings/ information for reference prior to the commencement of works.
3. Carry out condition survey of the adjoining structures/retaining wall/slopes and existing site condition prior to the commencement of works.
4. If the works would involve suspension of the drainage system, inform the affected parties in advance.
5. Excavation works to be carried out within scheduled area no. 3 and/or railing protection area are subject to prior agreement from MTRCL before the works can commence.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. For trench excavation with depth greater than 1.2m, adequate support must be installed at a timely manner and ahead of excavation as far as practicable. For excavation depth less than 1.2m, shoring may not be required for ground that is found to be self-supporting. However, if external loads are likely to be present, or if there is doubt as to the stability of the trench sides due to the presence of weak ground or high groundwater, especially in inclement weather, the trench sides should be supported even if the excavation depth is less than 1.2m. Design and installation of shoring support shall be referred to the "Guide To Trench Excavations (Shoring Support and Drainage Measures)" jointly published by Highway Department and Civil Engineering and Development Department (February, 2003) which provides good technical guidelines on good practice of shoring support and drainage measures for trench excavations.
3. There is no over-excavation, excessive temporary cutting slopes and stockpiling of materials adversely affecting the adjoining ground, structure or building, in case of any undue ground settlement or undue deflection of adjoining building/structures, works should be suspended immediately and notify BA for the remedial proposal.
4. Other precautionary measures related to excavation works are referred to the Recommended Design and details for MW item 1.12 (1.5m < depth <= 3m) or 2.11 (0.3m < Depth <= 1.5m)

WORKING PROCEDURES :

1. Carry out excavation and backfilling work in accordance with minor works item 2.11.
2. Remove the pipework as per drawing.
3. Plug the opening in the manhole with water proof cement mortar.
4. Any removed pipe works shall be sprayed with diluted bleaching agent (Bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.
5. Carry out water test to the manhole for any leakage. All drain tests are to be carried out in accordance with the method and procedure as set out BS EN 1610:2015
6. Backfilling and reinstate the top surface.

SCAFFOLD COVERED BY HEAVY DUTY
TARPAULIN AND PLASTIC MESH

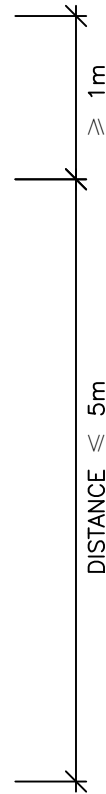
FRAME OF THE
CHIMNEY

CHIMNEY TO
BE REMOVED

FENCING

ADJOINING
ROOF LEVEL

ERECT TRUSS OUT
SCAFFOLD WITH STEEL
BRACKET SUPPORT



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector if the works to be involved are related to them.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Asbestos investigation works/ removal works shall be carried out by specialist contractor prior to any removal works.
5. Obtain the original design of the approved structure for reference of any required reinstatement works.
6. The contractor is required to submit his working procedure to the Buildings Authority prior to the commencement of works.

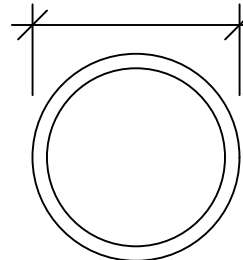
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. No accumulation of demolished parts should be stored on roof.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Cut down the chimney pipe and its supporting frame in small manageable size. The sequence of demolition shall be from top to bottom.
2. The disposal of demolition waste shall be at designated waste disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
3. Make good and reinstate the affected areas (including waterproofing) of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

SMALLEST CROSS-SECTIONAL DIMENSION \leq 500mm

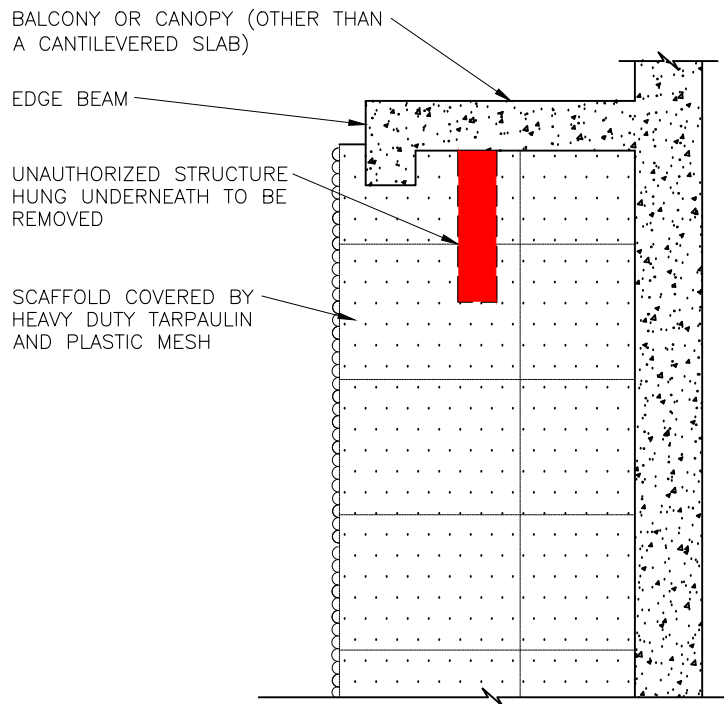


SECTION A-A

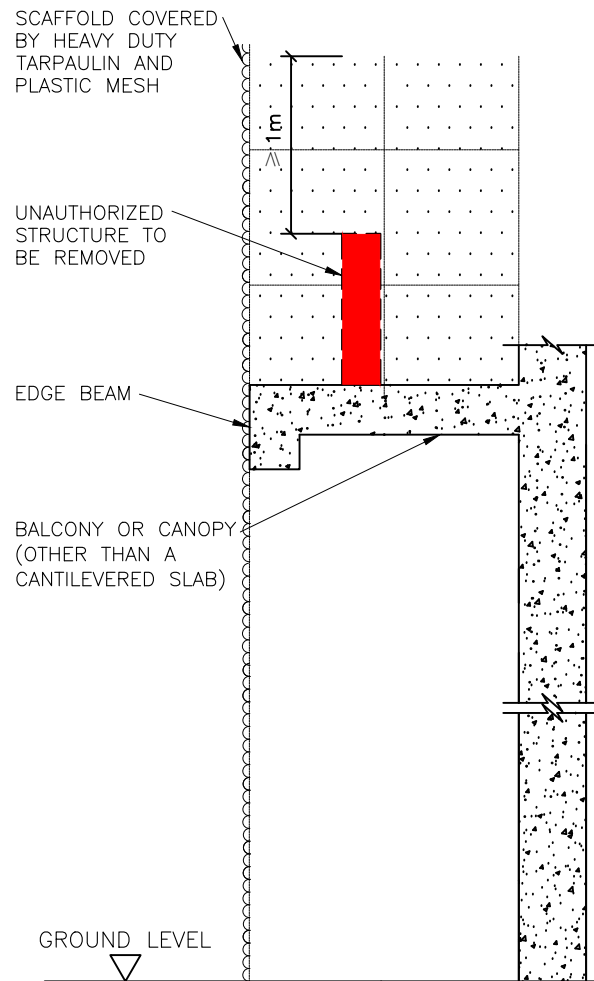
MINOR WORKS ITEM 2.37

DRAWING TITLE :

REMOVAL OF CHIMNEY ATTACHED TO THE EXTERNAL WALL
OF A BUILDING OR LOCATED ON THE ROOF OF A BUILDING



HUNG UNDERNEATH THE SOFFIT
OF A BALCONY OR CANOPY



FIXED TO A BALCONY OR CANOPY

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

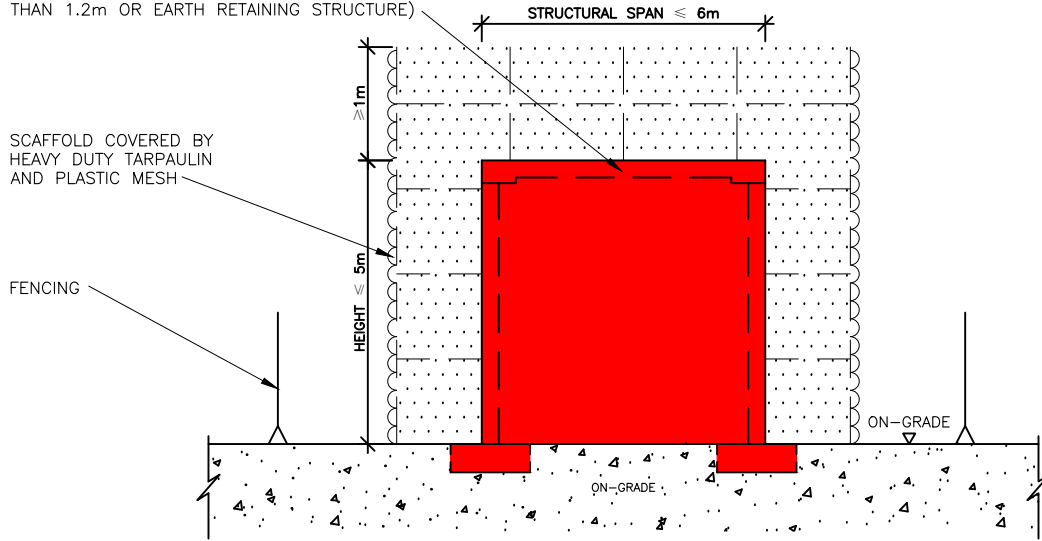
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

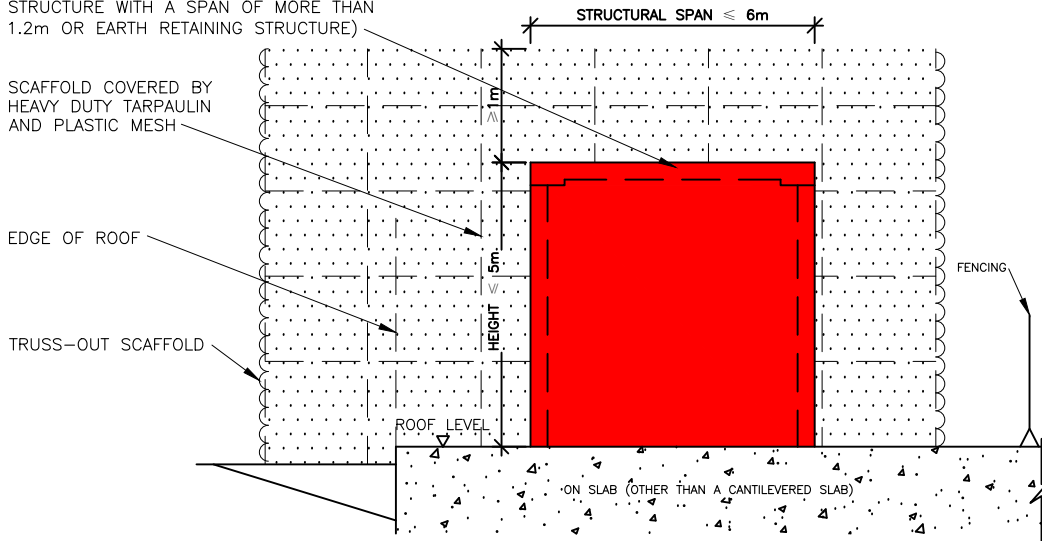
1. Demolish the structure by mechanical hand held tools.
2. The member of the unauthorized structure shall be cut into small pieces for construction waste disposal.
3. No accumulation of waste on the canopy or balcony is allowed.
4. After removal of the unauthorized structure, make good and reinstate the affected areas of the parent building.
5. Dismantle bamboo scaffold and clean the work areas.
6. The disposal of demolition waste shall be at designated waste disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.

UNAUTHORIZED STRUCTURE TO BE REMOVED. (NOT A FLAT SLAB, PRE-STRESSED CONCRETE CONSTRUCTION, TRANSFER GIRDER, HANGER, CANTILEVERED STRUCTURE WITH A SPAN OF MORE THAN 1.2m OR EARTH RETAINING STRUCTURE)



CASE 1: ON-GRADE

UNAUTHORIZED STRUCTURE TO BE REMOVED. (NOT A FLAT SLAB, PRE-STRESSED CONCRETE CONSTRUCTION, TRANSFER GIRDER, HANGER, CANTILEVERED STRUCTURE WITH A SPAN OF MORE THAN 1.2m OR EARTH RETAINING STRUCTURE)



CASE 2: ON SLAB (OTHER THAN A CANTILEVERED SLAB)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

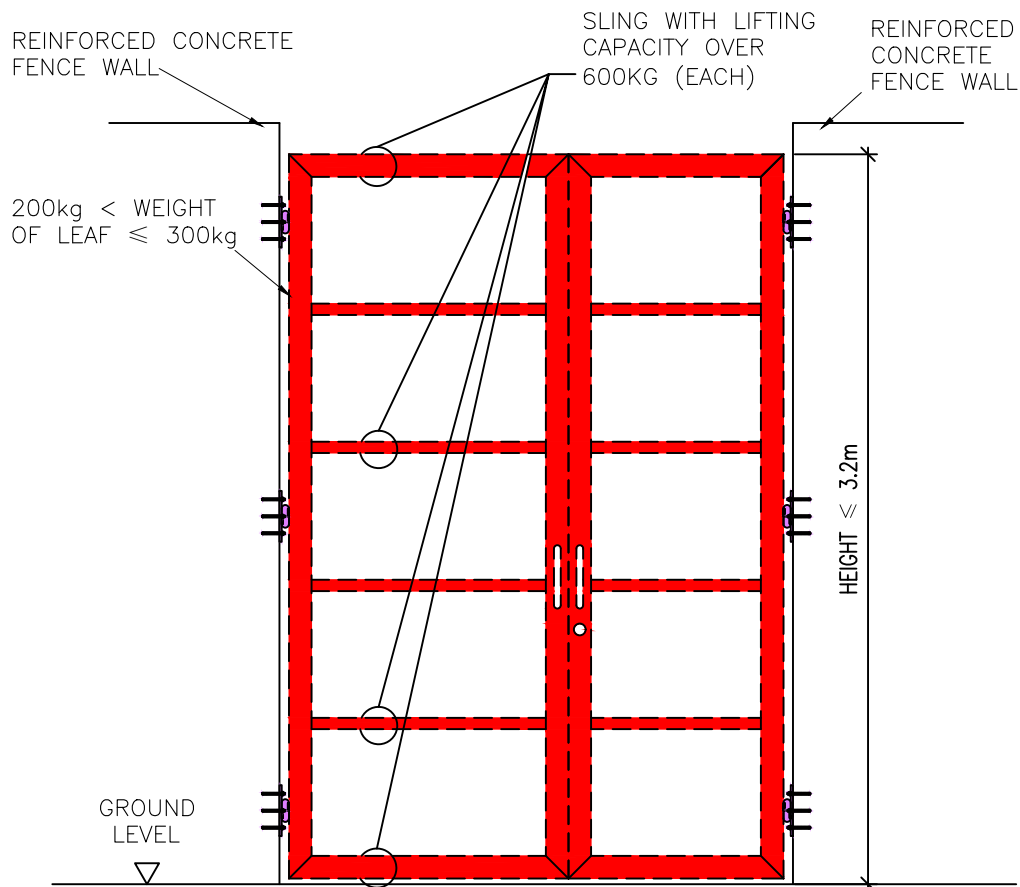
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.

WORKING PROCEDURES :

1. Remove all loose features inside the unauthorized building structures prior to the demolition of walls.
2. Demolish the unauthorized building structure from top to bottom. All structure shall be cut to a manageable size (i.e 300mm x 300mm).
3. The disposal of demolition waste shall be at designated waste disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas (including waterproofing layer) of the building.
5. Dismantle the bamboo scaffold and clean the site.

Remark : This case excludes MW item 3.32.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

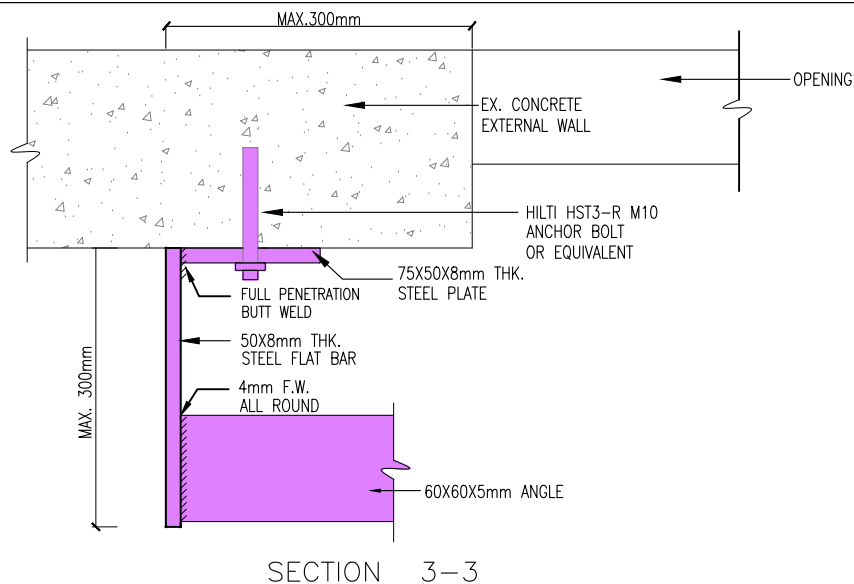
1. Obtain the existing design drawings / information of the metal gate for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. Disconnect the electric locking device (if any) prior to the commencement of work.

SAFETY AND PRECAUTIONARY MEASURES :

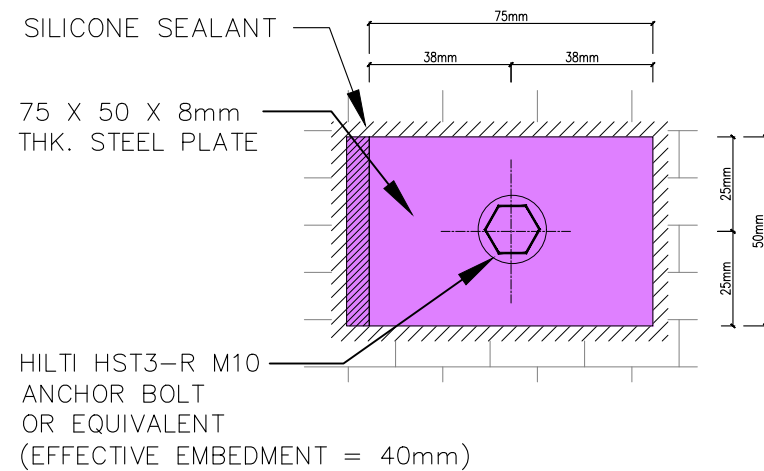
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department.

WORKING PROCEDURES :

1. Use of proper lifting device with slings to secure the gate.
2. Cut off the hinges connected to the metal gate.
3. Lower the metal gate onto floor horizontally.
4. Cut the metal gate into manageably small size and remove off site for construction waste disposal.
5. The disposal of demolition waste shall be at designated waste disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
6. Make good and reinstate the affected area.



SECTION 3-3



SECTION 1-1

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Section 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP / standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
- Code of Practice for the Structural Use of Steel 2011
- All structural steel to be grade S275 JO to BS EN 10056 for angles and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 4mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011.
- All anchor bolts to be "Hilti" HST3-R M10 or equivalent (with minimum effective embedment = 40mm) and shall be installed according to the manufacturer's specification.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Wind Load = 2.87 kN/m^2 with pressure coeff. 2.0 (Effective height = 100m).
Assume topography factor, $S_t = 1.0$; Wind directionality factor; factor $S_\theta = 0.85$; Size factor, $S_s = 1.0$

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference.
- Carry out condition survey of the parent structure/ existing condition prior to commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the parent structure due to the addition of these Minor Works must be checked to satisfy all structural requirements prior to the carrying out of works.

SAFETY AND PRECAUTIONARY MEASURES :

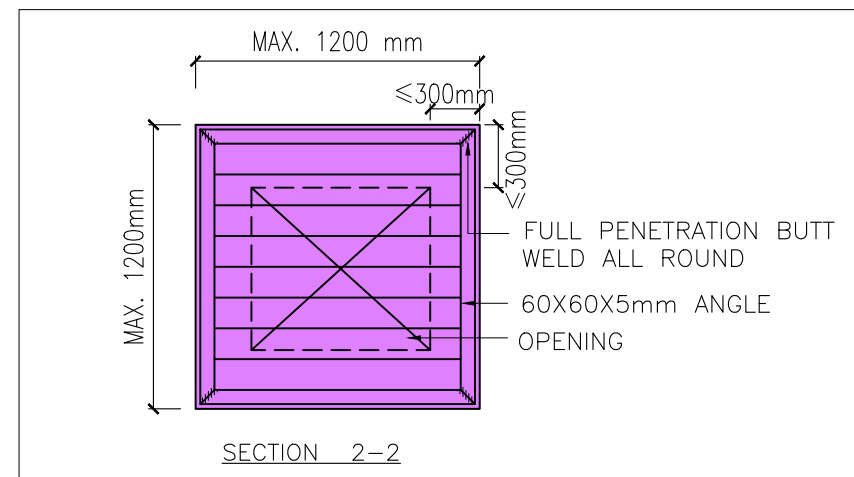
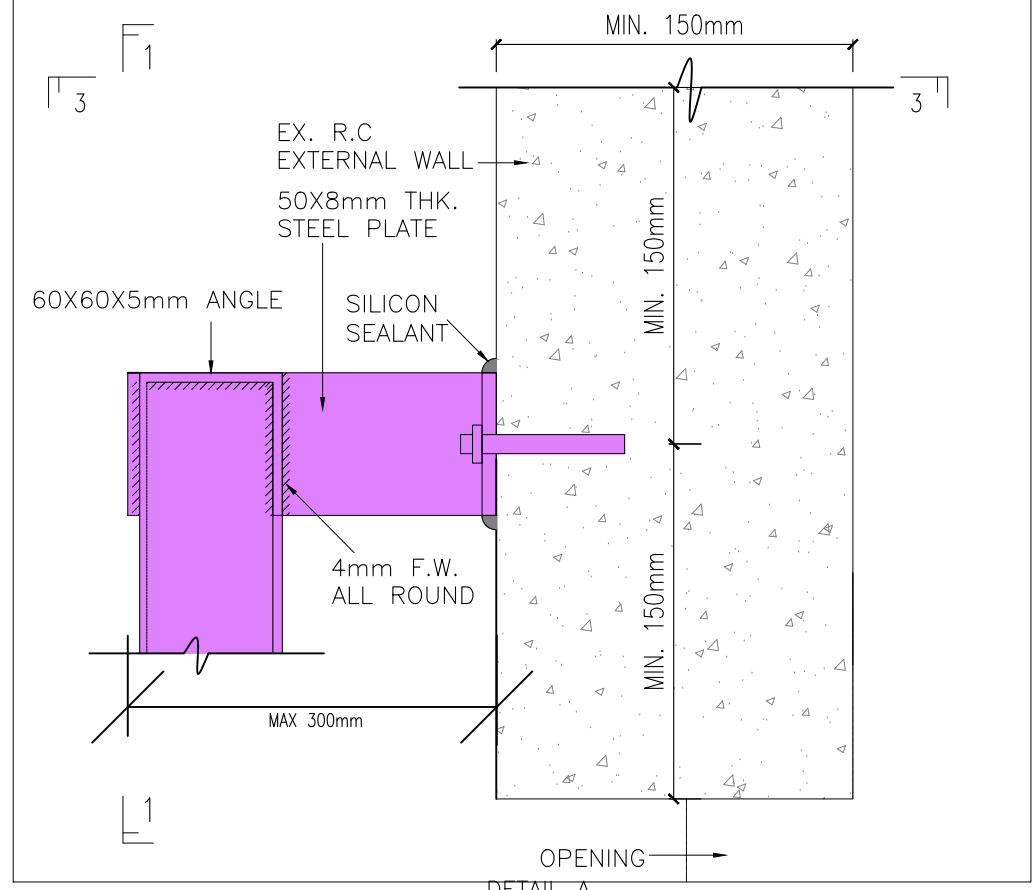
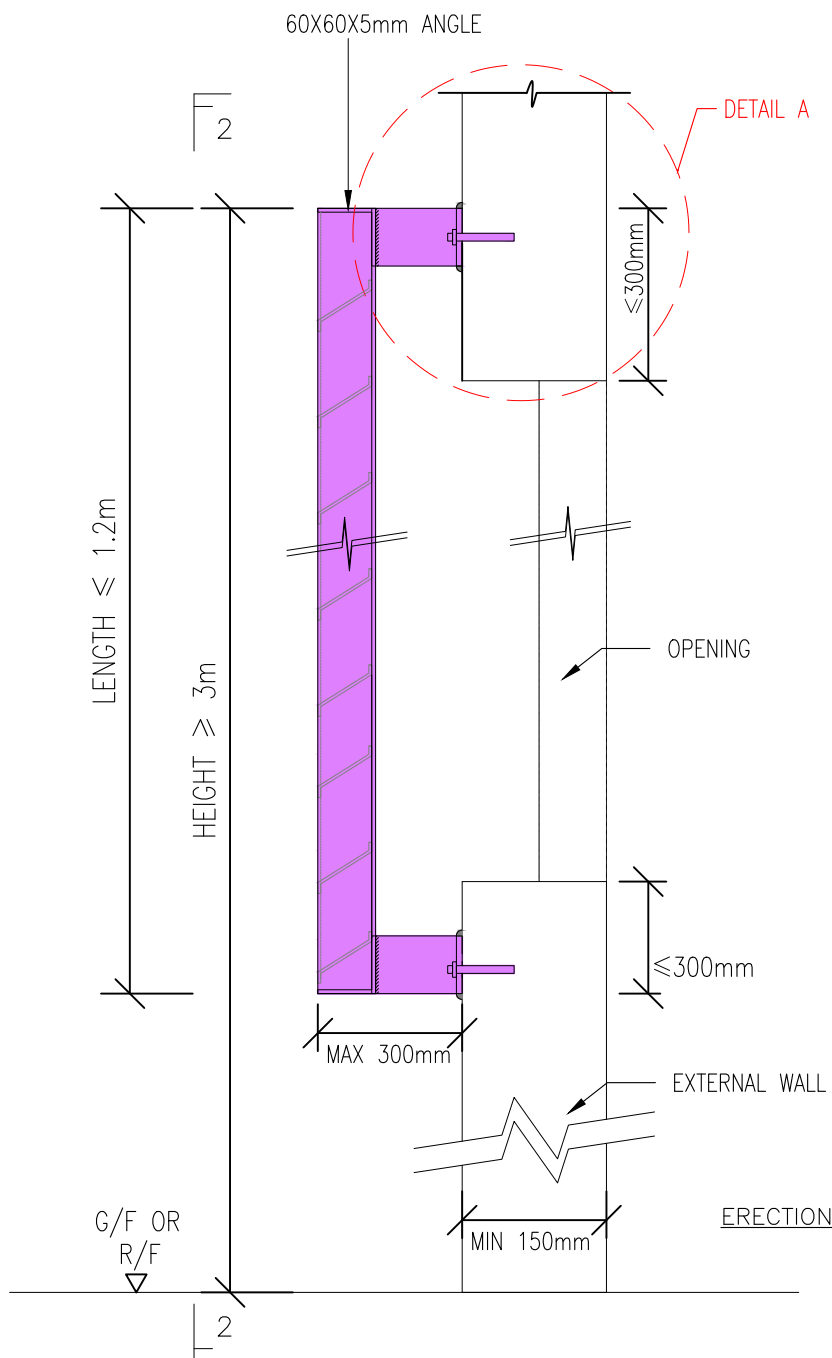
- Fence-off the working area from the public.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

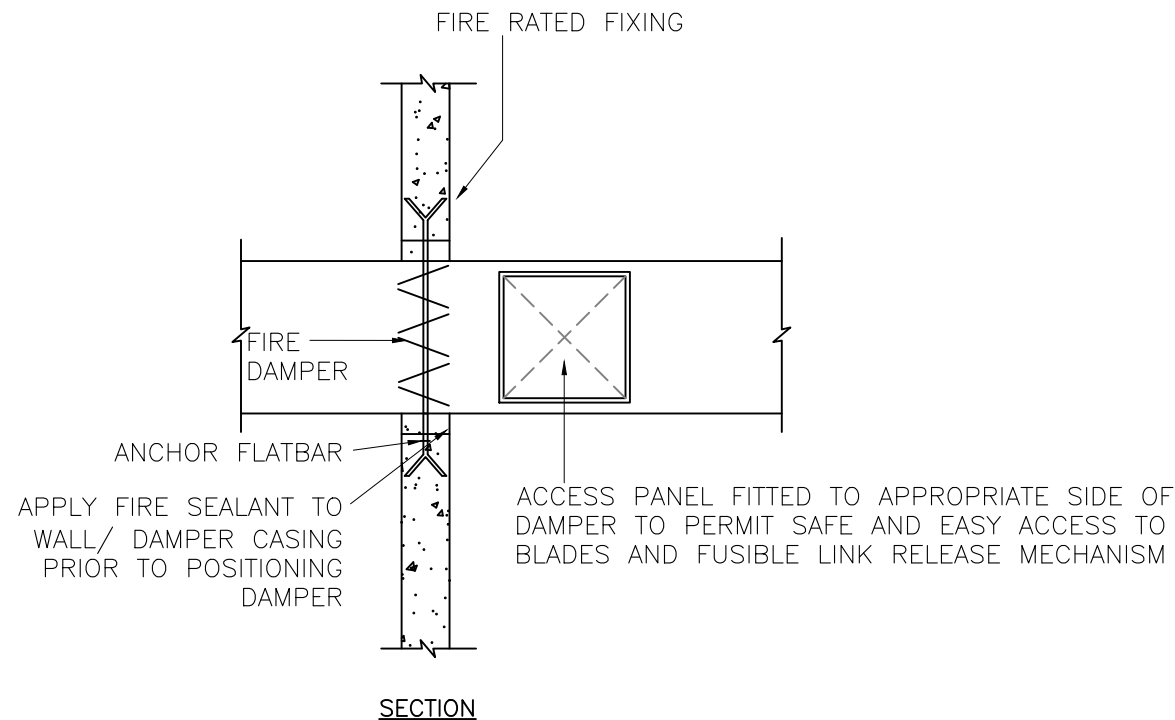
WORKING PROCEDURES :

- For erection or alteration
 - Remove all existing finishing before installation of anchor bolts.
 - Install the wind guard as per drawing.
 - Make good and reinstate the affected areas (including water-proofing) where necessary.
 - Remove the bamboo scaffold and clean the site.
- For repair:
 - Temporary fix the wind guard to a rigid point by using proper stainless steel wire / nylon.
 - Remove the defective parts and repair in accordance with the original design.
 - Make good and reinstate the affected areas (including water-proofing) where necessary.
 - Remove the bamboo scaffold and clean the site.
- For removal :
 - Dismantle the wind guard into small pieces by mechanical hand-held tools.
 - Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal. The disposal of waste shall be at designated facilities provided in waste disposal (charges for disposal of construction regulation).
 - Make good and reinstate the affected areas (including water-proofing) where necessary.
 - Remove the bamboo scaffold and clean the site.

REMARKS :

- The wind guard shall not project over any street.





GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Ventilating Systems) Regulations
 - Circular letters and guide issued by the Fire Services Department
 - The requirement of inspection by a RSC (V)
 - Code of Practice for Fire Safety in Buildings 2011

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Install the fire damper in accordance with the above drawing.
3. Debris from works should be put into bags and retrieved into the main building access for construction waste disposal.
4. Reinststate the affected areas where necessary.
5. Remove the bamboo scaffold and clean the site.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
3. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
4. Structural steel used for new structure to be grade S275 J0/JOH complying with BS EN 10210 for hollow sections and BS EN 10056 for angles and BS EN 10029 for plates and BS EN 10025 for other sections.
5. All welding shall comply with BS EN1011-1:2009 with design strength equal to 220MPa. electrodes shall comply with BS EN ISO 2560:2009.
6. Welding to be tested in accordance with BS EN ISO 9934 PART 1:2016.
7. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
8. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
9. All anchor bolts to be HILTI "HST3-R M16" or equivalent :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
10. Minimum concrete grade for existing structures is 25D/20.
11. Wind load design is in accordance with Code of Practice for Wind Effects in Hong Kong 2019. The maximum floor level of roof is to be 100m from existing ground and maximum height of retractable awning is to be 105.5m from ground level.
12. Design wind load shall be 2.88KPa (Effective height = 105.5m) with pressure coefficient CP of 2.0 for individual members of open framework building. Assume topography factor, St=1.0; wind directionality factor, S θ =0.85; size factor, Ss=1.0.
13. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

1. Obtain existing design drawings/information for reference prior to commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

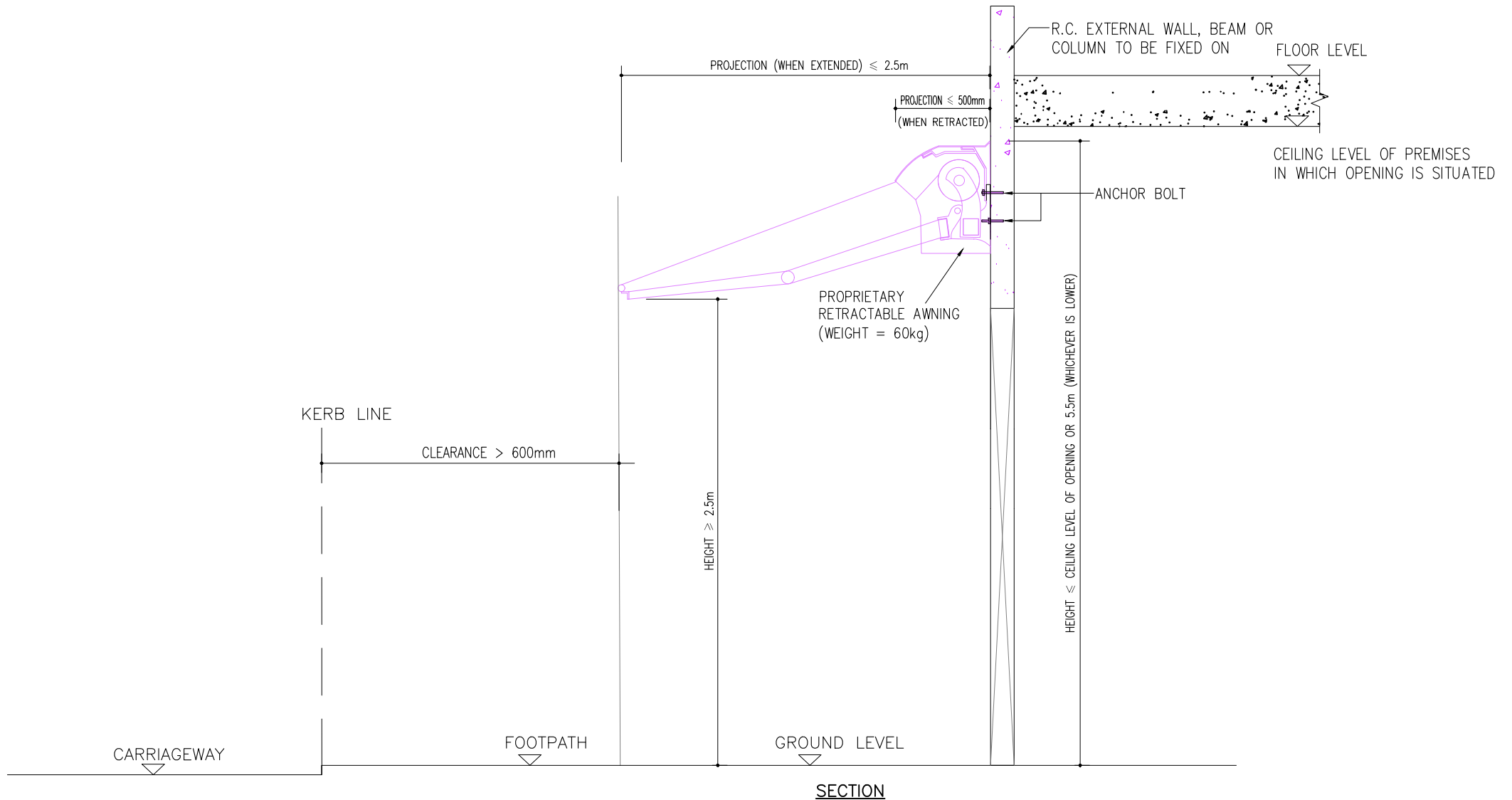
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

WORKING PROCEDURES :

- a) Erection
 1. Erect the awning as per the drawing.
 2. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.
- b) Alteration and Repair
 1. Remove the defective or unwanted part at the awning and supporting frame by hand held tools.
 2. Cut them into small pieces for disposal.
 3. Erect the altered or replaced parts as per drawing.
 4. Make good and reinstate the affected areas (including waterproofing layer) of the parent building and clean the site.

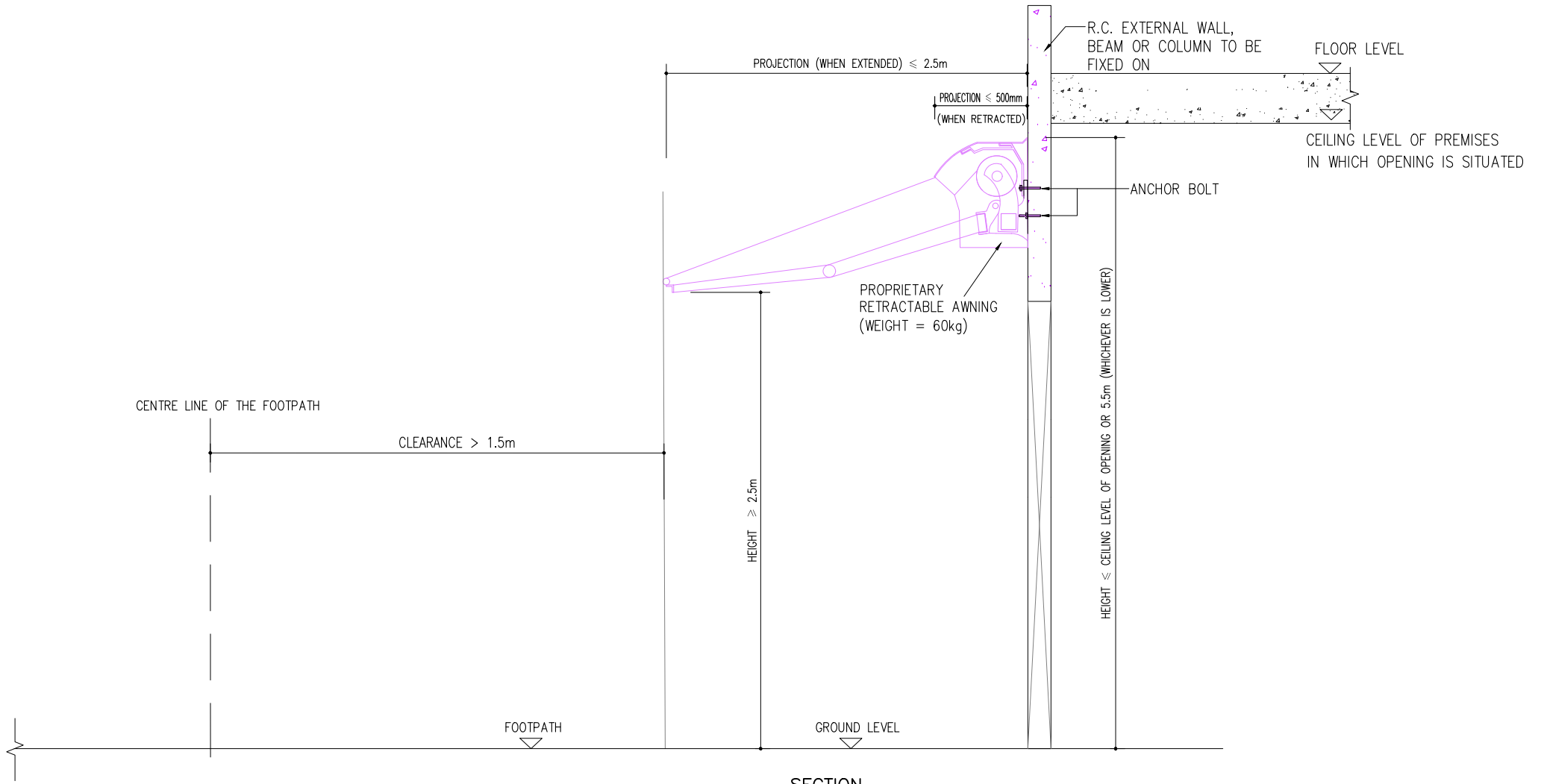
DESIGN PARAMETERS :

1. The opening is
 - (i) A door opening (other than a door opening that serves as an exit for an escape staircase or that leads to a balcony or verandah); or
 - (ii) A window opening (other than a window opening for a plant room, lavatory, bathroom or kitchen)
2. The awning is not fixed to any cantilevered slab.
3. The works do not involve the alteration of any other structural elements.
4. The awning should not project over street at a height of less than 2.5m above the ground level.
5. The horizontal clearance of the awning from any wall or fence that is higher than 1.1m is shall not less than 500mm even when fully extended.
6. The awning is at most 500mm wider than the opening on both the left hand side and the right hand side of the side.
7. If the awning is projected over a roof –
 - (i) No part of the awning projects more than 500mm from the wall to which it is fixed when retracted and 2m when fully extended;
 - (ii) No part of the awning projects beyond the edge of the roof.
8. If the awning is projected wholly or partly over a street–
 - (i) No part of the awning projects more than 500mm from the wall to which it is fixed when retracted and 2.5m when fully extended;
 - (ii) Where the street has a carriageway, the horizontal clearance of the awning from the pavement kerb shall be more than 600mm; and
 - (iii) Where the street has a footpath only, the horizontal clearance of the awning from the centre line of the footpath shall be more than 1.5m.



CASE 1 – PROJECT OVER STREET IF STREET HAS CARRIAGEWAY

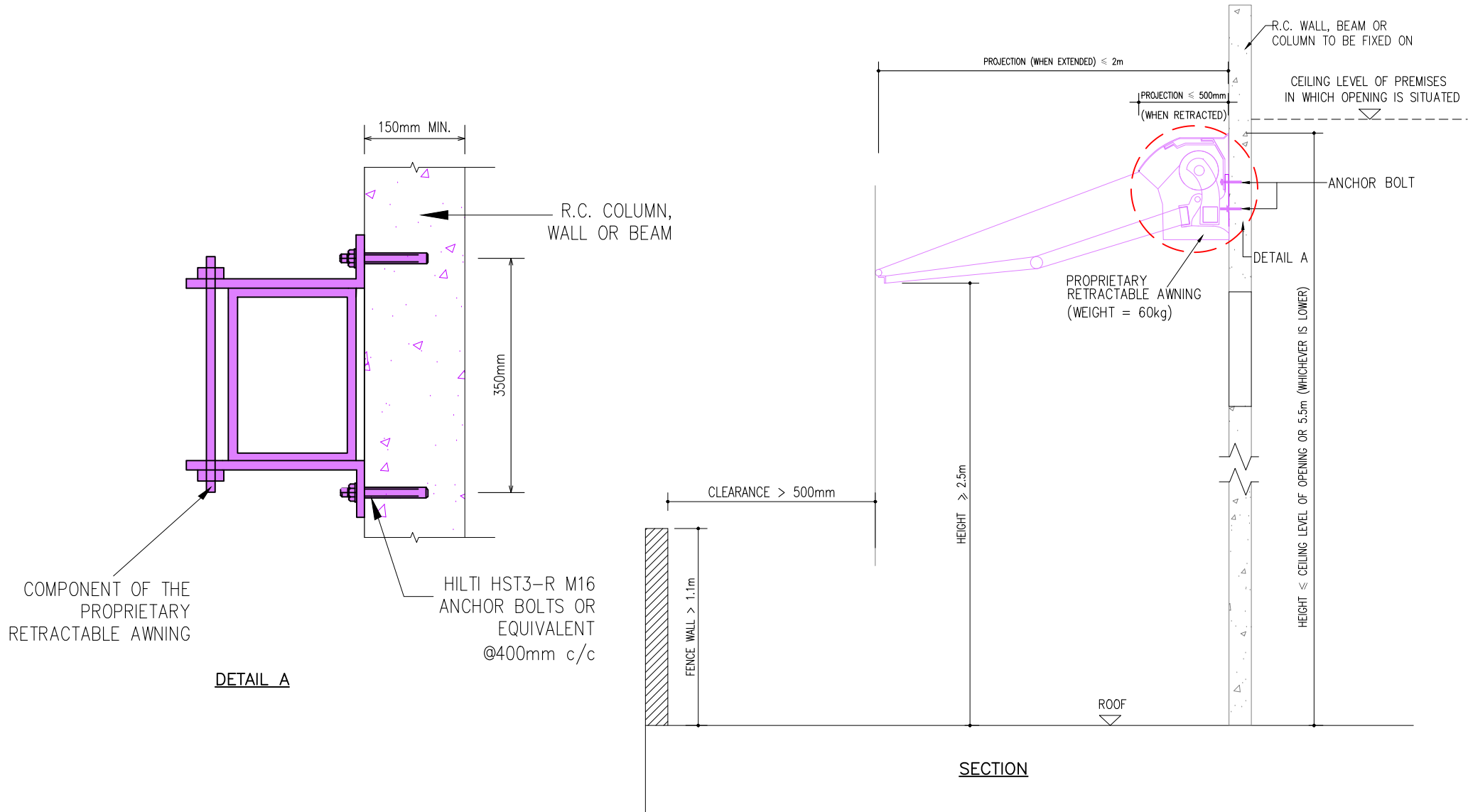
(Remark: The retractable awning should be retracted and locked when under strong wind)



SECTION

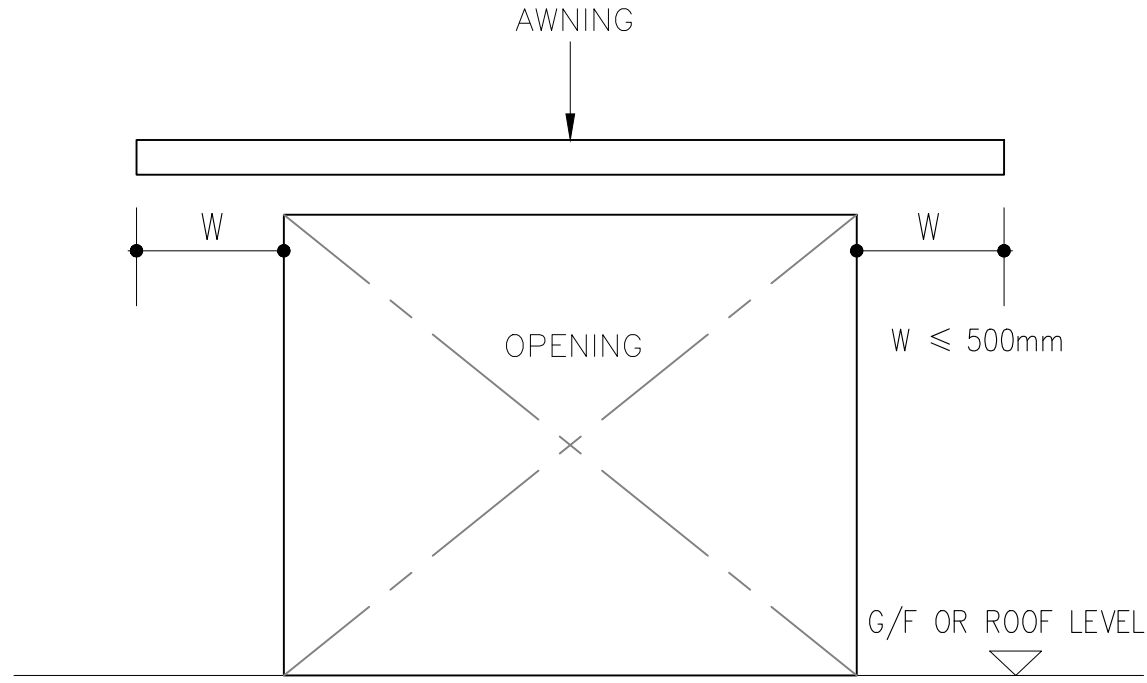
CASE 2 – PROJECT OVER STREET IF STREET HAVE FOOTPATH ONLY

(Remark: The retractable awning should be retracted and locked when under strong wind)



CASE 3 – PROJECT OVER ROOF
 (Remark: The retractable awning should be retracted and locked when under strong wind)

MINOR WORKS ITEM 2.43	DRAWING TITLE : ERECTION, ALTERATION OR REPAIR OF RETRACTABLE AWNING FOR AN OPENING ON AN EXTERNAL WALL OF A BUILDING	SHEET 4 OF 5
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ELEVATION FOR ALL CASES

GENERAL NOTES:

1. All dimensions shall be millimeter unless otherwise specified.
2. The works carried out shall comply with the buildings ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
3. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
 - BS 5268-2:2002 (Design Code and Standard for Structural Use of Timber).
4. All timber shall be suitable for exterior use either naturally durable or pressure treated with a preservative, selection of preservatives to be in accordance with BS 5268-5:2002.
5. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μm .
6. Structural steel used for new structure to be grade s275 J0 complying with BS EN 10029 for plates and grade s275 J0H complying with BS EN 10210 for hollow sections.
7. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
8. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2011.
9. Welding to be tested in accordance with BS EN ISO 9934 part 1:2016.
10. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
11. All anchor bolts to be HILTI "HST3-R M8" or equivalent of minimum embedment depth of 47mm:
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
12. All site welds shall be polished to bare metal and treated with two coats of zinc rich primer before application of 2 coats of zinc chromate paint according to manufacturer's specification.
13. Minimum grade for concrete slab is 25D/20.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the additional installation of the trellis must be checked to satisfy all structural requirements prior to the carrying out of the minor works.

DESIGN PARAMETERS:

1. Wind load design for steel post is in accordance with Code of Practice on Wind Effects in Hong Kong 2019.
2. Design wind loads shall be 1.59 kPa (effective height = 2.5m) with pressure coefficient C_p of 2.0 for individual members of open framework building. Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; size factor, $S_s=1.0$.
3. The maximum height of trellis is to be 2.5m from ground level.
4. For removal works –the area covered by the trellis $\leq 20\text{m}^2$.
5. For erection or alteration works –
 - (a) For works carried out in a private garden–the aggregate of the area covered by each trellis located in the private garden is–
 - (A) Not more than 20m^2 .
 - (B) Not more than 5% of the total area of the garden.
 - (b) For works carried out in a non-private garden–
 - (A) Each trellis in the garden covers an area of not more than 20m^2 .
 - (B) The aggregate of the area covered by each trellis located in the garden is not more than 10% of the total area of the garden.
 - (c) The trellis is not enclosed and the horizontal distance of the trellis from other structure is not less than 500mm.
 - (d) The trellis shall not affect the MOE and MOA.
 - (e) The trellis does not have ceiling or roof or cover that functions as a ceiling or roof.
6. The length and width of every opening of the overhead frame work of the trellis is $\geq 200\text{mm}$.

WORKING PROCEDURES :**A. ERECTION**

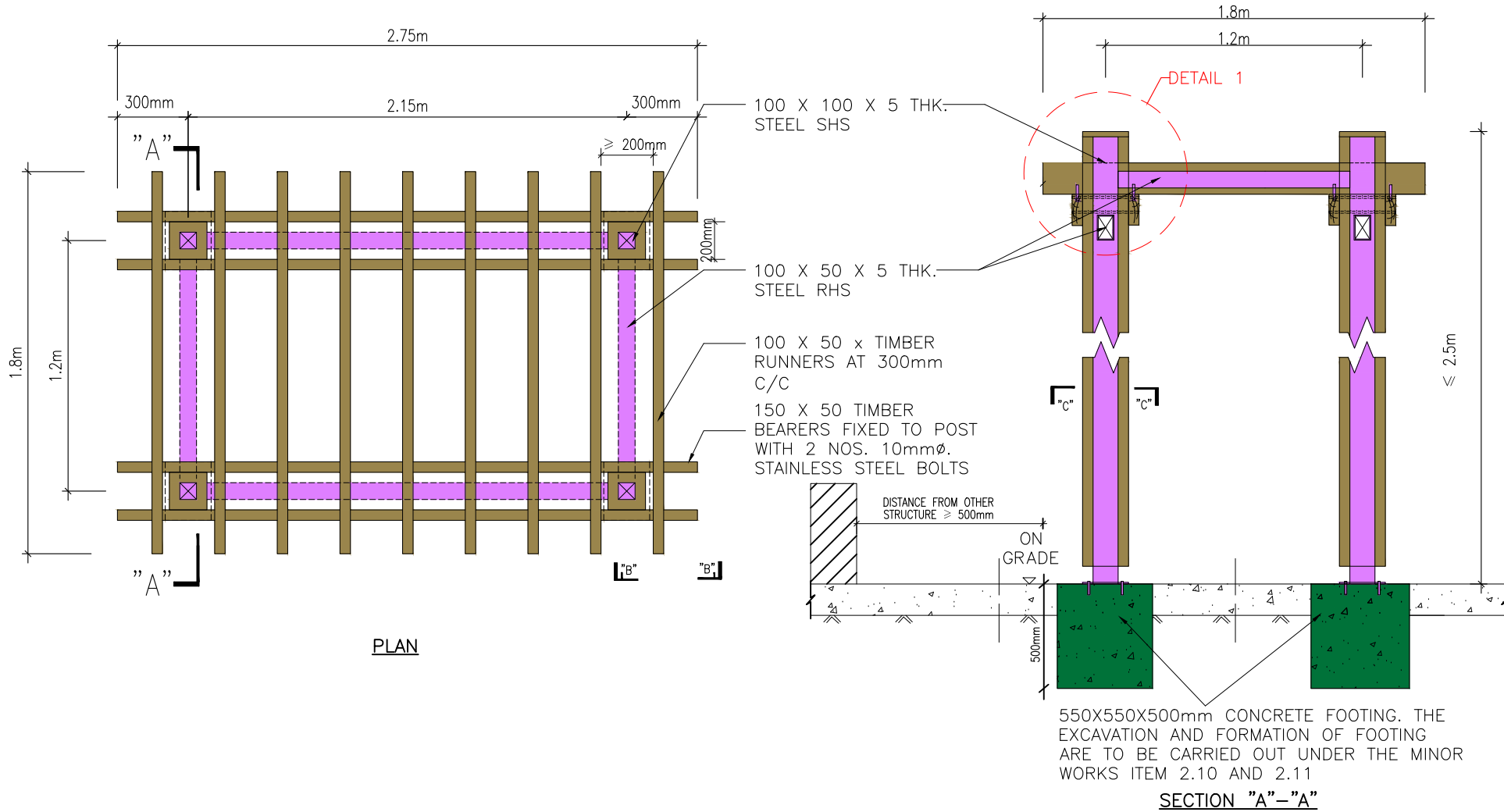
1. Excavation and formation of spread footing shall take reference on MW item 2.11 and MW item 2.10 respectively.
2. Drill holes to the footing structure for anchor bolts installation,
3. Install anchor bolts and erect the trellis as per the drawing.
4. Make good and reinstate the affected area and clean the site.

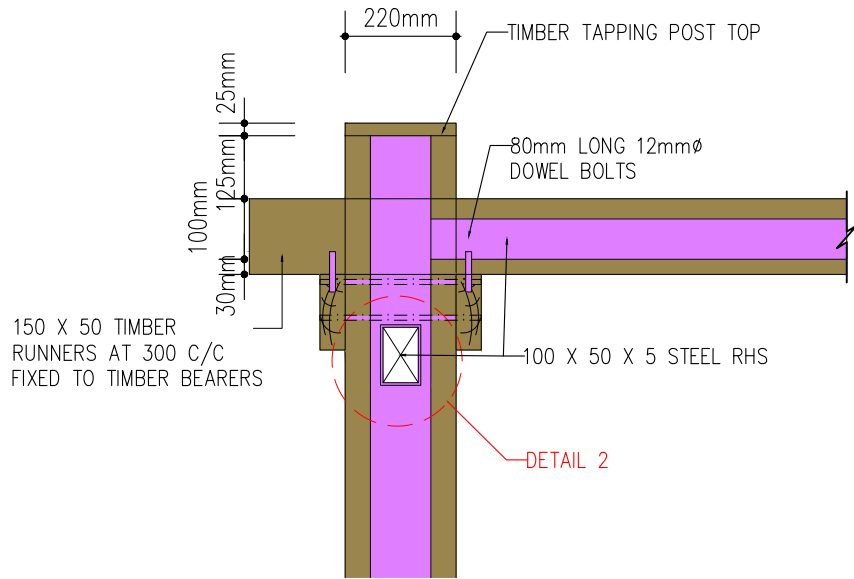
B. ALTERATION

1. Remove the member required to be altered without affecting the remaining structure and install new/ altered members.
2. Make good and reinstate the affected area of the parent building and clean the site.

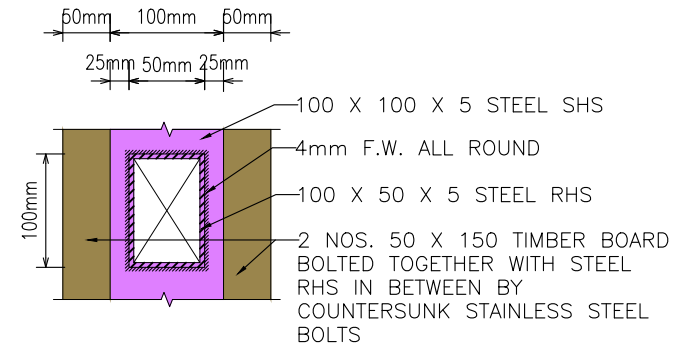
C. REMOVAL

1. Dismantle the secondary beams and then main beams after the column/post securely fixed to prevent suddenly collapse.
2. Dismantle the column and its base.
3. Cut the member into smaller size for construction waste disposal.
4. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal construction waste) regulation.
5. Make good and reinstate the affected areas.
6. Dismantle the bamboo scaffold and clean the site.

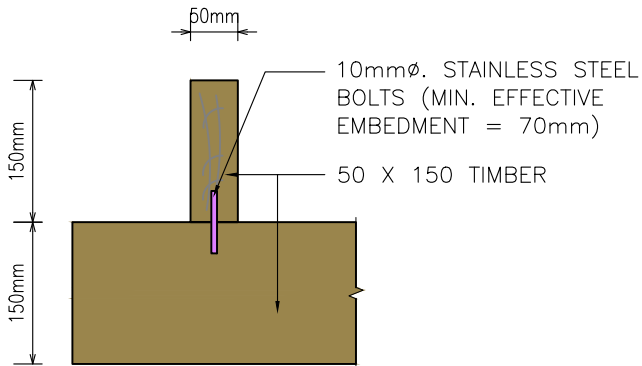




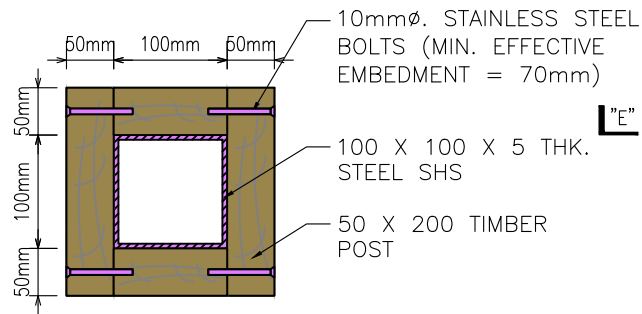
DETAIL 1



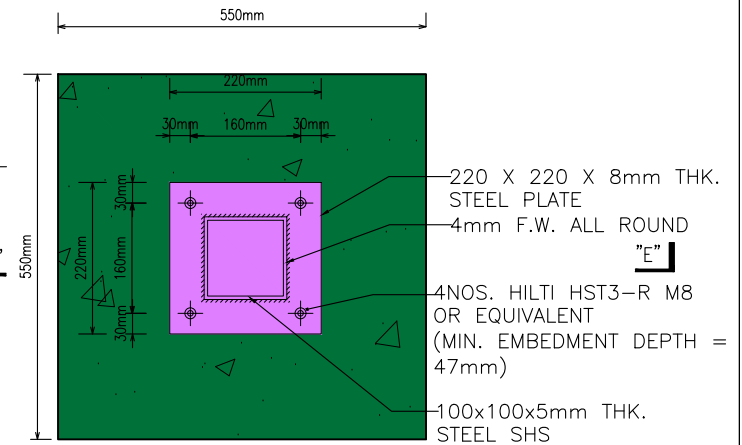
DETAIL 2
(TYPICAL DETAILS FOR STEEL BEAM CONNECTED TO STEEL POST)



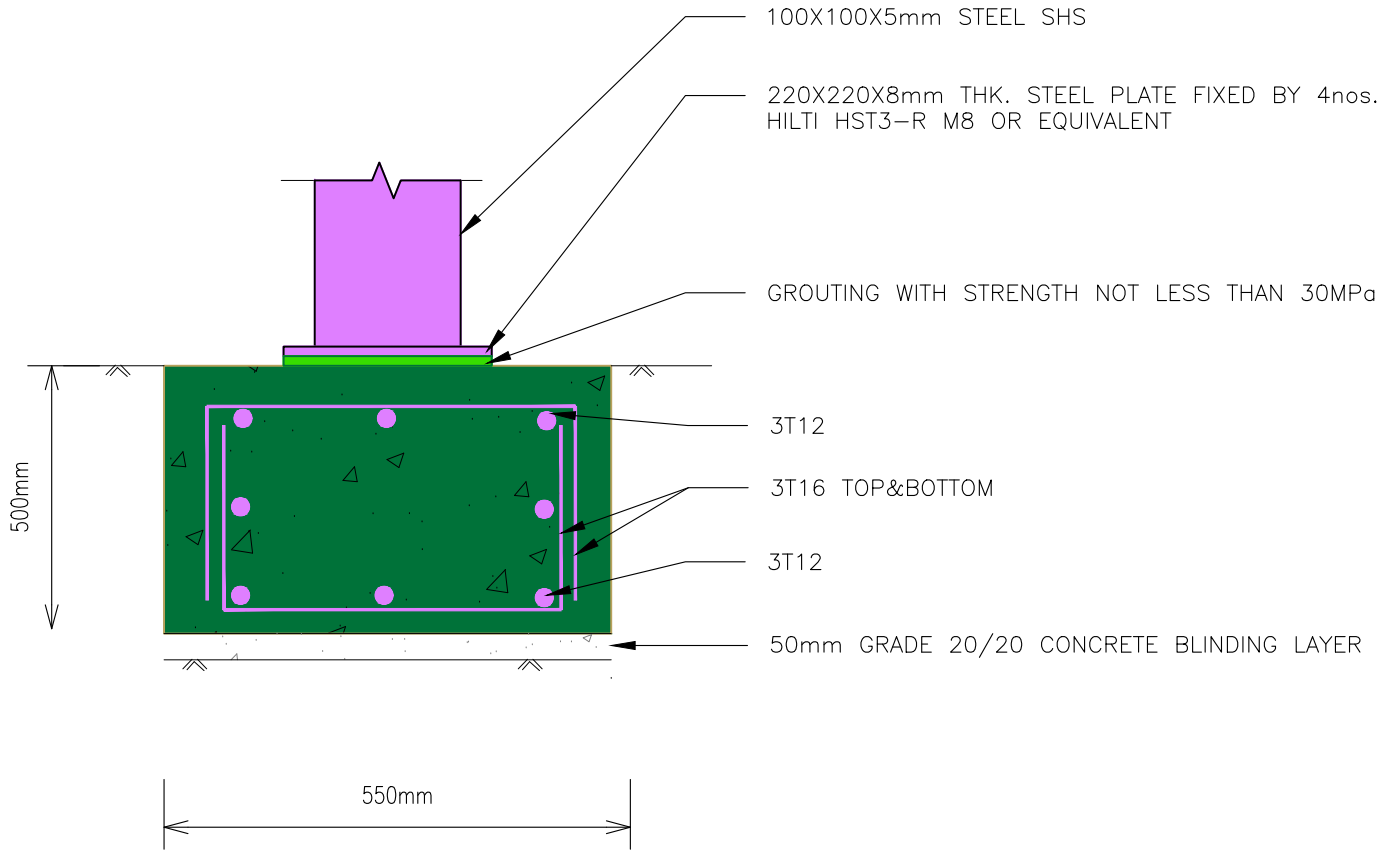
SECTION "B" - "B"



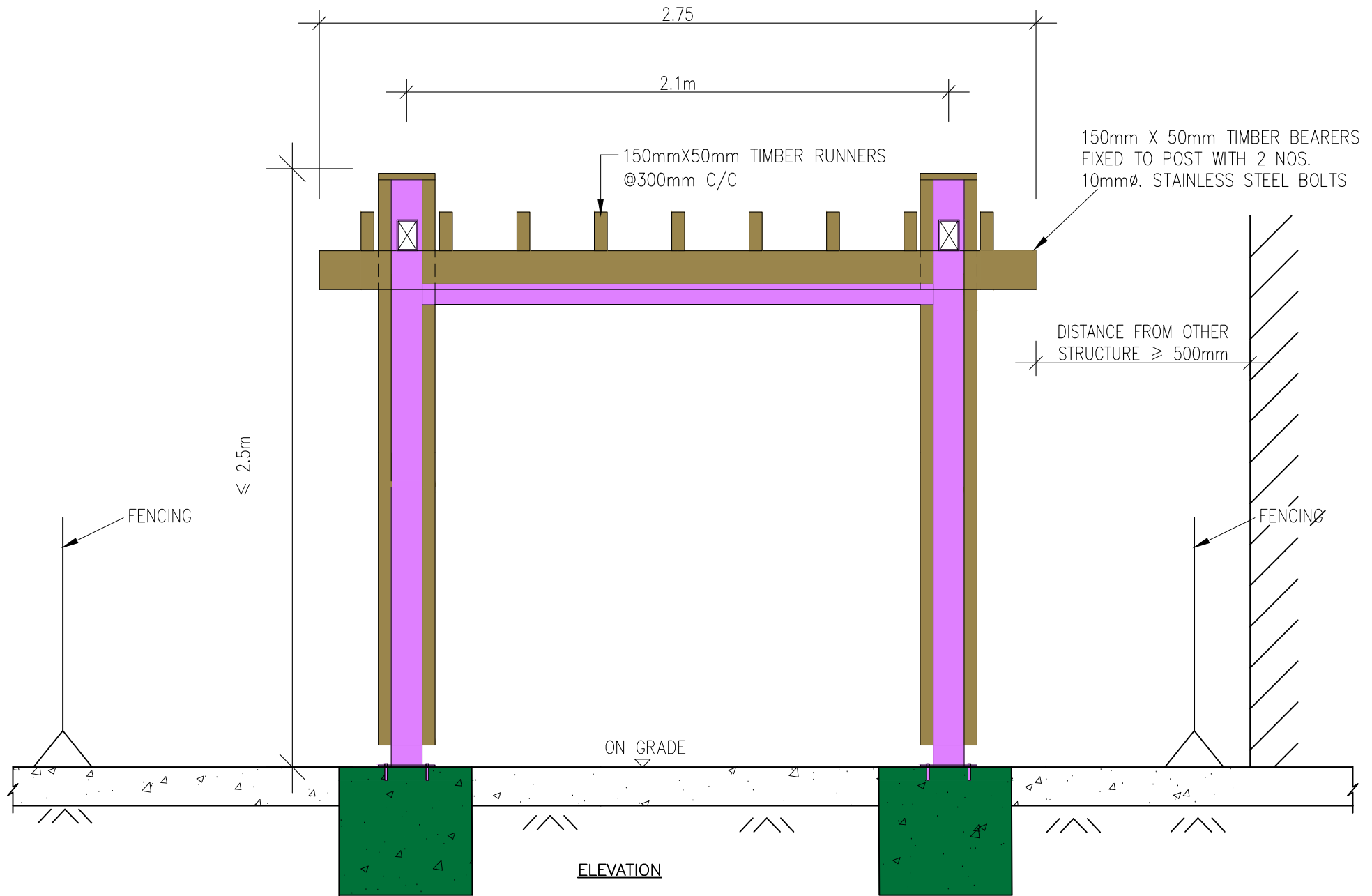
SECTION "C" - "C"



SECTION "D" - "D"



SECTION "E" - "E"



GENERAL NOTES:

1. The works carried out shall comply with the buildings ordinance and provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations and Building (Planning) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
 - BS 5268-2:2002 (Design Code and Standard for Structural Use of Timber).
3. All timber shall be suitable for exterior use either naturally durable or pressure treated with a preservative, selection of preservatives to be in accordance with BS 5268-5:2002.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
5. Structural steel used for new structure to be grade s275 J0/J0H complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BE EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2011.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2016.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. All anchor bolts to be HILTI "HST3-R M16" or equivalent of minimum embedment depth of 85mm:
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
12. Minimum grade for concrete slab is 25D/20.
13. Wind load design for trellis is in accordance with Code of Practice for Wind Effects in Hong Kong 2019. The maximum floor level of roof is to be 100m from existing ground and maximum height of trellis is to be 102.5m from ground level.
14. Design wind load shall be 2.87KPa (Effective height = 100m + 2.5m) with pressure coefficient C_p of 2.0 for individual members of open framework building. Assume topography factor, $S_t=1.0$; wind directionality factor, $S_{\theta}=0.85$; size factor, $S_s=1.0$.
15. All dimensions shall be millimeter unless otherwise specified.
16. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. No building materials should be stored on roof.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

DESIGN PARAMETERS:

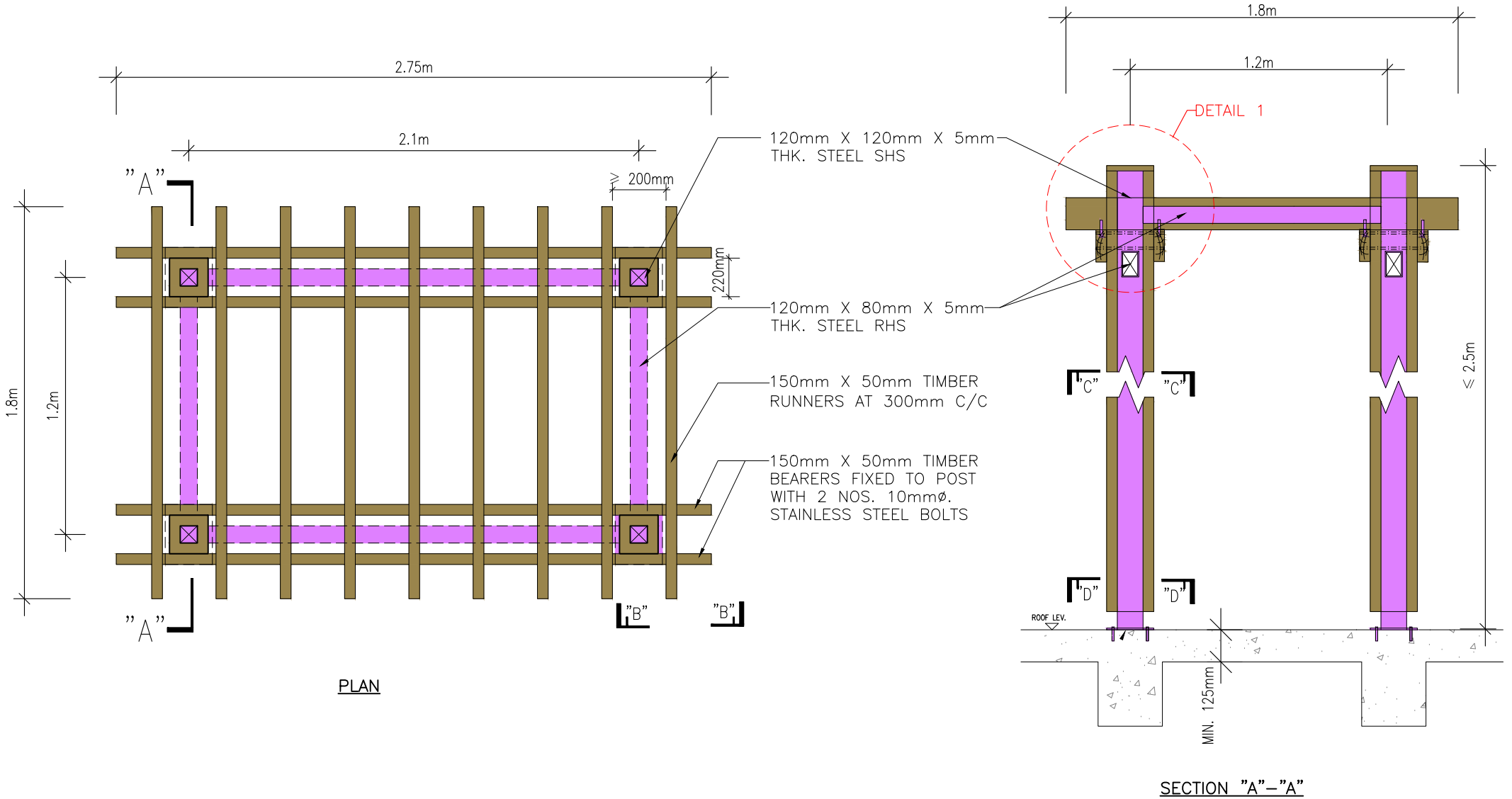
1. For removal works – the size of each trellis is not more than 20 m².
2. For erection or alteration works –
 - (a) For works carried out in a common part of the building , at the completion of the works–
 - (A) Each trellis located in that common part covers an area of not more than 5m² ; and
 - (B) The aggregate of the area covered by each trellis located in that common part is not more than 5% of the total area of that part; and
 - (b) For works carried out in a part that is not a common part of the building (non-common part),
 - (A) Each trellis located in that non-common part covers an area of not more than 5m² ; and
 - (B) The aggregate of the area covered by each trellis located in that non-common part is not more than 20m² and not more than 5% of the total area of that part; and
 - (c) No part of the trellis shall exceed the highest point of the building.
 - (d) The trellis is open-sided and the length and width of every opening of the overhead frame work of the trellis \geq 200mm.
 - (e) The trellis shall not affect the means of escape and means of access on roof.
 - (f) The trellis shall not affect the drainage system on roof.
 - (g) If the roof is divided into different parts by instrument registered in lands registry, the area of the roof is the roof on which the trellis is located.
 - (h) No part of the trellis shall project beyond the external wall of the building.
 - (i) The trellis is not enclosed in any side and the horizontal clearance of the trellis from other structures is not less than 500mm.

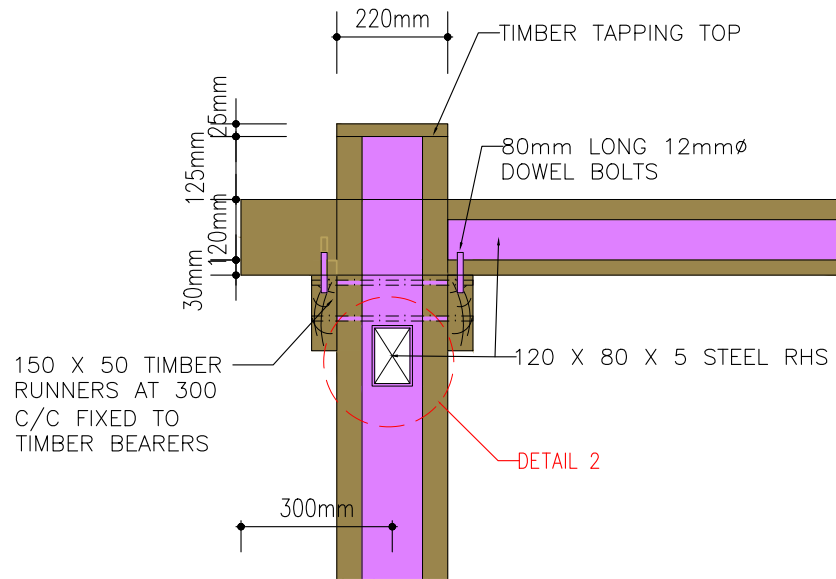
PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the additional installation of the trellis must be checked to satisfy all structural requirements prior to the carrying out of the minor works.

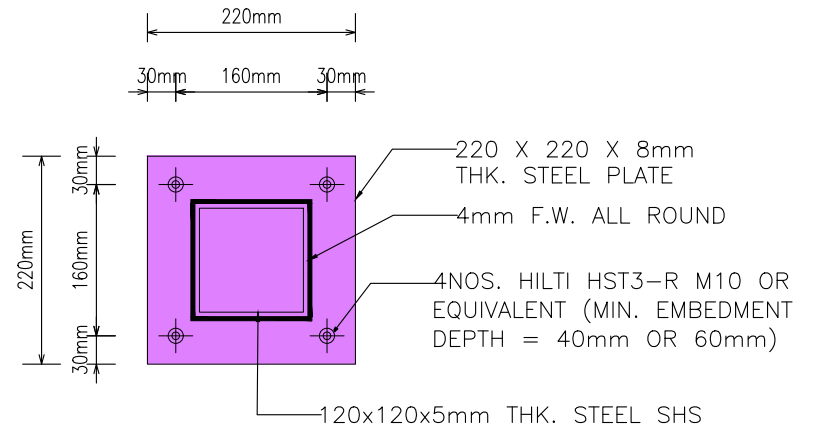
WORKING PROCEDURES :

- A. ERECTION
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area (Including waterproofing layer) of the parent building and clean the site.
- B. ALTERATION
 1. Remove the defective member and replace with member of the same size.
 2. Make good and reinstate the affected area (Including waterproofing layer) of the parent building and clean the site.
- C. REMOVAL
 1. Dismantle the secondary beams and then main beams after the column/ post securely fixed to prevent suddenly collapse.
 2. Dismantle the column and its base.
 3. Cut the member into smaller size for construction waste disposal.
 4. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal construction waste) regulation.
 5. Make good and reinstate the affected areas (Including waterproofing layer).
 6. Dismantle the bamboo scaffold and clean the site.

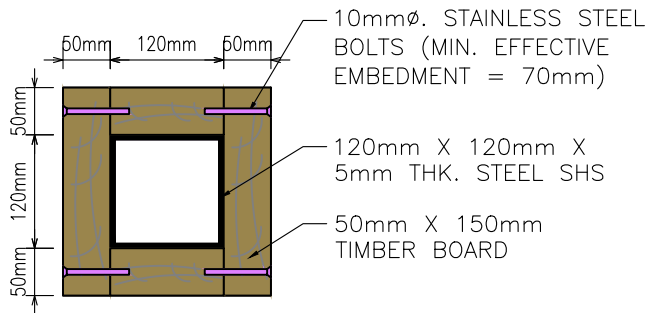




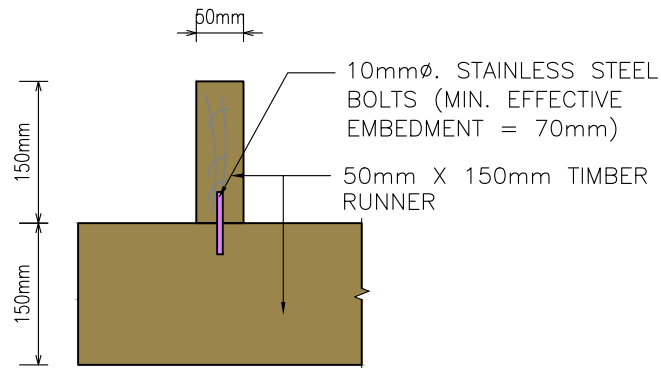
DETAIL 1
SCALE : N.T.S



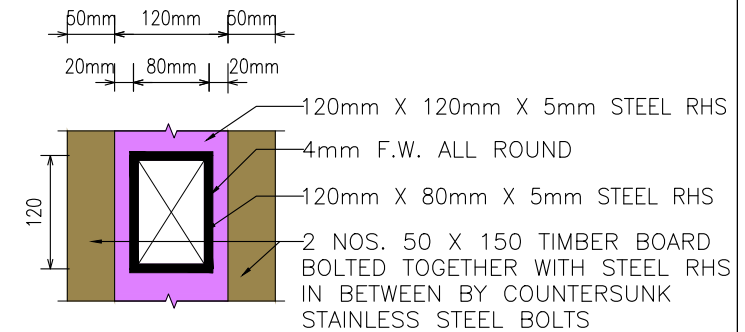
SECTION "D" - "D"
SCALE : N.T.S



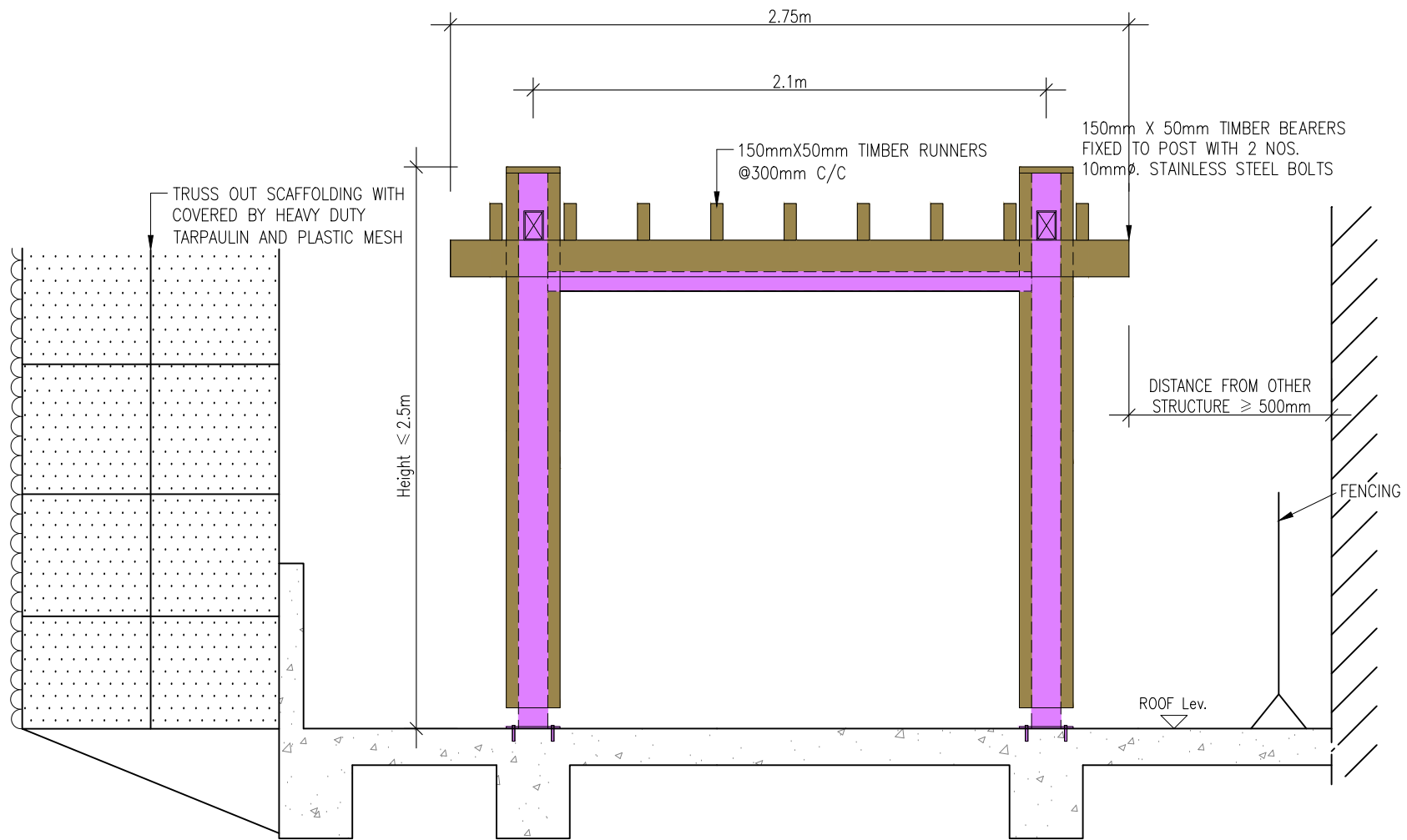
SECTION "C" - "C"
SCALE : N.T.S



SECTION "B" - "B"
SCALE : N.T.S



DETAIL 2
SCALE : N.T.S



ELEVATION

GENERAL NOTES:

1. The works carried out shall comply with the buildings ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice for Fire Safety in Buildings 2011.
3. The maximum loading of ventilation duct shall be 50 kg/m and design imposed load =0.75 kPa.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
5. Minimum concrete grade for existing structures is 25D/20.
6. Structural steel used for new structure to be grade S275 JO complying with BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other section.
7. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. electrodes shall comply with BS EN ISO 2560:2005.
8. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
9. Welding shall be tested in accordance with BS EN ISO 9934 part 1:2001.
10. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
11. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
12. Unless noted otherwise, all welding shall be 4mm continuous fillet weld all round.
13. The minimum effective embedment length of the anchor bolts shall be 40mm to sound concrete.
14. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All u-channel and end plates to be installed directly on structural concrete with all surface finishes removed.
15. Minimum thickness of existing r.c. slab for installation of anchor bolts to be 100mm.
16. Unless noted otherwise, all bolts and nuts are grade 4.6 to BS EN ISO 4190. of point system.
17. All dimensions shall be millimeter unless otherwise specified.
18. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

1. Obtain the original design drawings/information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.

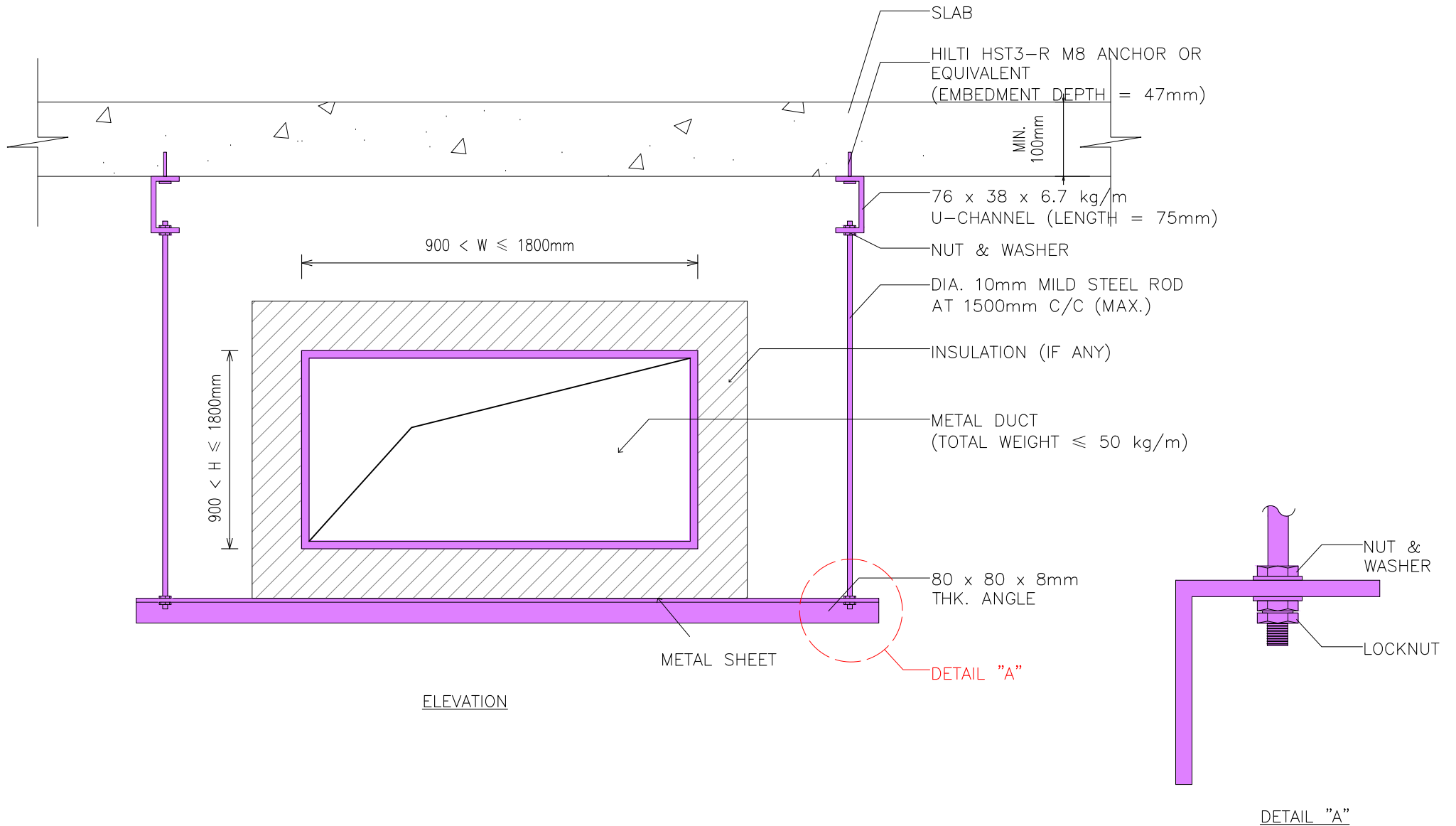
WORKING PROCEDURES :

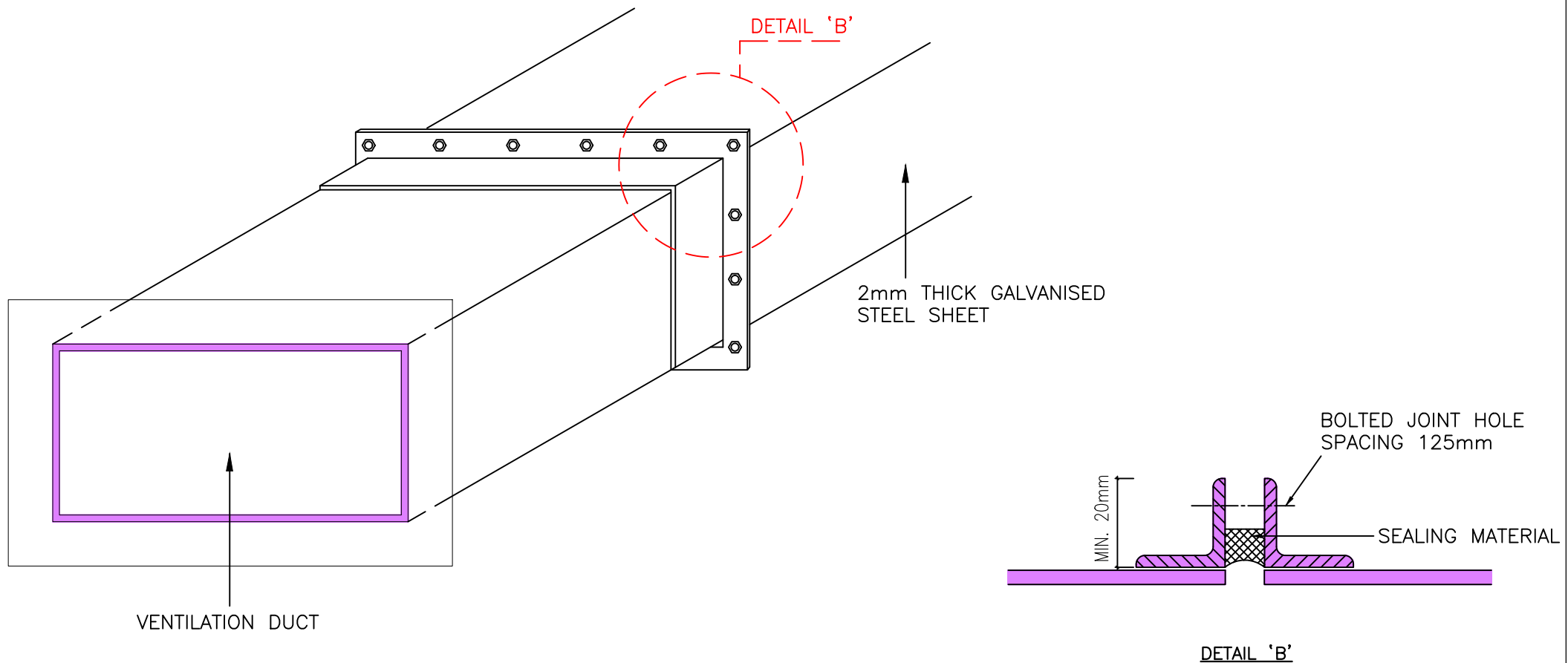
A. ERECTION

1. Erect the structure as per the drawing.
2. Make good and reinstate the affected area of the parent building and clean the site.

B. ALTERATION

1. Remove the defective member and replace with member of the same size.
2. Remove unwanted parts by hand-held tools.
3. Erect the duct on frame as per the drawing.
4. Make good and reinstate the affected area of the parent building and clean the site.





GENERAL NOTES:

1. Sheet metal air ducts shall comply with BS EN 1505:1998
2. Duct may be stiffened by corrugation to reduce noise generation.
3. The design of the duct and its insulation shall take into account of the use, the air pressure tightness, acoustic insulation into considerations.

GENERAL NOTES:

1. The works carried out shall comply with the buildings ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
3. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μm .
4. Minimum concrete grade for existing structures is 30D/25
5. Structural steel used for new structure to be grade S275 J0 complying with BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2005.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2001.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. Unless noted otherwise, all welding shall be 4mm continuous fillet weld all round.
12. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
13. Wind load design is in accordance with Code of Practice for Wind Effects in Hong Kong 2019.
14. Minimum grade for concrete slab is 25D/20.Design wind load shall be 2.86 kPa (effective height =100m) with pressure coefficient C_p of 2.0 for individual members of open frame work building. Assume topography factor, $S_t=1.0$; wind directionality factor, $S_{\theta}=0.85$; size factor, $S_s=1.0$
15. Minimum thickness of existing R.C. slab for installation of anchor bolts to be 150mm.
16. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. Do not store building materials on the roof.

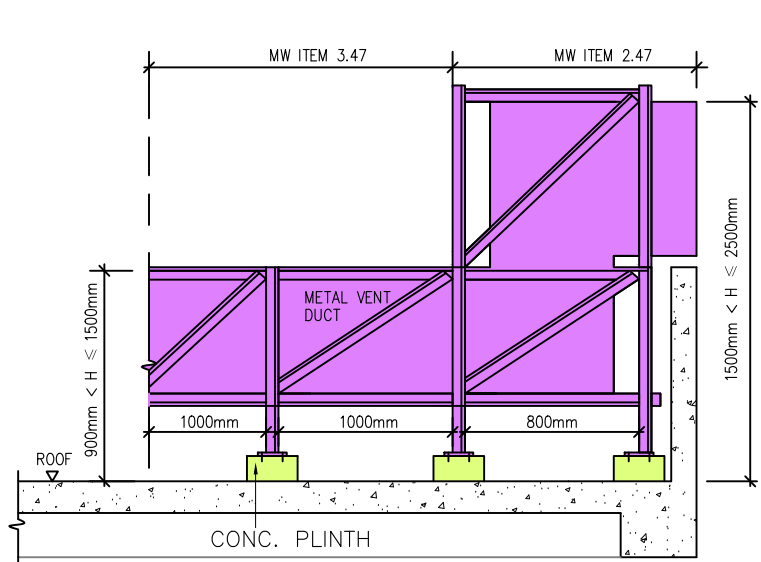
PREPARATION WORKS :

1. Obtain the original design drawings/information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

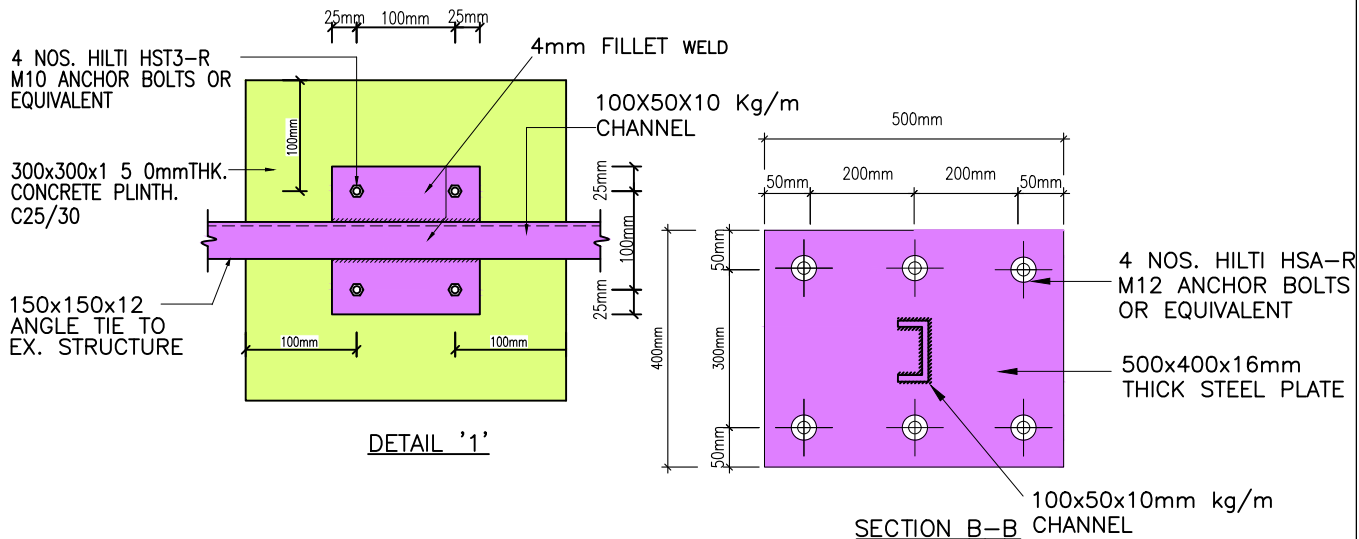
WORKING PROCEDURES :

- A. ERECTION
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.
- B. ALTERATION
 1. Remove the part of duct at the duct and supporting frame to be altered by hand held tools.
 2. Cut them into small pieces for disposal.
 3. Erect the altered parts as per drawing.
 4. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.
 5. Dismantle the bamboo scaffolding and clean the site.

NOTE : The works do not fall into DEW 22

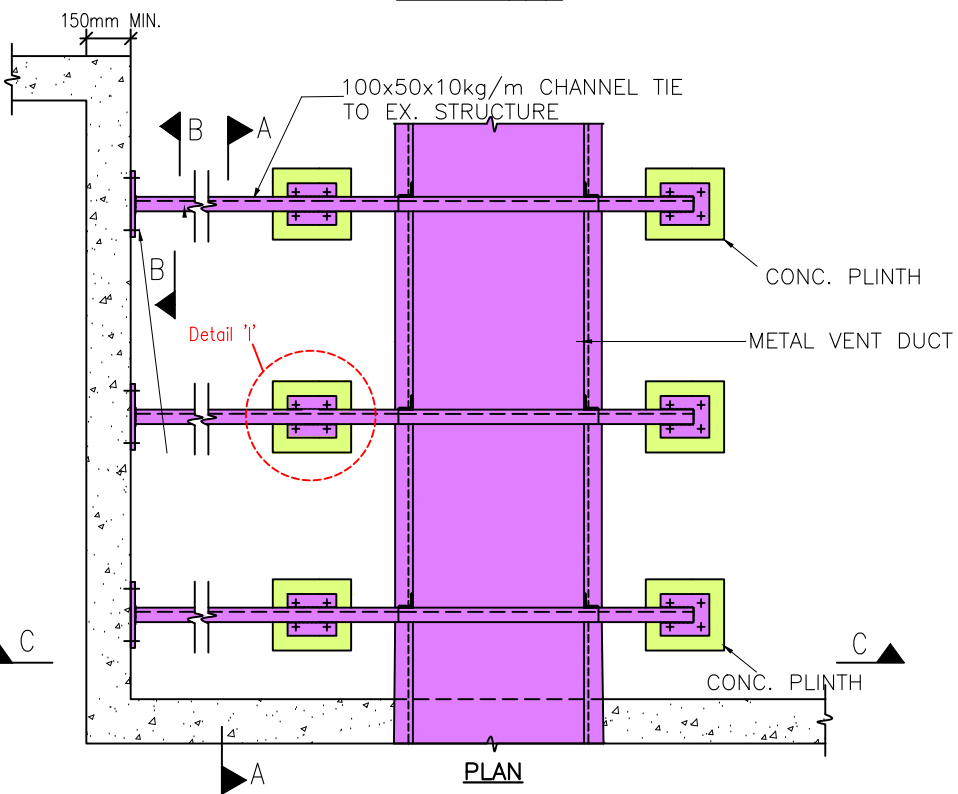


SECTION A-A

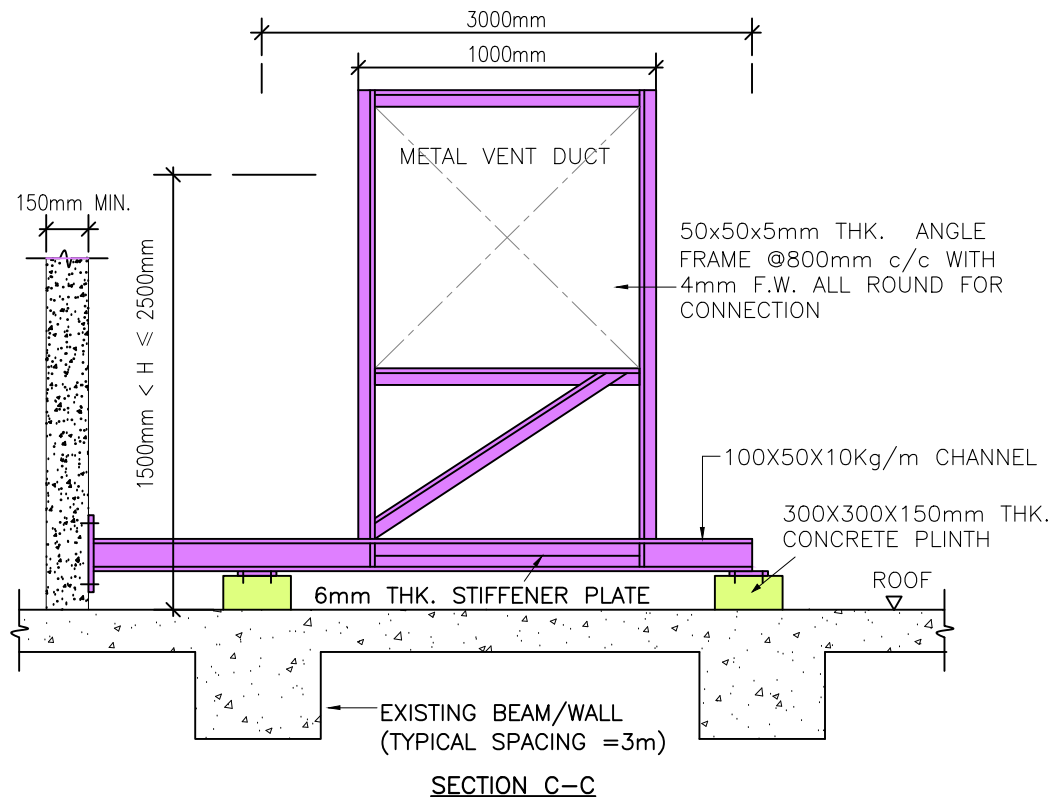


DETAIL '1'

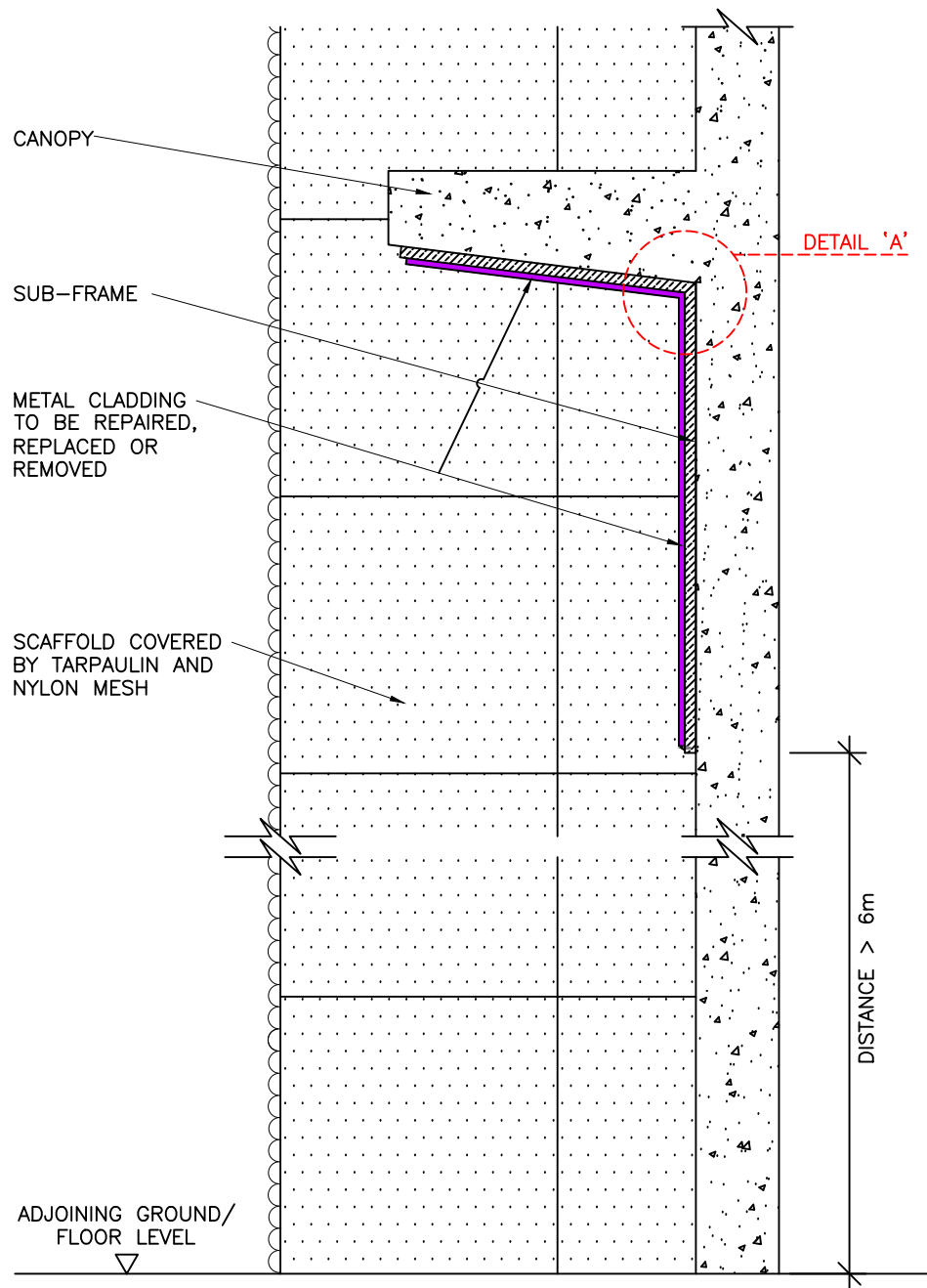
SECTION B-B CHANNEL



PLAN



SECTION C-C



REPAIR, REPLACEMENT OR REMOVAL OF CLADDING

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
3. All anchor bolts shall be installed according to the manufacturer's specification.
4. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

1. Obtain the existing design drawings/information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
3. Inform the utilities company or sector if the works to be involved.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.
5. The structure adequacy of the parent structure due to the additional cladding must be checked to the satisfaction of the structural requirement prior to carry out of minor works.
6. Existing rendering or plastering shall be removed before installation of steel frame.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

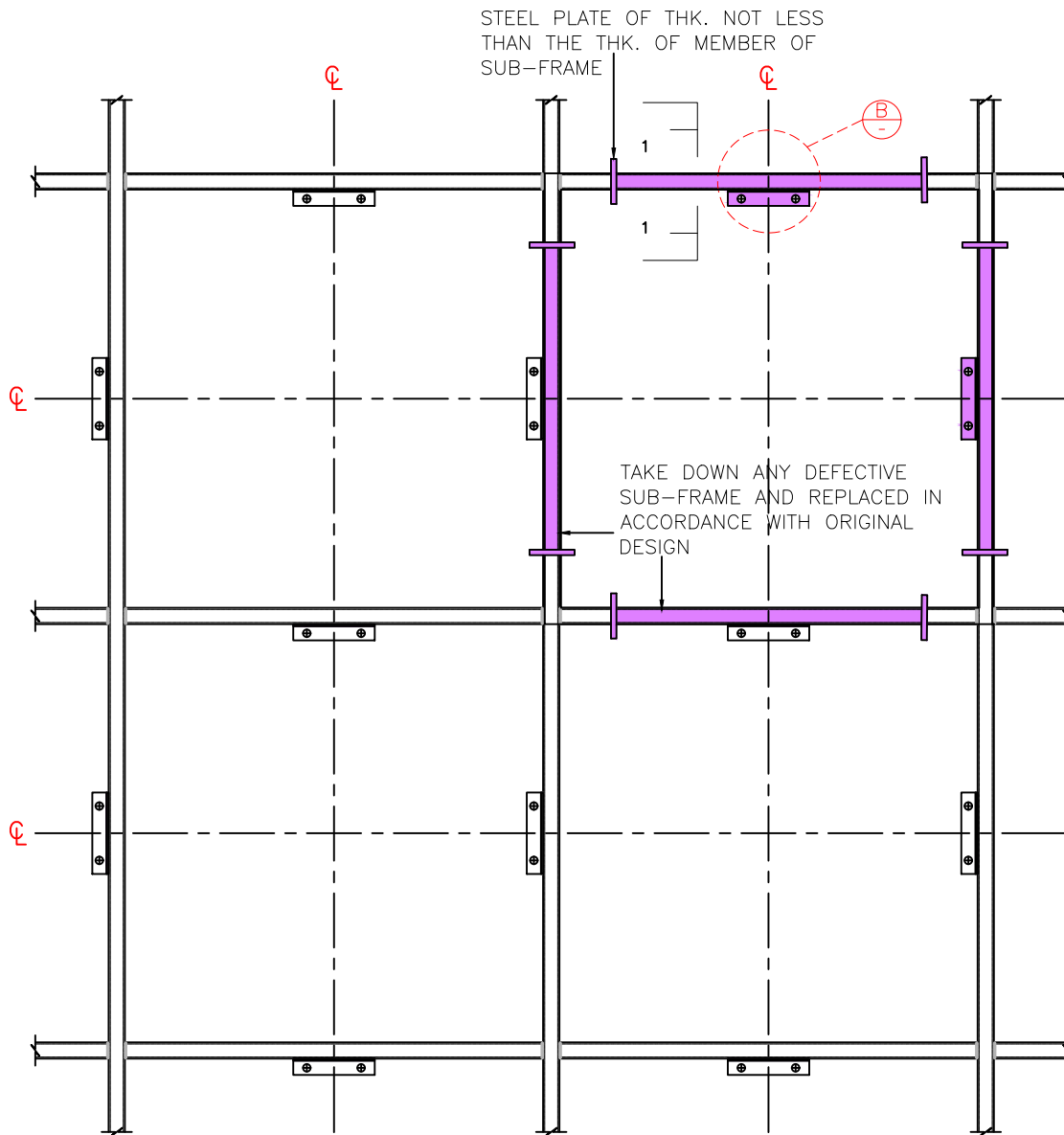
A. REPAIR OR REPLACEMENT

1. Remove the defective cladding panel and frame and use the same size of panel and frame for replacement in accordance with original design.
2. Check the fixings and the structure behind the cladding and repair as necessary.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

B. REMOVAL

1. Dismantle cladding panel and then its frame by cutting into small pieces with hand held tools without affecting the remaining cladding structure.
2. The disposal of demolition waste shall be at designated waste disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes MW item 3.31



SUB-FRAME ON WALL OR CEILING

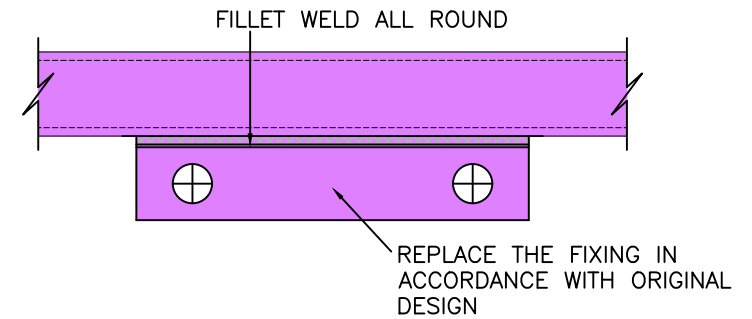
DOW CORNING 795
SEALANT OR
EQUIVALENT

APPLY REPLACE M6
STAINLESS STEEL
SELF-TAPPING SCREW

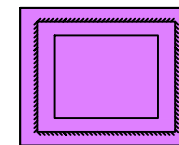
FILLET WELD ALL
ROUND

REPLACE METAL PANEL
IN ACCORDANCE WITH
ORIGINAL DESIGN

DETAIL A

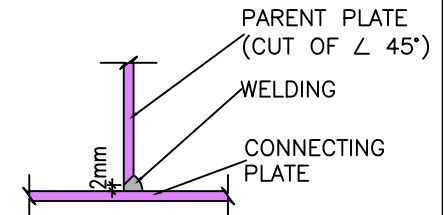


DETAIL B

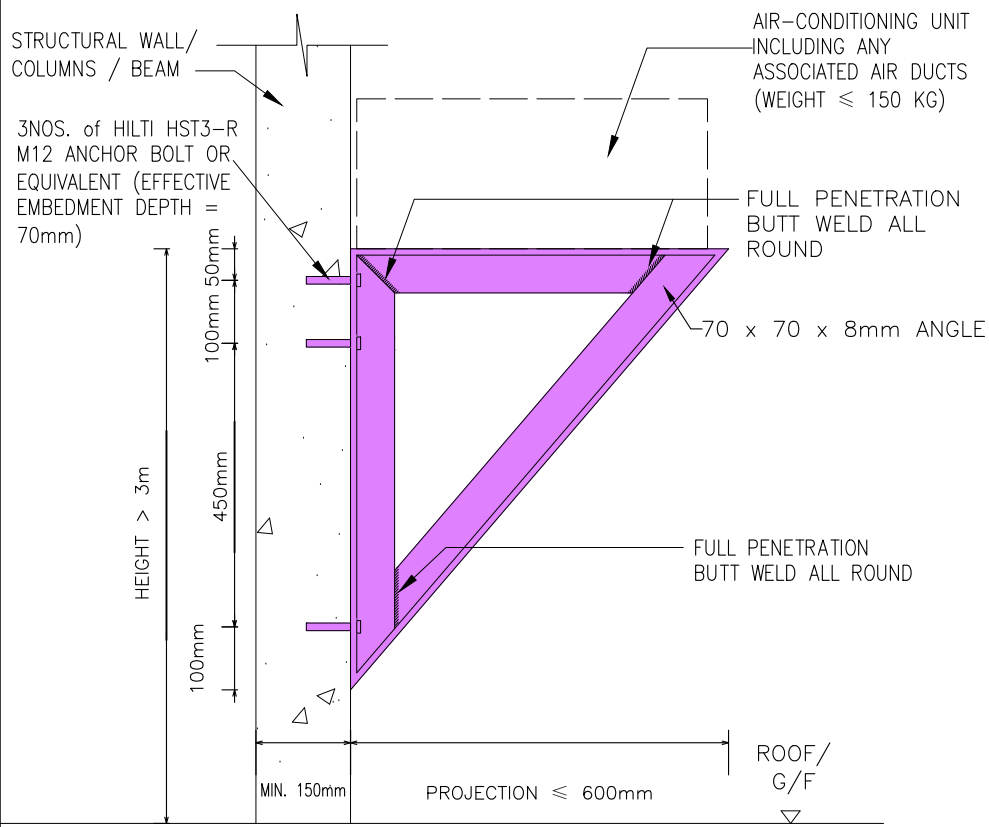


SECTION '1'-1'

STEEL PLATE
OF THK. NOT
LESS THAN
THE THK. OF
MEMBER OF
SUB-FRAME.
FILLET WELD
ALL ROUND



BUTT WELD DETAIL



ELEVATION (FRAME FOR AIR – CONDITIONING UNIT)

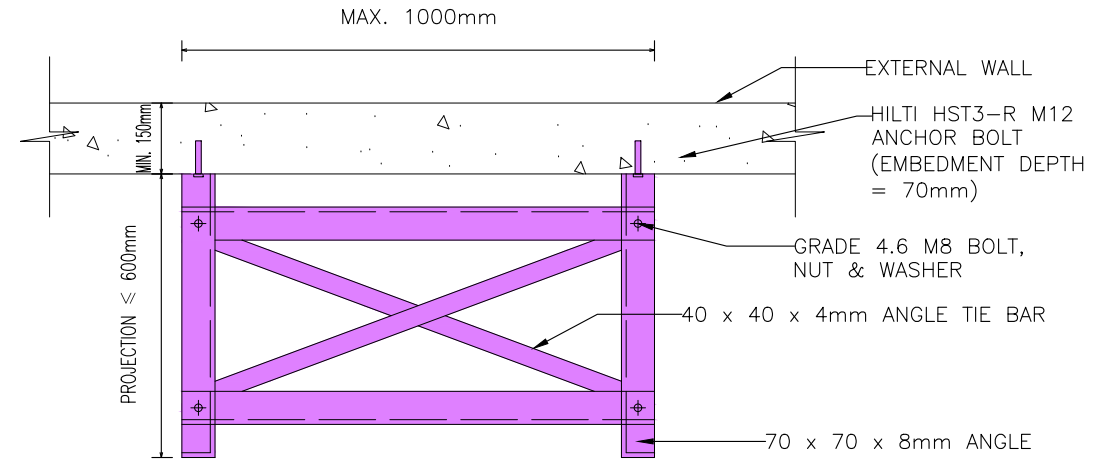
DESIGN LOADS:
 Wind Load = 2.86 kN/m with force coeff. 2.0 (effective height = 100m)
 Assume topography factor, $S_t = 1.0$; Wind directionality factor, $S_\theta = 0.85$; Size factor, $S_s = 1.0$

- PREPARATION WORKS:**
1. Obtain the original design drawings / information for reference prior to the commencement of works.
 2. Carry out condition survey of the parent structure / existing condition prior to the commencement of works.
 3. The structure adequacy of the supporting parent structure due to the addition installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

- SAFETY AND PRECAUTIONARY MEASURES:**
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
 2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Typical detail for truss-out bamboo scaffold.
 - Figure 4 Proper working platform on a double-row bamboo scaffold.

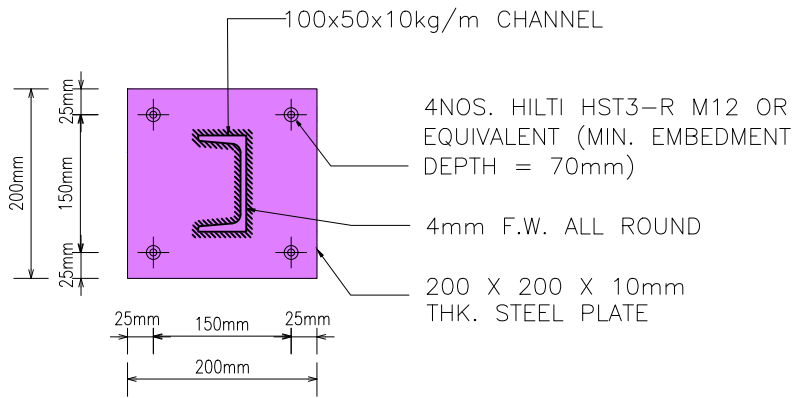
- WORKING PROCEDURES:**
1. Remove any rendering of the wall to bare concrete surface before fixing the supporting structure.
 2. Erect the structure as per the drawing.
 3. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.

REMARK: This case excludes the MW item 3.27

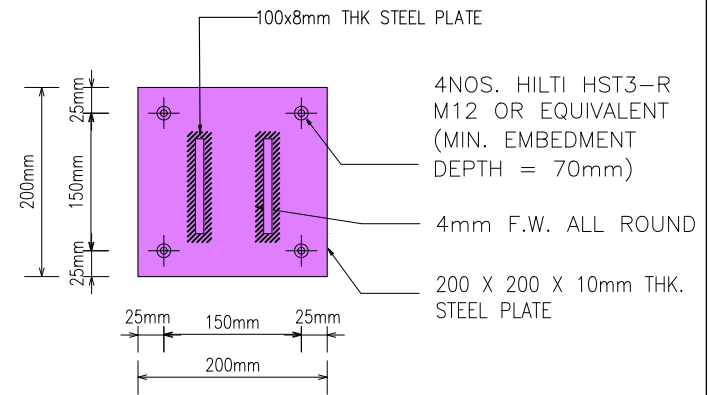


PLAN

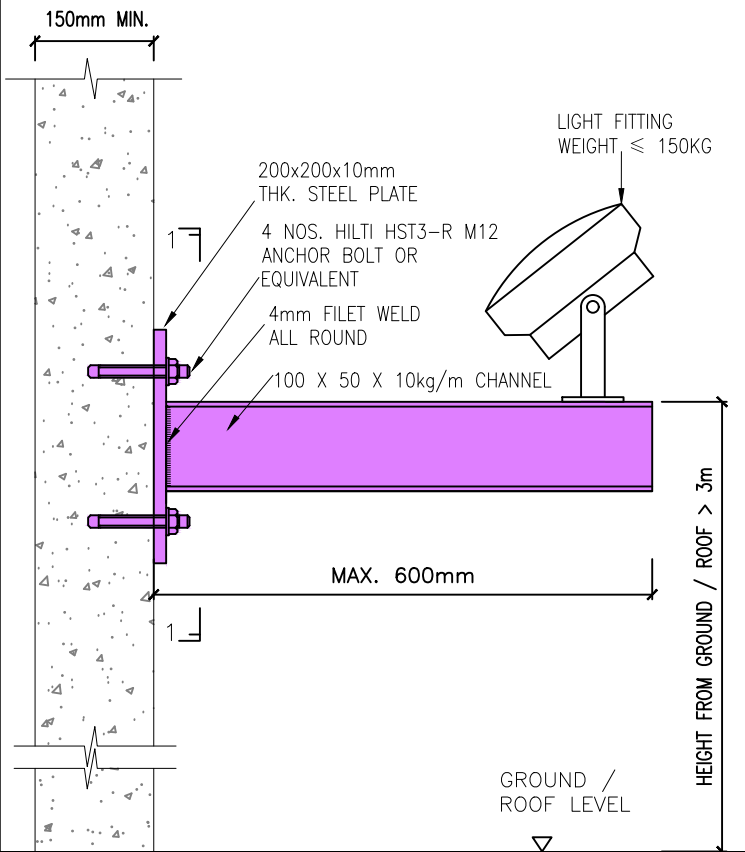
- GENERAL NOTES:**
1. The works carried out shall comply with the Buildings Ordinance and the provision of other enactment. (Reference can be made to the examples listed in Section 3 and 10 of the Guidelines.)
 2. All works shall comply with the following CoP / standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Steel 2011
 - Code of Practice on Wind Effects in Hong Kong 2019
 3. Minimum concrete grade for existing structures is 25D/20.
 4. All structural steel to be grade S275 J0 complying with BS EN 10056 for angles and BS EN 10029 for plates and BS EN 10025 for other sections. All steel structures shall be hot dip galvanized to BS EN ISO 1461:2009 with minimum thickness 85 μm .
 5. All connections to be 4mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004. Welding to be tested in accordance with BS EN ISO 9934 Part 1:2001.
 6. All structural steel shall be cleaned and free of scale and rust prior to welding and galvanization.
 7. Damaged area of galvanization due to site welding shall be polished to bare metal and apply 1 coat of zinc-rich primer and 2 coats zinc chromate paint according to the manufacturer's specification.
 8. Unless noted otherwise, all bolts and nuts are grade 4.6 to BS 3962:2014 or BS 4190:2014 of point system.
 9. All anchor bolts to be stainless steel bolt:
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed directly on structural concrete with all surface finishes removed.
 10. All anchor bolts shall be "Hilti" HST3-R M12 anchor bolts or equivalent and shall be strictly in accordance with manufacturer's specification and recommendations.
 11. The structure shall not affect the Means of Access (MOA) and Means of Escape (MOE).
 12. The structure shall not affect the drainage system.
 13. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.



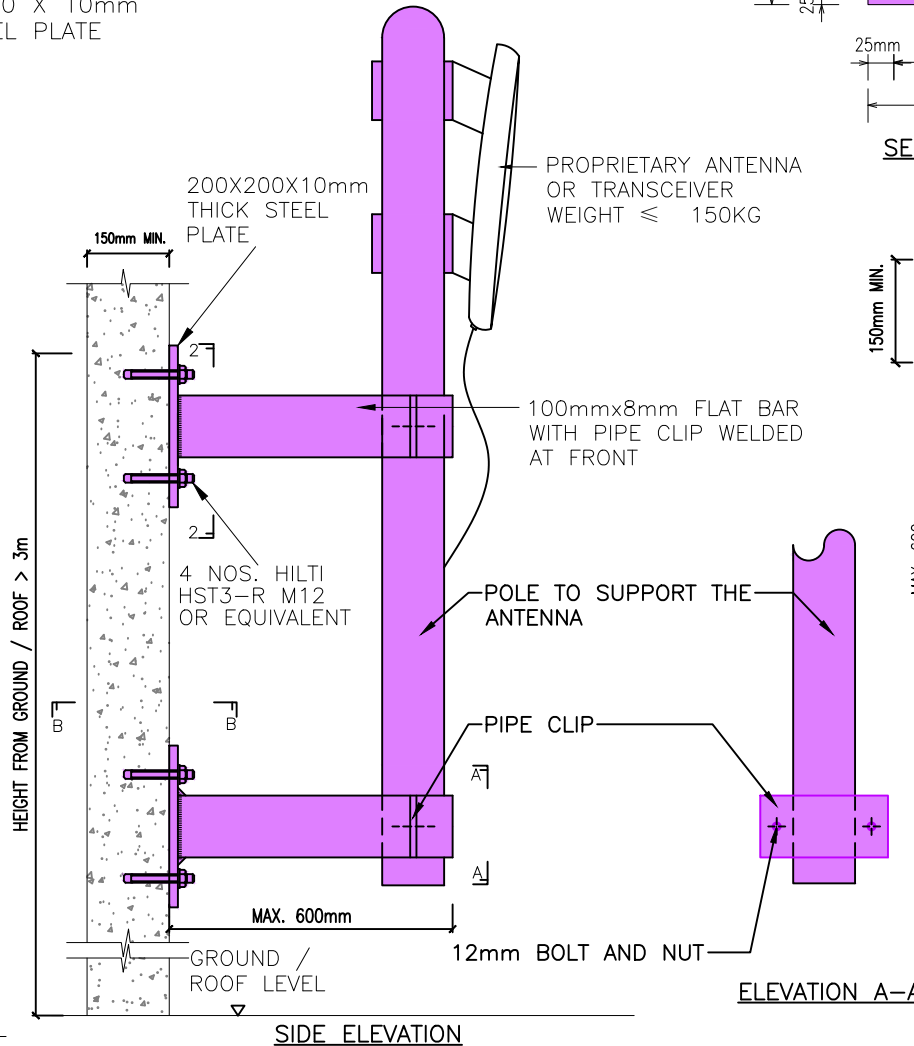
SECTION 1-1



SECTION 2-2

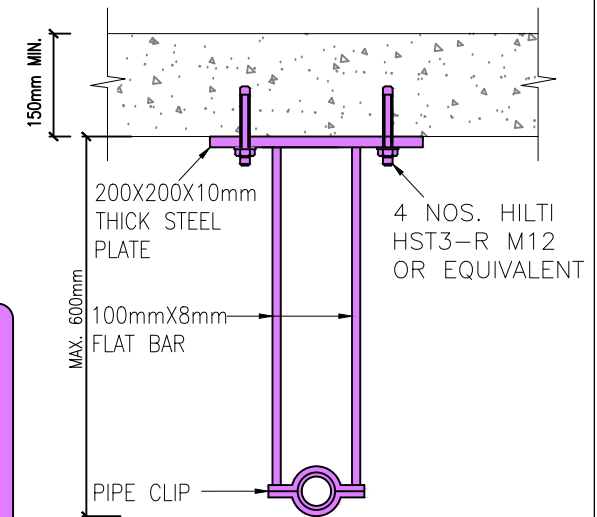


SUPPORTING FRAME FOR LIGHT FITTING



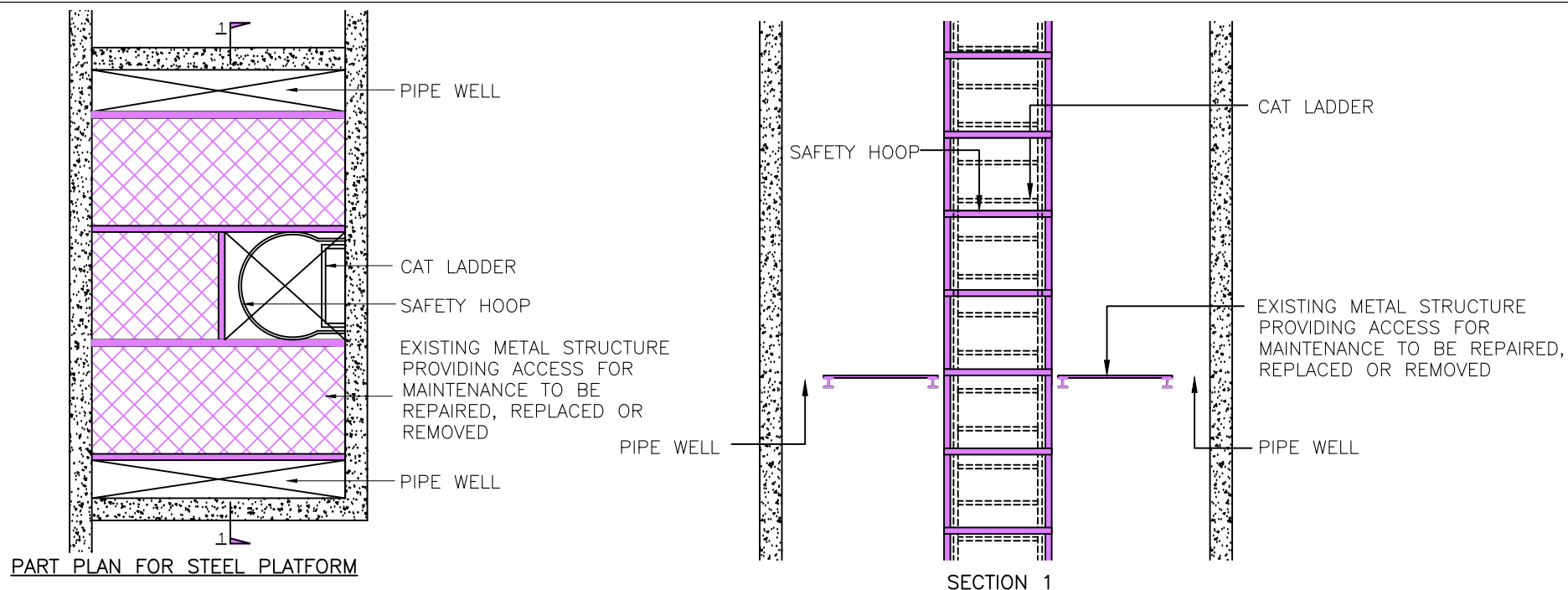
SIDE ELEVATION

ELEVATION A-A



SECTION B-B

SUPPORTING FRAME FOR ANTENNA OR TRANSCEIVER



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011
3. All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections shall be hot dip galvanized to BS EN ISO 1461: 2009 with min. thickness 85 μm .
4. All welds should comply with BS EN 1011-1:2009 and all welding works to be carried out by qualified welder.
5. All connections to be 3mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}$ (Electrode Class 50) and all electrodes to BS EN ISO 2560 : 2009.
6. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

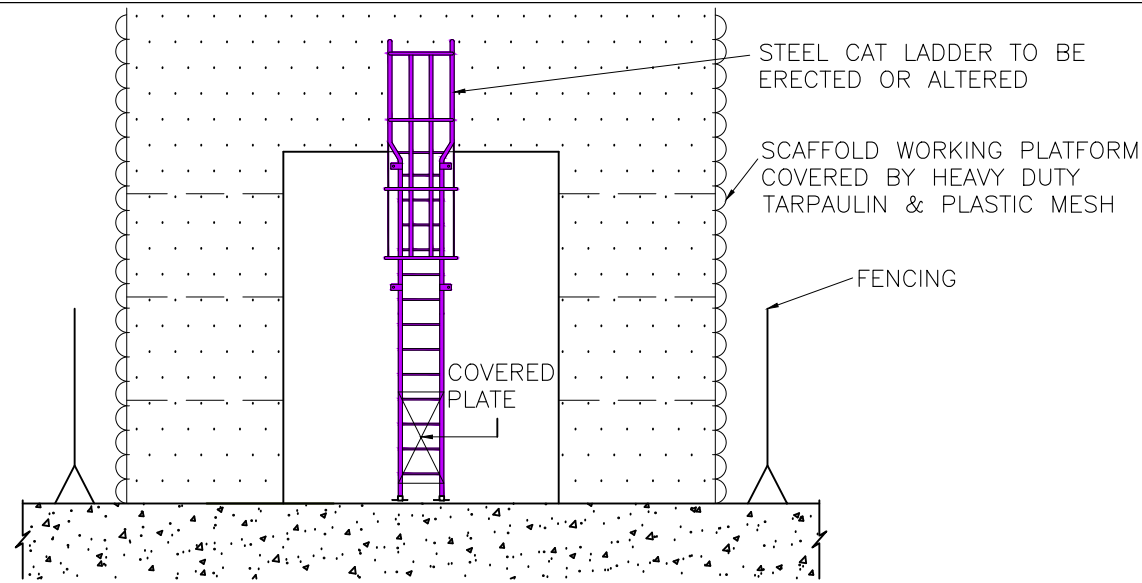
1. Fence-off the working area from the public.
2. No accumulation of demolished parts should be stored on platform.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the steel members to be replaced by oxy-acetylene torch or hand held tools to small pieces without affecting remaining structure, if any.
3. Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation
4. Make good and replace the steel members in accordance with original design and reinstate the affected areas (including the waterproofing) where necessary.
5. Remove the bamboo scaffold and clean the site.

MINOR WORKS ITEM 2.50

DRAWING TITLE : REPAIR OR REPLACEMENT OF EXTERNAL METAL STRUCTURE PROVIDING ACCESS FOR MAINTENANCE IN ACCORDANCE WITH ORIGINAL DESIGN OR REMOVAL OF SUCH A STRUCTURE



ELEVATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice in Access for External Maintenance 2021
3. All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections shall be hot dip galvanized to BS EN ISO 1461: 2009 with min. thickness 85 μm .
4. All welds should comply with BS EN 1011-1:2009 and all welding works to be carried out by qualified welder.
5. All connections to be 3mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}$ (Electrode Class 50) and all electrodes to BS EN ISO 2560 : 2009.
6. All anchor bolts to be Hilti HST3-R M8 or equivalent and shall be installed accordingly to the manufacturer's specification.
7. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

1. Wind Load = 2.87 kPa with pressure coeff. 2.0 (Effective height = 100m +4m)
Assume topography factor, $S_t = 1.0$; Wind directionality factor; $S_\theta = 0.85$; Size factor, $S_s = 1.0$

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.
5. The structure adequacy of the supporting parent structure due to the addition installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. No accumulation of material should be stored on roof.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Install the cat ladder as per the drawing.
2. Make good and reinstate the affected areas of the parent building. (including waterproofing)
3. Dismantle the scaffold and clean the site.

REMARKS: This case excludes DEW item 28.

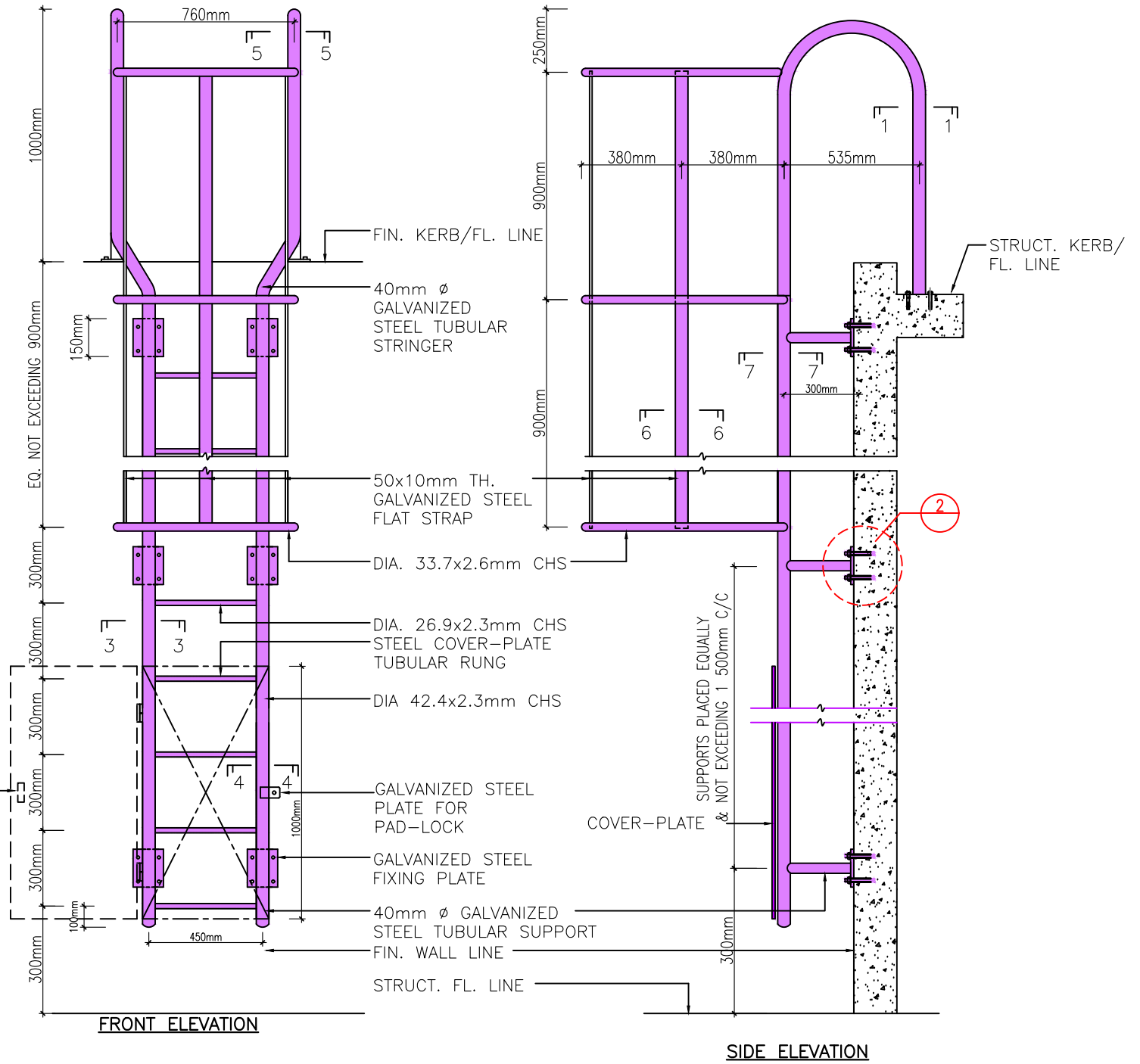
DRAWING TITLE :

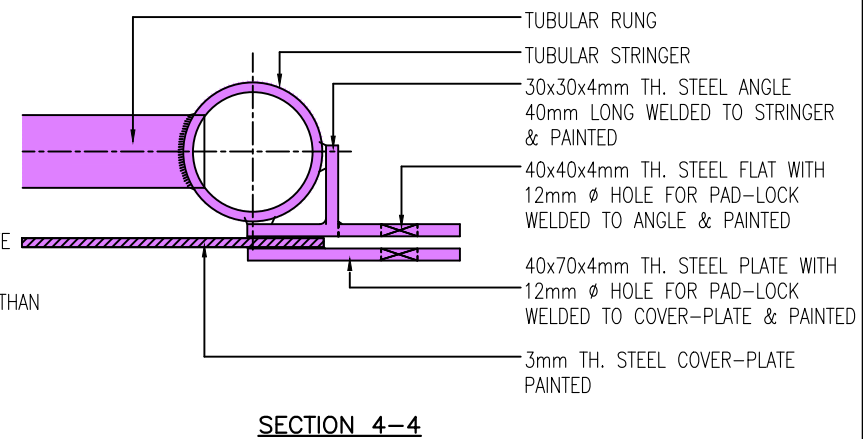
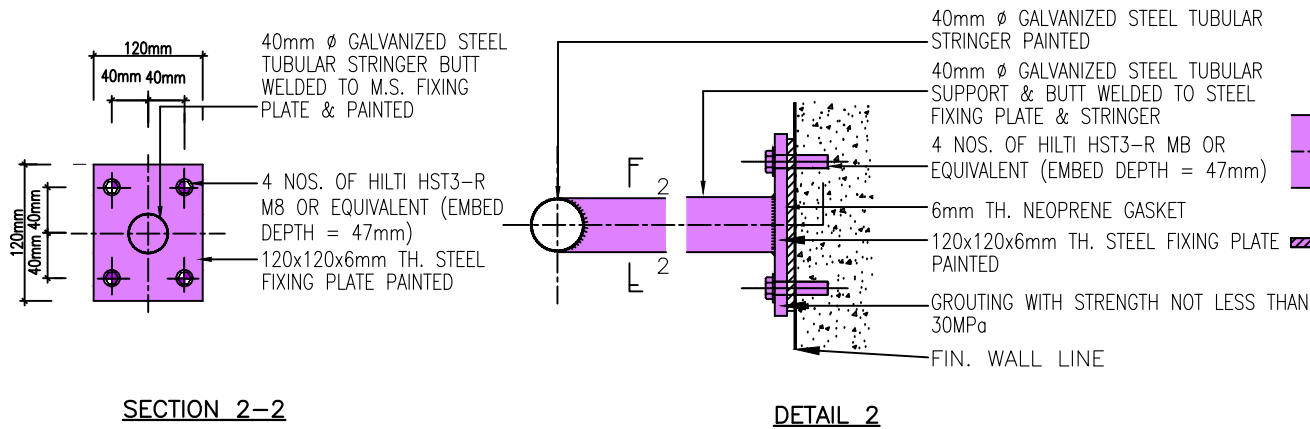
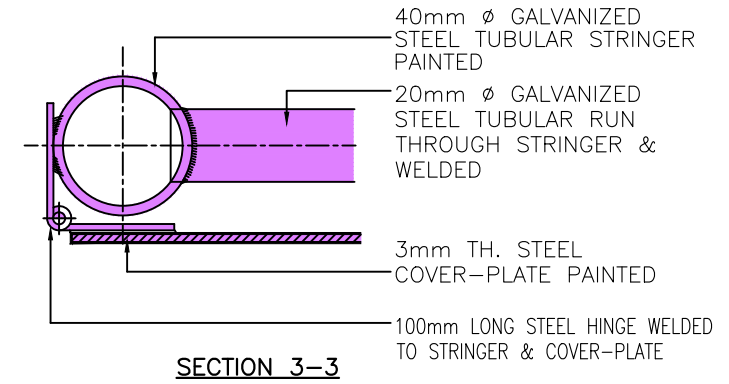
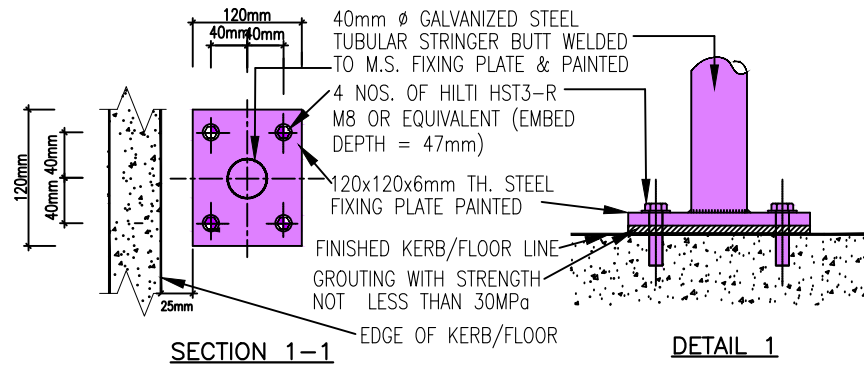
MINOR WORKS ITEM 2.51

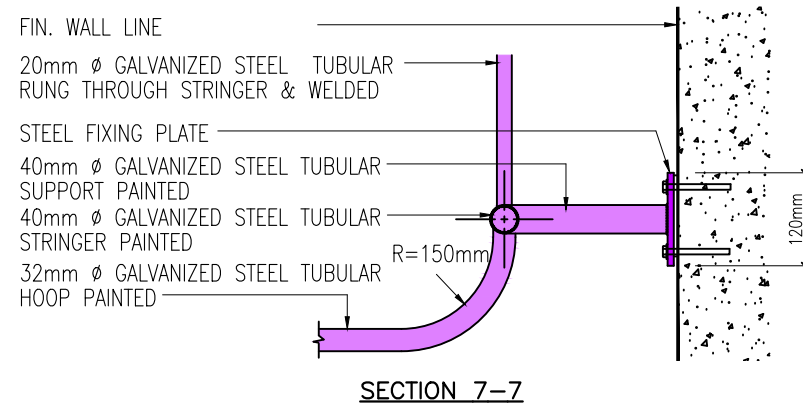
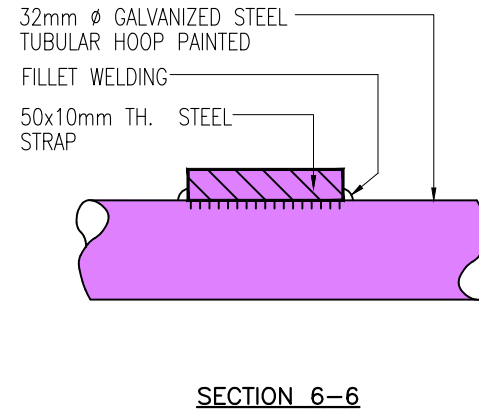
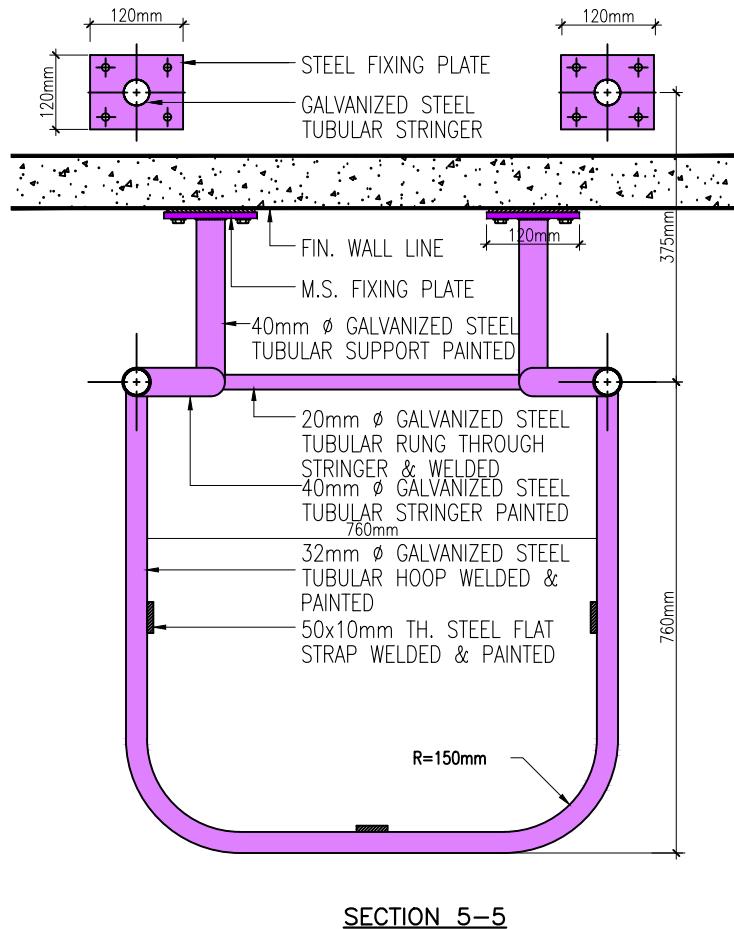
ERECTION OR ALTERATION OF EXTERNAL CAT-LADDER

SHEET 1 OF 4

**DETAILS OF CAT LADDER
WITH SAFE GUARD**
N.T.S.







NOTE:

1. ALL STEEL WORKS TO BE FINISHING WITH 2 COATS OF RED LEAD PRIMER AND 2 COATS OF OIL BASE PAINT.
2. 3mm THICK STEEL CAPPING PLATE TO BE WELDED TO ALL GALVANIZED STEEL TUBULAR.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Concrete 2013
3. All concrete works shall comply with CS1 : 2010 with concrete grade to be C35
4. Steel reinforcement shall be high tensile steel bar (denoted by "T") with yield stress 500 Mpa (grade 500B).
5. Concrete cover shall be 40mm.
6. Steel reinforcement shall comply with CS2:2012 and shall be bent in accordance with BS4466.
7. Minimum ground pressure to be 50kN/m².

DESIGN LOADS:

Wind Load = 1.59 kPa (Effective height = 2.5m) with pressure coeff. 2.1
Assume topography factor, St =1.0; Wind directionality factor; S0=0.85; Size factor, Ss =1.0

PREPARATION WORKS :

1. Obtain and investigate all underground utilities drawings/ information prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior commencement of works.
3. Obtain the original design of the approved structure for reference if there is any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the addition installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

WORKING PROCEDURES :

A. Erection

1. Excavate to the founding level of the footing of the planter (Under MW item 2.11)
2. Laying blinding layer as necessary.
3. Erect formwork and fix reinforcing bar for the planter/fountain
4. Cast concrete to the footing (Under MW item 2.10) and the wall of planter/fountain.
5. 24 hours after concrete casting, remove the formwork & curing the concrete and clean the site.
6. For fountain and pond, waterproofing layer should be provided.

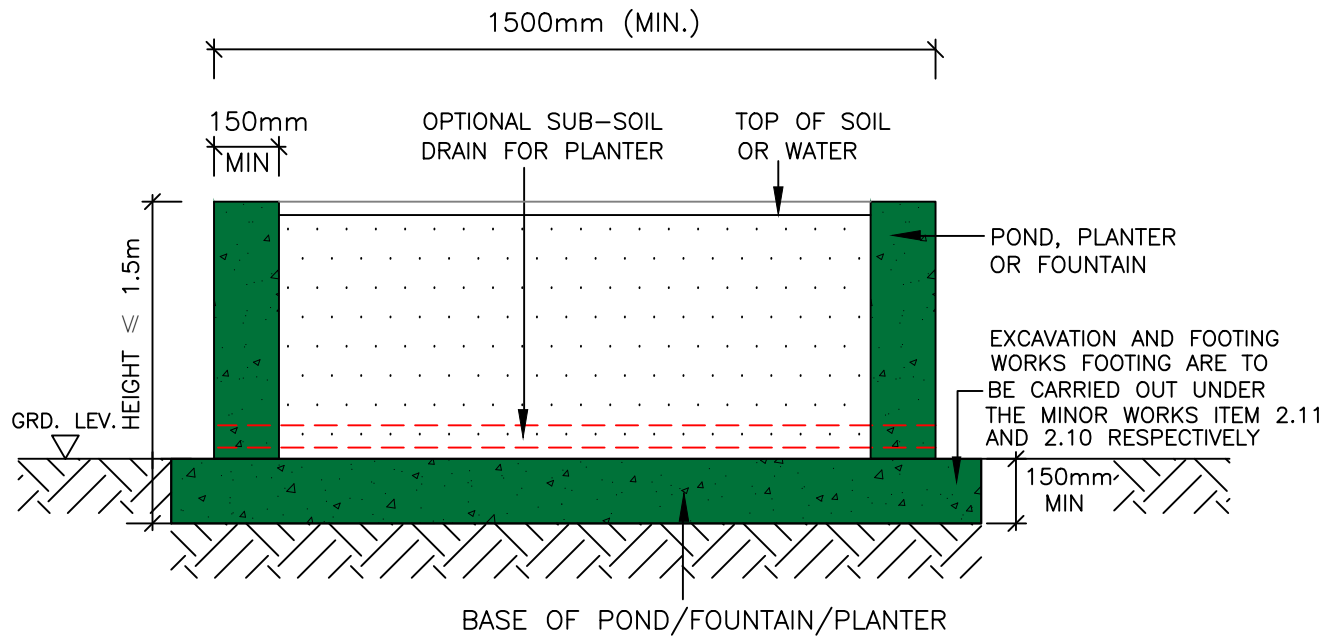
B. Alteration/Repair

1. Remove the soil or water from the planter, pond or fountain.
2. Saw cut and hack off finishes/concrete at the repair/altered area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
3. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions.
4. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
5. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
6. For alteration, construct the new portion by following the above procedures of erection.
7. Make good (including any waterproofing) and reinstate the affected areas.
8. Remove the bamboo scaffold and clean the site.

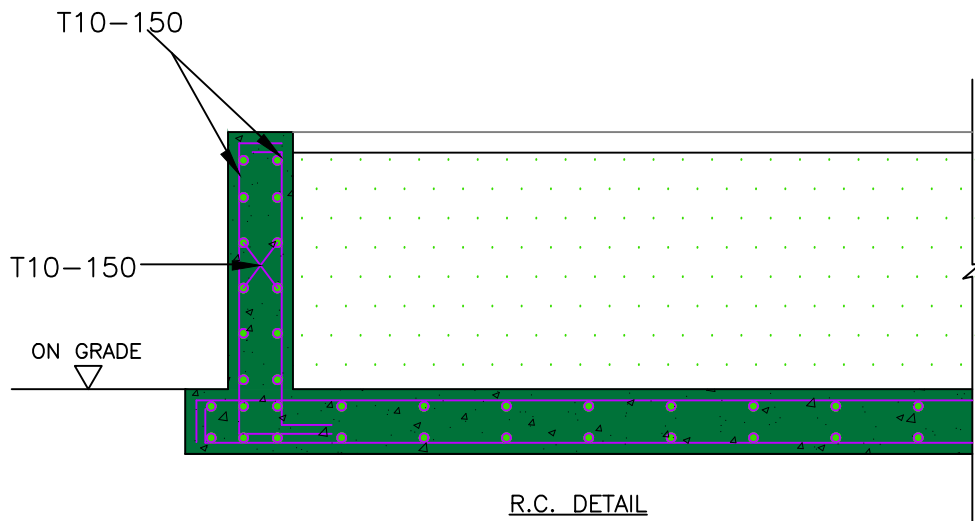
C. Removal

1. Remove the soil or water planter from the planter , pond or fountain.
2. Demolish the planter, pond or fountain from top by breaking/cutting it into smaller size for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
4. Make good and reinstate the affected areas.
5. Dismantle the temporary protection and clean the site.

REMARK: This case excludes DEW item 24.



SECTION OF PLANTER, POND OR FOUNTAIN



NOTE :

- FOR NEW R.C. STRUCTURE
1. CONCRETE GRADE TO GRADE C35.
 2. CONCRETE COVER TO BE 40mm.
 3. REINFORCEMENT "T" DENOTES HIGH TENSILE STEEL BAR WITH YIELD STRESS 500 MPa (GRADE 500B)

GENERAL NOTES:

1. The works carried out shall comply with the buildings ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice for Foundations 2017
 - BS EN 40-3-1:2013 With Modifications on Topography Factor, Mean Return Period and Reference Wind Pressure
3. Minimum concrete grade for existing structures is 30 D/20.
4. ALL steel components and fixings to be hot dip galvanized to BS EN ISO 146:2009 with min. thickness 85 μ m.
5. Structural steel used for new structure to be grade S275 JO/JOH complying with BS EN 10210 for hollow sections and BS EN 10029 for plates.
6. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 PART 1:2001.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. Minimum concrete grade to be grade C30 with 75mm concrete cover.
12. All reinforcement to be grade 500.
13. All anchor bolts to be stainless steel bolt :
 - (a) Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - (b) All anchor bolts are to be installed in strict compliance with manufacturer's specification and recommendations;
 - (c) All base plates and end plates are to be installed after the finishes of the affected area removed.
 - (d) The gap between the base plate / end plate and structural concrete shall be cementitious grouted with strength not less than 30MPa.
14. Interface of two different metal (e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. The pole shall not affect the MOE ,MOA or EVA.
3. The pole shall not affect the drainage.

DESIGN PARAMETERS:

1. DESIGN LOADS:
 - a. Design dead load = Weight of pole = 150 Kg
 - b. Design wind load :

Based on CoP on wind effects in Hong Kong 2019:

- (i) Design wind pressure = 1.77 kPa (Effective height = 5m)
- (ii) Total pressure coefficient, C_p for individual members of open framework = 2
Assume topography factor, $S_t=1.0$; Wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$

Based on BS EN 40-3-1:2013 with modifications on topography factor f , mean return period and reference wind pressure $q(10)$:

- (i) Design wind pressure = 2.72 kPa where reference wind pressure $q(10) = 1.095\text{kPa}$ and Terrain category I is taken
 - (ii) Shape coefficient, $C = 0.75$.
2. The maximum height of pole is to be 5m from ground level.
 3. The weight of the pole (Exclude pedestal if any) is not more than 150 Kg.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the additional installation of these minor works must be checked to satisfy all structural requirements prior to the carrying out of the minor works.

WORKING PROCEDURES :

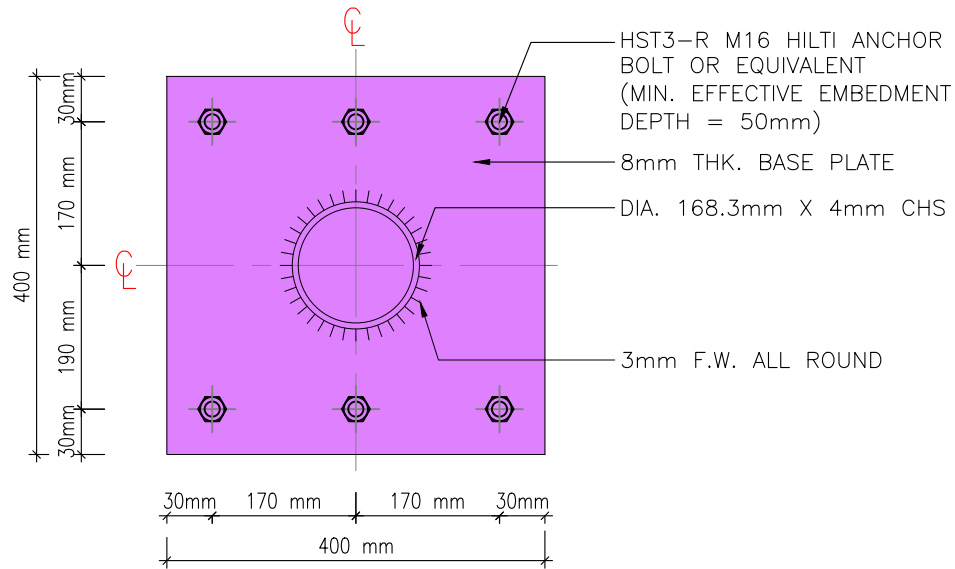
A. ERECTION

1. Excavate to the founding level of the footing of the pole (Under MW 2.11).
2. Construct footing (Under MW 2.10).
3. Erect the pole as per the drawing.
4. Make good and reinstate the affected area of the parent building and clean the site.

B. ALTERATION

1. Break down the external pole into small pieces for disposal.
2. Alter the external pole in accordance with the new design.
3. make good and reinstate the affected area of the parent building and clean the site.

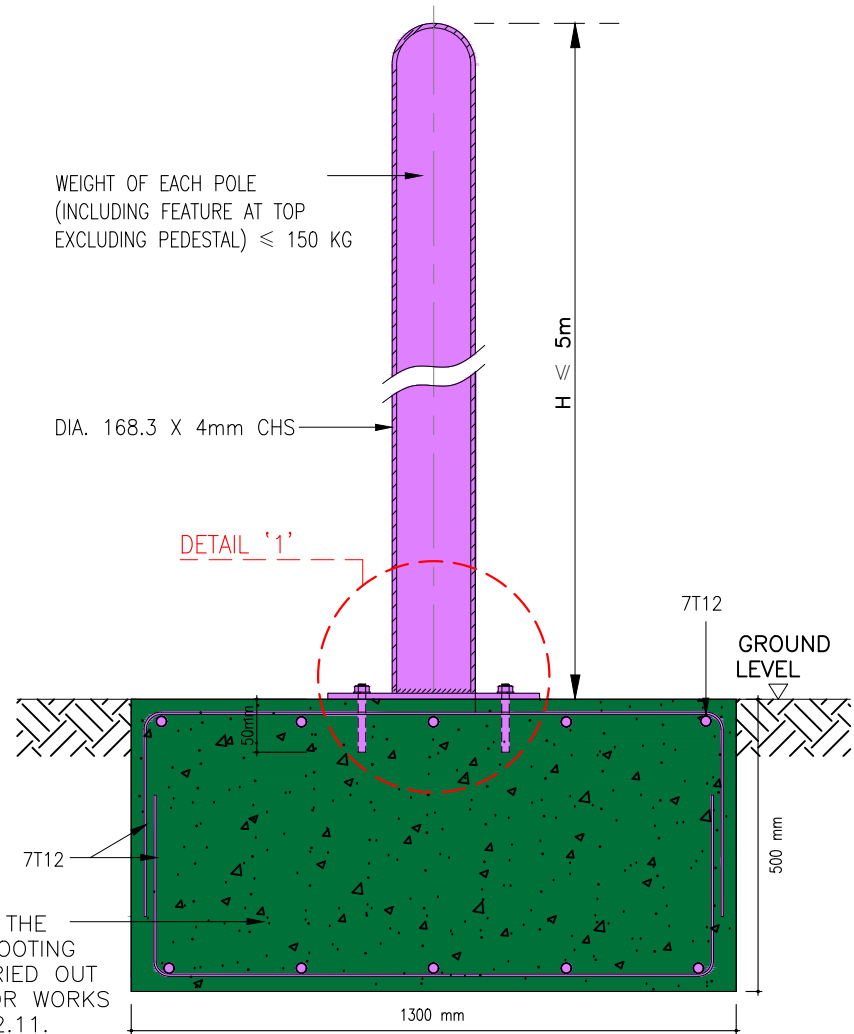
NOTE : This case excludes DEW item 17



DETAIL '1'

WEIGHT OF EACH POLE (INCLUDING FEATURE AT TOP EXCLUDING PEDESTAL) ≤ 150 KG

DIA. 168.3 X 4mm CHS



EXCAVATION AND THE FORMATION OF FOOTING ARE TO BE CARRIED OUT UNDER THE MINOR WORKS ITEM 2.10 AND 2.11.

SECTION OF POLE

GENERAL NOTES:

1. The work carried out shall comply with the Building Ordinance and Provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/Standards
 - Building (Construction) Regulations.
 - Code of Practice For Structural Use of Steel 2011.
 - Code of Practice On Wind Effects In Hong Kong 2019.
 - BS EN 40-3-1:2013 with modifications on topography factor, mean return period and reference wind pressure.
3. Minimum concrete grade for existing structures is 25D/20.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with MIN. thickness 85 μm .
5. Structural steel used for new structure to be grade S275 J0/J0H complying with BS EN 10210-1 for hollow sections and BS EN 10029 for plates.
6. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2005.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:1992.
8. Welding to be tested in accordance with BS EN ISO 9934 PART 1:2001.
9. All structural steel shall be cleaned and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied to the manufacturer's specification.
11. All anchor bolts to be stainless steel bolt :
 - (a) Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C member is to be surveyed by means of a covermeter to ensure no clash occurs
 - (b) All anchor bolts are to be installed in strict compliance with manufacturer's specification and recommendation.
 - (c) All base plates and end plates are to be installed after finishes of the affected area removed.
 - (d) The gap between the base plate/ end plate and structural concrete shall be cementitious grouted with strength not less than 30MPa.
12. All dimension shall be millimeter unless otherwise specified .
13. Interface of two metal (E.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. The pole shall not affect the MOE and MOA of roof.
3. The pole shall not affect the drainage system of roof.

DESIGN PARAMETERS:

1. Design loads:
 - a. Design dead load = Weight of pole = 100 Kg
 - b. Design wind load :

Based on CoP on Wind Effect in Hong Kong 2019:

- (i) Design wind pressure = 2.87 kPa (Height above site ground level $\leq 100+2.5\text{m}$)
- (ii) Total pressure coefficient , C_p for individual members of open framework = 2
Assume topography factor , $S_t=1.0$; Wind directionality factor , $S_\theta=0.85$; Size factor, $S_s=1.0$.

Based on BS EN 40-3-1:2013 with modifications on topography factor, mean return period and reference wind pressure $q(10)$:

- (i) Design wind pressure = 5.46 kPa where reference wind pressure $q(10) = 1.095$ kPa and terrain category I is taken
 - (ii) Shape coefficient , $C = 0.52$.
2. The maximum height of pole is to be 2.5m from roof level.
 3. Minimum thickness of existing roof slab supporting the pole should be 150mm thick.
 4. No part of the pole shall project beyond the external wall.
 5. No part of the pole shall exceed the highest point of the building.

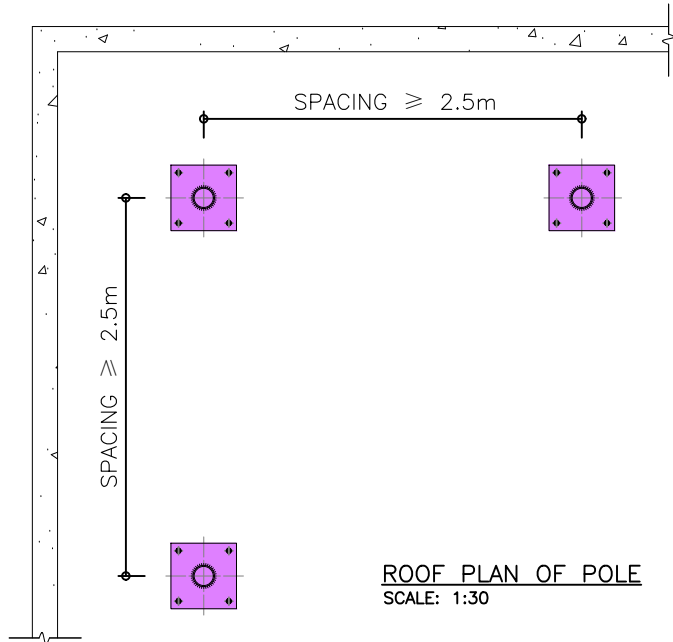
PREPARATION WORKS :

1. Carry out condition survey of the parent structure / existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structural adequacy of the supporting parent structure due to the additional installation of these minor works must be checked to satisfy all structural requirements prior to carrying out of the minor works.

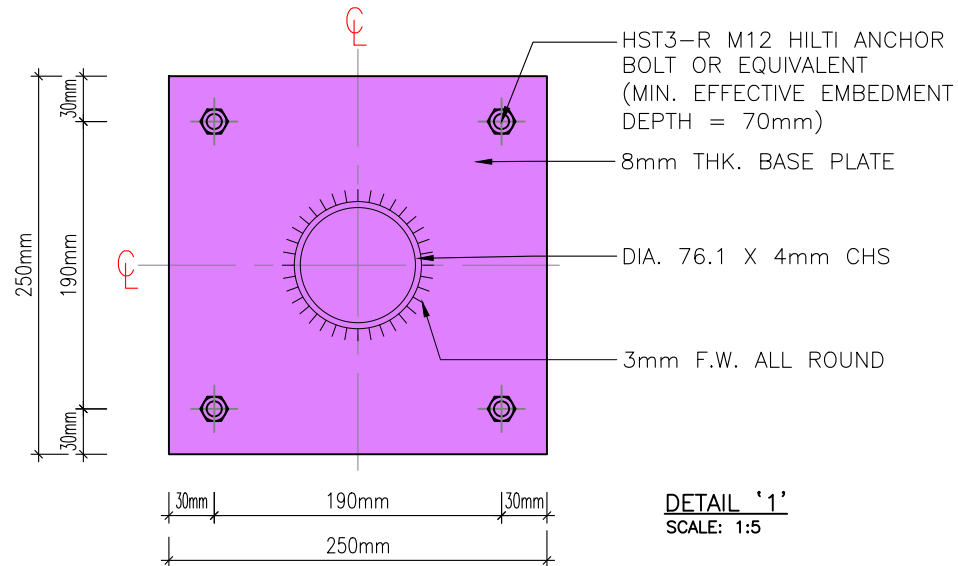
WORKING PROCEDURES :

1. Erect the structure as per the drawing.
2. Make good and reinstate the affected area of the parent building and clean the site.
3. Make good the water proofing of the roof.

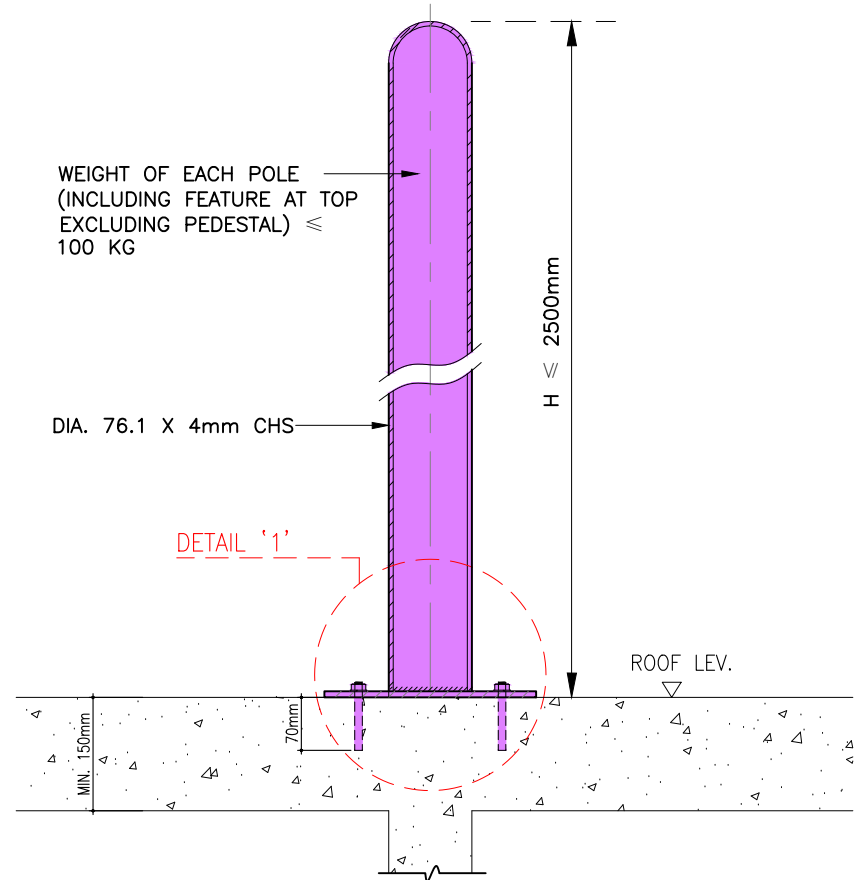
Note : This case excludes MW item 3.54 or DEW item 19



ROOF PLAN OF POLE
SCALE: 1:30



DETAIL '1'
SCALE: 1:5



SECTION OF POLE
SCALE: 1:10

300mm long R10 DOWEL
BAR @ 300 C/C FIXED
BY 5mm FILLET WELD
ALL ROUND

89 x 89 x 19 kg/m
JOIST FIXED BY 5mm
FILLET WELD ALL ROUND

100mm THK. YTONG
WALL OR EQUIVALENT
DENSITY $\leq 650 \text{ kg/m}^3$

89 X 89 X 19 kg/m
JOIST FIXED BY 5mm
FILLET WELD ALL ROUND

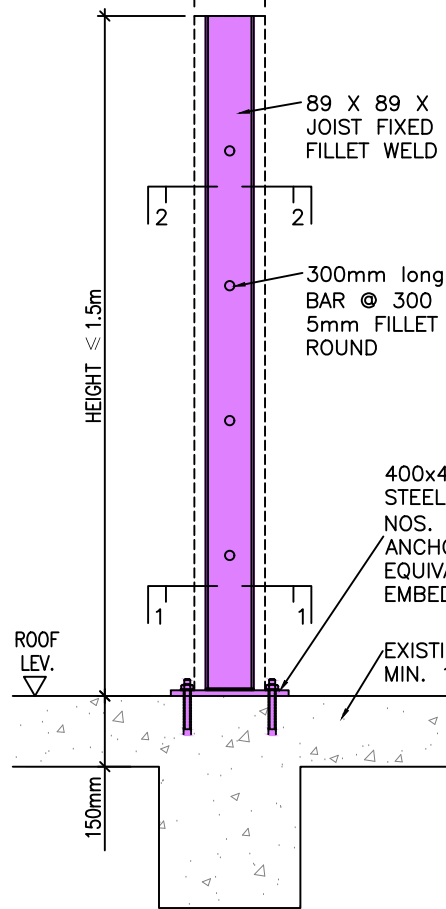
300mm long R10 DOWEL
BAR @ 300 C/C FIXED BY
5mm FILLET WELD ALL
ROUND

400x440x15mm THK. MILD
STEEL PLATE FIXED BY 6
NOS. "HILTI" HST3-R M16
ANCHOR BOLTS OR
EQUIVALENT MIN. EFF.
EMBEDMENT DEPTH=65mm

EXISTING ROOF SLAB OF
MIN. 150mm THK.

FILLED UP WITH
MORTAR
MAX. 100mm
THK. Y-TONG
BLOCK OR
EQUIVALENT

SECTION 2 - 2



TYPICAL SECTION

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Section 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP / standards:
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - BS 5628: Part 1: 2005 Code of Practice for the Use of Masonry. Structural Use of Unreinforced Masonry
 - Specifications and Method Statements for YTONG AAC Block Wall or equivalent.
- All structural steel to be grade S275 JO to BS EN 10029 for plates and BS EN 10025 for other sections and shall be min. 85 um thick hot dip galvanized to BS EN ISO 1461.
- All connections to be 4mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HST3-R M16 or equivalent and shall be installed according to the manufacturer's specification.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm^2 and the density of not more than 650 kg/3m^3 .
- Mortar designation shall be Class (ii) to Table 1 of BS 5628-1 with the mean compressive strength at 28 days of 4.5 N/mm^2 by site tests.
- Existing concrete grade is assumed to be Grade 30 with 75 mm concrete cover.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Wind Load = 2.87 kN/m^2 with pressure coeff. 3.4 (Zone A) and 2.1 (other than Zone A) (effective height = $100+1.5\text{m}$)
Assume topography factor, $St=1.0$; wind directionality factor, $S_\theta=0.85$; Size factor, $S_s=1.0$.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

PREPARATION WORKS :

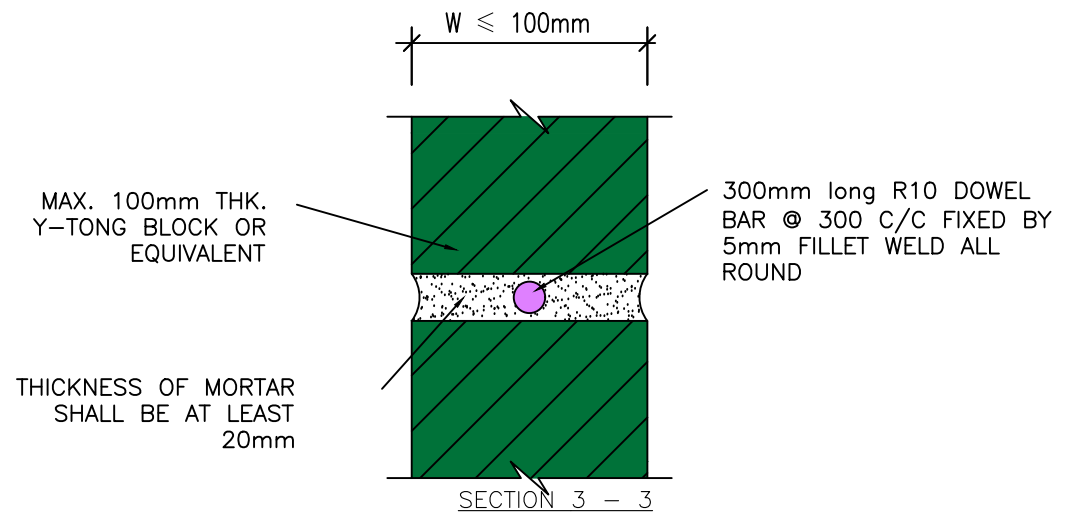
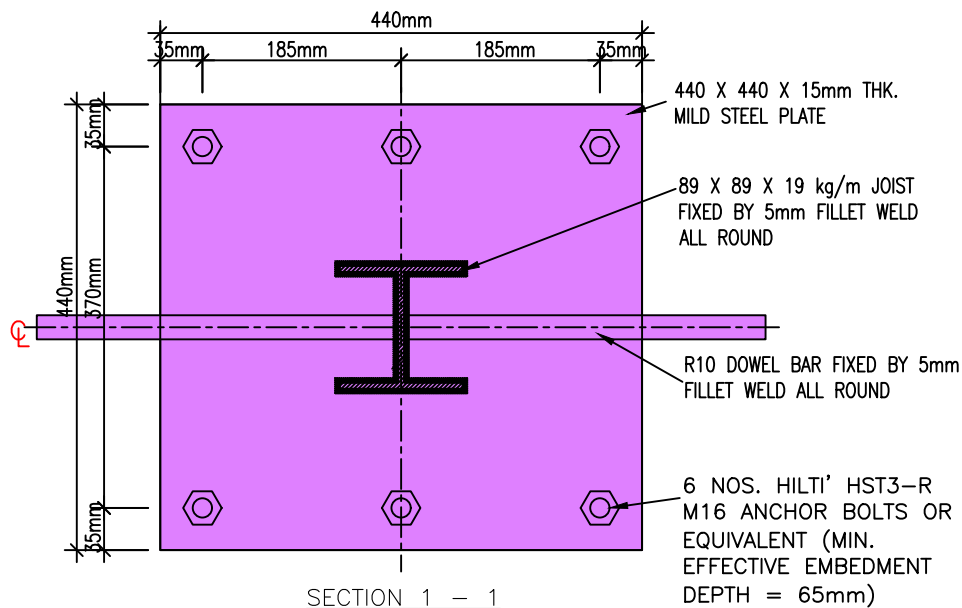
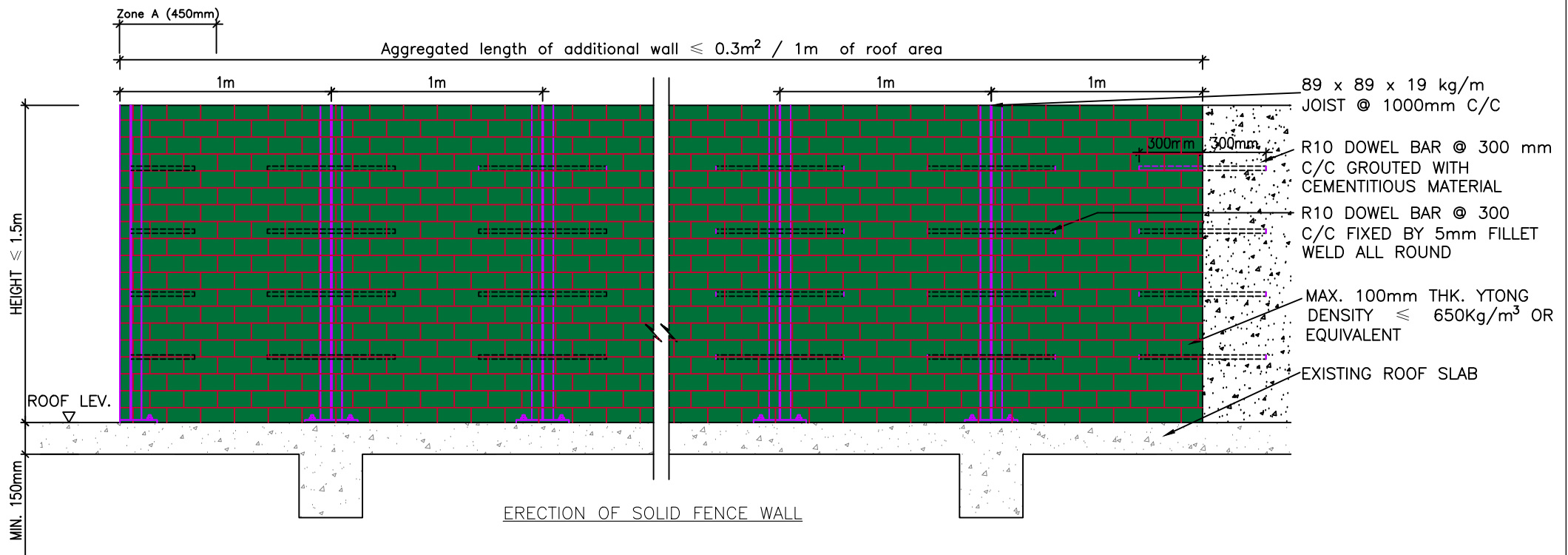
- Obtain the existing design drawings/ information for reference.
- Carry out condition survey of the parent structure/ existing condition prior to commencement of works.
- The structural adequacy of the supporting parent structure due to the addition of the wall(s) must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.

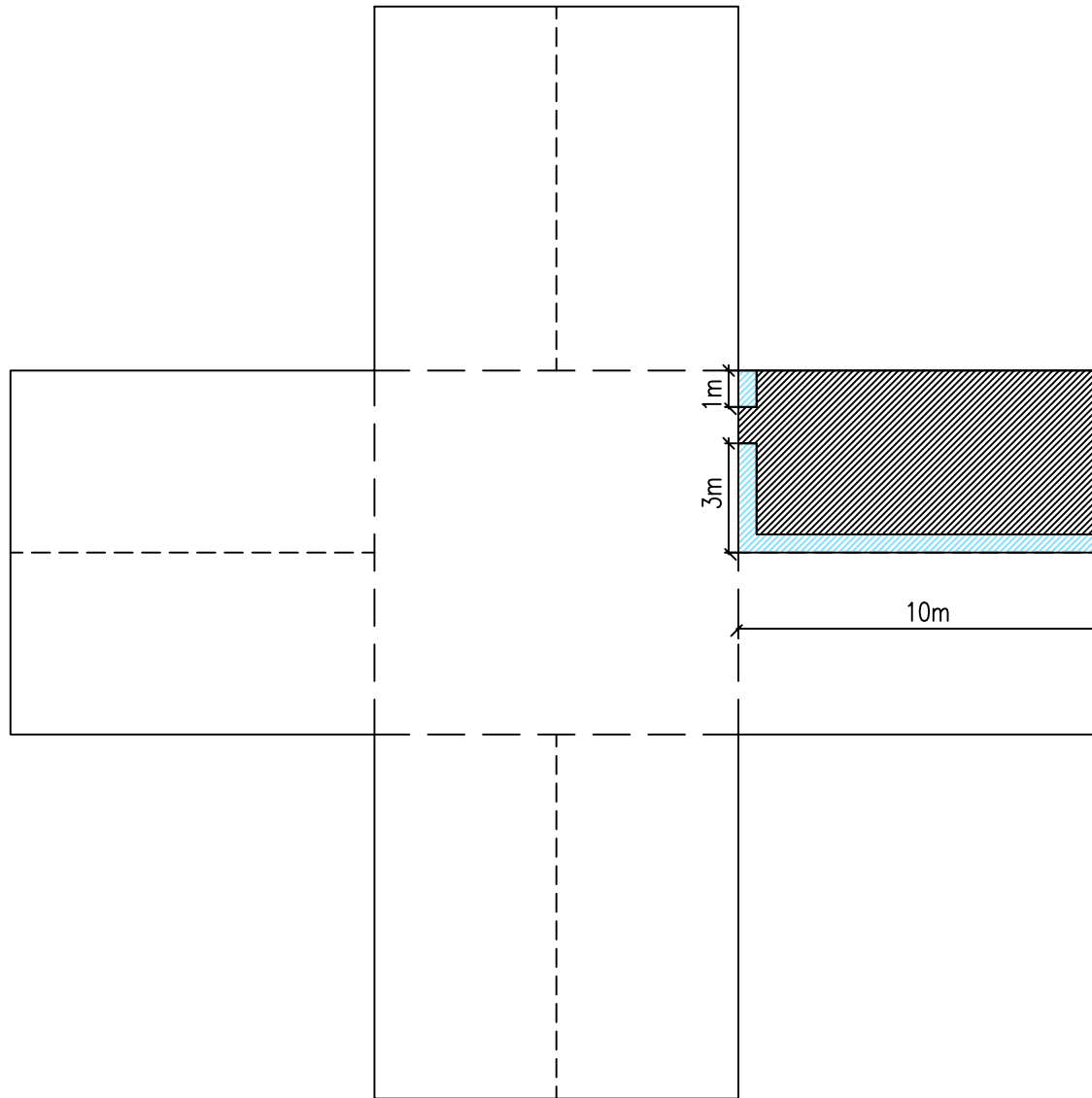
WORKING PROCEDURES :

- Erection
 - Drill hole to existing structure.
 - Install dowel bar as per the drawing.
 - Erect the block wall.
 - Make good and reinstate the affected areas (including water-proofing) of the parent building and clean the site.
- Alteration
 - Break down the part of wall to be altered into small pieces from top to bottom for construction waste disposal.
 - Replace the existing joist/dowel bar or add new joist/dowel bar.
 - Alter the block wall in accordance with the new design.
 - Make good and reinstate the affected areas (including water-proofing) of the parent building and clean the site.

REMARKS :

- This case excludes MW item 3.55 and DEW item 20.
- The wall shall not project beyond the external wall.
- The wall shall not exceed the highest point of the building.
- The wall shall not attach to the external wall or protective barrier of the building.
- No part of the wall shall be covered by retractable awning or is within a horizontal clearance of 500mm from any retractable awning when the awning is fully extended.
- The aggregated length of the additional wall per m^2 of roof area $\leq 0.3\text{m}$.
- The works shall not affect the MOE, MOA and obstruct drainage of the roof.





ROOF PLAN

LEGEND



SOLID FENCE WALL TO BE ERECTED
UNDER MINOR WORKS ITEM 2.55



UNIT AREA UNDER THE ROOF = 50m²

e.g. AGGREGATE LENGTH OF ADDITIONAL WALL PER
m² OF THE ROOF AREA

$$= \frac{1m + 3m + 10m}{50m^2}$$

$$= 0.28m < 0.3m$$

NOTE:

1. Aggregate length for any additional wall means the difference between the total length of the non-load bearing walls on the roof as shown on the approved plan and that as measured after the minor works item is carried out.
2. The wall finishes are not counted in the wall thickness

GENERAL NOTES:

1. The works carried out shall comply with the Buildings Ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following COP/standards
 - Building (Construction) regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
 - Code of Practice for Fire Safety in Buildings 2011.
3. Minimum concrete grade for existing structures is 25D/20.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 146:2009 with min. thickness 85 μm .
5. Structural steel used for new structure to be grade S275 J0/J0H complying with BS EN 10210-1 for hollow sections and BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2005.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:1992.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2016.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing r.c. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts are to be installed in strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates are to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and structural concrete shall be cementitious grouted with strength not less than 30 MPa.
11. All site welds shall be polished to bare metal and treated with two coats of zinc rich primer before application of 2 coats of zinc chromate paint according to manufacturer's specification.
12. All block wall shall comply with BS6073-1 with minimum compressive strength of 4N/mm² and density of not more than 650 Kg/m³.
13. Interface of two different metal(e.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. Do not store building material on the roof.
3. The fence or railing shall not affect the MOE and MOA of roof.
4. The fence or railing shall not affect the drainage system of roof.
5. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

DESIGN PARAMETERS:

1. Wind load design for mesh fence/ metal railing is in accordance with Code of Practice on Wind Effects in Hong Kong 2019.
2. Design wind loads shall be 2.87 KPa (Effective height = 102.5m) with pressure coefficient CP of 2.0 for individual members of open framework building.
Assume topography factor, $St=1.0$; Wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$
3. The maximum height of mesh fence, railing and pole is to be 2.5m from roof level.
4. Minimum thickness of existing roof slab supporting the fence or railing should be at least 150mm thick.
5. The lowest part of it may be solid fence wall construction with a thickness not more than 100mm, a density of not more than 650 kg per m³ and a height of not more than 1.1m.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the addition the mesh fence or metal railing must be checked to satisfy all structural requirements prior to the carrying out of the minor works.

WORKING PROCEDURES :**A Erection**

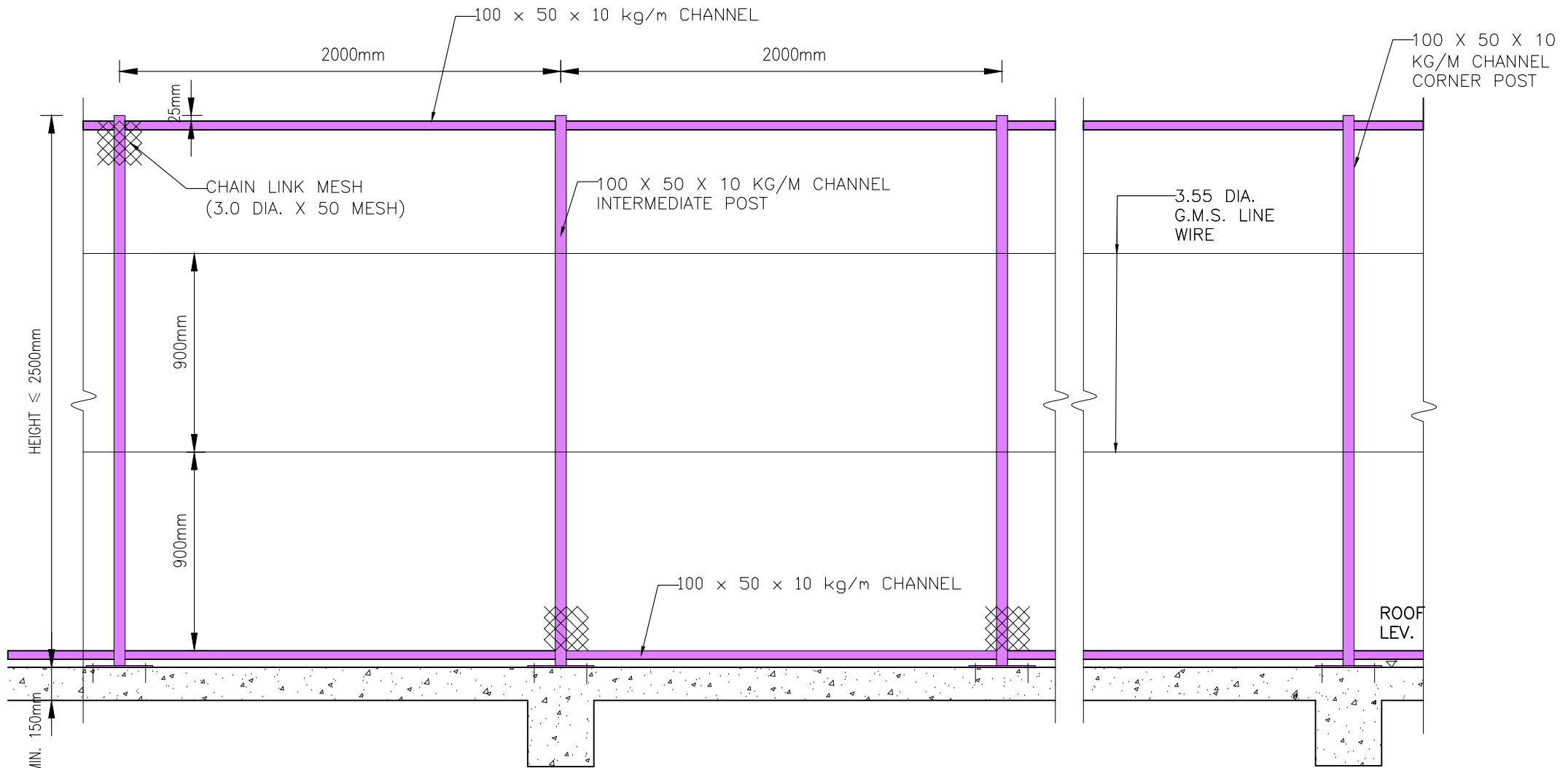
1. Erect the structure as per the drawing.
2. Make good and reinstate the affected area of the parent building and clean the site.
3. Make good the water proofing of the roof.

B Alteration

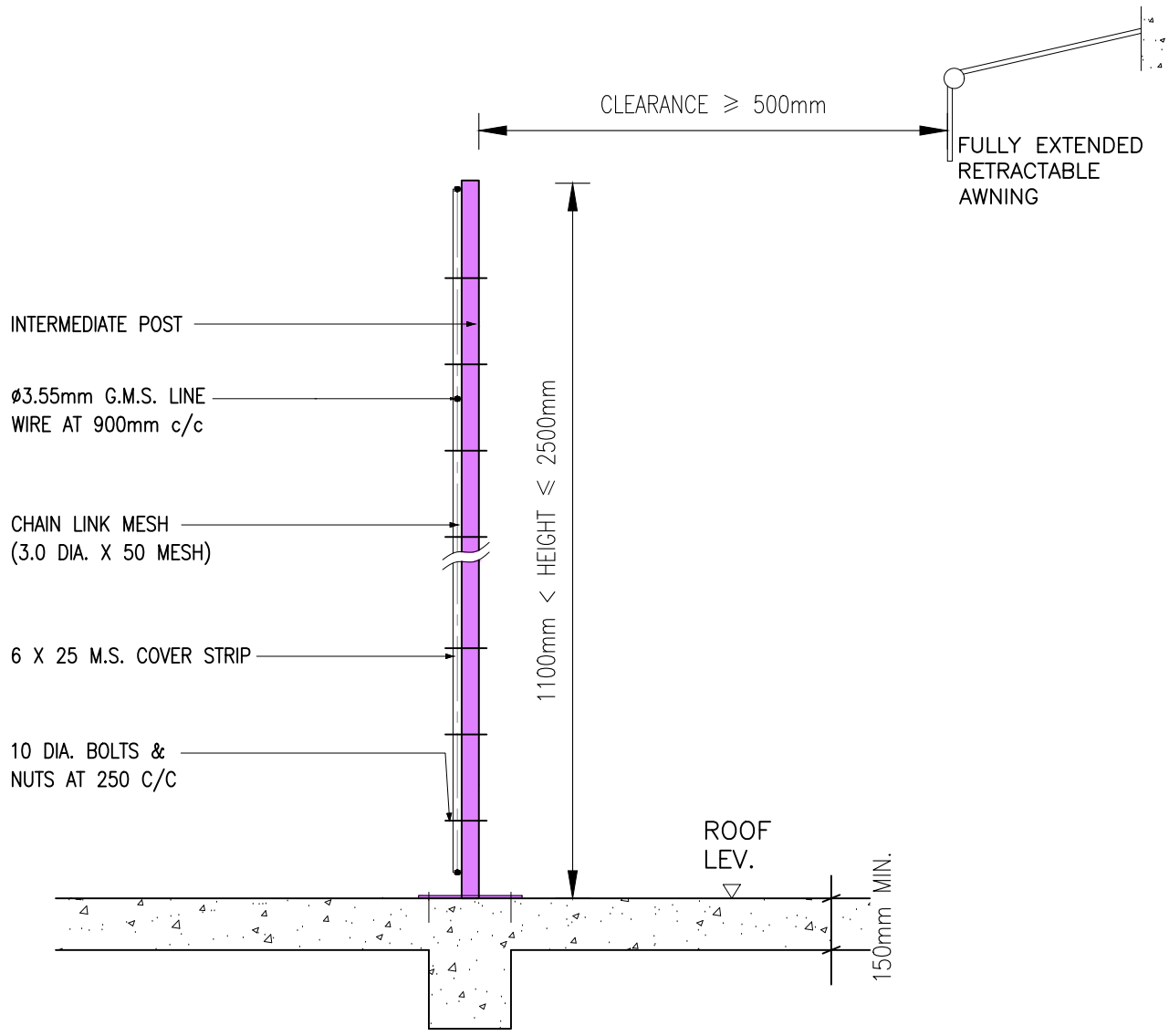
1. Remove the member required to be altered without affecting the remaining structure and install new/altered members.
2. Make good and reinstate the affected area of the parent building and clean the site.
3. Make good the water proofing of the roof.

REMARK :

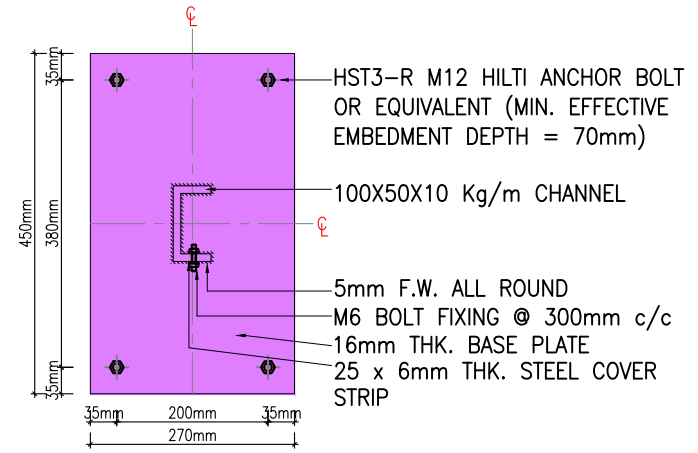
1. This case excludes MW item 3.56 and DEW item 18.
2. The works shall not affect MOE, MOA and obstruct drainage on roof.
3. The aggregate length of additional wall per m of roof area $\leq 0.3\text{m}$.



ELEVATION OF MESH FENCE ON ROOF
SCALE: 1:20



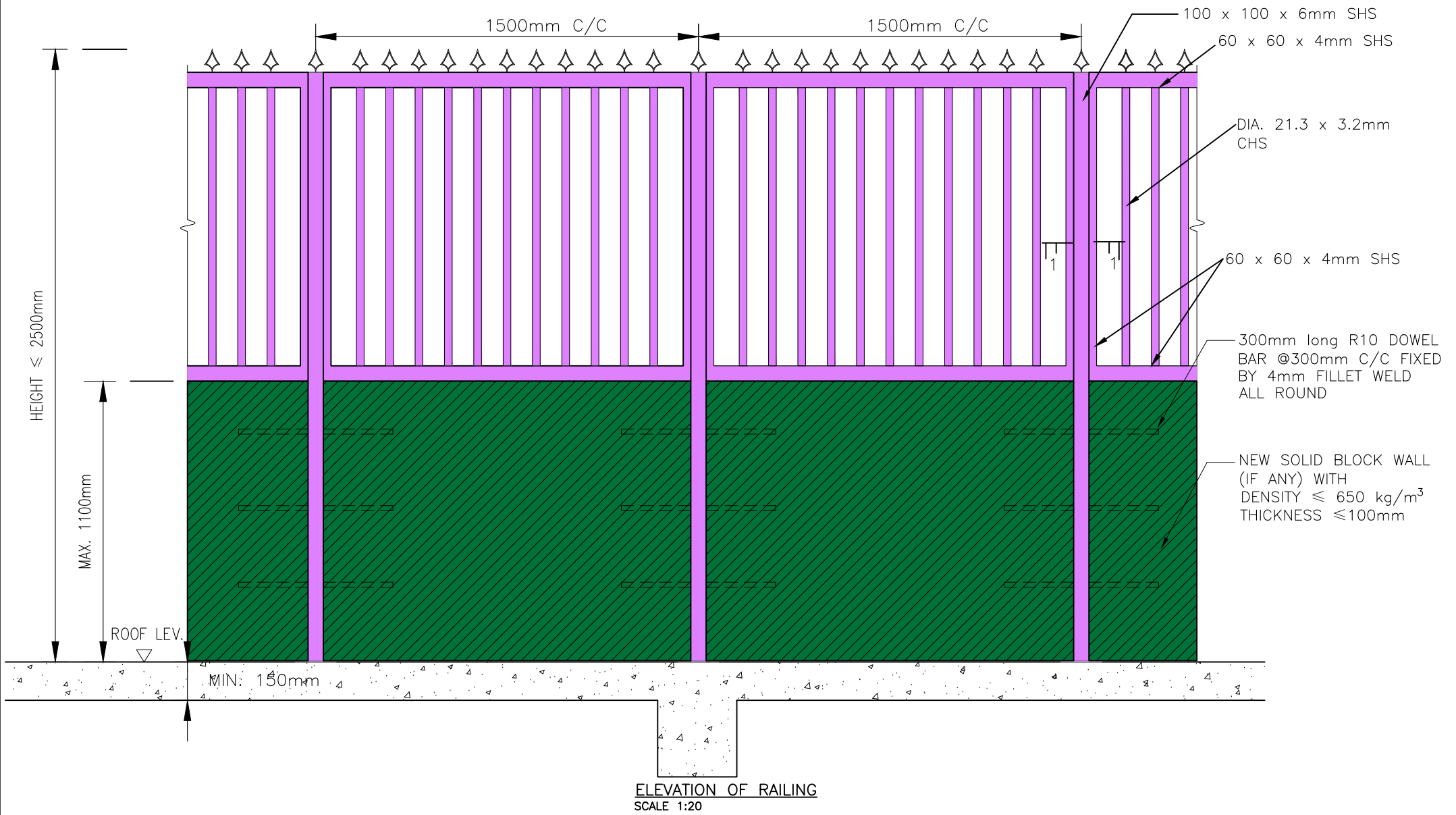
- INTERMEDIATE POST
- $\phi 3.55\text{mm}$ G.M.S. LINE WIRE AT 900mm c/c
- CHAIN LINK MESH (3.0 DIA. X 50 MESH)
- 6 X 25 M.S. COVER STRIP
- 10 DIA. BOLTS & NUTS AT 250 C/C

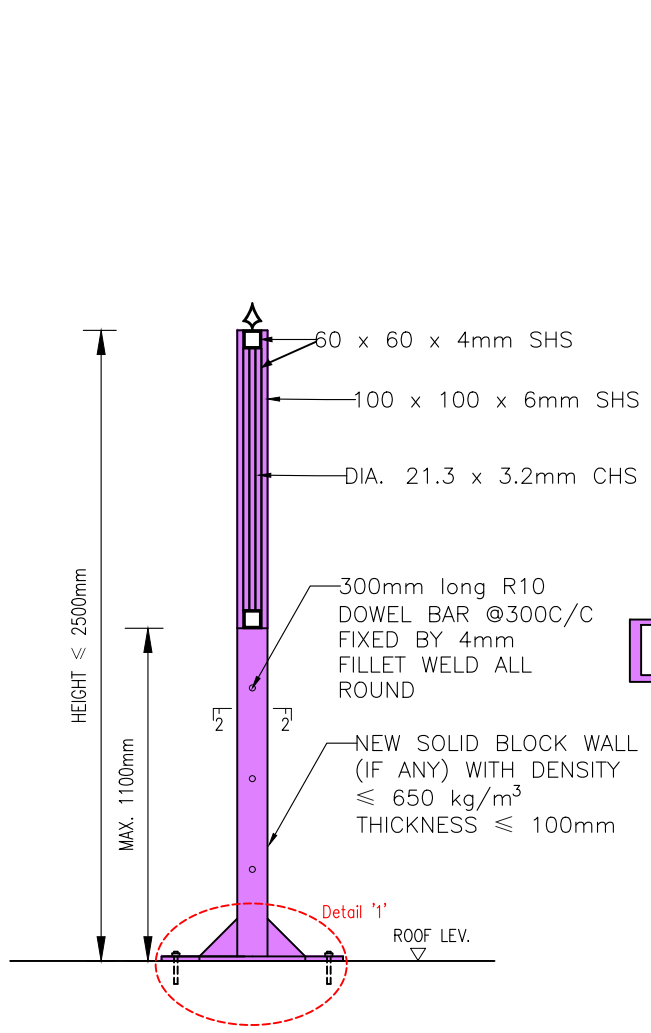


DETAIL OF BASE PLATE
SCALE: 1:10

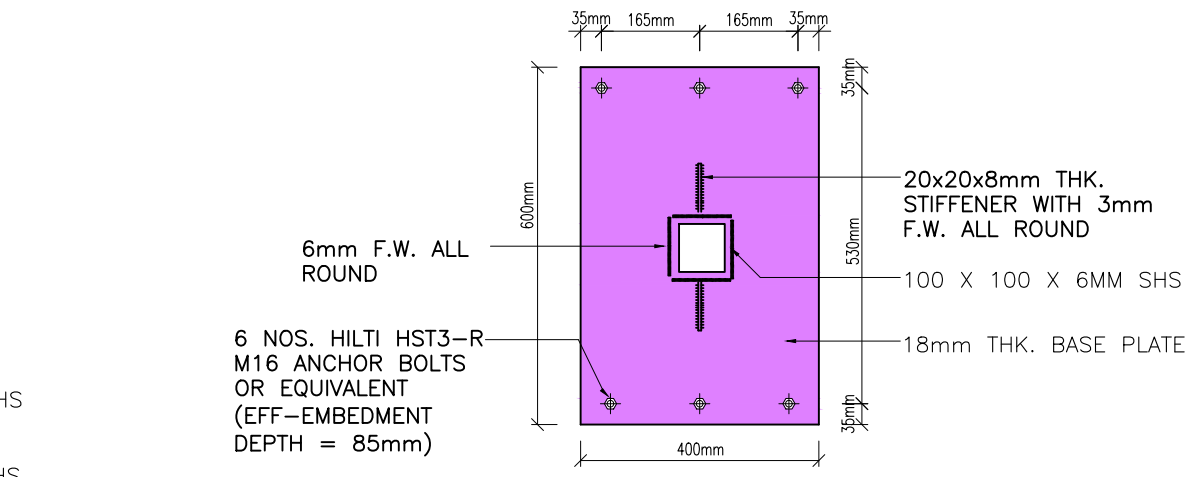
SIDE ELEVATION OF MESH FENCE ON ROOF
SCALE: 1:20

NOTE : AGGREGATE LENGTH OF WALL < 0.3m PER m² OF ROOF AREA

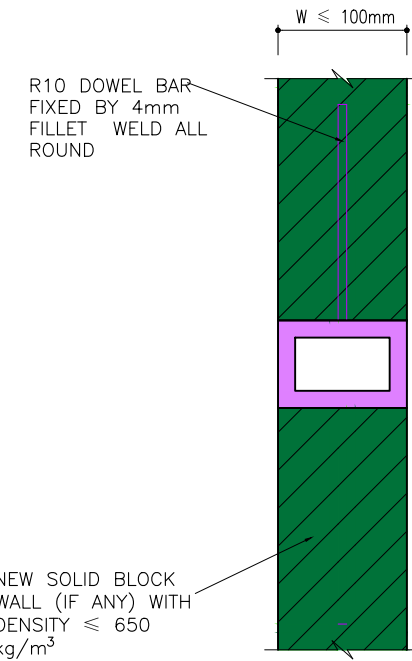
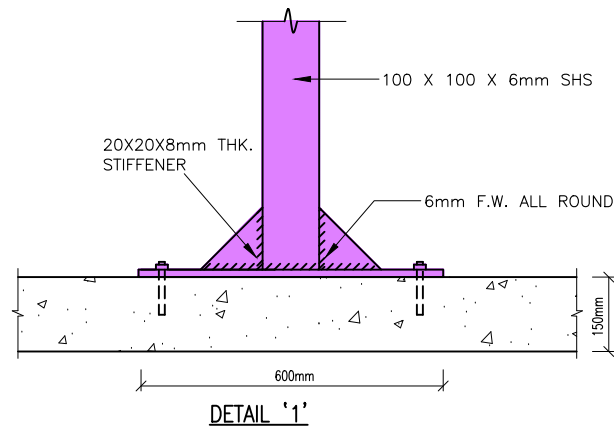
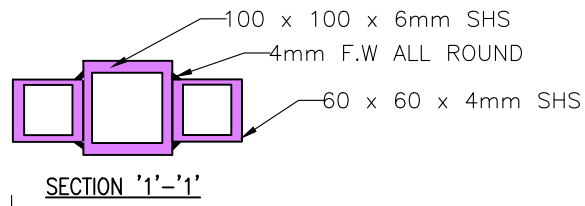




TYPICAL SECTION
SCALE: 1:25



DETAIL OF BASE PLATE



SECTION '2'-'2'

GENERAL NOTES:

1. The work carried out shall comply with the Building Ordinance and Provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/Standards
 - Building (Construction) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
3. Minimum concrete grade for existing structures is 25D/20.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with MIN. thickness 85 μm .
5. Structural steel used for new structure to be grade S275 J0 complying with BS EN 10210 for hollow sections and BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa. Electrodes shall comply and BS EN ISO 2560:2005.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:1992.
8. Welding to be tested in accordance with BS EN ISO 9934 PART 1:2016.
9. All structural steel shall be cleaned and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied to the manufacturer's specification.
11. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts are to be installed in strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates are to be installed after finishes of the affected area removed;
 - d. The gap between the base plate/ end plate and structural concrete shall be cementitious grouted with strength not less than 30MPa.
12. All site welds shall be polished to bare metal and treated with two coats of zinc rich primer before application of two coats of zinc chromate paint according to manufacturer's specification.
13. All dimension shall be millimeter unless otherwise specified .
14. Interface of two different metal (E.g. steel and stainless steel, steel and aluminum) shall be isolated by PVC sheet or bituminous paint.

DESIGN PARAMETERS:

1. Wind load design for mesh fence/ metal railing or pole shall be in accordance with the Code of Practice on Wind Effect In Hong Kong 2019.
2. Design wind loads shall be 1.77 kPa (effective height = 5m) with pressure coefficient C_p of 1.9 (for mesh fence with solidity ratio =0.12) or 1.8 (for railing with solidity ratio=0.1) or 2.0 (for pole) for individual members of open framework building. Assume topography factor, $S_t=1.0$; wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$
3. The aggregate height of the wall and the fence, railing or pole, including any feature at its top is not more than 5m.
4. Minimum thickness of existing external fence wall supporting the fence, railing or pole should be at least 150mm thick and constructed by reinforced concrete.
5. If the wall (including the addition of fence, railing & pole) > 1.1m in height, no part of it shall be covered by any retractable awning, or is within a horizontal clearance of 500mm from any retractable awning when the awning is fully extended.
6. The fence or railing is not used as protective barrier.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure / existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structural adequacy of the supporting parent structure due to the additional installation of the mesh fence, metal railing or pole must be checked to satisfy all structural requirement prior to the carrying out of the minor works.

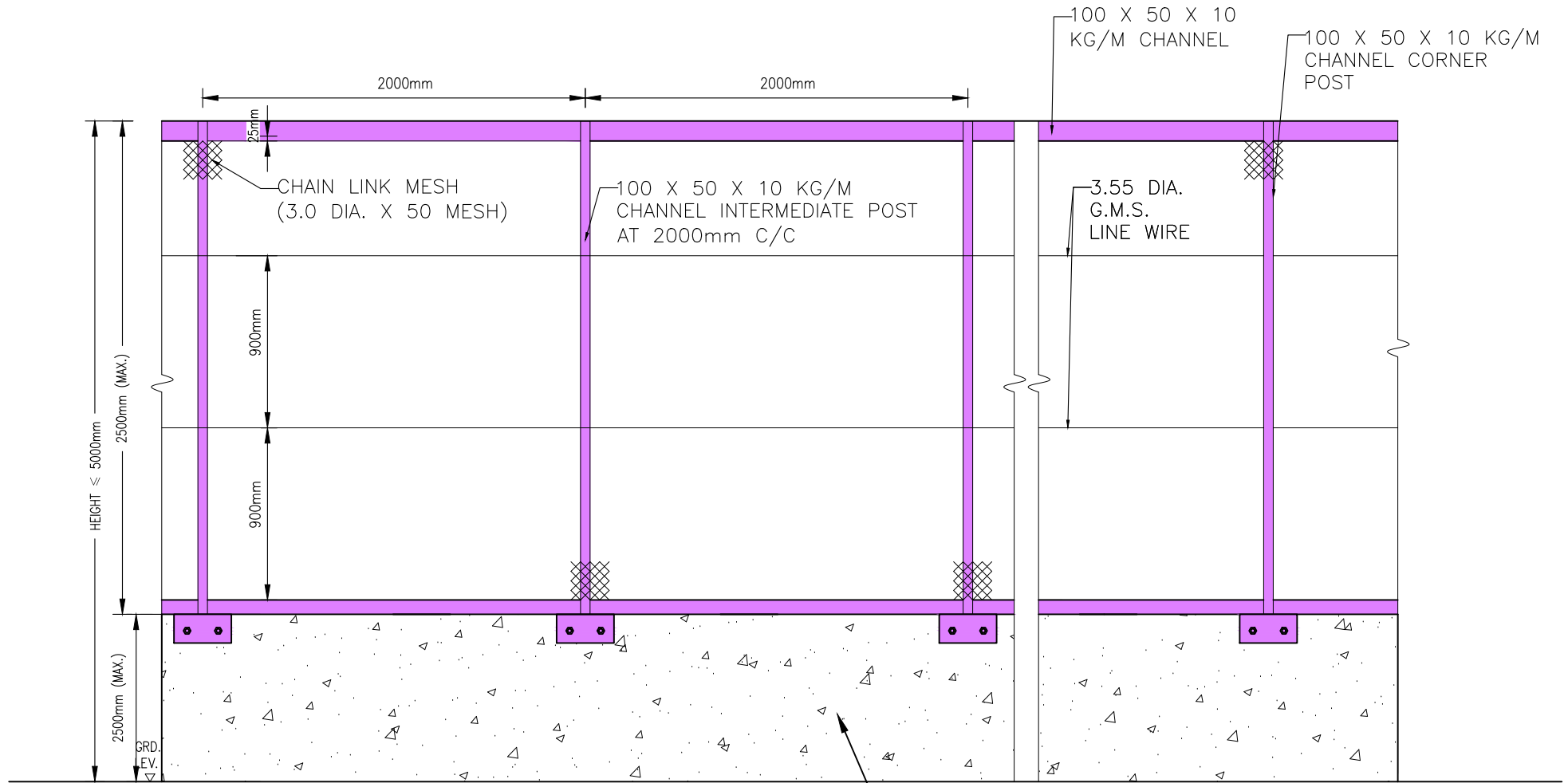
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing NO. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double -row bamboo scaffold

WORKING PROCEDURES :

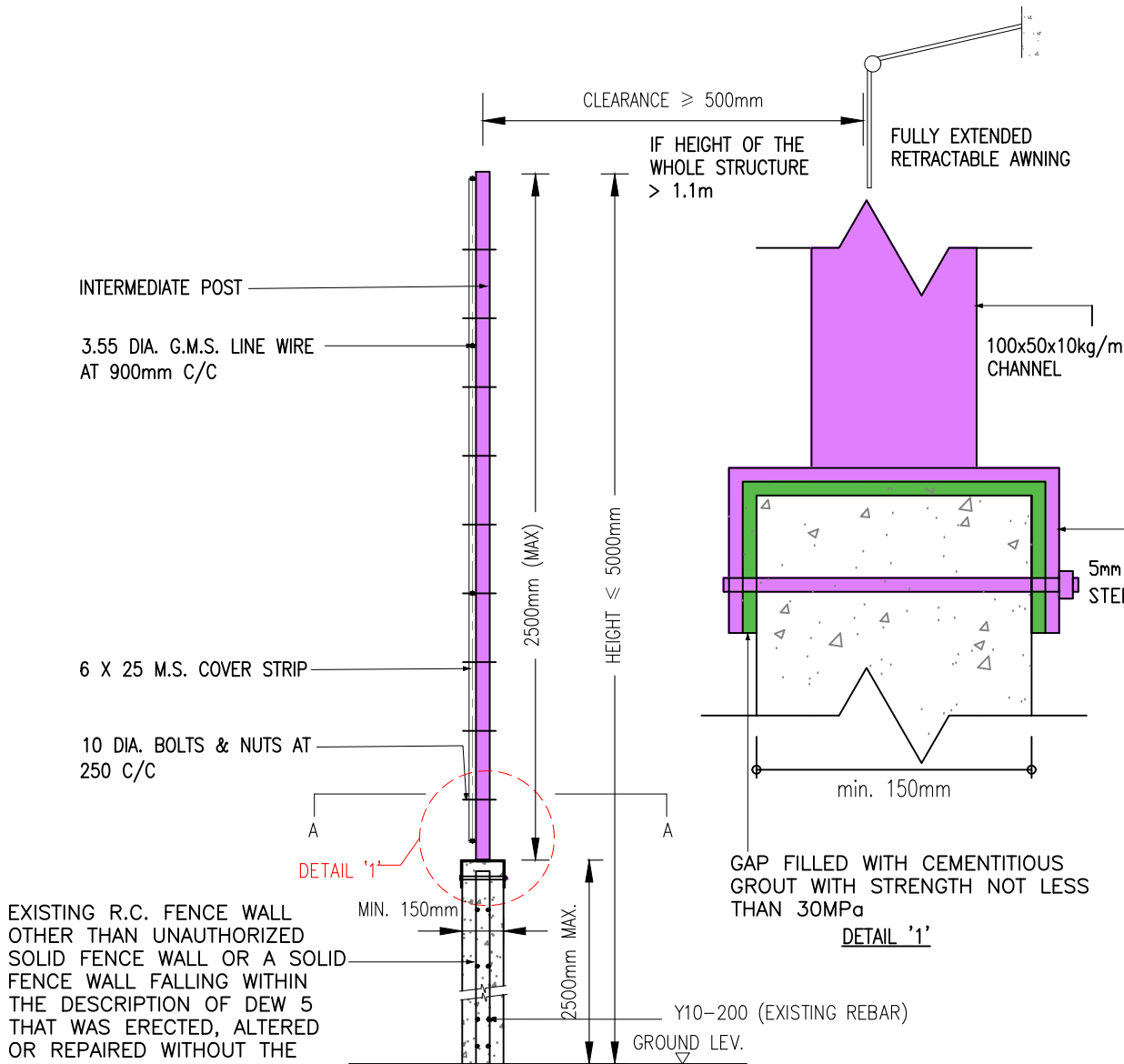
1. Erect the mesh fence, metal railing or pole as per the drawing.
2. Make good and reinstate the affected area of the parent building and clean the site.

REMARKS: This case excludes DEW item 21



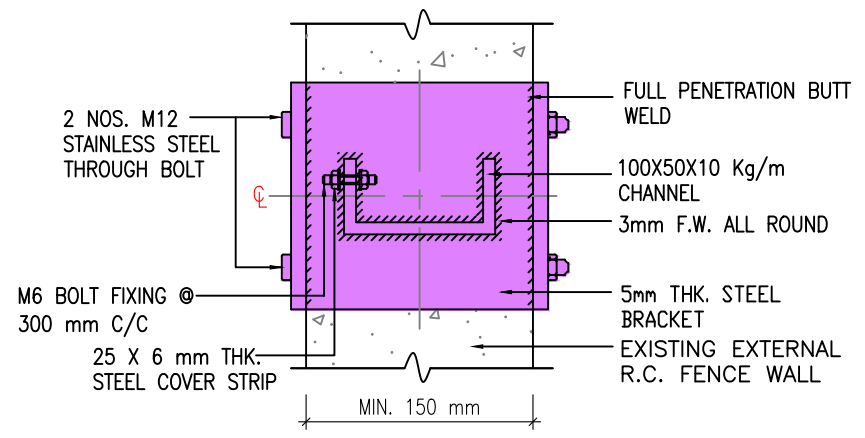
EXISTING R.C. FENCE WALL OTHER THAN UNAUTHORIZED SOLID FENCE WALL OR A SOLID FENCE WALL FALLING WITHIN THE DESCRIPTION OF DEW 5 THAT WAS ERECTED, ALTERED OR REPAIRED WITHOUT THE APPROVAL AND CONSENT OF THE BUILDING AUTHORITY UNDER SECTION 14(1) OF THE ORDINANCE

ELEVATION OF MESH FENCE ON EXISTING SOLID FENCE WALL
SCALE: 1:20

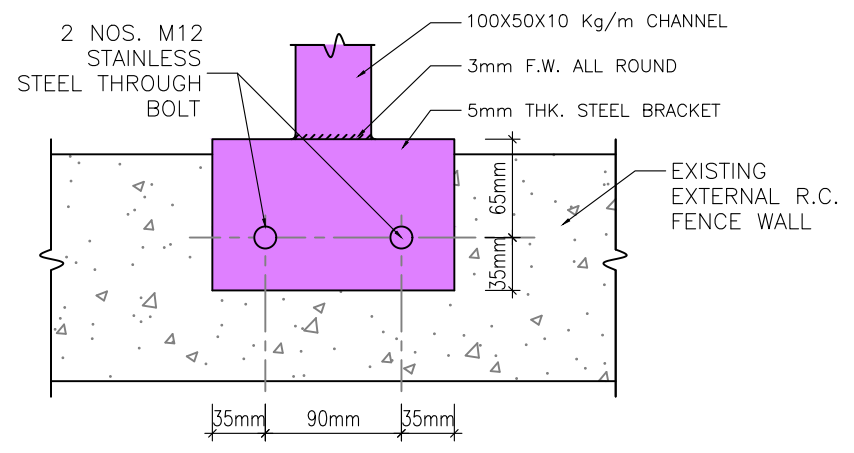


GAP FILLED WITH CEMENTITIOUS GROUT WITH STRENGTH NOT LESS THAN 30MPa

DETAIL '1'



SECTION A-A
SCALE: 1:5

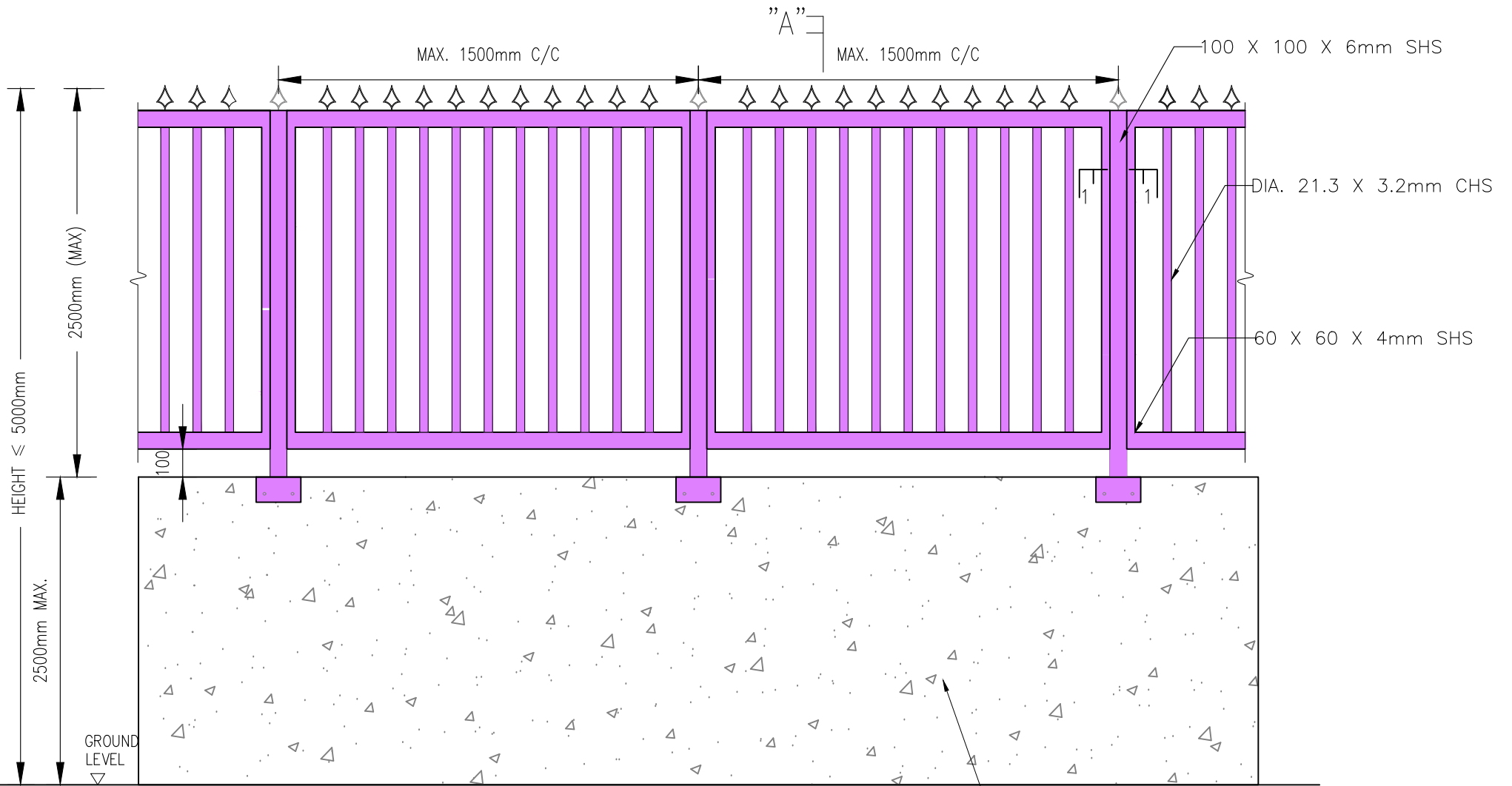


VIEW '1'
SCALE: 1:5

EXISTING R.C. FENCE WALL OTHER THAN UNAUTHORIZED SOLID FENCE WALL OR A SOLID FENCE WALL FALLING WITHIN THE DESCRIPTION OF DEW 5 THAT WAS ERECTED, ALTERED OR REPAIRED WITHOUT THE APPROVAL AND CONSENT OF THE BUILDING AUTHORITY UNDER SECTION 14(1) OF THE ORDINANCE

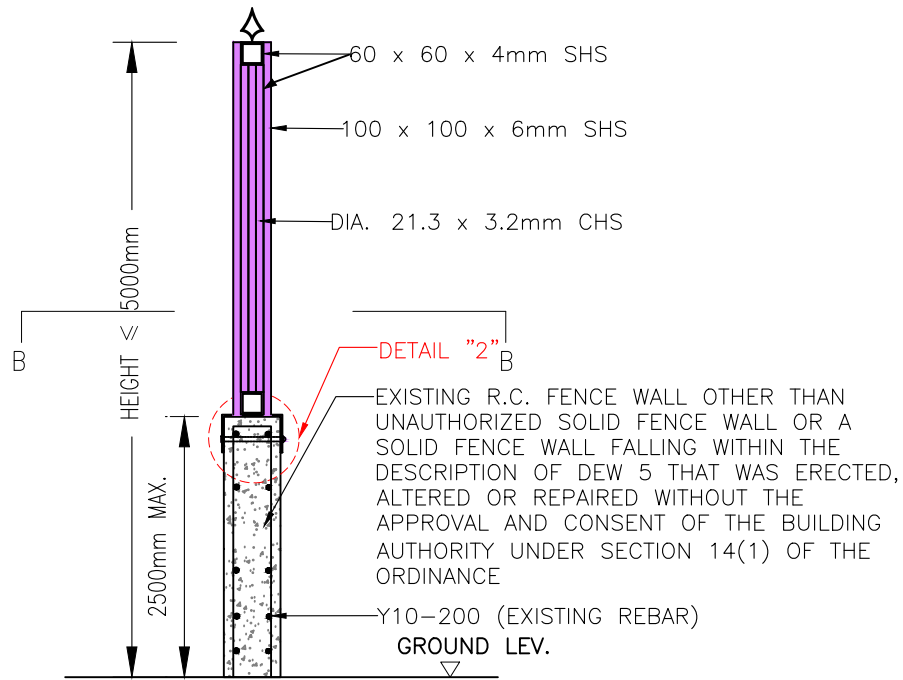
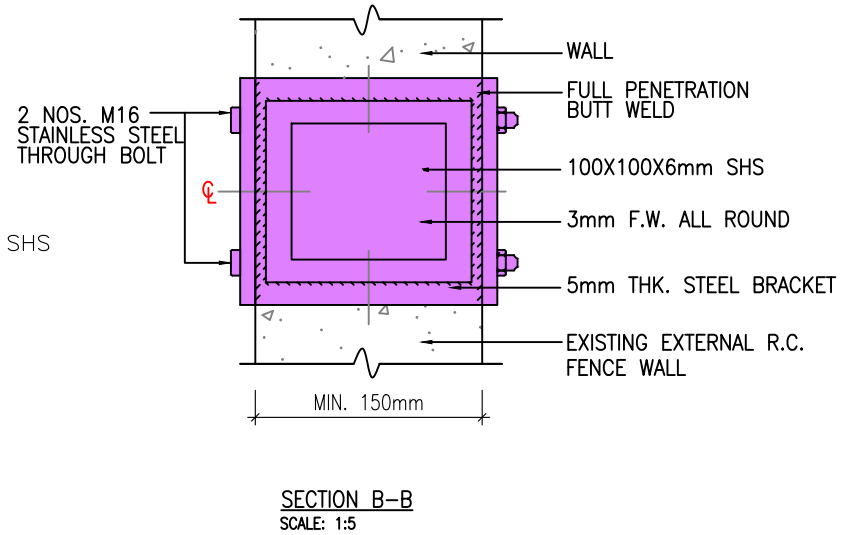
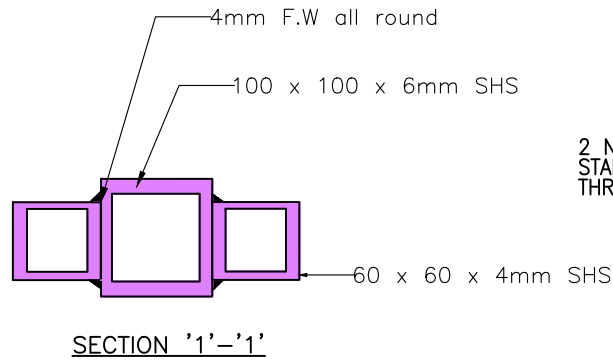
SIDE ELEVATION OF MESH FENCE ON FENCE WALL
SCALE: 1:25

MINOR WORKS ITEM 2.57	DRAWING TITLE : ERECTION OF ANY MESH FENCE, METAL RAILING OR POLE ON TOP OF AN SOLID FENCE WALL ON GRADE	SHEET 3 OF 6
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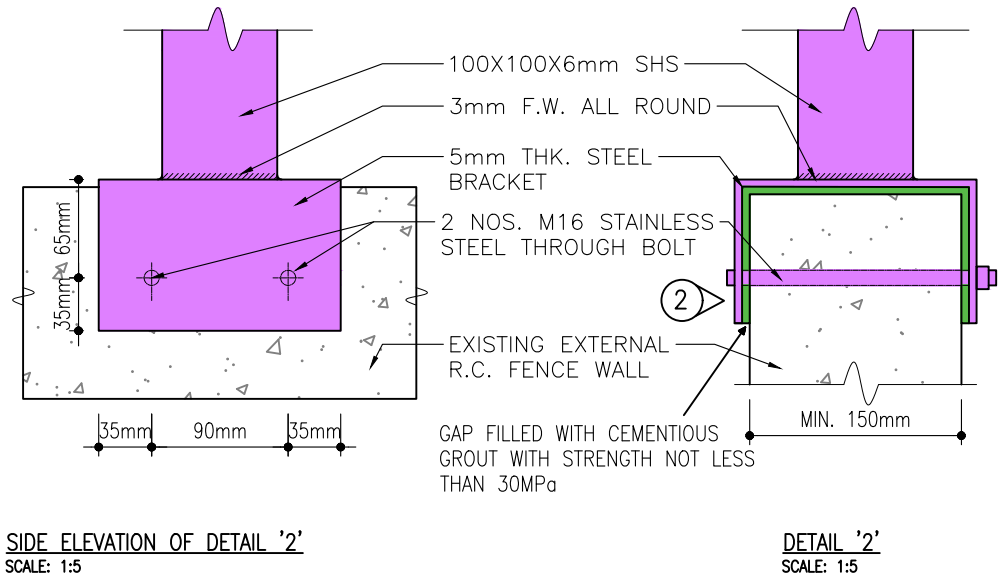


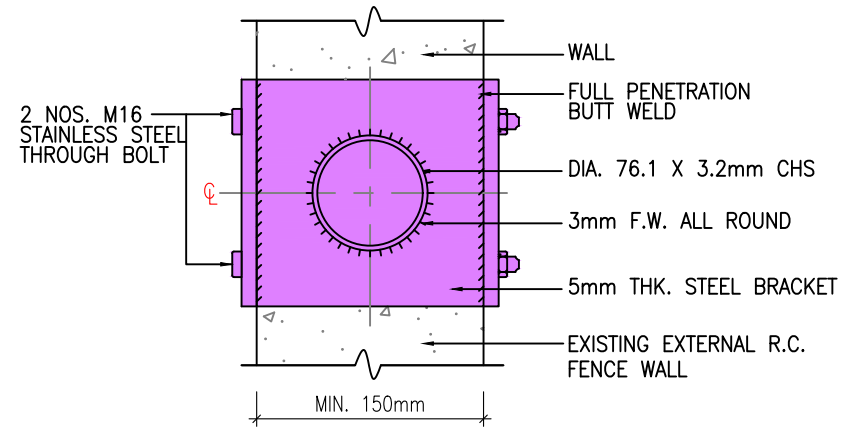
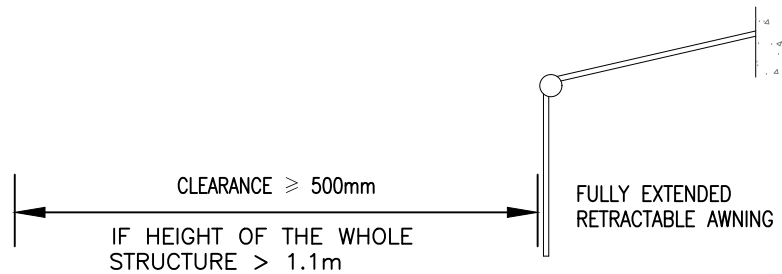
ELEVATION OF RAILING ON EXISTING SOLID FENCE WALL
SCALE 1:20

EXISTING R.C. FENCE WALL (OTHER THAN UNAUTHORIZED WALL OR FALLING WITHIN THE DESCRIPTION OF DEW 5 THAT WAS ERECTED, ALTERED OR REPAIRED WITHOUT THE APPROVAL AND CONSENT OF THE BUILDING AUTHORITY UNDER SECTION 14(1) OF THE ORDINANCE)

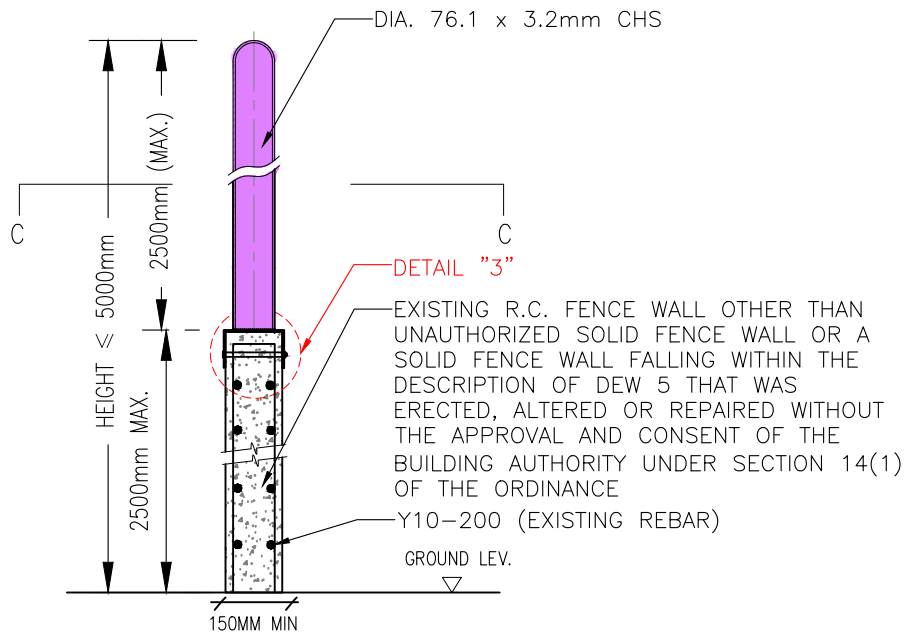


SECTION OF METAL RAILING ERECTED ON EXISTING FENCE WALL
SCALE: 1:20

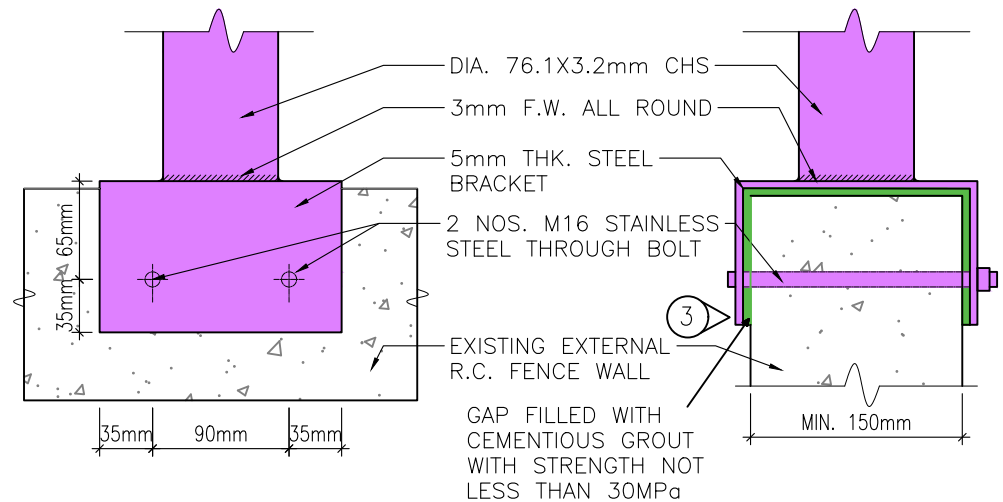




SECTION C-C
SCALE: 1:5

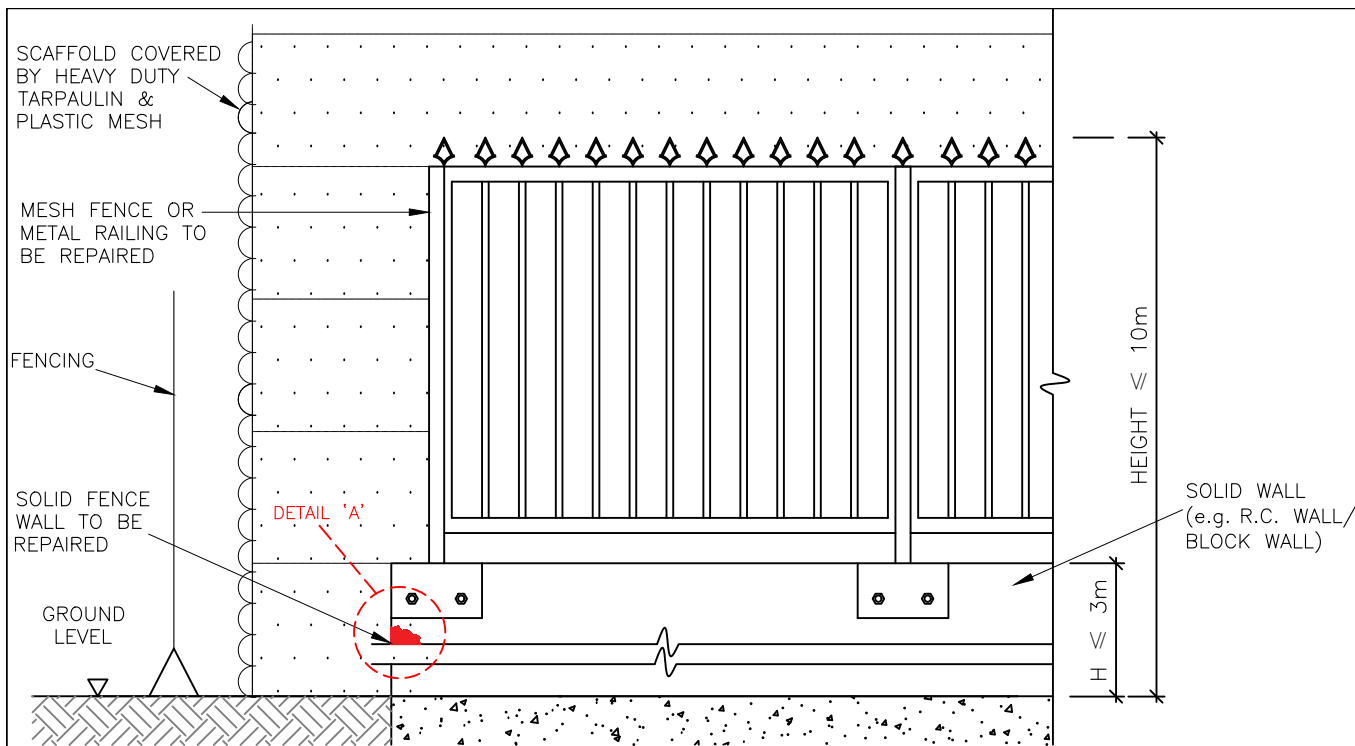


SECTION OF POLE ERECTED ON EXISTING FENCE WALL SECTION A-A
SCALE: 1:20



SIDE ELEVATION OF DETAIL '3'
SCALE: 1:5

DETAIL '3'
SCALE: 1:5



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations.
 - Code of Practice for the Structural use of Steel 2011.
 - Code of Practice for Structural use of Concrete 2013.
 - Concrete shall comply with CS1:2010.
3. All structural steel to be grade S275 J0/J0H to BS EN 10210-1 for hollow sections and BS EN 10056 for angles and BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009 with min. thickness 85 μm .
4. All welding should be comply with BS EN 1011-1: 2009 and all welding works shall be carried out by qualified welder.

PREPARATION :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector if its works will be involved.
3. Carry out condition survey of the parent structure/ existing condition.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

For mesh fence/ metal railing:

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the defective steel member to be replaced by oxy-acetylene torch to small pieces.
3. Debris from removal works should be put into bags and disposed as construction waste.
4. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
5. Repair the mesh fence or metal railing.
6. Make good and reinstate the affected areas where necessary.
7. Remove the bamboo scaffold and clean the site.

For Block Wall

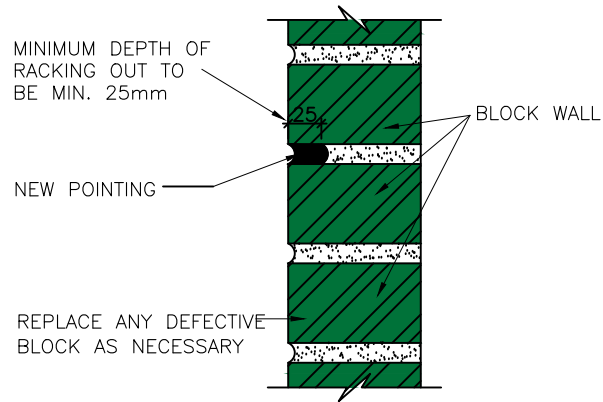
1. Dismantle the part of mesh fence/ railing which may be affected by the repair work.
2. Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
3. Remove the defective part using hand-held mechanical tools.
4. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm. Replace any defective blocks by new blocks.
5. Apply pointing in cement and sand (1:1) to the exposed joints.
6. Apply 20mm thick rendering (cement : sand = 1:3) to the wall as necessary.
7. Reinstall the metal fence/ railing.
8. Make good and reinstate the affected areas of the parent building.
9. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

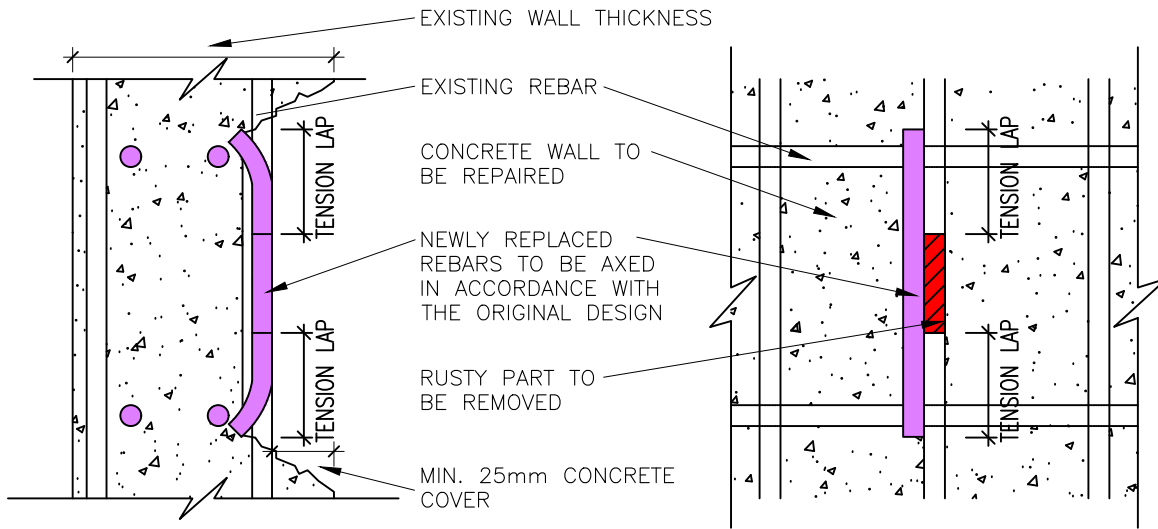
1. Dismantle the part of mesh fence/ railing which may be affected by the repair work
2. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
3. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
4. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
5. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
6. Reinstall the metal fence/ railing.
7. Make good and reinstate the affected areas of the parent building.
8. Remove the bamboo scaffold and clean the site.

Remark:

1. This case excludes MW item 3.58 OR DEW item 6
2. The fence or railing is not used as a protective barrier.

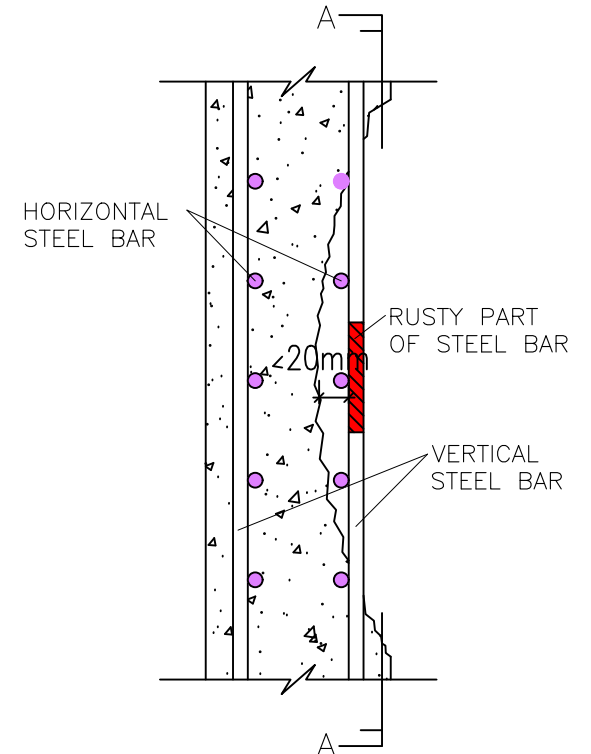


DETAIL 'A'
(FOR BLOCK WALL)

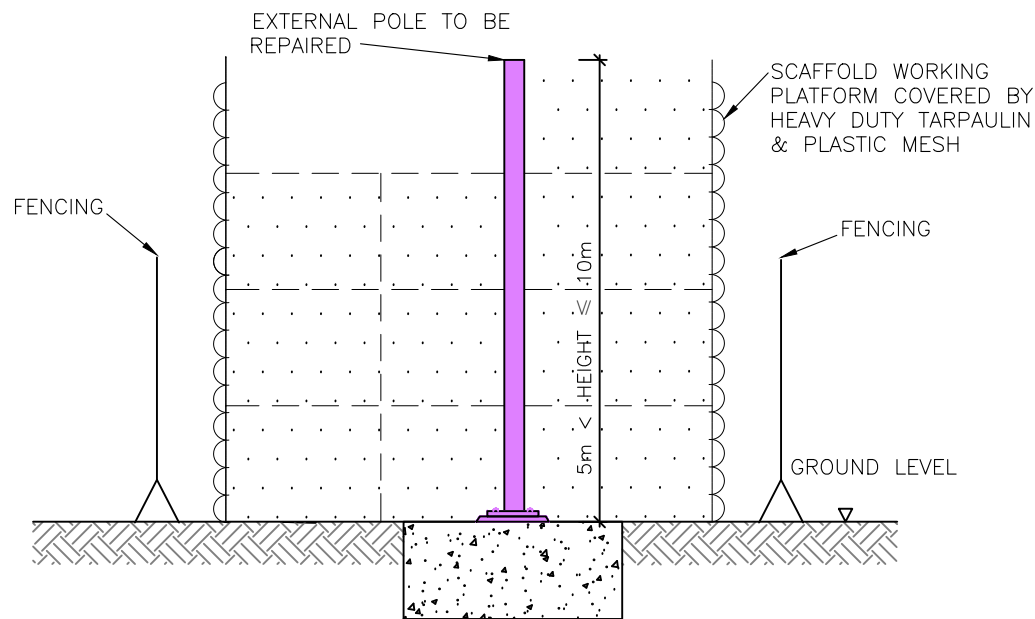


REPLACEMENT OF DETERIORATED
REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL



ELEVATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations.
 - Code of Practice for the Structural use of Steel 2011.
3. All structural steel to be grade S275 J0/J0H to BS EN 10210-1 for hollow sections and BS EN 10056 for angles and BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009 with min. thickness 85 μm .
4. All welding should be comply with BS EN 1011-1: 2009 and all welding works shall be carried out by qualified welder.
5. All connections to be 3mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}$ (Electrode class 50) and all electrodes to BS EN ISO 2560 : 2009.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if its works will be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

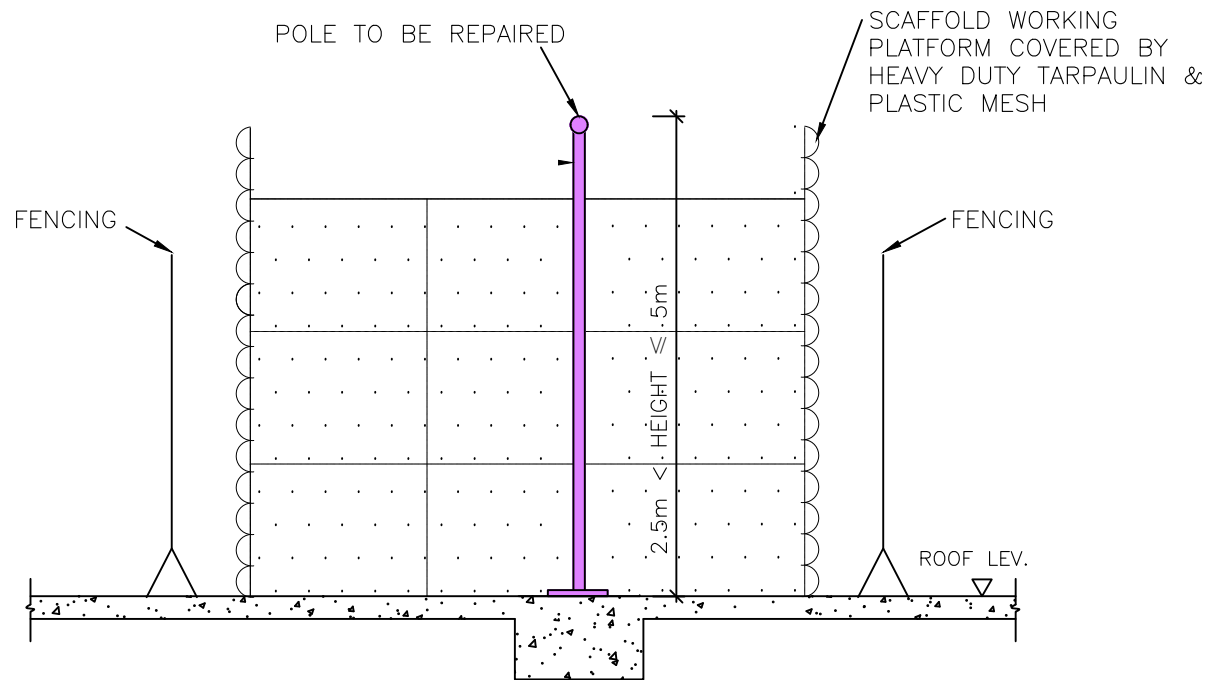
1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Repair the pole.
3. Reinststate the affected areas where necessary.
4. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes MW item 3.59 and DEW item 17

MINOR WORKS ITEM 2.59	DRAWING TITLE : REPAIR OF EXTERNAL POLE ON GRADE	
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ELEVATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural use of Steel 2011
3. All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections and BS EN 10056 for angles and BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009 to at least 85 microns thick.
4. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.
5. The work does not involve alteration of any other structural elements.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if its works will be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

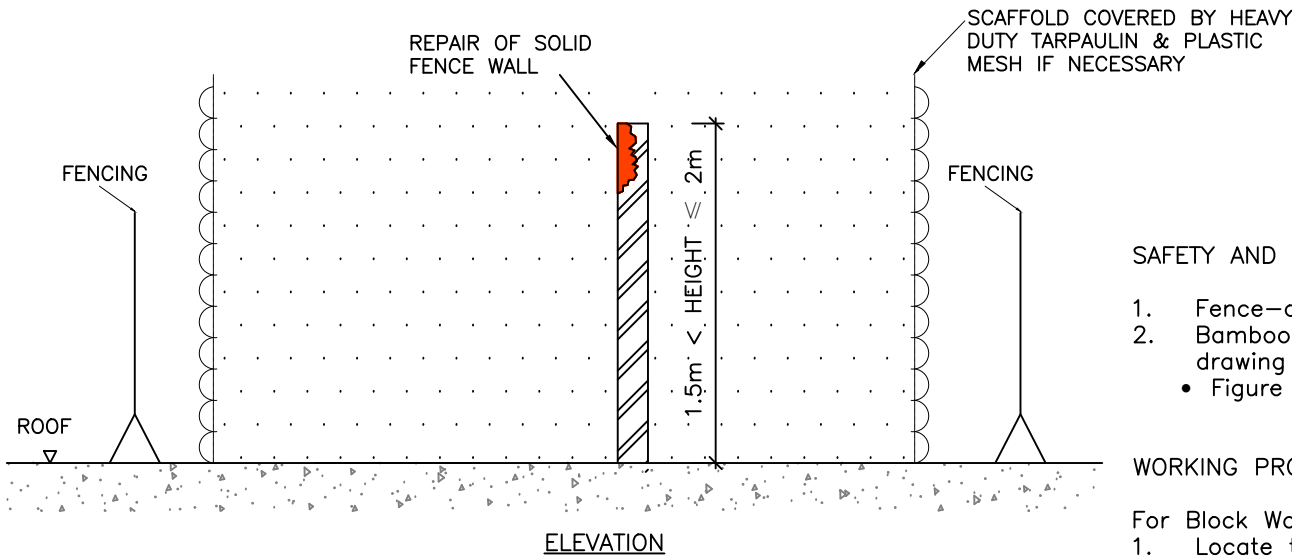
1. Disconnect all services in vicinity that may be affected by the works.
2. Repair the pole.
3. Reinststate the affected areas where necessary.
4. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes DEW item 19 and MW item 3.60

DRAWING TITLE :

MINOR WORKS ITEM 2.60

REPAIR OF POLE ON THE ROOF OF A BUILDING



SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

For Block Wall

1. Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
2. Remove the defective part using hand-held mechanical tools.
3. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm. Replace any defective blocks by new blocks.
4. Apply pointing in cement and sand (1:1) to the exposed joints.
5. Apply 20mm thick rendering (cement : sand = 1:3) to the wall as necessary.
6. Make good and reinstate the affected areas of the parent building.
7. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

1. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
2. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
3. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
4. Apply procedure 1 to 3 to both vertical and horizontal rebars.
5. Make good and reinstate the affected areas of the parent building.
6. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes DEW item 20 and MW item 3.61

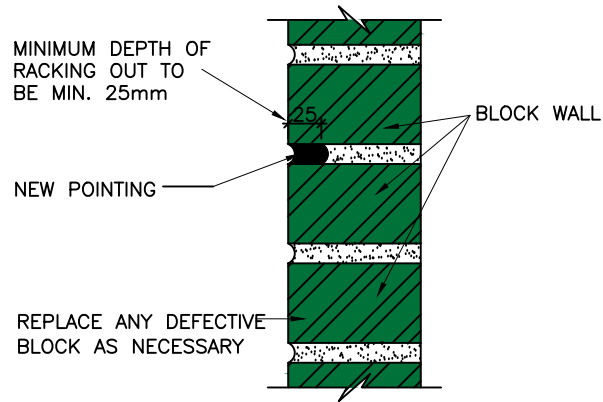
GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural use of Concrete 2013
 - Concrete shall comply with CS1:2010
3. The works do not involve the alteration of other structural element.
4. Concrete grade and the minimum cover shall be grade 30 and 25 mm respectively.
5. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2:2012.
6. Minimum anchorage and lap length are 40 x and 56 x diameter of the existing rebar unless otherwise specified.

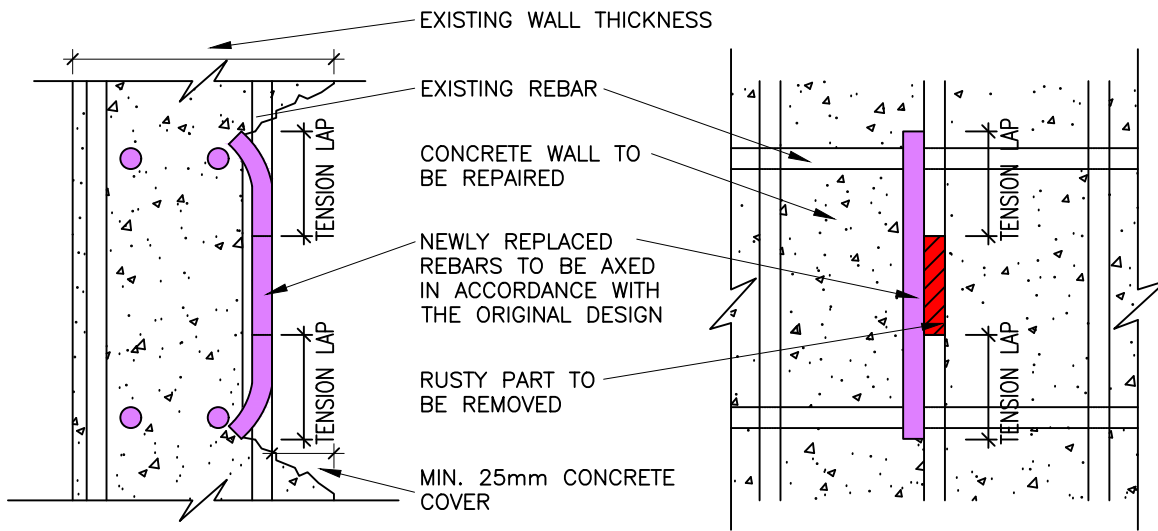
PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

MINOR WORKS ITEM 2.61	DRAWING TITLE : REPAIR OF SOLID FENCE WALL ON THE ROOF OF A BUILDING	SHEET 1 OF 2
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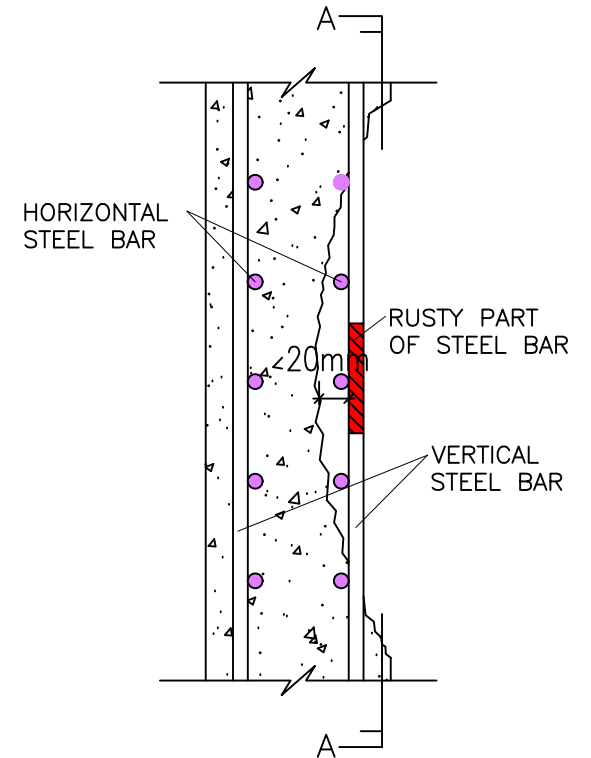


DETAIL 'A'
(FOR BLOCK WALL)



REPLACEMENT OF DETERIORATED
REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL

SCAFFOLD WORKING PLATFORM COVERED BY HEAVY DUTY TARPAULIN & PLASTIC MESH

MESH FENCE OR METAL RAILING TO BE REPAIRED (NOT USED AS PROTECTIVE BARRIER)

FENCING

DEFECTIVE PART TO BE REPAIRED

1000mm

HEIGHT \leq 5m

SOLID WALL (e.g. R.C. WALL / BLOCK WALL)

H \leq 1.5m

DETAIL 'A'

ROOF LEV.

ELEVATION

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the defective steel member by oxy-acetylene torch to small pieces and replace with a new with the original design.
3. Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal.
4. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
5. Reinststate the affected areas where necessary.
6. Remove the bamboo scaffold and clean the site.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations.
 - Code of Practice for the Structural use of Steel 2011.
 - Code of Practice for Structural use of Concrete 2013.
 - Concrete shall comply with CS1:2010.
3. The works do not involve the alteration of other structural element.
4. All concrete works shall comply with CS1 2010.
5. Concrete grade and the minimum cover shall be grade 30 and 25 mm respectively.
6. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2:2012.
7. Minimum anchorage and lap length are 40 x and 56 x diameter of the existing rebar unless otherwise specified.
8. All structural steel to be grade S275 J0/J0H to BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009 with min. thickness 85 μ m.
9. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector if its works will be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

For Block Wall

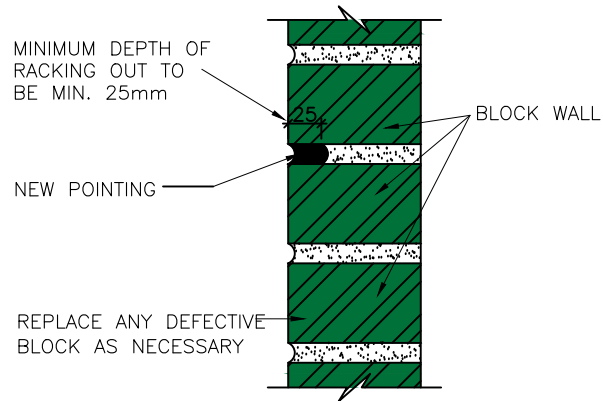
1. Dismantle the part of mesh fence / railing which may be affected by the repair work.
2. Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
3. Remove the defective part using hand-held mechanical tools.
4. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm. Place any defective blocks by new blocks.
5. Apply pointing in cement and sand (1:1) to the exposed joints.
6. Apply 20mm thick rendering (cement : sand = 1:3) to the wall as necessary.
7. Reinstall the metal fence/ railing.
8. Make good and reinststate the affected areas of the parent building.
9. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

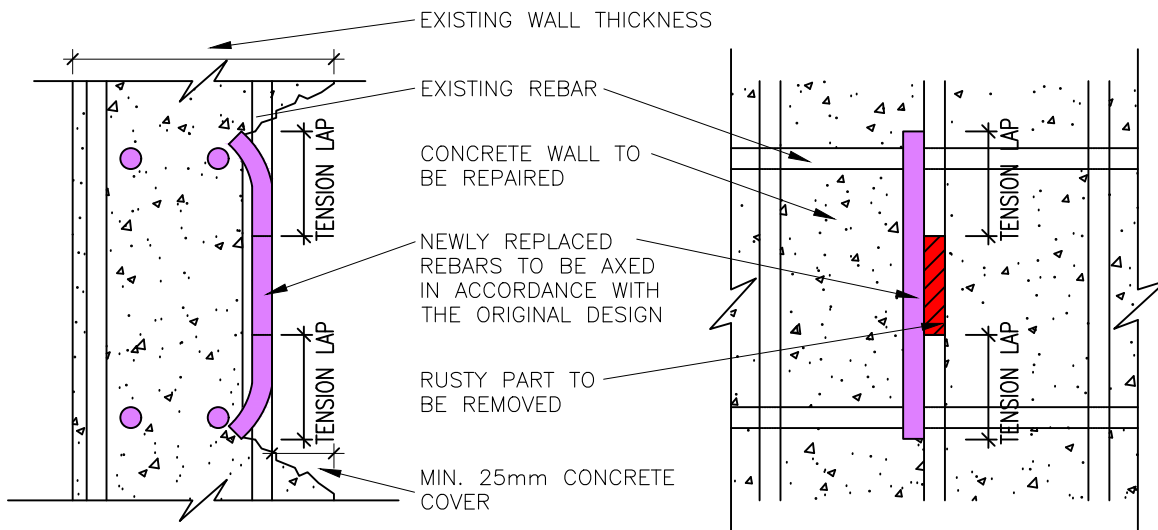
1. Dismantle the part of mesh fence / railing which may be affected by the repair work.
2. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
3. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
4. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
5. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
6. Reinstall the metal fence/ railing.
7. Make good and reinststate the affected areas of the parent building.
8. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes MW item 3.62 and DEW item 18.
The mesh fence or metal railing is not used as a protective barrier.

DRAWING TITLE :

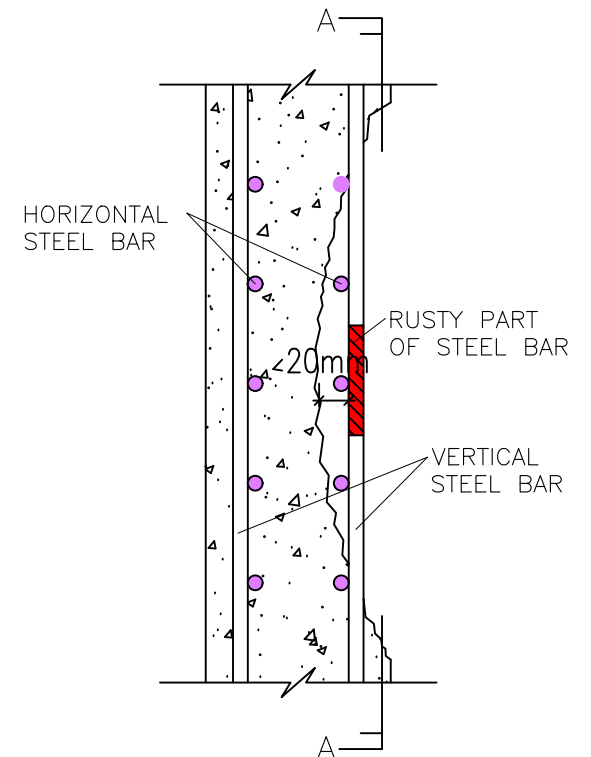


DETAIL 'A'
(FOR BLOCK WALL)



REPLACEMENT OF DETERIORATED
REBAR AT R.C. WALL

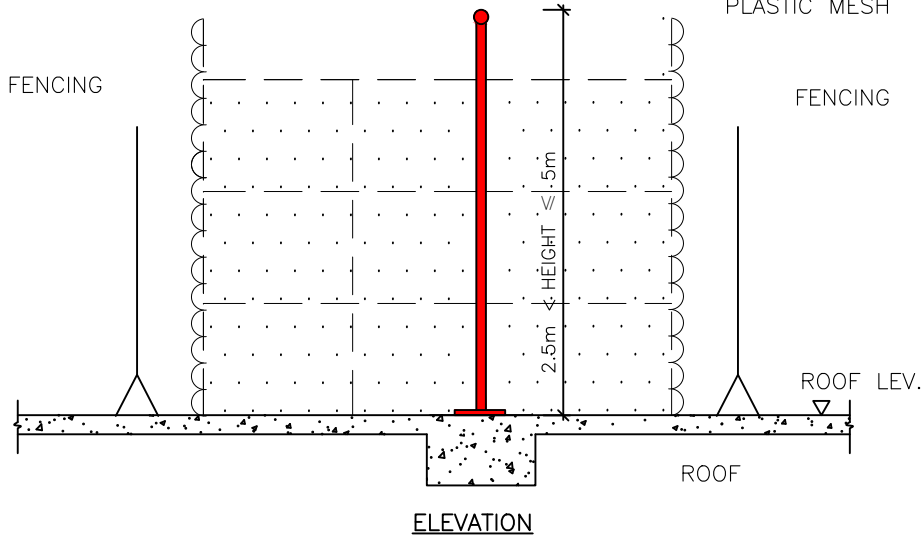
SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL

POLE TO BE REMOVED

SCAFFOLD WORKING
PLATFORM COVERED BY
HEAVY DUTY TARPULIN &
PLASTIC MESH



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. The works do not involve the alteration of other structural element.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
Figure 4 Working platform on a double-row bamboo scaffold
Figure 2 Truss out Bamboo scaffolding
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

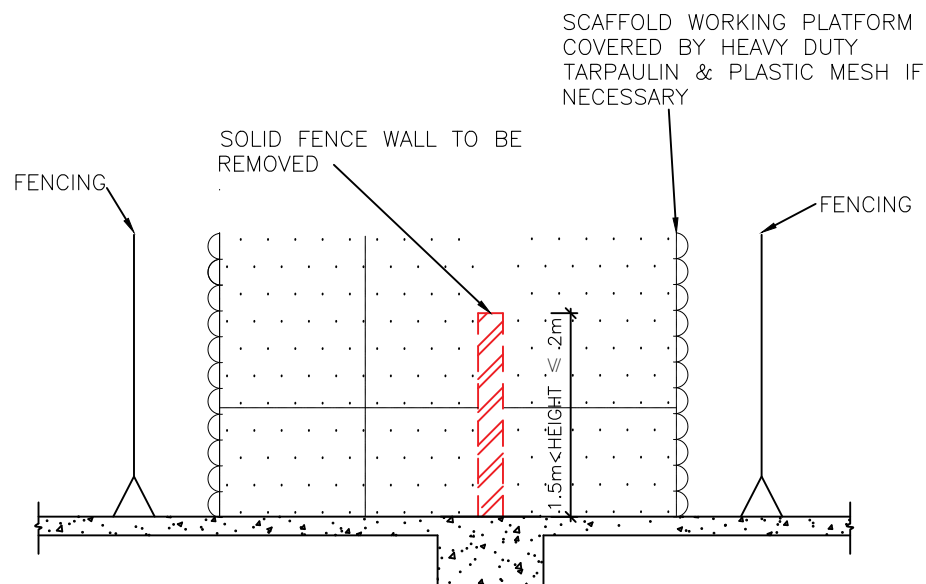
1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the pole by wire & winch to existing structures to prevent the pole collapse suddenly.
3. Remove all loose features attached to the pole.
4. Cut the pole (If necessary, cut into small piece from top to bottom) and lower down to the roof slowly for construction waste disposal.
5. The removed pole and debris should not be accumulated on the roof and should be disposed as construction waste immediately.
6. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes DEW item 19 and MW item 3.63

MINOR WORKS ITEM 2.63

DRAWING TITLE :

REMOVAL OF POLE ON THE ROOF OF A BUILDING



ELEVATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

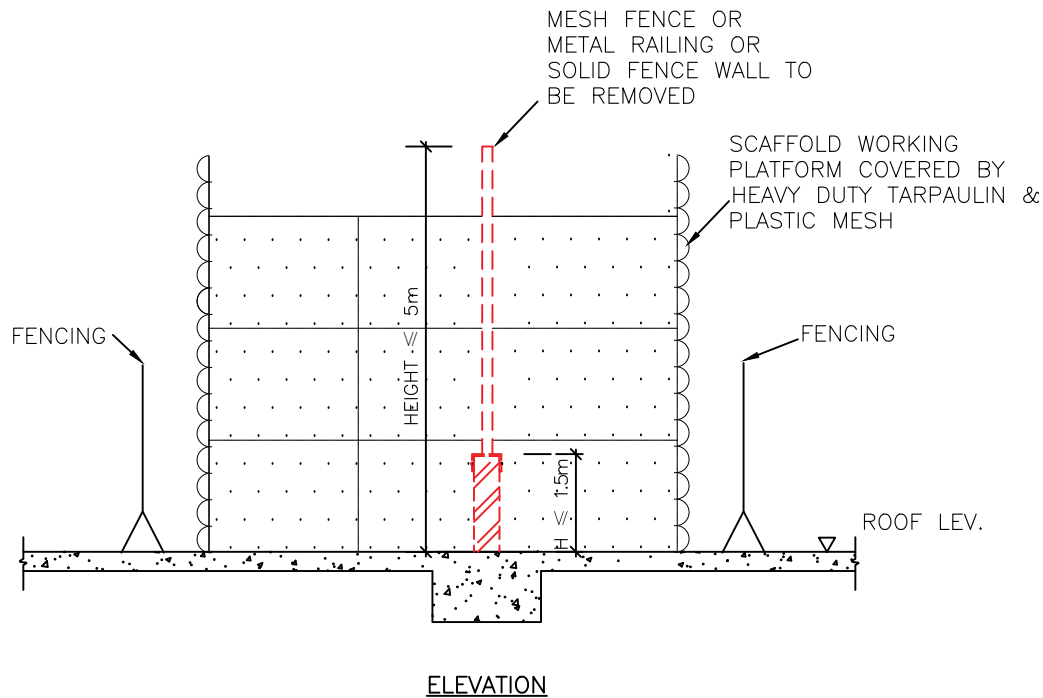
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
 - Figure 2 Truss out bamboo scaffolding
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the pole by wire & winch to existing structures to prevent the wall collapse suddenly.
3. Remove all loose features attached to the wall.
4. Remove the wall (If necessary, cut into small piece from top to bottom and in bay by bay). The contractor may refer to Figure 4.6 from Code of Practice for Demolition Works as appropriate.
5. The removed wall and debris should not be accumulated on the roof and should be disposed as construction waste immediately.
6. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes DEW item 20 and MW item 3.64



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.
2. The work does not involve the alteration of any other structural elements.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
Figure 2 Truss-out bamboo scaffold
Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

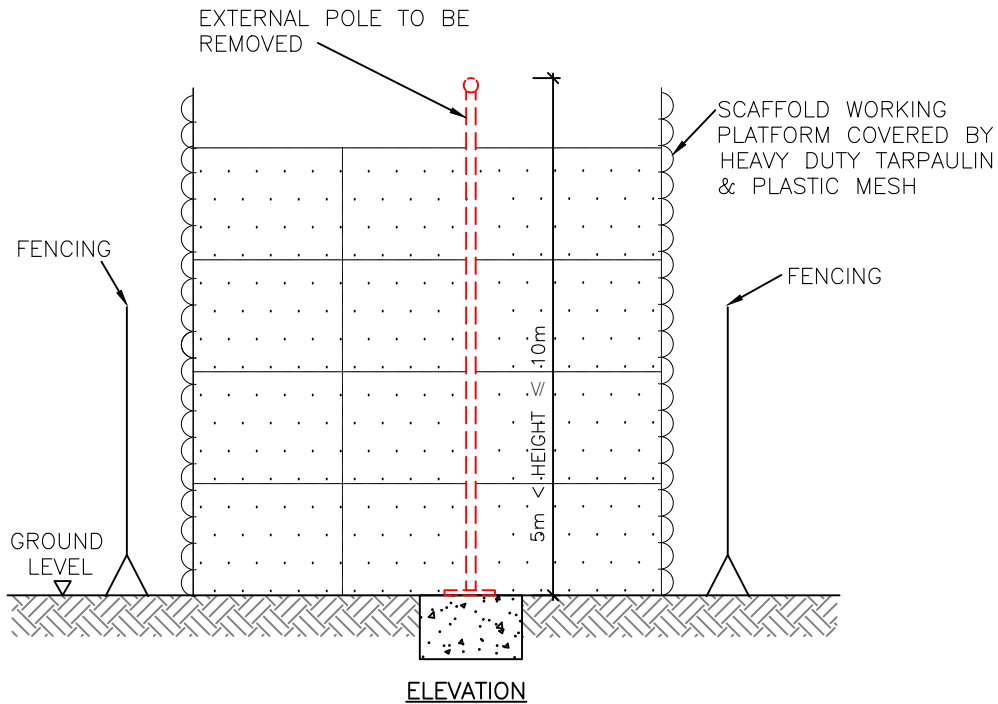
1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the mesh fence / metal railing by wire & winch to existing structures to prevent the mesh fence / metal railing collapse suddenly.
3. Remove all loose features attached to the mesh fence or metal railing.
4. Cut the mesh fence / metal railing (If necessary, cut into small piece from top to bottom and removed in bay by bay) and lower down to the roof slowly for construction waste disposal.
5. Remove the wall if any from top to bottom.
6. The removed mesh fence / metal railing should not be accumulated on the roof and should be disposed as construction waste immediately.
7. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
8. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
9. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes DEW item 18 and MW item 3.65

MINOR WORKS ITEM 2.65

DRAWING TITLE :

REMOVAL OF MESH FENCE OR METAL RAILING, WITH OR WITHOUT A SOLID FENCE WALL AS ITS LOWER PART, ON THE ROOF OF A BUILDING



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

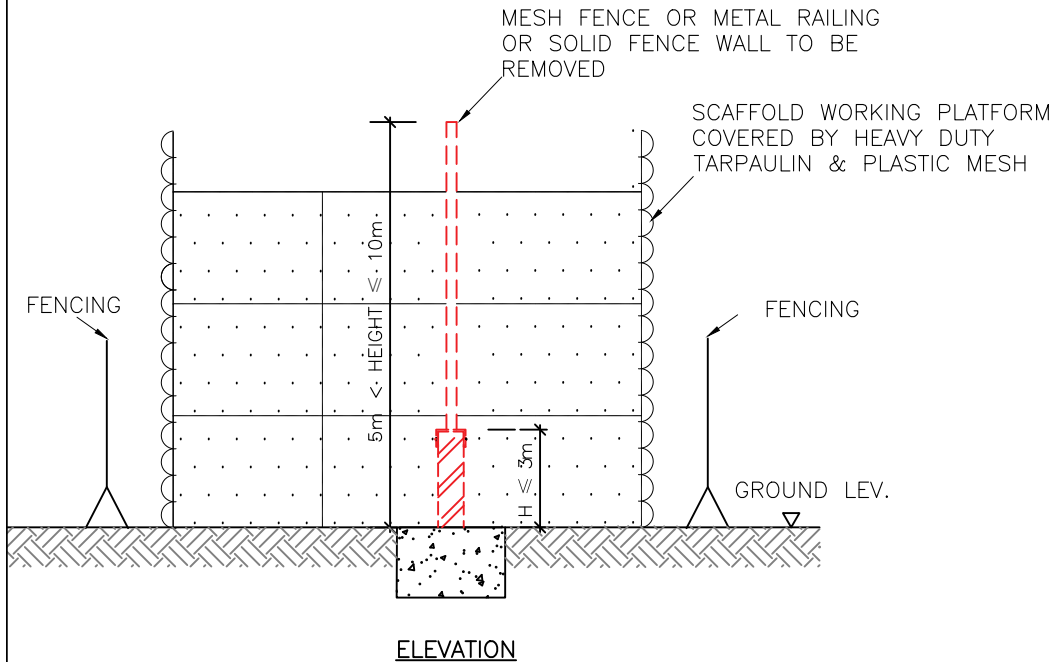
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
3. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the pole by wire & winch to existing structures to prevent the pole collapse suddenly.
3. Remove all features attached to the pole.
4. Cut the pole (if necessary, cut into small piece from top to bottom) and lower down to the ground slowly for construction waste disposal.
5. The removed pole should be disposed as construction waste immediately.
6. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes DEW item 17 and MW item 3.66



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. The work does not involve the alteration of any other structural elements.

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

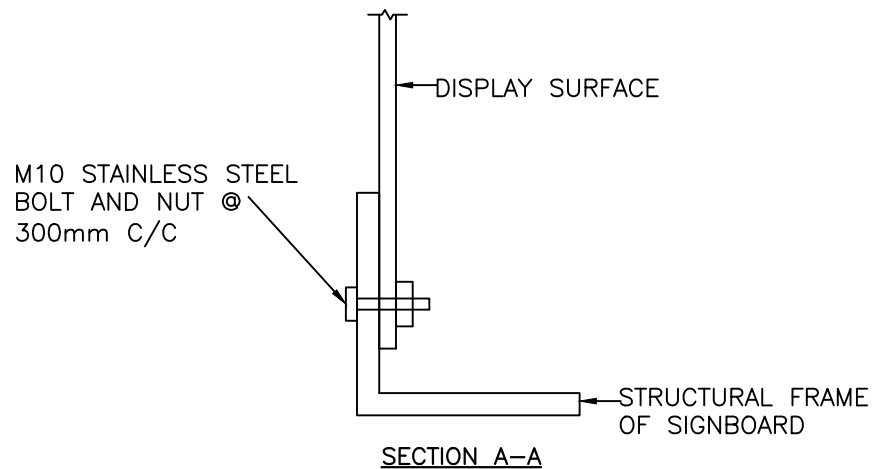
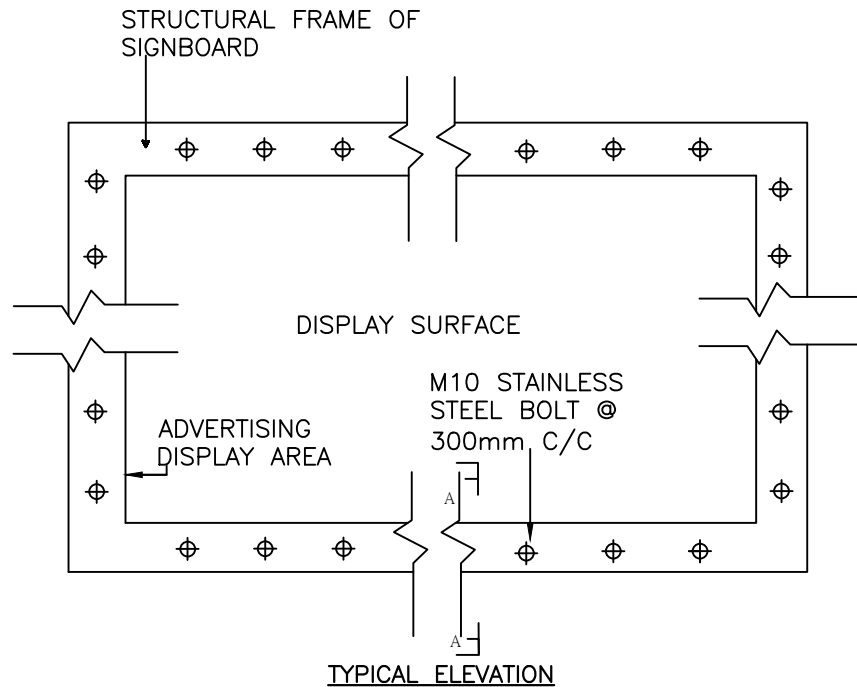
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
Figure 4 Working platform on a double-row bamboo scaffold
3. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the mesh fence / metal railing by wire & winch to existing structures to prevent the mesh fence / metal railing collapse suddenly.
3. Remove all loose features attached to the mesh fence or metal railing.
4. Cut the mesh fence / metal railing (If necessary, cut into small piece from top to bottom and removed in bay by bay) and lower down to the ground slowly for construction waste disposal.
5. Remove the wall if any from top to bottom.
6. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes DEW item 6 and MW item 3.5



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the original design drawings/ information for reference prior to the commencement of works
2. Check the catalogue of the new display surface to ensure it is suitable for replacement and comply with requirement of PNAP APP-126.

SAFETY AND PRECAUTIONARY MEASURES :

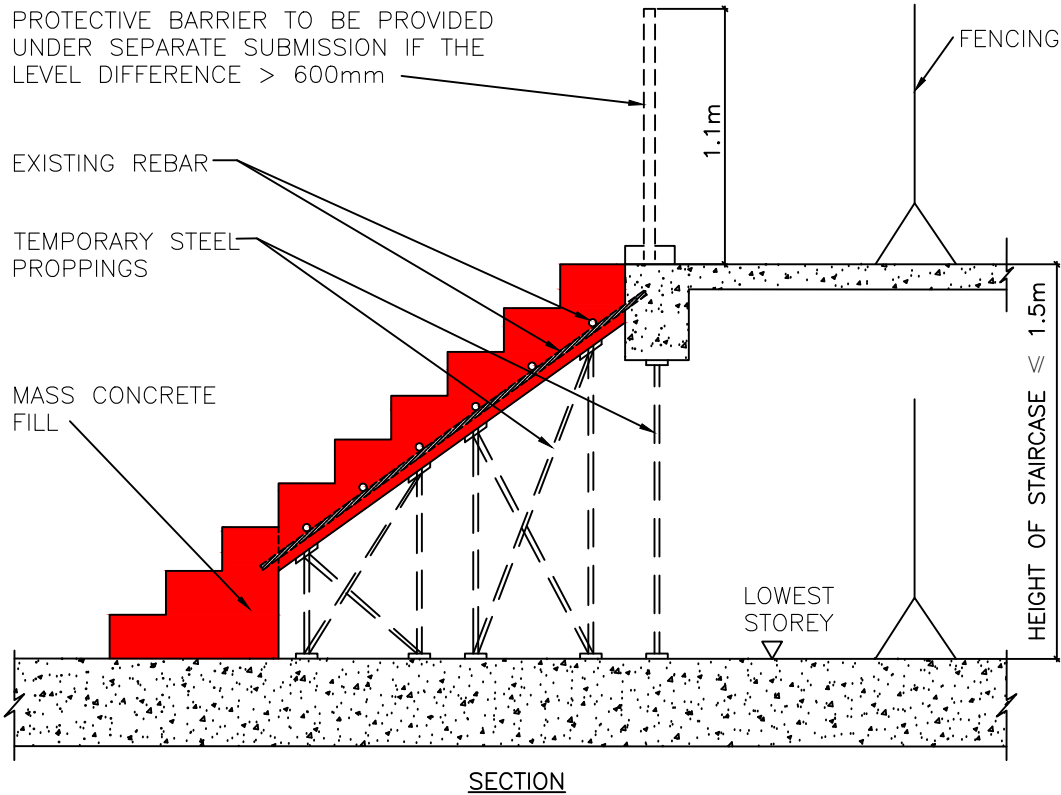
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
Figure 5 Bamboo scaffold for signboard

WORKING PROCEDURES :

1. Remove the display surface and re-install the new surface using the same fixing method.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.

REMARKS :

1. The display surface does not consist of stone.
2. This case excludes MW item 3.16 or 3.17 or DEW item 10 or 30.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the staircase for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Prior to the commencement of works, the contractor is recommended to refer to Section 4 (Method of Demolition) of the Code of Practice for Demolition of Buildings for details of works.
3. Erect steel proppings as temporary support as per the manufacturers' instructions.

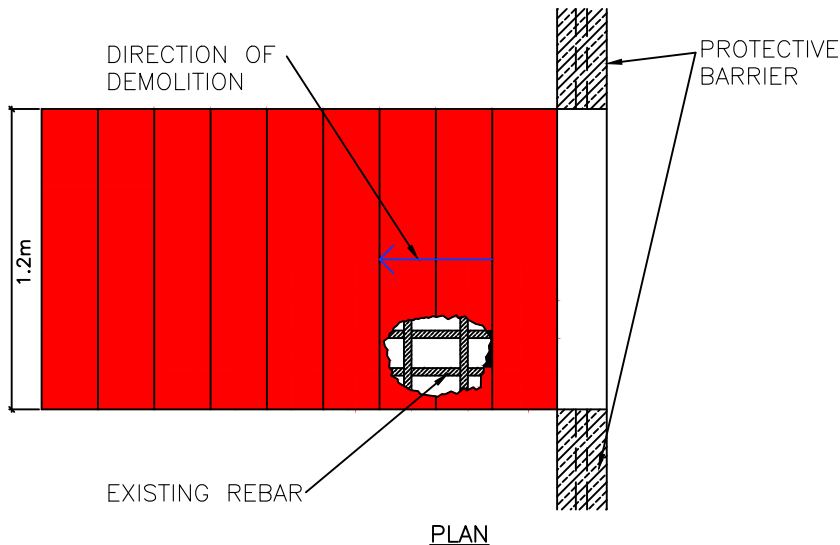
WORKING PROCEDURES :

A. Removal of the reinforced concrete staircase

1. Break down the concrete top down into small pieces using mechanical hand-held tools to expose the reinforcing bars.
2. Cut the exposed reinforcement, repair the exposed surface of the parent structure after cutting the reinforcement.
3. Repeat the above steps 1 and 2 until complete removal of the reinforced concrete staircase.
4. Arrange construction waste disposal.
5. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
6. Make good and reinstate the affected area.

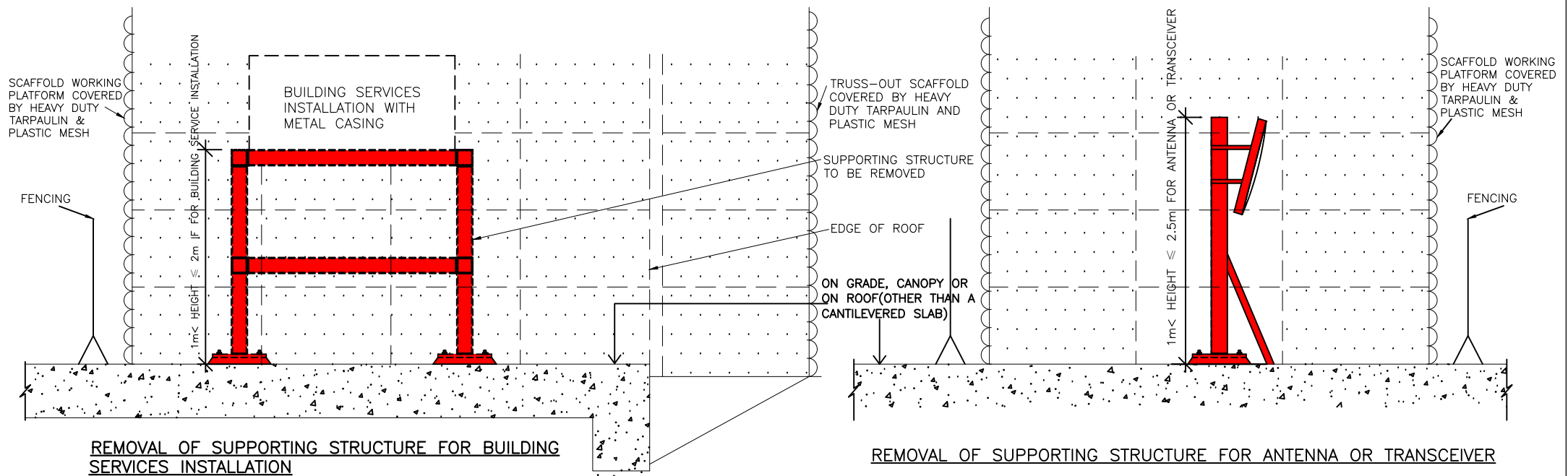
B. Removal of the mass concrete portion of the staircase

1. Break down the mass concrete into small pieces.
2. Arrange construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas of the parent structure.



DRAWING TITLE : REMOVAL OF THE WHOLE OF INTERNAL STAIRCASE ON THE LOWEST STOREY OF A BUILDING THAT IS NOT USED AS A MEANS OF ESCAPE OR A MEANS OF ACCESS FOR FIREFIGHTING AND RESCUE

MINOR WORKS ITEM 3.1



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION :

1. Obtain the original design drawings/ information for reference prior to the commencement of works.
2. Check structural adequacy of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

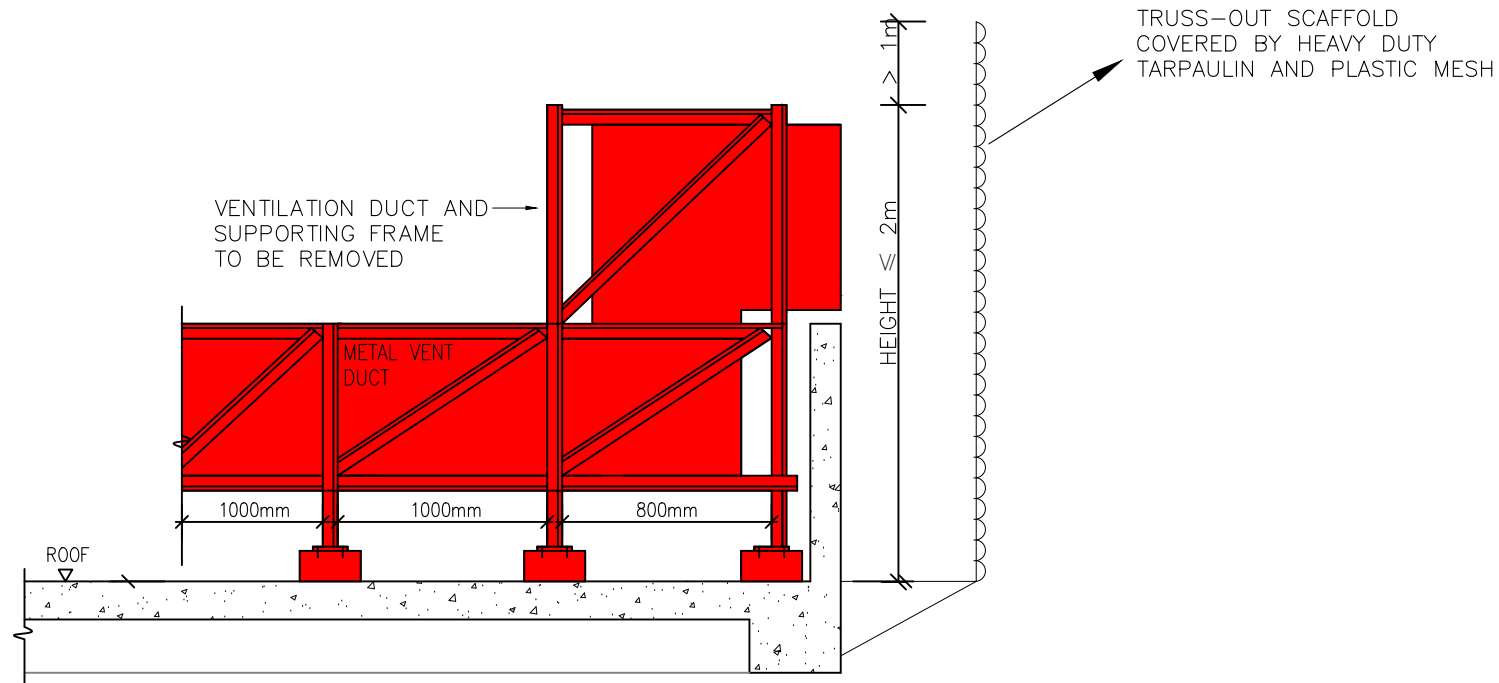
1. Remove the existing building services, metal casing or ventilation duct installation or any associated duct works if necessary. (Ensure all water pipes and electrical cable or wires have been disconnected prior to any removal works.)
2. Cut the supporting structure into manageable size by hand-held tools or machine and retrieve for construction waste disposal.
3. Proper disposal shall be at prescribed facilities as provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
4. Make good and reinstate the affected areas (including waterproofing) where necessary.

REMOVAL OF FOOTINGS (FOR ON-GRADE SITUATION) :

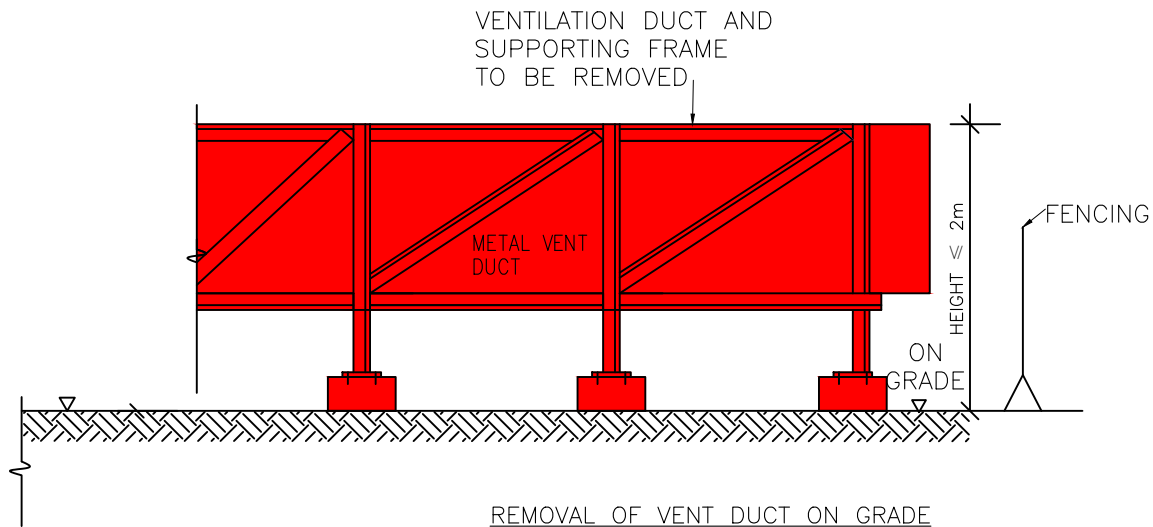
1. Carry out excavation and backfilling work in accordance with minor works item 2.11.
2. Break down the concrete footings into small pieces for construction waste disposal.
3. Backfill and reinstate the top surface.

Note: This case excludes DEW item 12

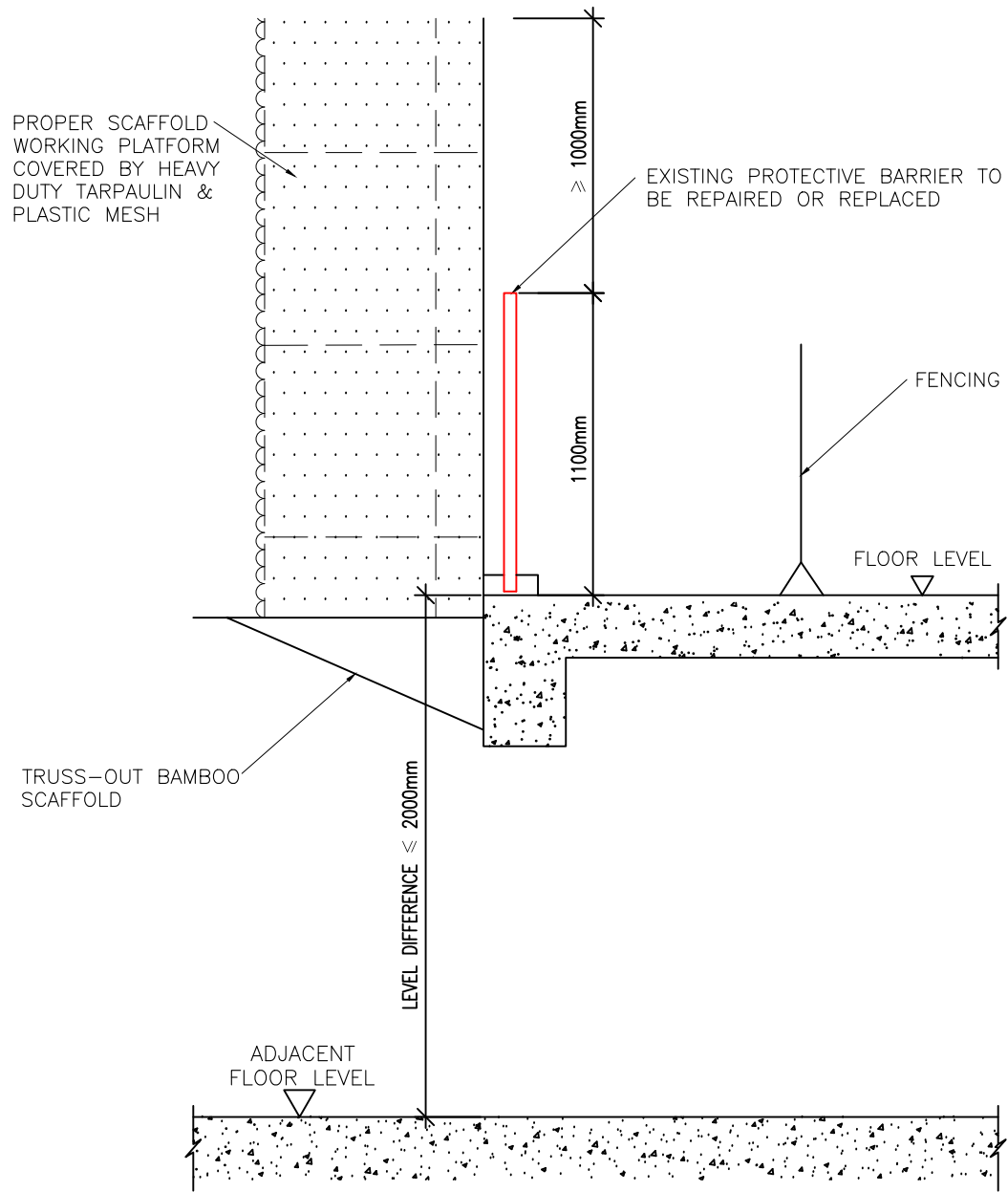
MINOR WORKS ITEM 3.2	DRAWING TITLE : REMOVAL OF (a) SUPPORTING STRUCTURE OR METAL CASING FOR A BUILDING SERVICES INSTALLATION ON GRADE, ON A CANOPY OR ON THE ROOF OR (b) VENTILATION DUCT AND ASSOCIATED STRUCTURE ON GRADE OR ON ROOF (OTHER THAN A CANTILEVERED SLAB)	SHEET 1 OF 2
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REMOVAL OF VENT DUCT ON ROOF (OTHER THAN A CANTILEVERED SLAB)



REMOVAL OF VENT DUCT ON GRADE



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the original design drawings/ information for reference prior to the commencement of works
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold

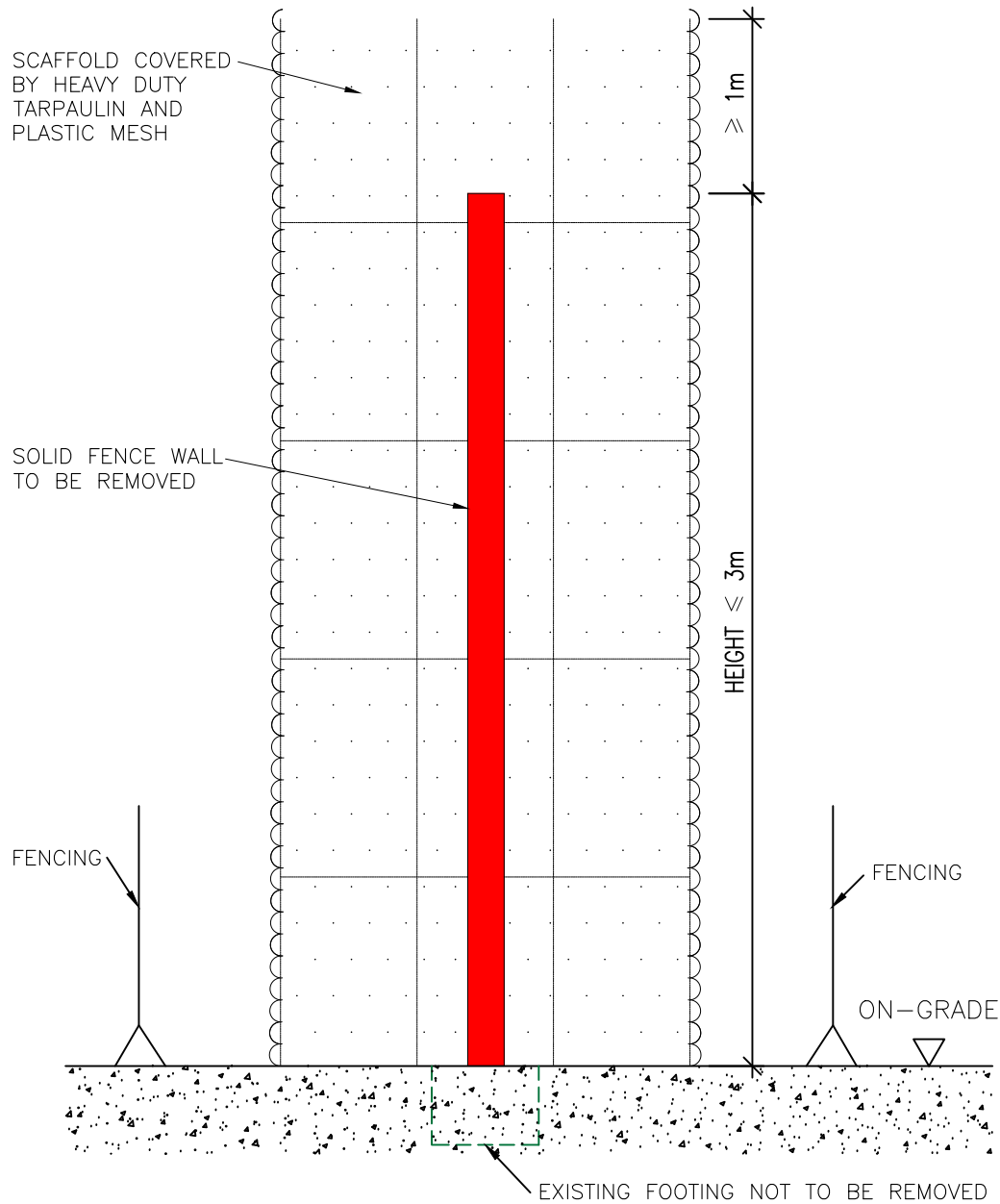
WORKING PROCEDURES :

A. Repair

1. Remove the defective member of the protective barrier and replace with a new one in accordance with the original design.
2. Make good and reinstate the affected areas of the parent structure.
3. Remove the bamboo scaffold and clean the site.
4. All rubbish generated shall be disposed as construction waste.
5. The disposal of waste shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.

B. Replacement

1. Remove the protective barrier.
2. Reinstall the protective barrier in accordance with the original design.
3. Make good and reinstate the affected areas of the parent structure.
4. Remove the bamboo scaffold and clean the site.
5. All rubbish generated shall be disposed as construction waste.
6. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings / information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

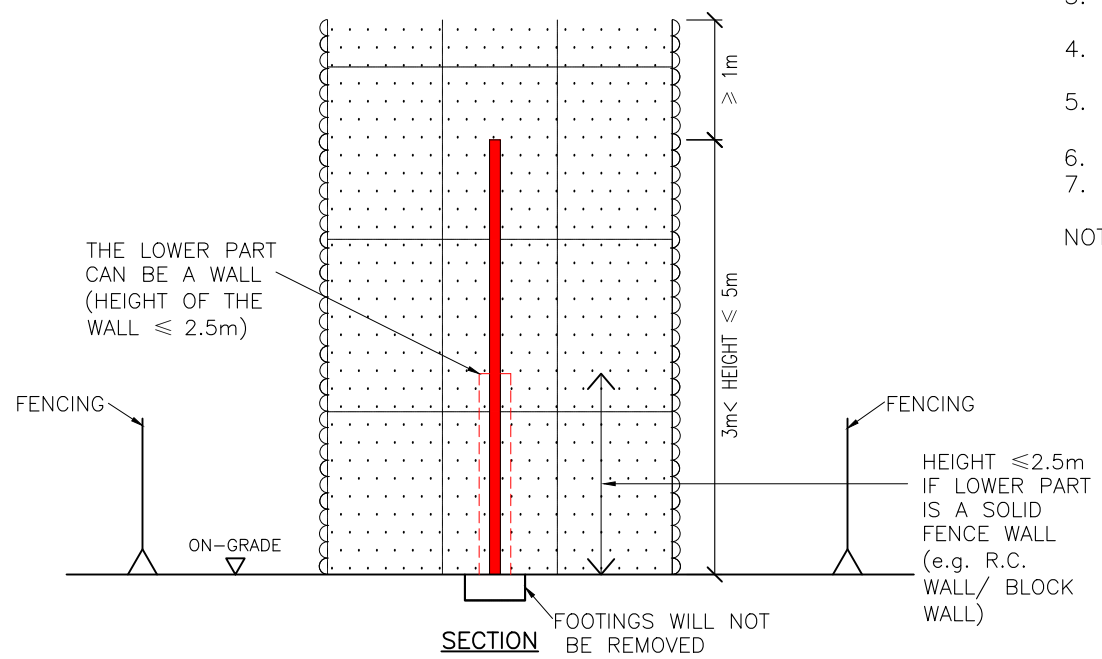
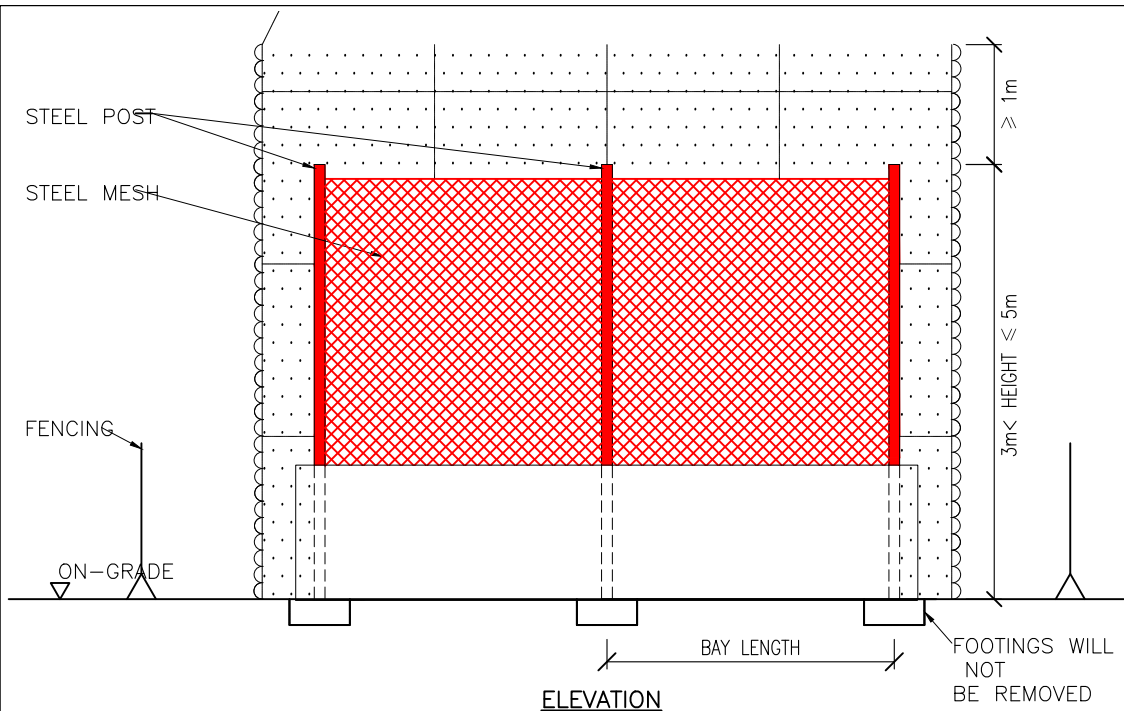
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
3. Reference shall be made to Code of Demolition 2004 published by the Buildings Department.

WORKING PROCEDURES :

1. The wall shall be removed from top to bottom.
2. The contractor may refer to Figure 4.7 from Code of Practice for Demolition Works as appropriate.
3. The wall shall be broken down into small pieces for construction waste disposal.
4. The disposal of waste shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
5. Make good and reinstate the affected area of the parent structure.
6. Dismantle the bamboo scaffold and clean the site.

NOTE : This case excludes the DEW item 5



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

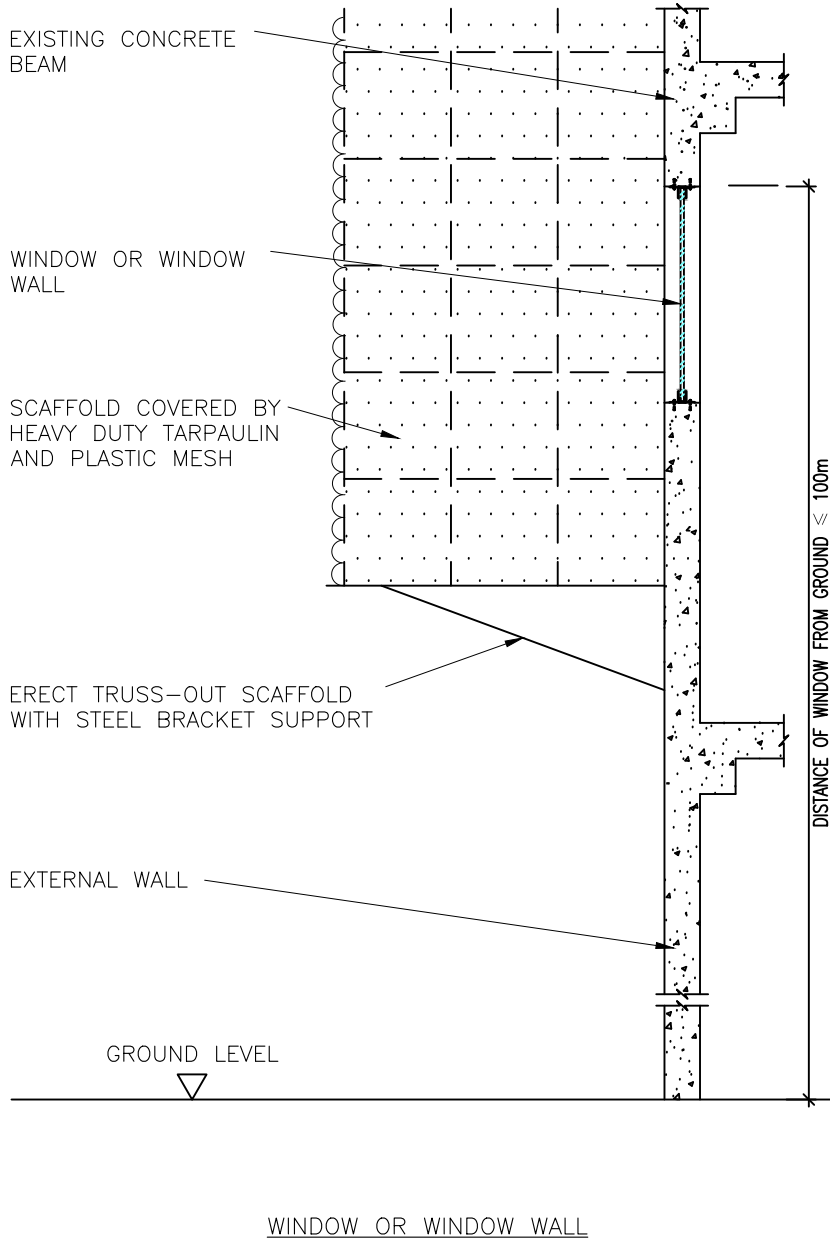
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Cut down the steel mesh from top to bottom. (To be removed in bay by bay)
2. Remove the steel posts and their base plates.
3. If the lower part is a solid fence wall, use handheld tools to break up the wall from top to bottom into small pieces.
4. All materials shall be cut down into small pieces for construction waste disposal.
5. Proper disposal shall be at prescribed facilities as provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
6. Make good and reinstate the work area affected by the works.
7. Dismantle the bamboo scaffold and clean the site.

NOTE : This case excludes the DEW item 6

MINOR WORKS ITEM 3.5	<p>DRAWING TITLE :</p> <p>REMOVAL OF EXTERNAL MESH FENCE, OR METAL RAILING, WITH OR WITHOUT A SOLID FENCE WALL AS ITS LOWER PART ON GRADE</p>	
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GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- The requirements of PNAP APP-116 and PNRC 47 should be followed for the standards and details of aluminium windows and fixing of hinges.
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of practice for structural use of glass 2018
- All structural steel plates and angles to be Grade S275JO to BS EN 10029 and BS EN 10056 respectively. All structural steel plates and angles shall be hot dip galvanized to BS EN ISO 1461:1461
- All anchor bolts to be HILTI HSC-AR M8x40 or equivalent @ 250 mm c/c and shall be installed according to the manufacturer's specifications.
- All glass panels to be tempered glass with ultimate design strength of 80N/m² and strength reduction factor=1.0. All glass should be flat clear/ tinted/ coated glass. The glass surface treatment shall not be ceramic fritted/ enamelled painted/ patterned (embossed)/ sand blasted/ acid etched.
- Non-structural silicone sealant to be Dow Corning 791 or equivalent.
- Structural silicone sealant to be Dow Corning 795 or equivalent. Maximum allowable design strength 138 N/mm².
- Existing concrete grade is assumed to be Grade 20 with the min. cube strength of 20N/mm².
- The works do not result in any additional load to any cantilevered slab.
- Size of glass should be 2mm smaller than the opening size to allow thermal expansion.
- Proposed works do not involve the alteration of any other structural elements, except a simply supported beam that:
 - is not of pre-stressed construction; and
 - is not used to support any column, flat slab or ribbed beam
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

- Obtain the original design drawings/ information for reference prior to the commencement of works.
- Inform the utilities company or sector if its works will be affected.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- The structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to carrying out of minor works.

DESIGN LOADS :

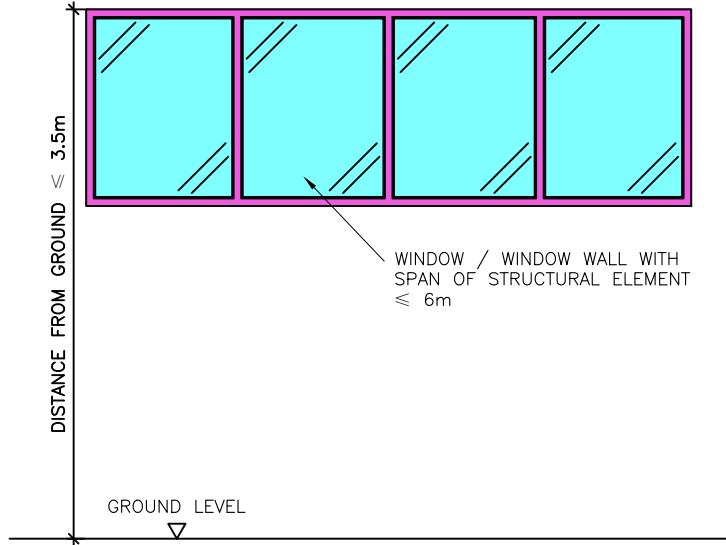
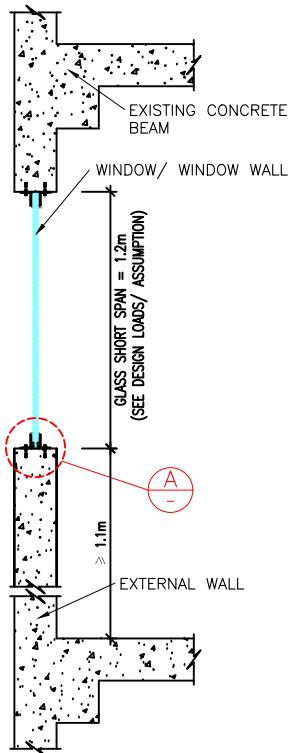
- Dead Load = 27 kN/m³
- Wind Load = 2.86 kN/m² with total pressure coeff. of 1.4 (effective height = 100m)
Assume topography factor, St=1.0; Wind directionality factor, Sθ=0.85; size factor, Ss=1.0
- 12mm THK. tempered glass and its fixing is designed for glass span of 1.2m, spanning one-way.

SAFETY AND PRECAUTIONARY MEASURES

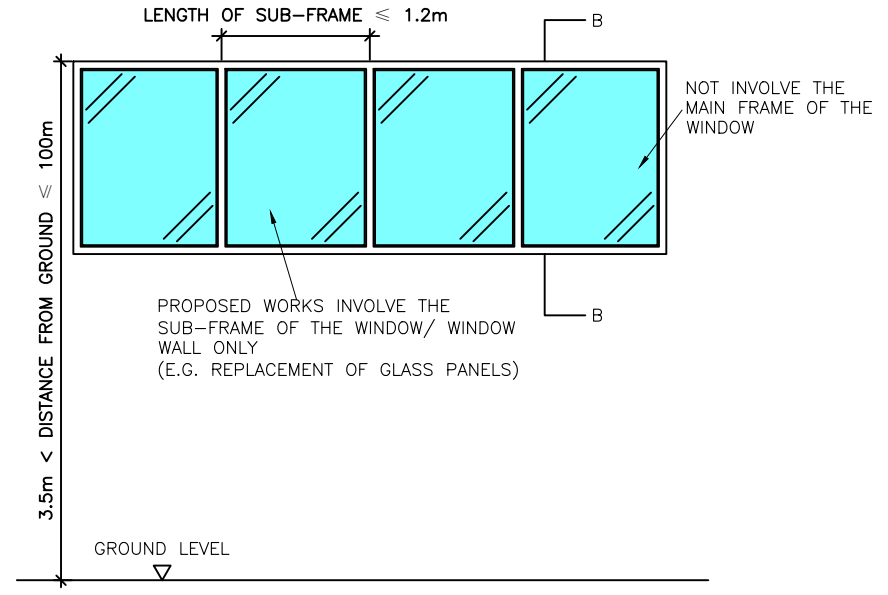
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

- Installation
 - Setting out the level and alignment of the window frame onto the wall.
 - Place the window frame into correct setting out.
 - Fix the angle and neoprene pad in accordance with the original design.
 - Seal up the gap between the edge of opening and window frames by using non-shrink cementitious grout.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration
 - Temporary fix the window frame to a rigid point by using proper stainless steel wire/ nylon.
 - Break off the concrete surrounding of the original window frame by hand-held hydraulic breaker. Allow 25mm to 75mm between the edge of opening and window frames.
 - Cut off the original steel angle.
 - Remove the original window glass and install the new window frames and glass according to the new design.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Repair and Replacement
 - Temporary fix the window frame to a rigid point by using proper stainless steel wire/ nylon rope.
 - Remove the defective window glass, and/or frame and using the same size of glass/frame for replacement.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

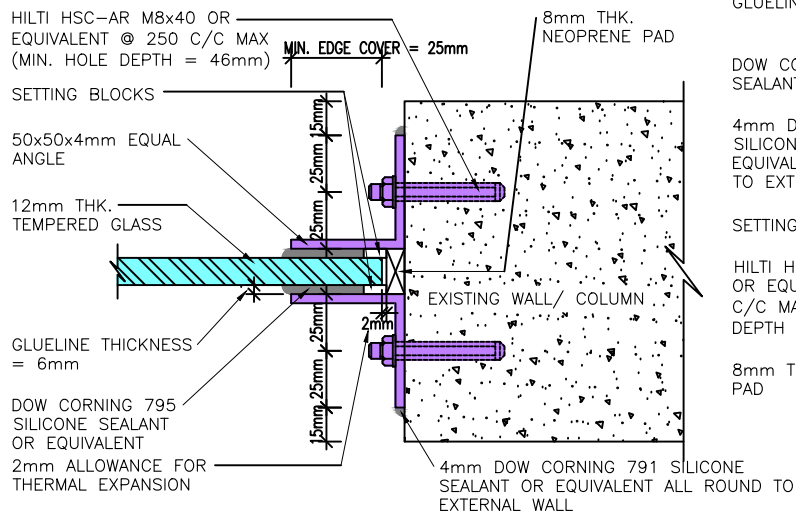


CONDITIONAL DIAGRAM 1
(DISTANCE FROM GROUND ≤ 3.5m)

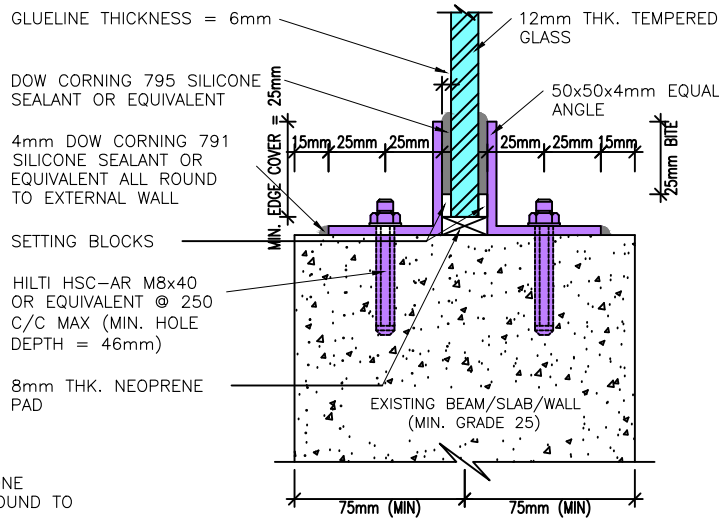


CONDITIONAL DIAGRAM 2
(3.5m ≤ DISTANCE FROM GROUND ≤ 100m)

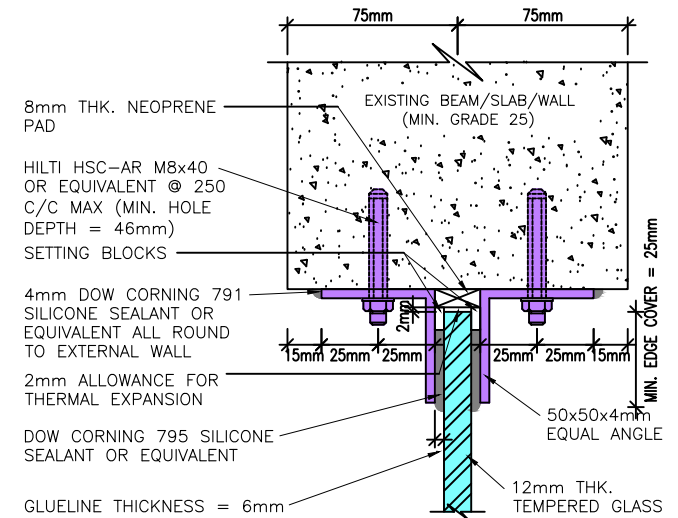
SECTION B-B OF WINDOW / WINDOW WALL



SIDE EDGE FIXING DETAILS



DETAIL A : BOTTOM EDGE FIXING DETAILS



TOP EDGE FIXING DETAILS

SCAFFOLD COVERED BY HEAVY DUTY TARPAULIN AND NYLON MESH

HEIGHT OF SCAFFOLD ABOVE THE WINDOW

EXTERNAL WALL

WINDOW OR WINDOW WALL TO BE REMOVED

OUTSIDE

DISTANCE \leq 3.5m

GROUND LEVEL

INSIDE OF A BUILDING

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

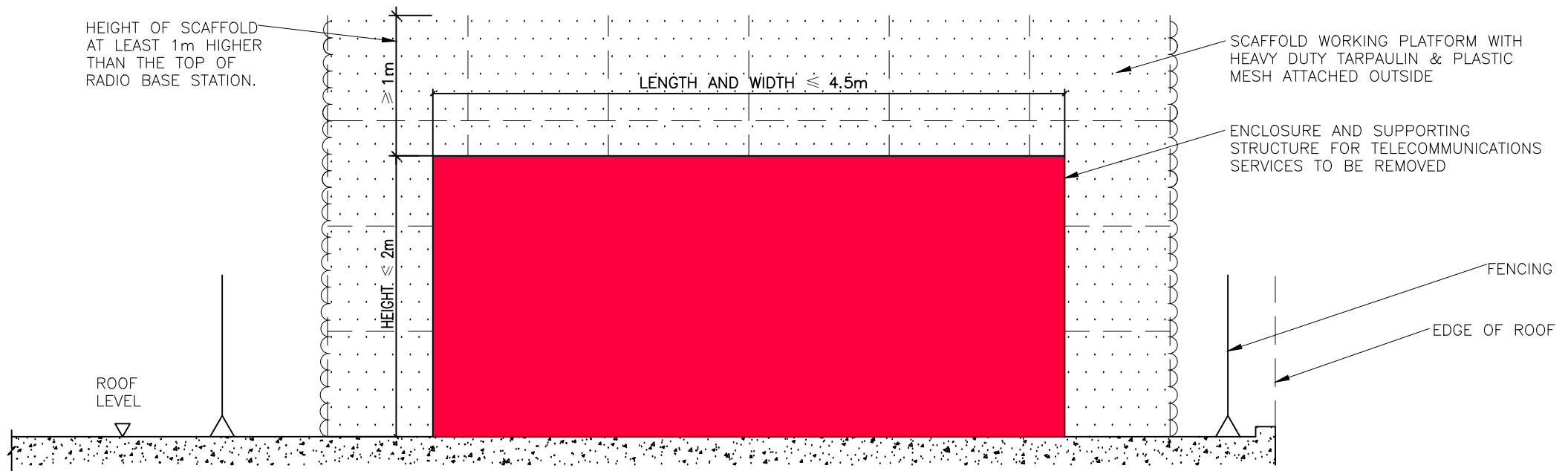
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove all glazing manually.
2. Remove all openable window frames manually by mechanical tool where appropriate.
3. Remove the main frame/ mullion/ transom using mechanical hand held tool.
4. All members shall be cut into small pieces for construction waste disposal.
5. The disposal of waste shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
6. Provide temporary protection to the wall opening for subsequent works where necessary.
7. Dismantle bamboo scaffold and clean the site.

Remarks :

1. For window erection to the opening, please refer to MW item 3.6.
2. For block wall erection to the opening, please refer to MW item 2.14.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works
2. Inform the utilities company or sector if the works to be involved.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

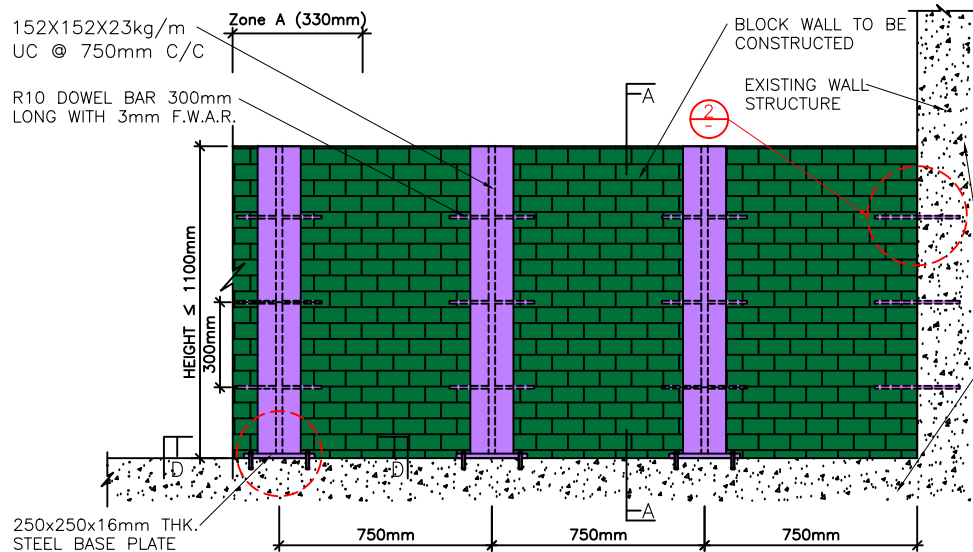
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. No accumulation of demolished parts should be stored on roof.
3. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

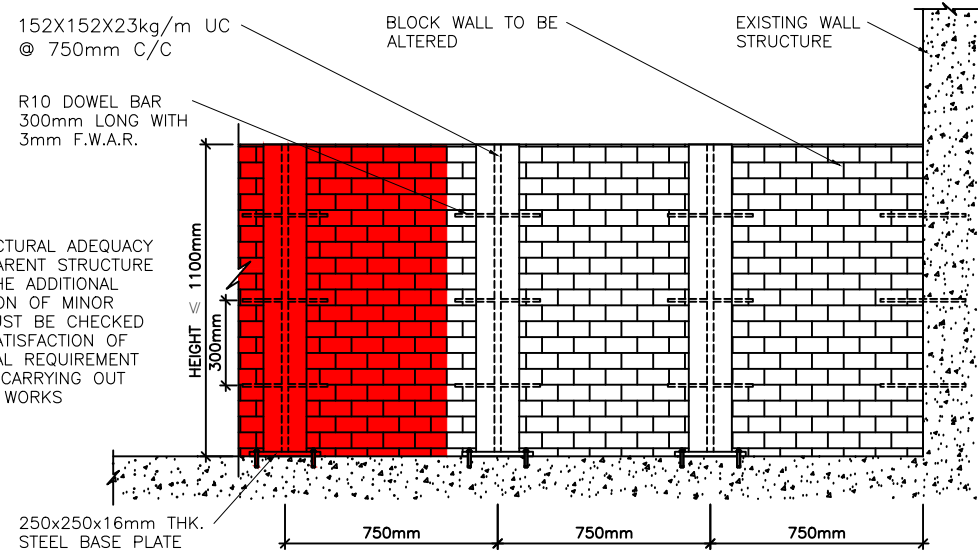
1. Disconnect all utilities prior to the removal of enclosure or cabinet of the telecommunication services.
2. Remove the enclosure or cabinet of the telecommunication services by releasing all fixing bolts if necessary.
3. Remove the telecommunication equipment.
4. Remove the steel supporting structure by oxy-acetylene torch to small pieces for construction waste disposal.
5. Remove the concrete supporting structure by hand-held hydraulic breaker. Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal.
6. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected areas (including waterproofing layer) of the parent building.
8. Remove the bamboo scaffold and clean the site.

MINOR WORKS ITEM 3.8

DRAWING TITLE : REMOVAL OF RADIO BASE STATION FOR TELECOMMUNICATIONS SERVICES
IN THE FORM OF AN ENCLOSURE OR EQUIPMENT CABINET TOGETHER WITH ITS SUPPORTING
STRUCTURE LOCATED ON A ROOF OF A BUILDING



ERECTION OF EXTERNAL NON-LOAD BEARING BLOCK WALL



ALTERATION OF EXTERNAL NON-LOAD BEARING BLOCK WALL

THE STRUCTURAL ADEQUACY OF THE PARENT STRUCTURE DUE TO THE ADDITIONAL INSTALLATION OF MINOR WORKS MUST BE CHECKED TO THE SATISFACTION OF STRUCTURAL REQUIREMENT PRIOR TO CARRYING OUT OF MINOR WORKS

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations.
 - Code of Practice for Structural Use of Steel 2011.
 - Code of Practice on Wind Effects in Hong Kong 2019.
 - Code of Practice for Demolition of Buildings 2004.
 - BS5628 – Code of Practice for the Use of Masonry : Part 1 Structural use of Unreinforced Masonry
 - Specifications and Method Statements for YTONG AAC Block Wall or equivalent standard.
- All structural steel to be grade S275 J0 to BS EN 10025 and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 3 mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchors bolts to be Hilti HSC-AR M12x60 or equivalent and shall be installed according to the manufacturer's specification.
- Existing concrete grade is assumed to be Grade 30.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm^2 and the density of 650 kg/m^3 .
- Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm^2 by site tests.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- DEAD LOAD = 6.5 kN/m^2
- WIND LOAD = 2.86 kN/m^2 with force coefficient of 3.4 (Zone A) and 2.1 (other than Zone A) (effective height=100m)
Assume topography factor, $S_t=1.0$; wind directionality factor, $S_\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

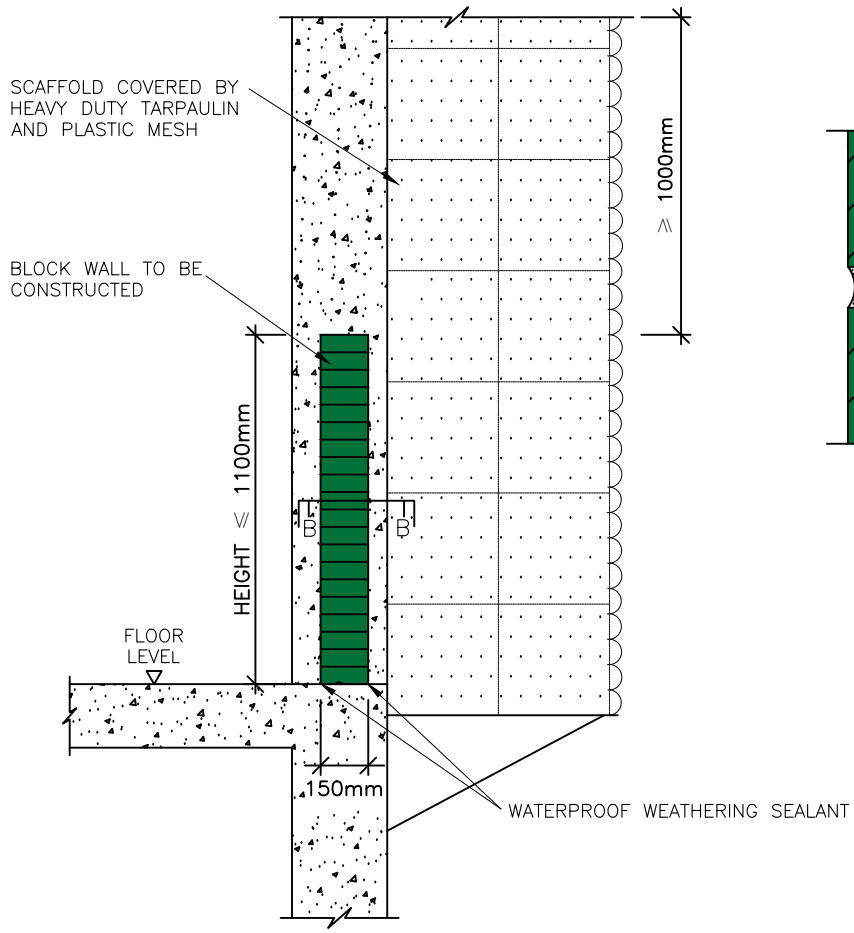
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

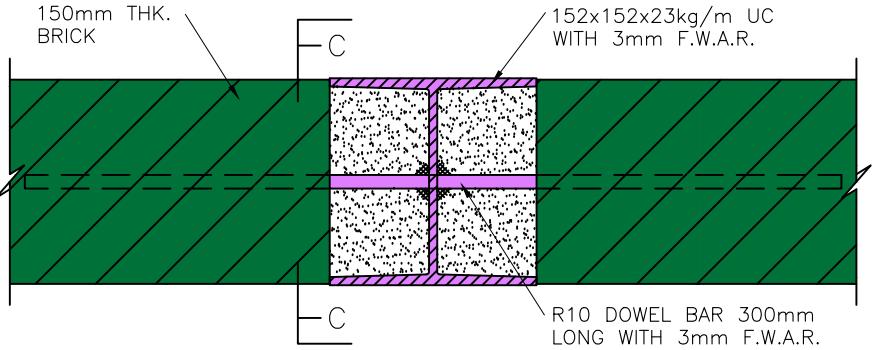
- Erection
 - Install the required works as per the drawing.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration (e.g. Reducing the length of the block wall)
 - Set out the areas to be removed.
 - Use saw cut machine to saw cut the render and remove the brickwork by using mechanical hand-held tools.
 - Cut down the steel posts into small pieces for construction waste disposal.
 - Apply 20mm thick rendering (cement : sand = 1 : 3) to the new edge of the block wall.
 - Make good and reinstate the affected areas.
 - Dismantle the bamboo scaffold and clean the site.
- Removal
 - Remove the brickwork by using mechanical hand-held tools.
 - Remove the top 300mm wall layer first and repeat layer by layer.
 - Cut down the steel posts into small pieces for construction waste disposal.
 - The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation .
 - Make good and reinstate the affected areas.
 - Dismantle the bamboo scaffold and clean the site.

Remarks:

- Protect the external wall opening by providing a barrier not less than 1100mm high if necessary.
- This case excludes MW items 3.45 or 3.46.



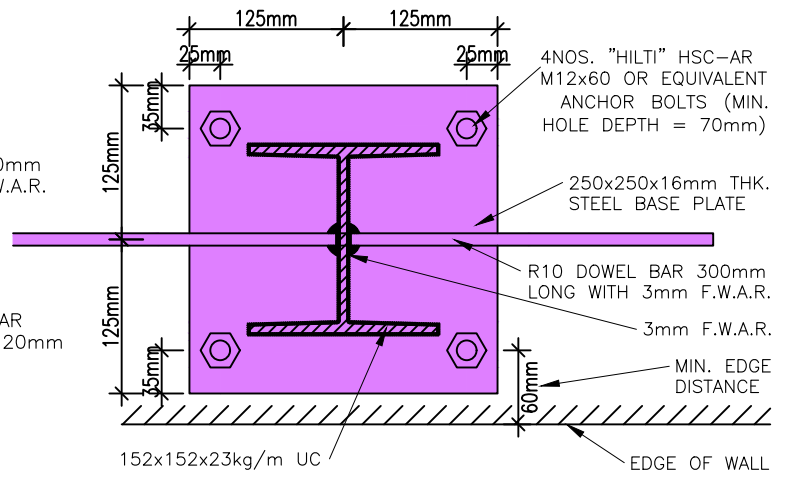
SECTION A-A



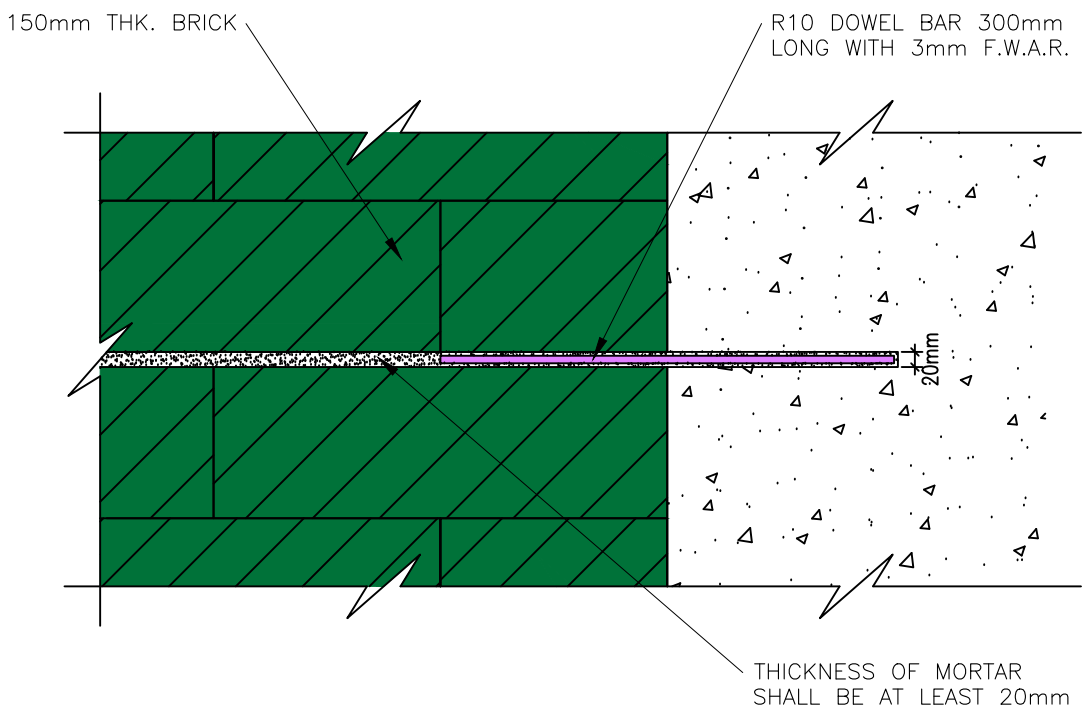
SECTION B-B



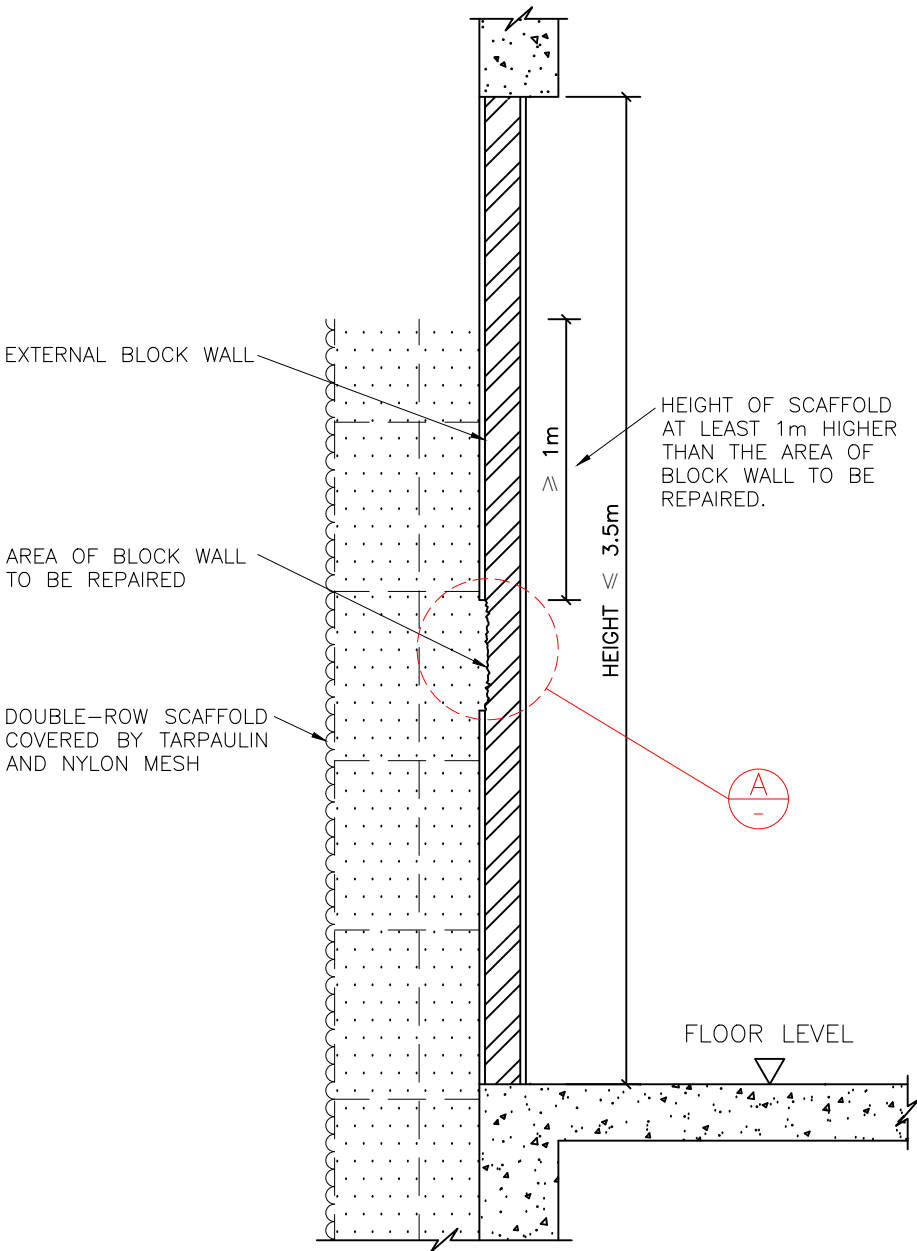
SECTION C-C



SECTION D-D



DETAIL 2



REPAIR OF EXTERNAL BLOCK WALL

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

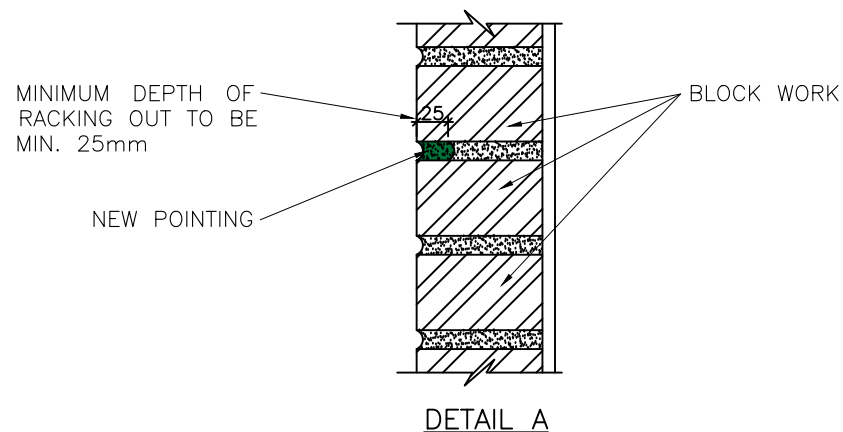
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector if their works will be involved.
3. Carry condition survey of the parent structure/existing condition prior to the commencement of works.

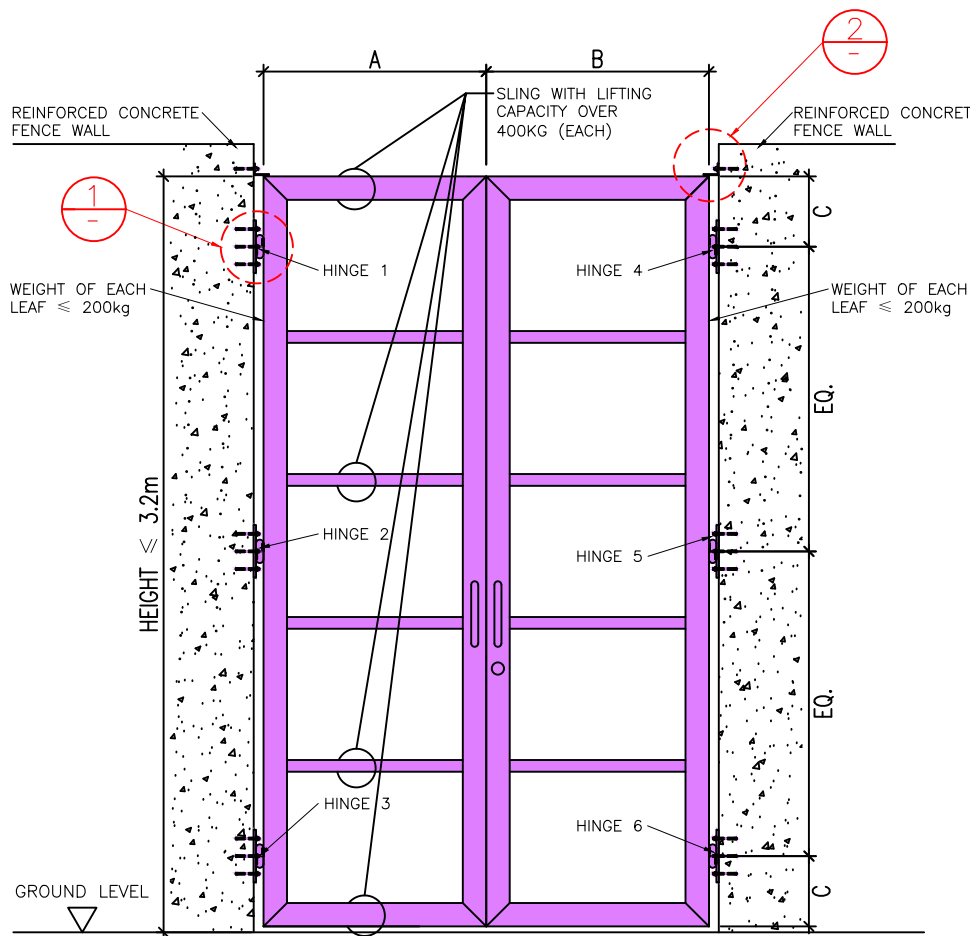
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Locate the defective area on wall by visual inspection and saw cut the rendering around the area to be repaired.
2. Remove the rendering using hand-held mechanical tools.
3. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm.
4. Apply pointing in cement and sand (1:1) to the exposed joints.
5. Apply 20mm thick rendering (cement : sand = 1:3) to the wall.
6. Make good and reinstate the affected areas of the parent building.
7. Dismantle the bamboo scaffold and clean the site.





ERECTION OF METAL GATE AT A FENCE WALL OR AT AN ENTRANCE TO A BUILDING

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
- All structural steel to be grade S275 JO to BS EN 10029 for plates, BS EN 10056 for angles and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 5 mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HSC-AR M10x40 or equivalent and shall be installed according to the manufacturer's specification.
- Concrete grade of the existing reinforced concrete wall shall be Grade 30 with a minimum thickness of 200mm.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN DIMENSIONS :

A = 1.2m, B = 1.2m, C = 300mm, Height = 3.2m

DESIGN LOADS :

- Dead Load = 200kg/Leaf
- Wind Load = 1.77 kN/m^2 with pressure coeff. 2.0 (effective height=5m)
Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey of the parent structure/ existing condition to ensure it is structurally capable to hold the metal gate prior to the commencement of works.
- Disconnect the electric locking device (if any) prior to the commencement of works.

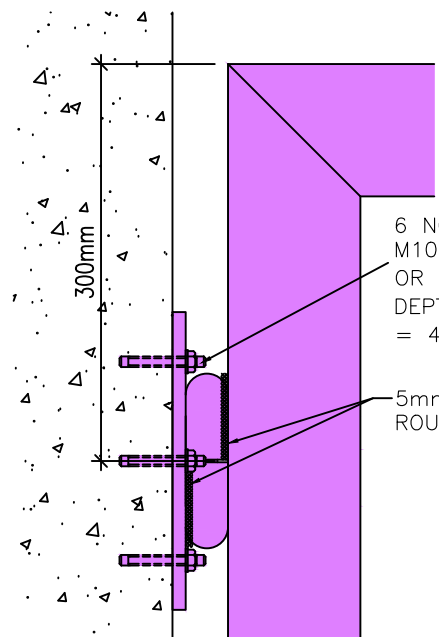
SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department.

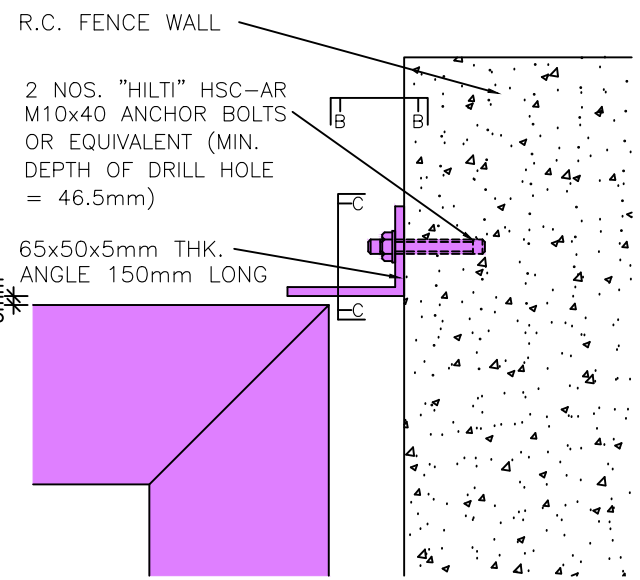
WORKING PROCEDURES :

- Erection
 - Install the metal gate as per the drawing.
 - Check the gate to ensure if it can operate smoothly.
 - Make good and reinstate the affected areas of the parent structure and clean the site.
- Alteration or Repair
 - Fix the lifting device(s) onto a secure point above the metal gate.
 - Temporary remove the metal gate by using lifting device(s).
 - Alter or repair the member(s) of the metal gate.
 - Erect the metal gate by the lifting device(s).
 - Make good and reinstate the affected areas of the parent structure and clean the site.
- Removal
 - Refer to MW item 3.33.

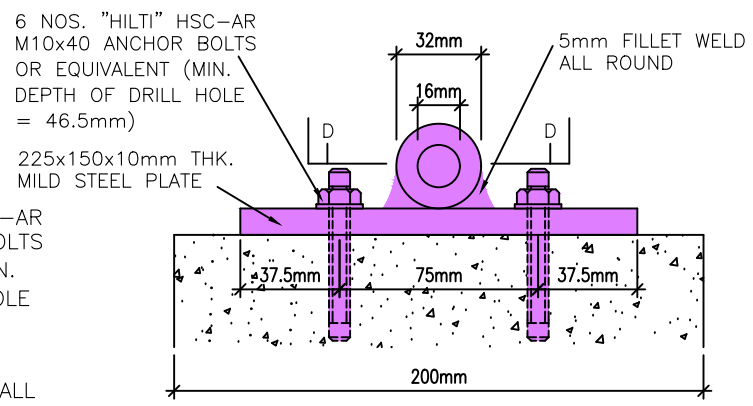
Remarks : This case excludes DEW Item 8



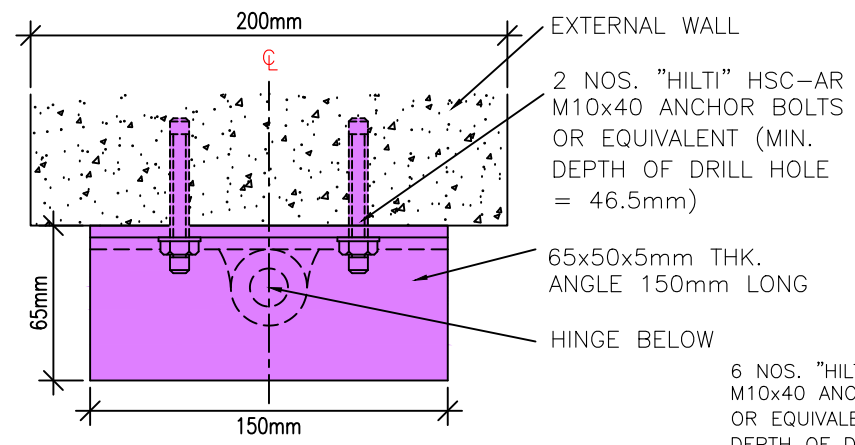
DETAIL 1



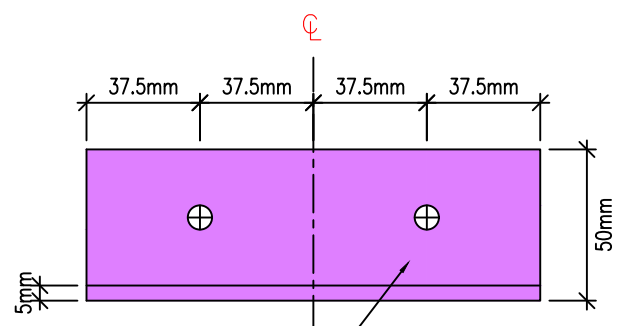
DETAIL 2 : RESTRAINT AGAINST VERTICAL MOVEMENT



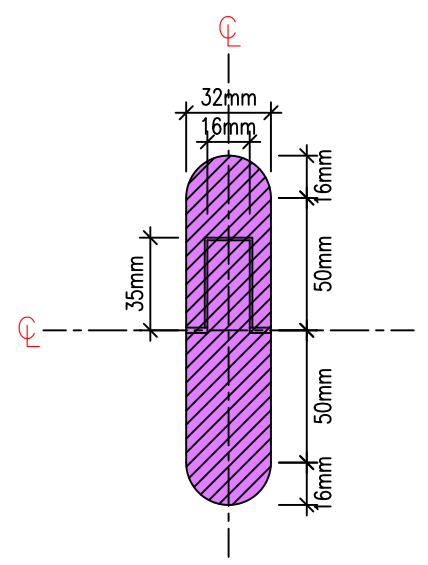
SECTION A-A



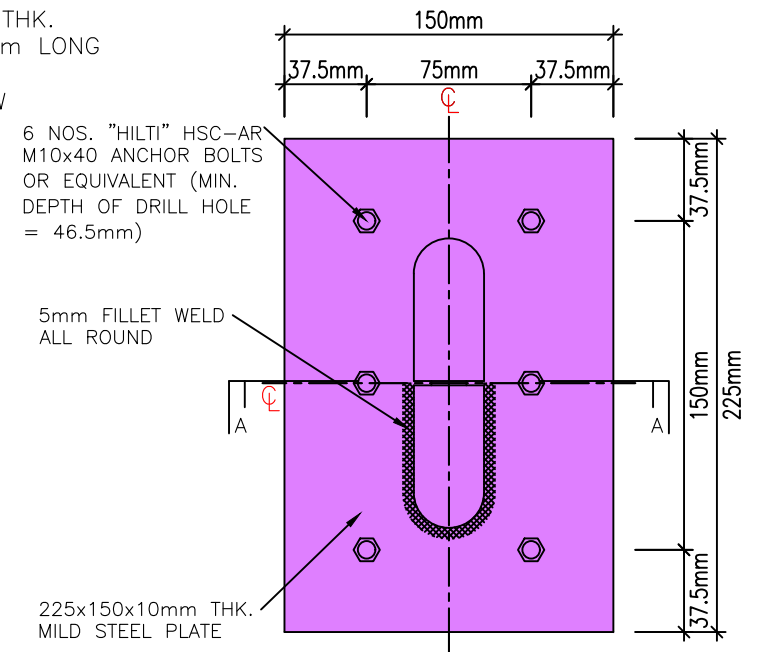
SECTION B-B



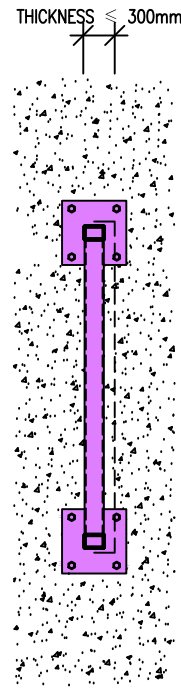
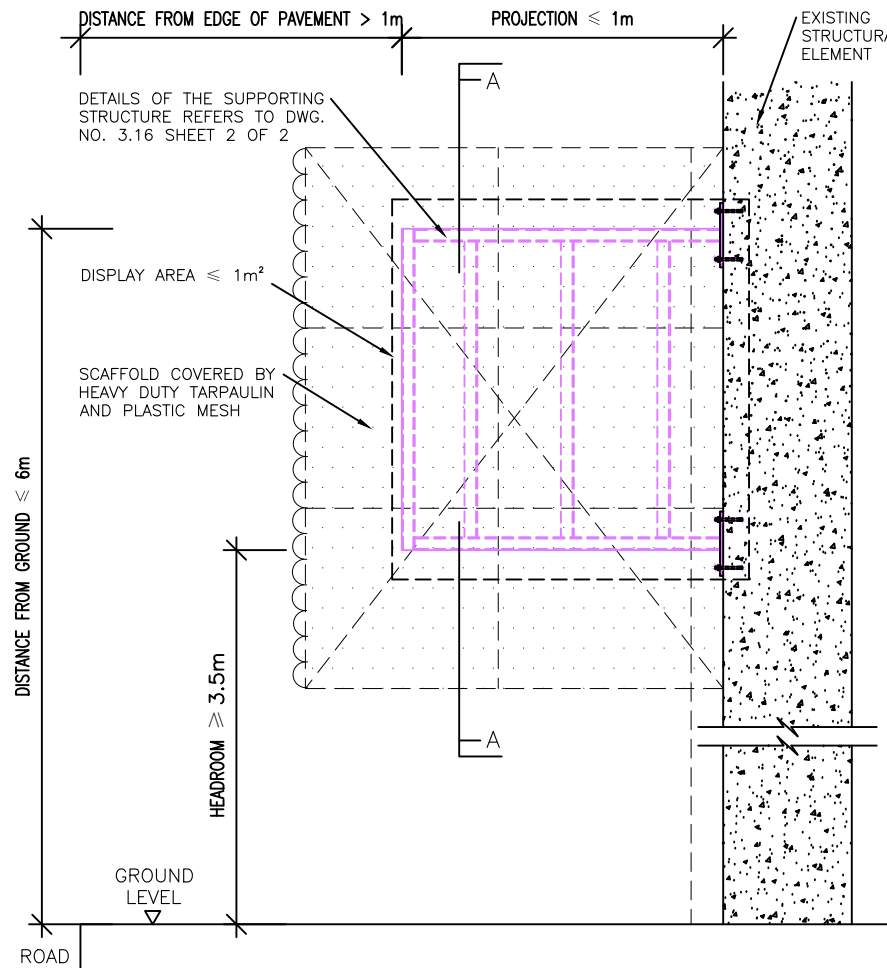
SECTION C-C



SECTION D - D



HINGE DETAIL



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - Code of Practice in Access for External Maintenance 2021
- All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections, BS EN 10056 for angles and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 4 mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011-1:2009 and all electrodes to BS EN ISO 2560:2009
- All anchor bolts to be Hilti HSA-R M16 or equivalent and shall be installed according to the manufacturer's specification.
- Concrete grade of the existing reinforced concrete column is assumed to be Grade 20 with a minimum thickness of 400mm.
- All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint or equivalent with thickness of 1.5mm ($H_p/A = 175$).
- All banners should be made of non-combustible material.
- Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011".
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 1.00kN/m^2 (Including cladding)
- Wind Load = 1.98kN/m^2 with total pressure coefficient 1.8 (effective height = 10m)
Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

- Obtain the existing design drawings/ information of the signboard for reference.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- For removal, if the signboard consists of light emitting diodes or other lighting, disconnect the power to the signboard before the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- The structural adequacy of the supporting parent structure due to the additional installation of signboard must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
- Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

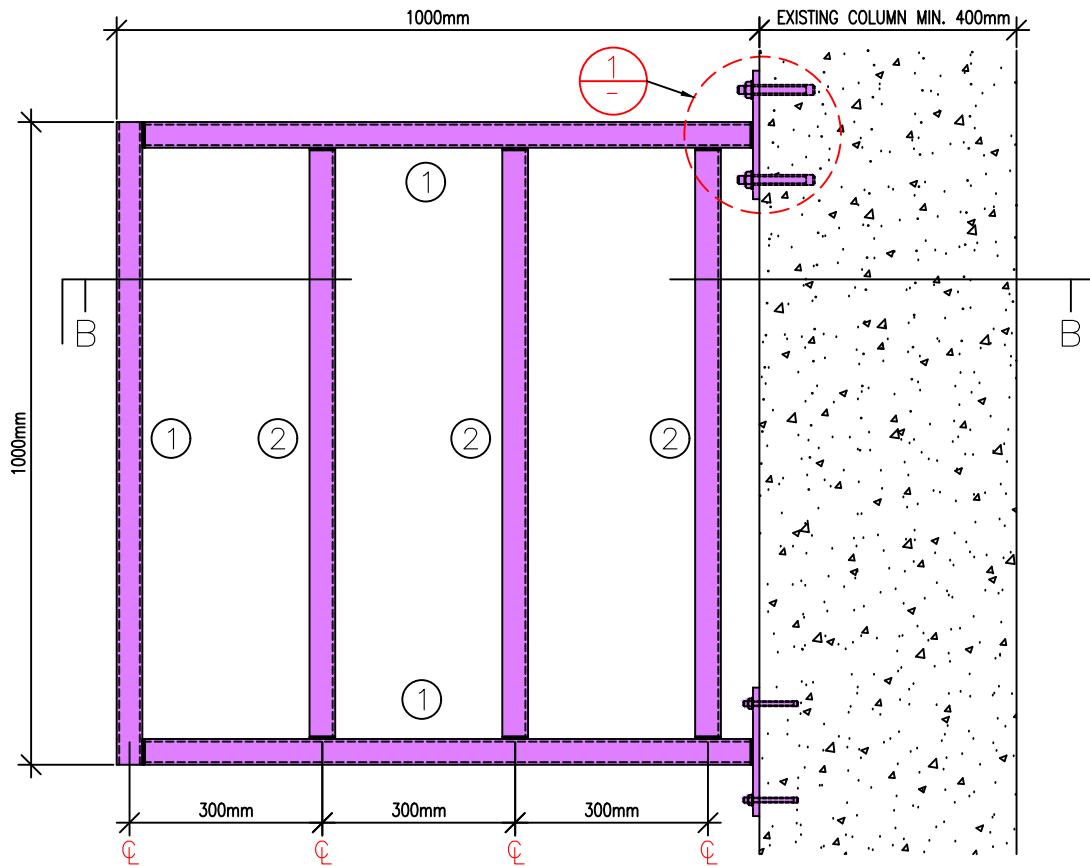
SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
 - Figure 5 Bamboo scaffold for signboard
- Disconnect the electric power, if any, connected to the sign board.

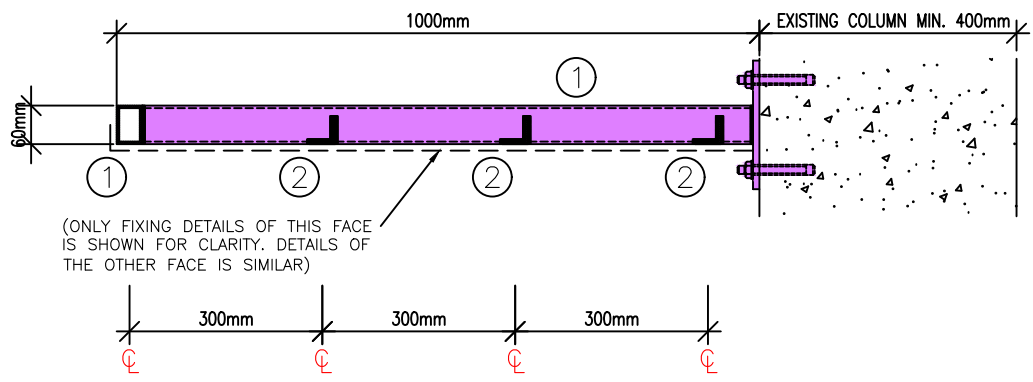
WORKING PROCEDURES :

- Erection**
 - Install the signboard as per drawing.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Alteration**
 - Remove the display surface/ loose parts from the signboard.
 - Remove the defective member and replace with a new member of the same material and same size.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.
- Removal**
 - Remove the display surface/ loose parts from the signboard.
 - Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
 - The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
 - The removal works shall commence from the outmost side to the supporting ends at the parent structure.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the bamboo scaffold and clean the site.

ERECTION OF PROJECTING SIGNBOARD



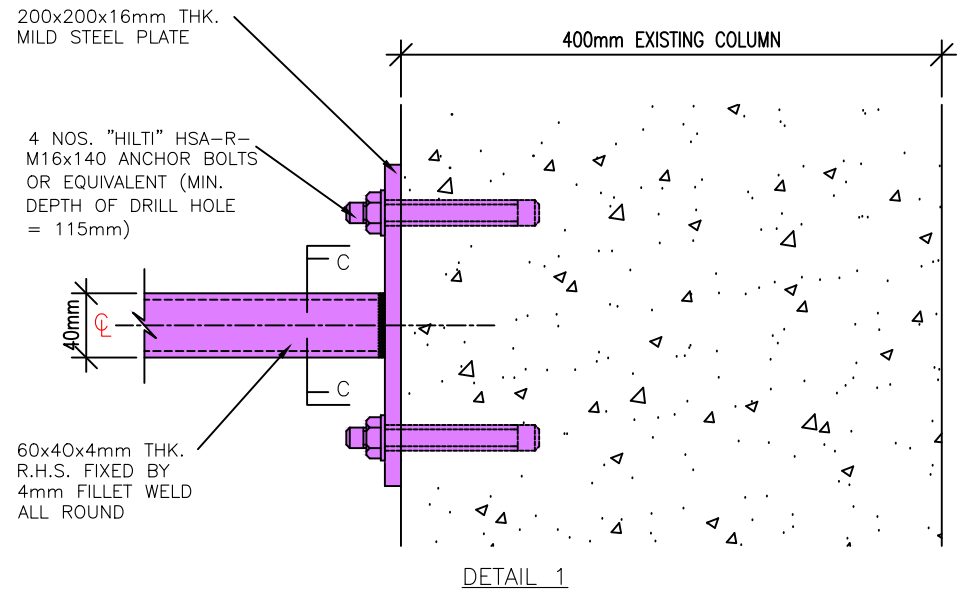
ELEVATION OF THE STRUCTURAL FRAME



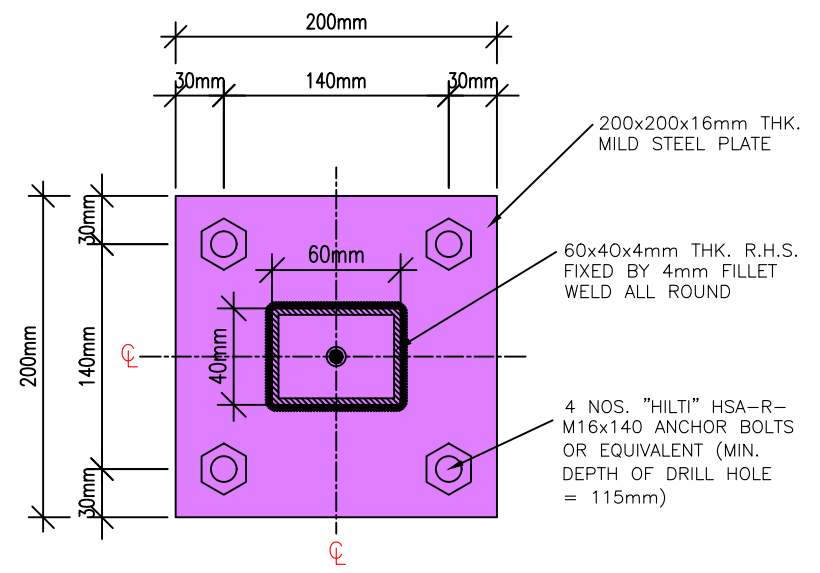
SECTION B - B

(ONLY FIXING DETAILS OF THIS FACE IS SHOWN FOR CLARITY. DETAILS OF THE OTHER FACE IS SIMILAR)

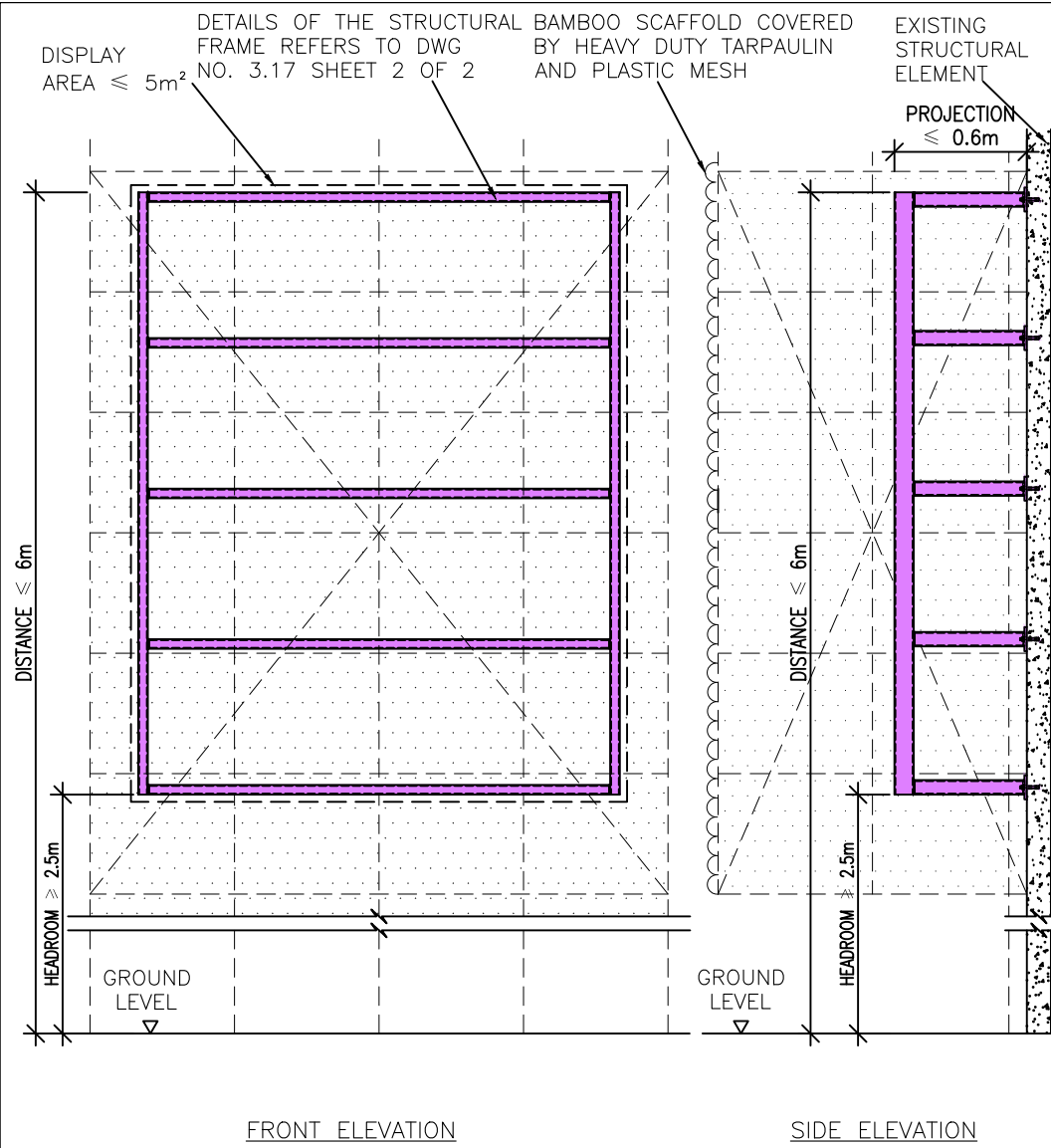
MEMBER SCHEDULE	
①	60x40x4mm THK. R.H.S. FIXED BY 4mm FILLET WELD ALL ROUND
②	40x4mm THK. E.A. FIXED BY 4mm FILLET WELD ALL ROUND



DETAIL 1



SECTION C - C



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for Structural Use of Steel 2011
 - Code of Practice in Access for External Maintenance 2021
3. All structural steel to be grade S275 JO/JOH to BS EN 10210 for hollow sections and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.
4. All connections to be 4mm fillet weld all round or butt weld with weld strength, $p_w = 220 \text{ N/mm}^2$ unless otherwise specified.
5. All anchor bolts to be Hilti HSA-R-M10 or equivalent and shall be installed according to the manufacturer's specification.
6. Existing concrete grade and minimum wall thickness are assumed to be Grade 20 and 100 mm respectively.
7. All removal of existing concrete shall be carried out by using of hand-held tools carefully.
8. All existing reinforcement should not be damaged.
9. All steel members shall be protected with one coat of "UNITHERM 38091" fire resistance paint or equivalent with thickness of 1.5mm ($H_p/A = 175$).
10. All banner should be made of non-combustible material.
11. Tolerances such as lack of fit, hole diameter and dimensions etc shall be allowed in accordance with the provision of "Code of Practice for the Structural Use of Steel 2011".
12. Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

1. Dead Load = 0.2 kN/m^2
2. Live Load = 1.00 kN/m
3. Wind Load = 1.98 kN/m^2 with pressure coeff. 1.4 (effective height=10m)
Assume topography factor, $S_t=1.0$; wind directionality factor, $S_0=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structural adequacy of the supporting parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of the minor works.
5. Plastering or rendering should be removed to expose concrete face before installation of anchor bolts and base plate.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
 - Figure 5 Bamboo scaffold for signboard

WORKING PROCEDURES :

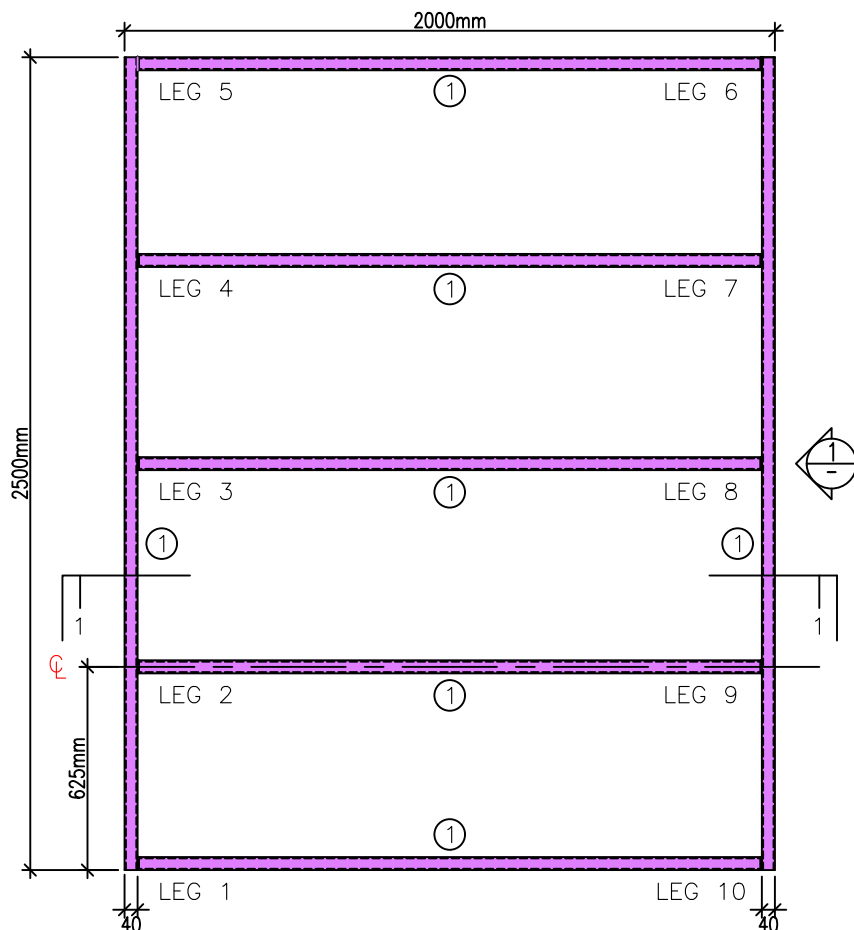
- A. Erection
 1. Install the signage as per drawing NO. 3.17 SHEET 2 OF 2.
- B. Alteration
 1. Remove the display surface and replace with a new one using the same fixing method.
 2. Dismantle bamboo scaffold and clean the site.
- C. Removal
 1. Remove the display surface/ loose parts from the signboard.
 2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
 3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
 4. The removal works shall commence from the top to the bottom.
 5. Make good and reinstate the affected areas of the parent building.
 6. Dismantle the bamboo scaffold and clean the site.

Remarks :

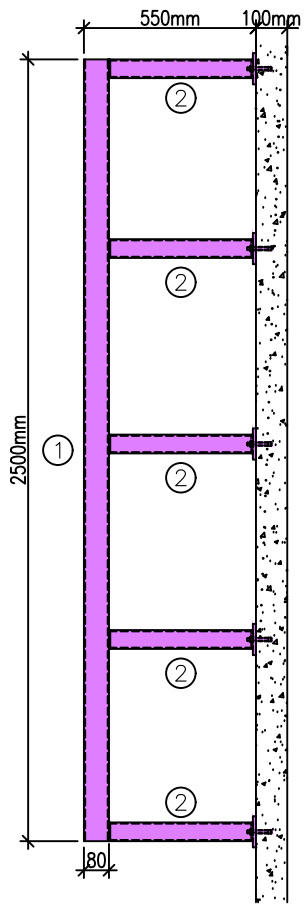
1. This case excludes the DEW item 10, 11 or 30.
2. This item excludes signboard comprising of display system with light emitting diodes.

Wall signboards can also be used as decoration for the shopfront provided that :

- (i) a minimum clearance of 2.5m from ground is maintained below any part of the wall signboard; and
- (ii) the signboard is structurally independent without supporting any roller shutter, air-conditioning unit or being used for storage.



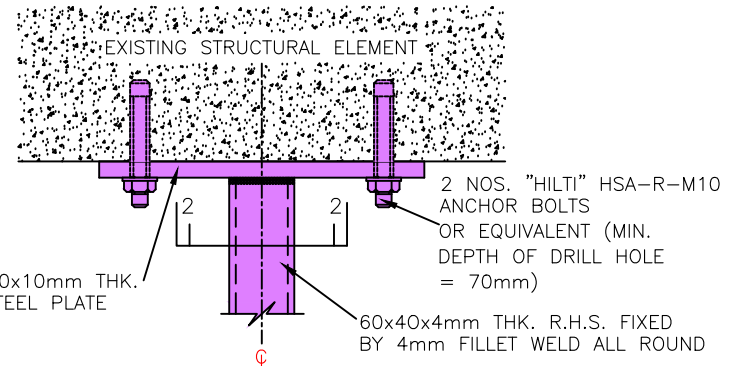
STRUCTURAL FRAME ELEVATION



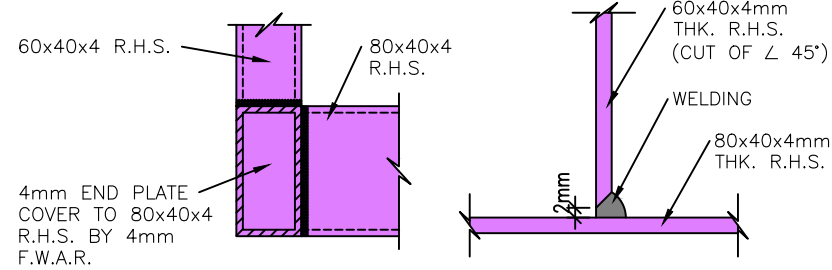
ELEVATION 1

MEMBER SCHEDULE	
①	80x40x4mm THK. R.H.S. FIXED BY 4mm F.W.A.R.
②	60x40x4mm THK. R.H.S. FIXED BY 4mm F.W.A.R.

MIN. THICKNESS OF THE EX. STRUCTURAL ELEMENT FOR THE ANCHOR BOLTS

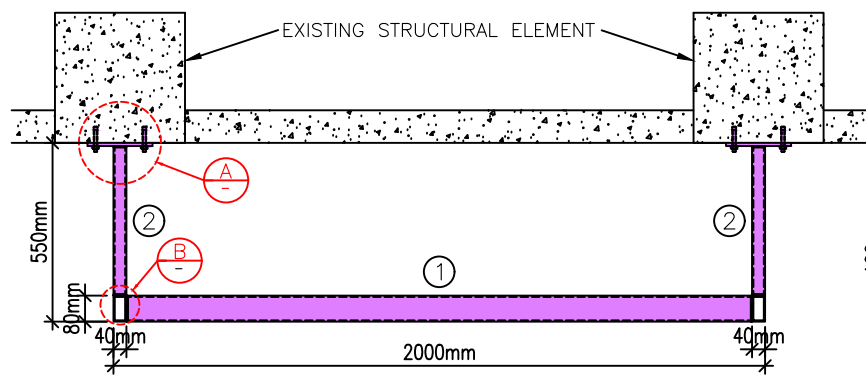


DETAIL A

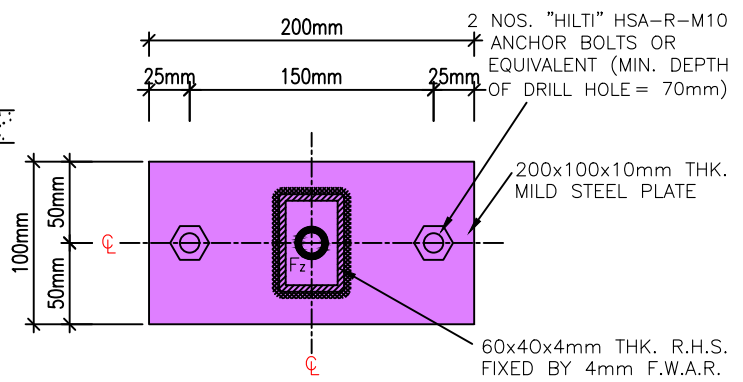


DETAIL B

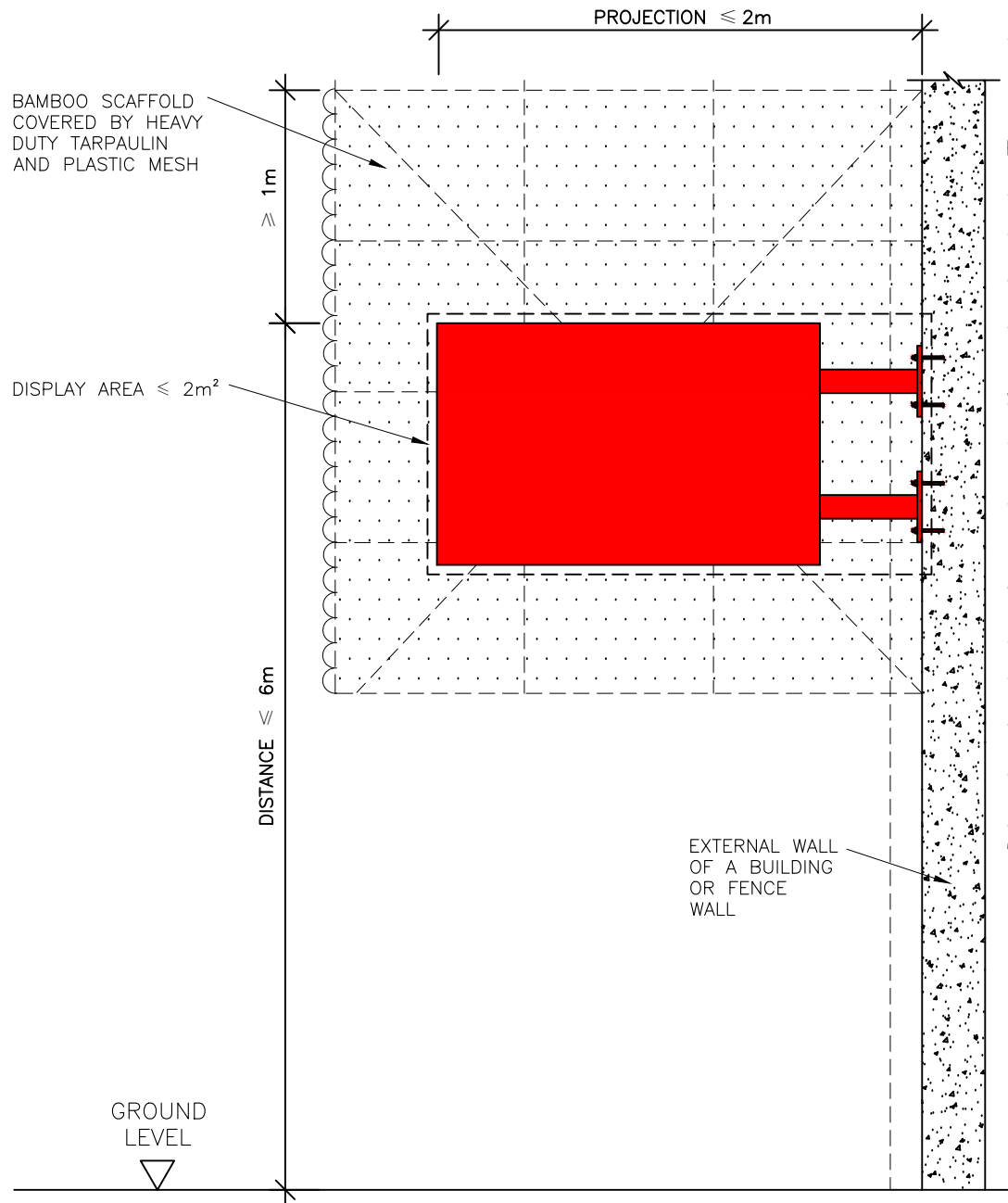
BUTT WELD DETAIL



SECTION 1 - 1



SECTION 2 - 2



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

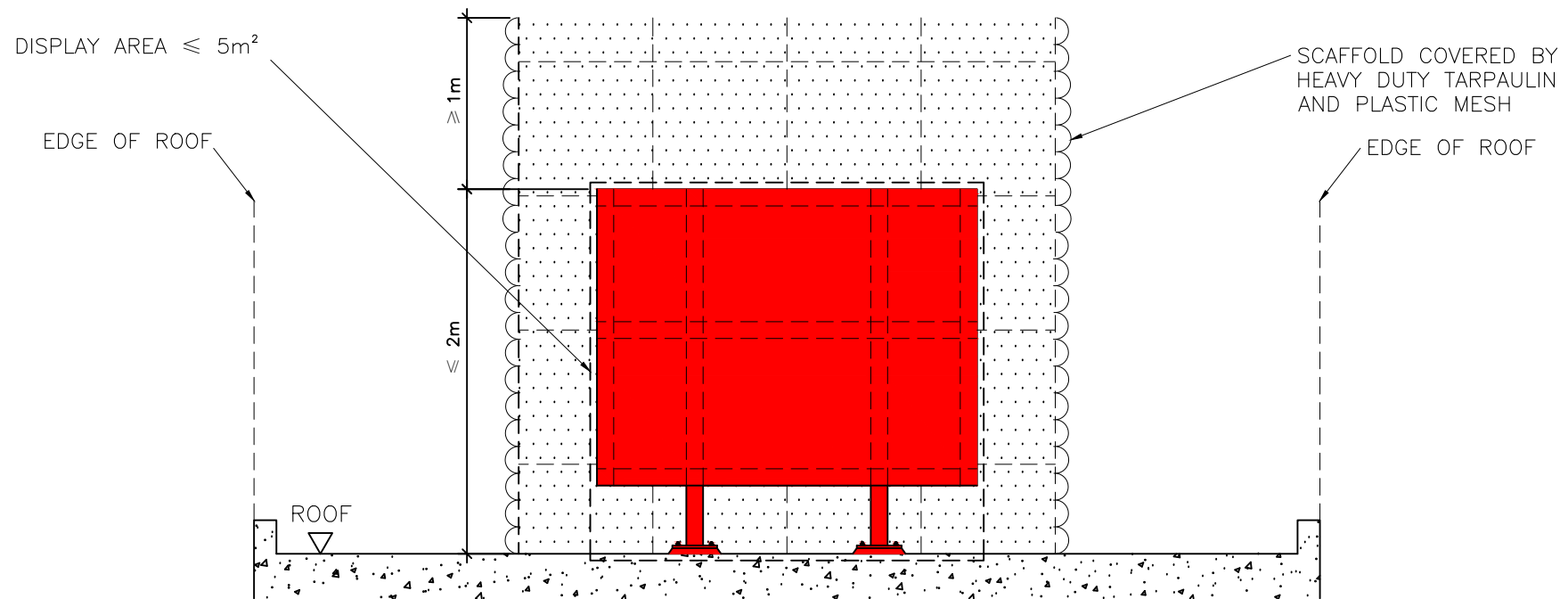
1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the signboard consists of light emitting diodes, disconnect the power connected to the signboard before commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 5 Bamboo scaffold for signage

WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. The removal works shall commence from the outmost side to the supporting ends at the parent structure.
5. Make good and reinstate the affected areas of the parent building.
6. Dismantle the bamboo scaffold and clean the site.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.
(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

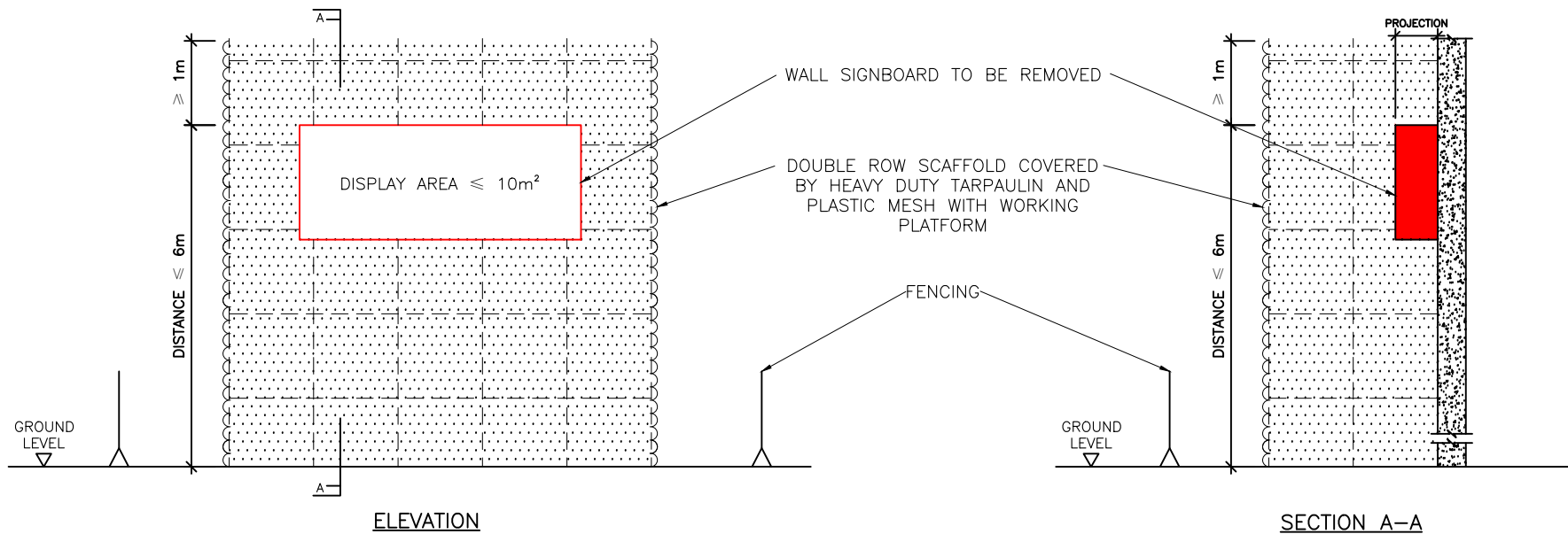
1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the signboard consists of light emitting diodes, disconnect the power connected to the signboard before commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. The removal works shall commence from the top to the bottom.
5. Make good and reinstate the affected areas(including waterproofing works) of the parent building.
6. Dismantle the bamboo scaffold and clean the site.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. If the signboard consists of LED or other lighting, disconnect the power connected before the commencement of work.

SAFETY AND PRECAUTIONARY MEASURES :

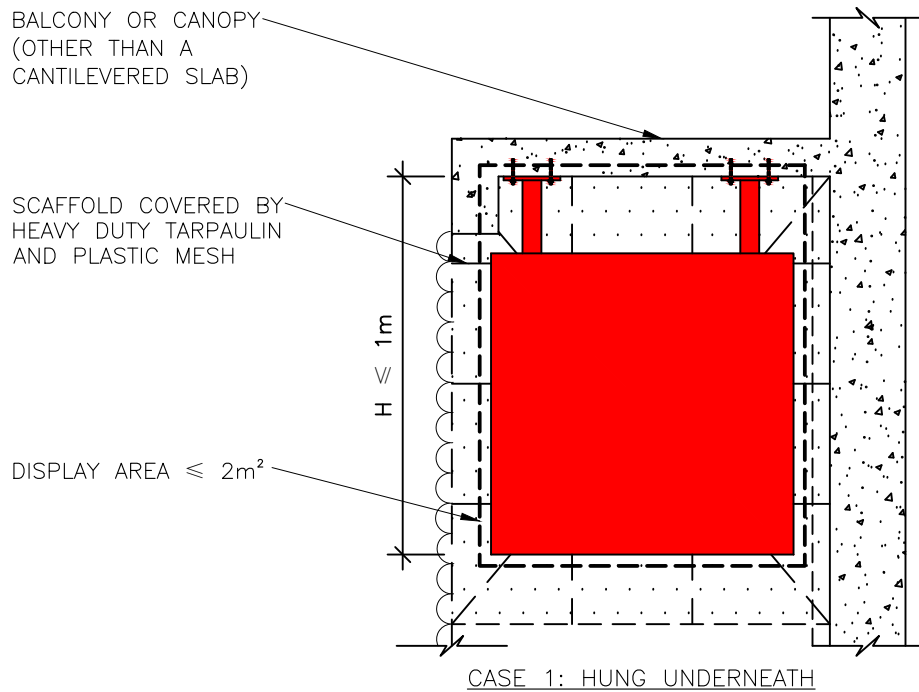
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

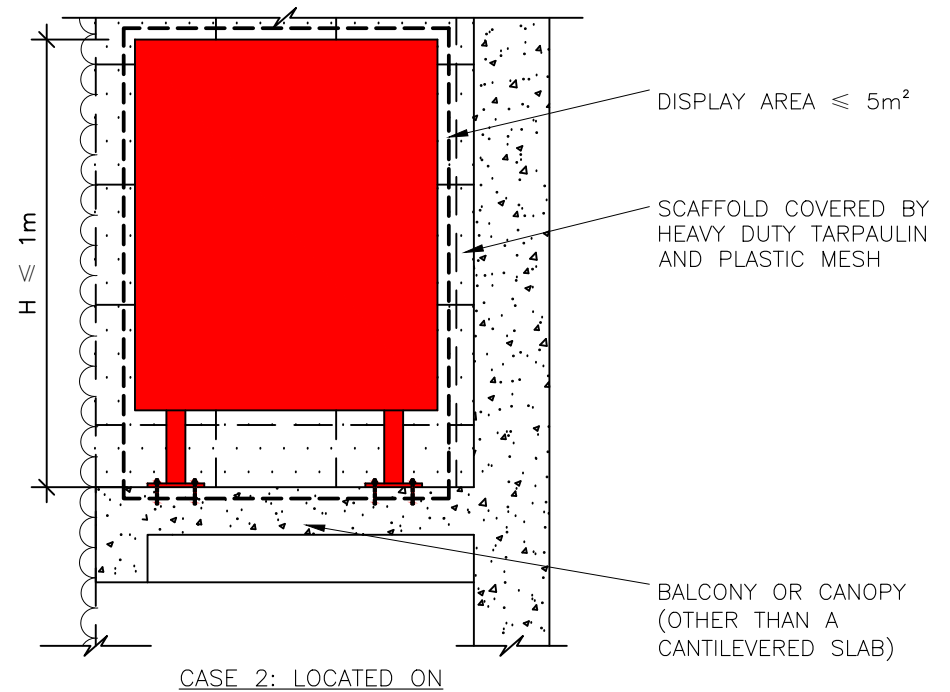
1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation
4. The removal works shall commence from the top to the bottom.
5. Make good and reinstate the affected areas of the parent building.
6. Dismantle the bamboo scaffold and clean the site.

Remarks : This case excludes the DEW item 11

MINOR WORKS ITEM 3.20	DRAWING TITLE : REMOVAL OF WALL SIGNBOARD	
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OR



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference.
2. If the signboard consists of light emitting diodes or other lighting disconnect all the power connected to the signboard before the commencement of any works site.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
 - Figure 5 Bamboo scaffold for signboard

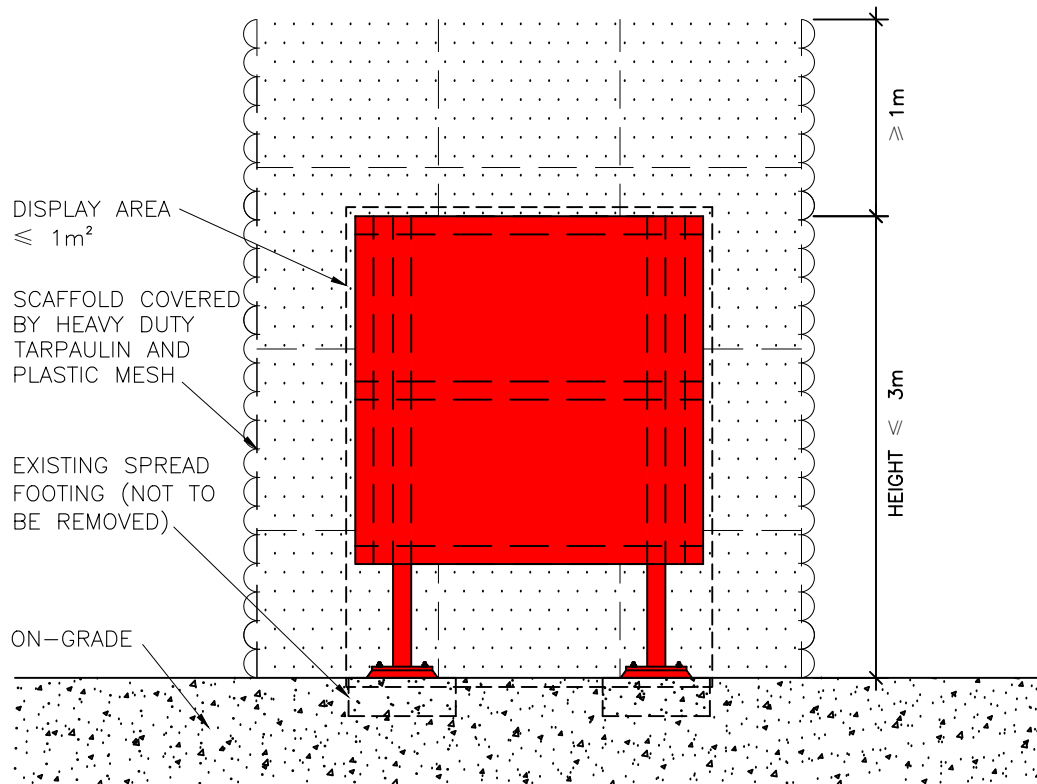
WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the hanging down signboard in Case 1 by cutting the member into smaller size from the bottom to the top for construction waste disposal or remove supporting frame of the signboard in case 2 by cutting the member into smaller size from the top to the bottom for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas (including waterproofing) of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

MINOR WORKS ITEM 3.21

DRAWING TITLE :

REMOVAL OF SIGNBOARD LOCATED ON OR HUNG UNDERNEATH
THE SOFFIT OF A BALCONY OR CANOPY (OTHER THAN A CANTILEVERED SLAB)



GENERAL NOTES :

The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

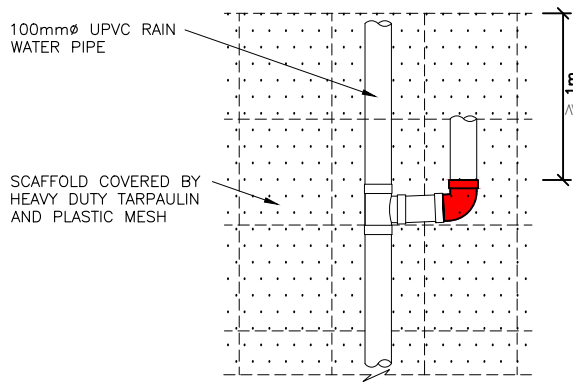
1. Obtain the existing design drawings/ information of the signboard for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the signboard consists of light emitting diodes or other lighting, disconnect the power connected to the signboard before commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

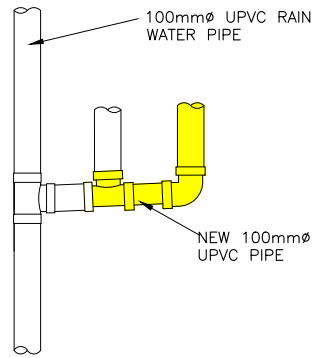
WORKING PROCEDURES :

1. Remove the display surface/ loose parts from the signboard.
2. Remove the supporting frame of the signboard by cutting the member into smaller size for construction waste disposal.
3. The disposal of waste shall be at designated disposal facilities provided in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
4. The removal works shall commence from the top to the bottom.
5. Make good and reinstate the affected areas of the parent structure.
6. Dismantle the bamboo scaffold and clean the site.

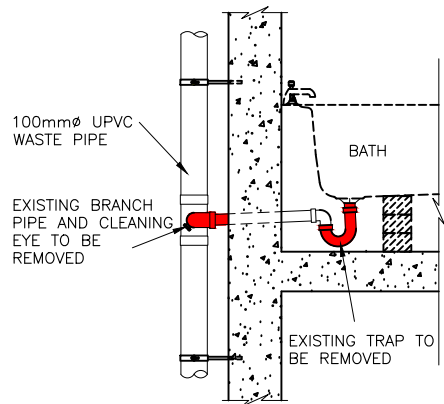


BEFORE

ERECTION

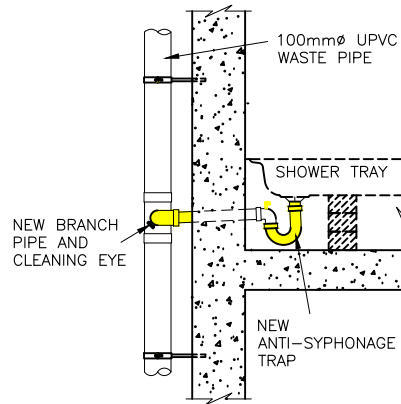


AFTER

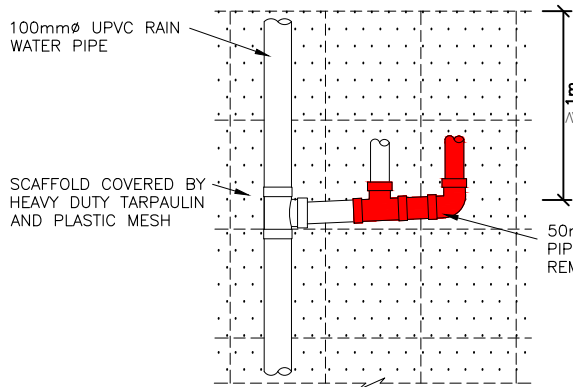


BEFORE

ALTERATION

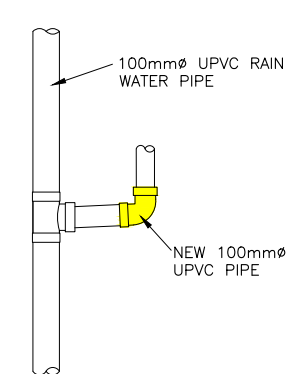


AFTER



BEFORE

REMOVAL



AFTER

MATERIAL SPECIFICATION :

Plastic rainwater pipes and fittings to be UPVC to BS4576. Plastic soil and ventilating pipes and fittings to be UPVC to BS4514. Plastic waste pipes and fittings to be ABS, MUPVC, PP or PE based to BS5255. Plastic flushing water service pipes and fittings to be UPVC to BS3505 class D and BS4346: Pt. 1 and Pt. 2.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. The requirements of PNAP APP-93 and APP-164 should be followed for the planning and design of drainage works.
3. The principals of PNAP APP-105 and APP-164 should be observed for protecting the structure against penetration of moisture or water at the design stage.

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the works would involve suspension of the drain system, inform the affected parties in advance.

SAFETY AND PRECAUTIONARY MEASURES :

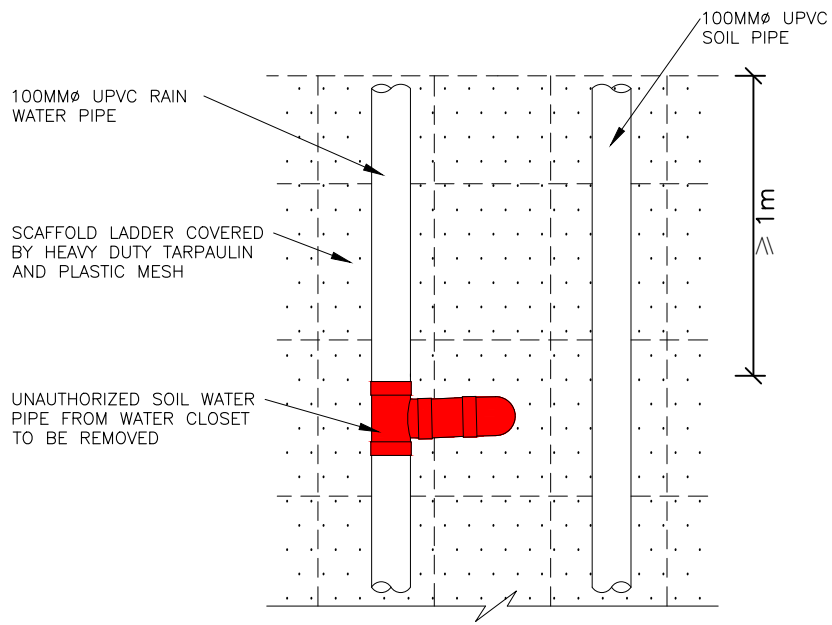
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES

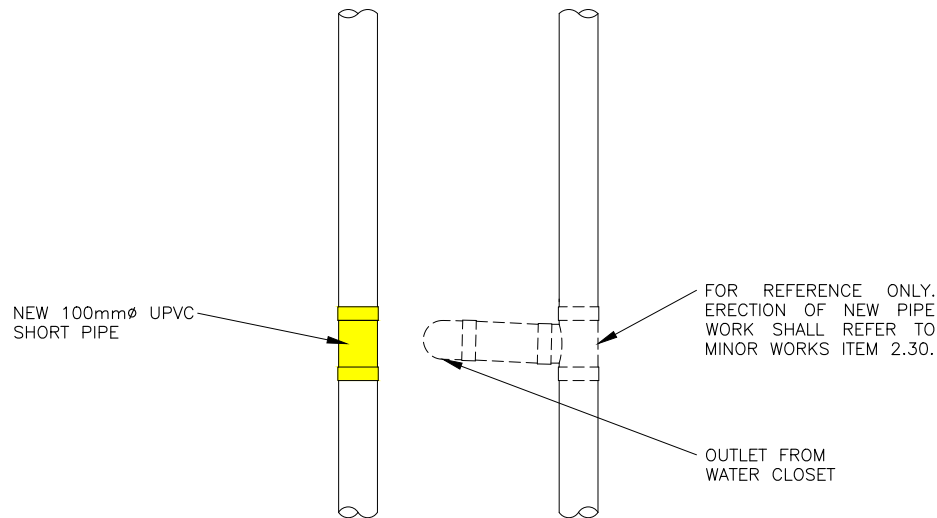
- A. Erection
 1. Install the pipe work and fitting as per drawing.
 2. Water test the pipe works to make sure that the work is properly done.
 3. Make good and reinstate the works area affected by the works.
 4. Remove the bamboo scaffold and clean the site.
 5. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.
- B. Alteration (E.g. Replacement of a bath tub with a shower tray that leads to altering the external branch pipe)
 1. Replace the pipe work and fitting as per drawing.
 2. Water test the pipe works to make sure that the work is properly done.
 3. Make good and reinstate the works area affected by the works.
 4. Remove the bamboo scaffold and clean the site.
 5. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.
- C. Removal
 1. Remove the pipe work and fitting as per drawing.
 2. Make good and reinstate the works area affected by the works.
 3. Remove the bamboo scaffold and clean the site.
 4. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.

REMARKS :

1. This item excludes works that involve any repair or replacement of an internal branch pipe or sanitary fitting.
2. No pipeworks of residential premises shall protrude into the private premises of the floor below.
3. The nominal diameter of every soil pipe from water closet fittings or slop sinks shall be not less than the diameter of the outlet of any of the fittings it serves.
4. For prevention of water seepage, the works do not involve any embedded pipe, other than a pipe that passes through a wall or slab following the guidelines in Appendix A of PNAP APP-105.



BEFORE



AFTER

MATERIAL SPECIFICATION :

Plastic rainwater pipes and fittings to be UPVC to BS4576. Plastic soil and ventilating pipes and fittings to be UPVC to BS4514. Plastic waste pipes and fittings to be ABS, MUPVC, PP or PE to BS5255. Plastic flushing water service pipes and fittings to be UPVC to BS3505 class D and BS4346: Pt. 1 and Pt. 2.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

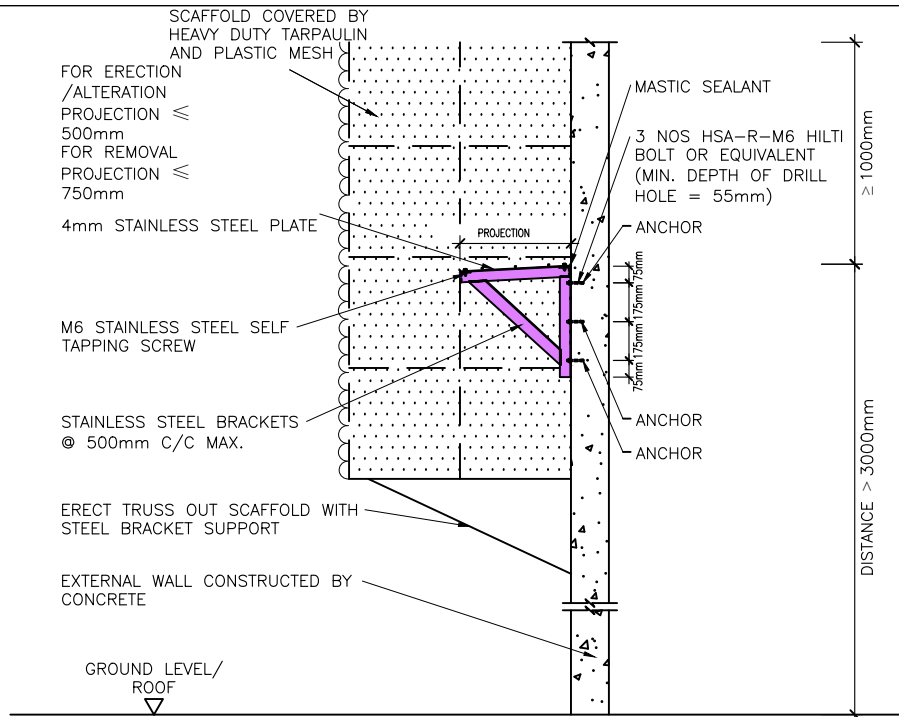
1. Obtain the existing design drawings/ information for reference prior to the commencement of works
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. If the works would involve suspension of the drain system, inform the affected parties in advance. Temporary diversion shall be considered if suspension is not possible.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Install the pipe work and fitting as per drawing.
2. Water test the pipe works to make sure that the work is properly done.
3. Make good and reinstate the works area affected by the works.
4. Remove the bamboo scaffold and clean the site.
5. Any removed pipe works shall be sprayed with diluted bleaching agent (bleaching agent: water = 1:99) and pack into plastic bag for construction waste disposal.



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
- All stainless steel to be grade 304L to BS EN 10088.
- All stainless steel bolts and screws to be grade A2-50 to BS EN ISO 3506 with permissible yield stress of $y_s = 210 \text{ N/mm}^2$
- All connections to be 3mm fillet weld all round with weld strength, $p_w = 180 \text{ N/mm}^2$ to BS EN 1011-3 and electrode to BS EN ISO 2560 : 2009
- All anchor bolts to be Hilti HSA-R-M6 or equivalent and shall be installed according to the manufacturer's specification.
- Existing concrete grade and thickness of the wall are assumed to be grade 20 and 100 mm respectively.
- The works do not result in any additional load to any cantilever slab.
- The canopy is not constructed of concrete.
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 0.31 kN/m^2
- Live Load = 0.75 kN/m^2
- Wind Load = 2.86 kN/m^2 with pressure coefficient of 1.8(upwards) and 1.8(downwards) (Effective height=100m)
Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Inform the utilities company or sector if the works to be involved.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- The structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to carrying out of minor works.
- Existing rendering or plastering to be removed before installation of steel frame.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold
- Asbestos investigation works/ removal works shall be carried out by specialist contractor prior to any removal works.

WORKING PROCEDURES :

A. Erection

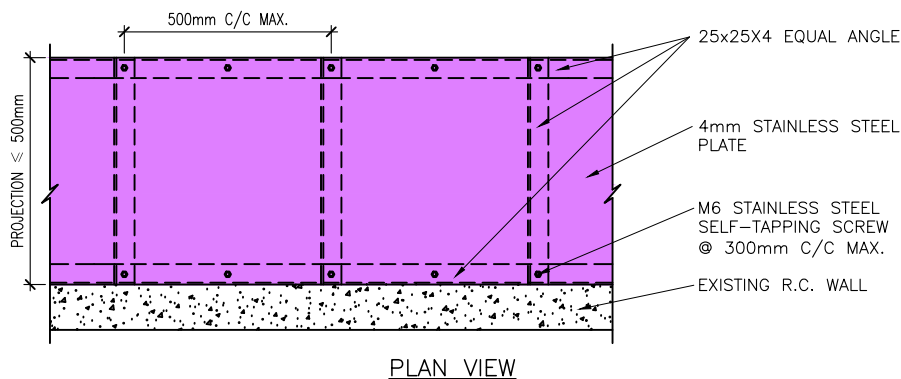
- Install the canopy as per the drawing.
- Make good and reinstate affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.

B. Alteration

- Remove the defective member and replace with new one having the same size as the existing member.
- Make good and reinstate affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.

C. Removal

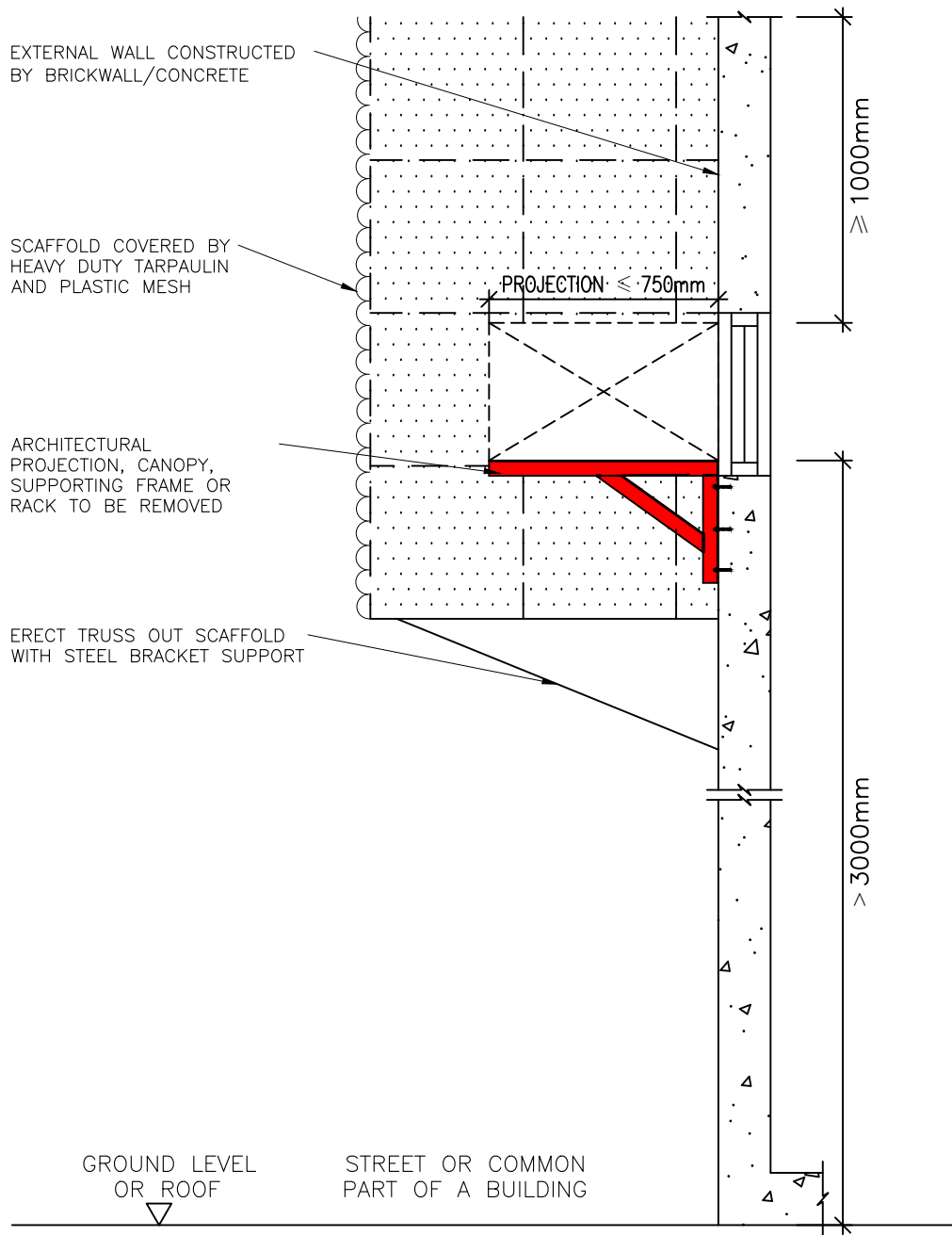
- Remove the canopy by using mechanical hand held tools to cut the members into a manageable size and collect into the main building for construction waste disposal.
- Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
- Make good and reinstate the affected areas of the parent building.
- Dismantle the bamboo scaffold and clean the site.



MINOR WORKS ITEM 3.25

DRAWING TITLE :

ERECTION, ALTERATION OR REMOVAL OF CANOPY
PROJECTING FROM THE EXTERNAL WALL OF A BUILDING



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector if the works involve their facilities.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

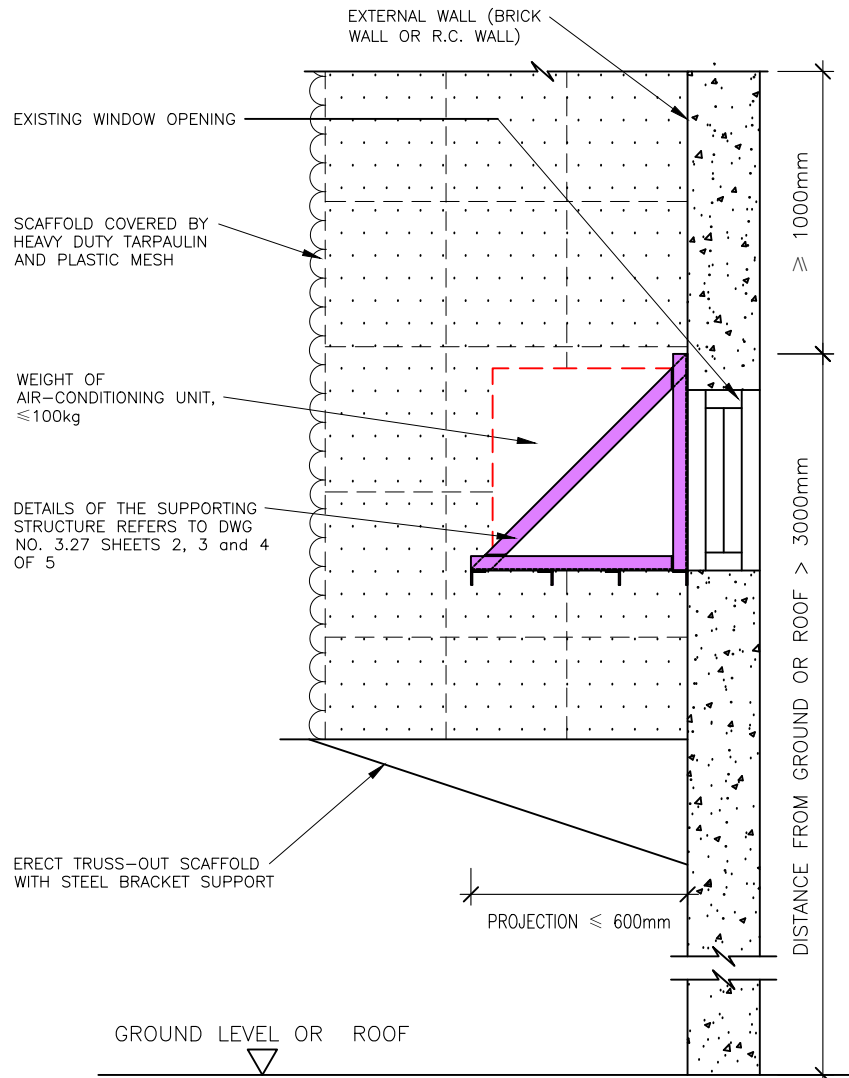
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Remove air conditioning unit, light fitting or antenna or transceiver, including all the associated cables, duct works and etc.
2. Remove the architectural projection, canopy, supporting frame or rack. Using mechanical hand held tools to cut the member into a manageable size for removal.
3. proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

Remarks:

1. This case excludes the DEW items 13 or 14.
2. The projection, canopy, frame or rack is not constructed of concrete.



**ERECTION OF METAL SUPPORTING FRAME FOR
AIR-CONDITIONING UNIT PROJECTING FROM THE EXTERNAL
WALL OF A BUILDING**

3 CASES ARE CONSIDERED INCLUDING:

1. SUPPORTING FRAME FOR RC WALL
2. SUPPORTING FRAME FOR BRICK WALL
3. SUPPORTING FRAME FOR WINDOW WALL

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.(Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
3. All stainless steel to be Grade 304L to BS EN 10088.
4. All connections to be 3 mm fillet weld all round with weld strength, $p_w = 180 \text{ N/mm}^2$ to BS EN 1011-3 and electrode to BS EN 499.
5. (a) For R.C. wall – All anchor bolts to be Hilti HSA-R M10 or equivalent and shall be installed according to the manufacturer's specification.
(b) For brick wall – All through bolts to be S.S. Grade A4-50 to BS EN ISO 3506.
(c) For window – All bolt connections to be M6 S.S. screws or bolts.
6. Existing concrete grade is assumed to be Grade 20 with a min. cube strength of 20 N/mm^2 .
7. All existing aluminium to be Alloy H9-TE to BS EN 1999 CP 118.
8. All S.S. through bolts to comply with BS EN ISO 3506 part 1 for bolts, screw and studs and part 2 for nuts 2009.
9. Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

1. Wind Load = 2.86 kN/m^2 (effective height=100m with pressure coefficient=2.0)
Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

1. Obtain existing design drawings/ information for reference prior to commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. For all cases, structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.
4. Plastering or rendering should be removed to expose concrete/ brickwork surface before installation of anchor bolts and steel angles.

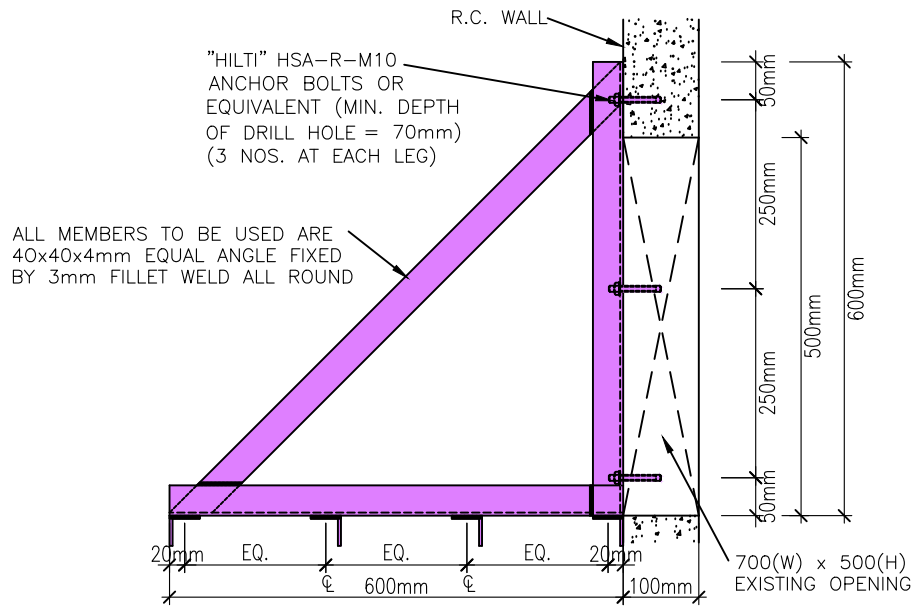
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working Platform on a double-row bamboo scaffold

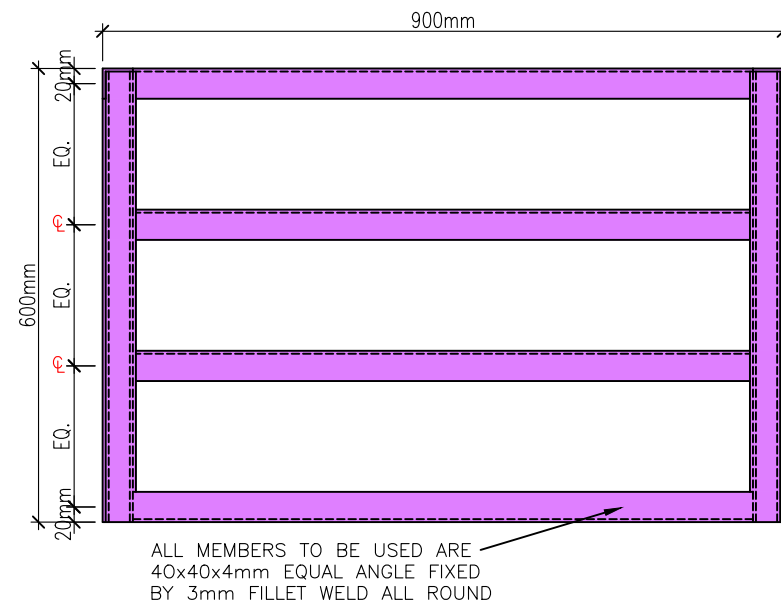
WORKING PROCEDURES :

- a) Erection
 1. Install the supporting frame as per the drawing.
 2. In case of supporting frame for air conditioner, connect the flexible condensation pipe from the air-conditioning unit to the existing drain pipe of the building for drainage of the condensation.
 3. Make good and reinstate the affected areas of the parent building.
 4. Dismantle the scaffold and clean the site.
- b) Alteration
 1. Remove the light fitting, antenna, transceiver or air-conditioning unit sitting on the supporting frame together with the electrical supply.
 2. Remove the defective member and replace with member of the same size.
 3. Re-connect the flexible condensation pipe from the air-conditioning unit to the existing drain pipe of the building for drainage of the condensation. (if applicable)
 4. Make good and reinstate the affected areas of the parent building.
 5. Dismantle the scaffold and clean the site.
- c) Removal
 1. Remove the light fitting, antenna, transceiver or air-conditioning unit sitting on or fixed to the supporting frame together with the electrical supply.
 2. Remove the supporting frame by cutting the member into smaller size for construction waste disposal.
 3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulations.
 4. Make good and reinstate the affected areas.
 5. Dismantle the bamboo scaffold and clean the site.

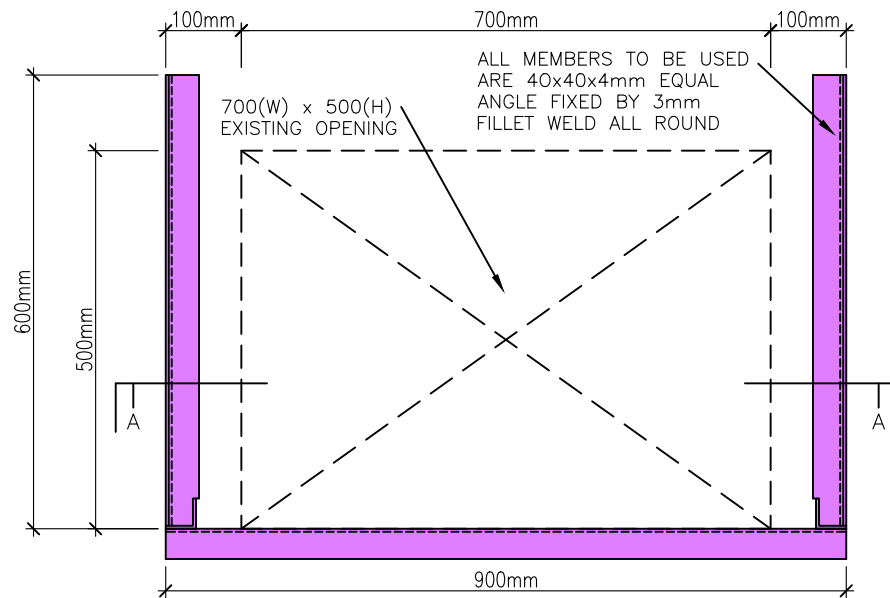
Remarks : In case the building is not provided with a disposal system for drainage of the condensation, the building management/ IO/ other owners(where appropriate) should be informed for the provision of a proper disposal system.



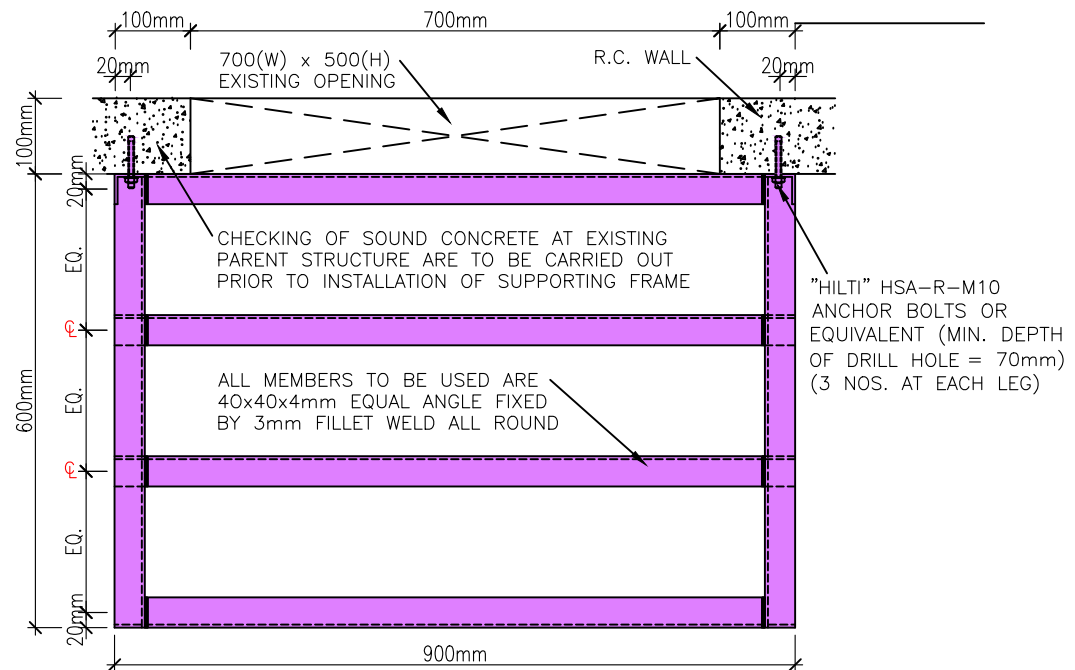
SUPPORTING FRAME FOR R.C. WALL (CASE 1)



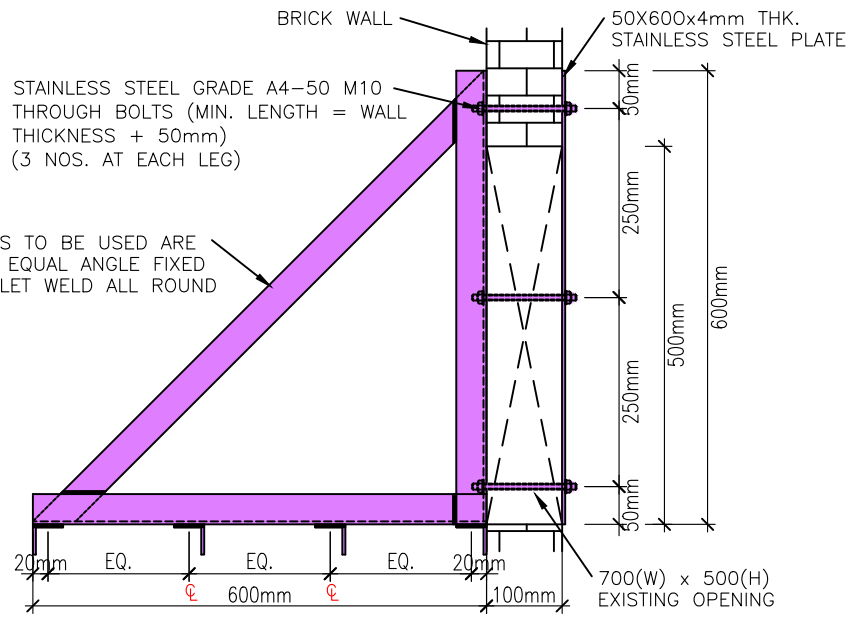
SUPPORTING FRAME LAYOUT PLAN



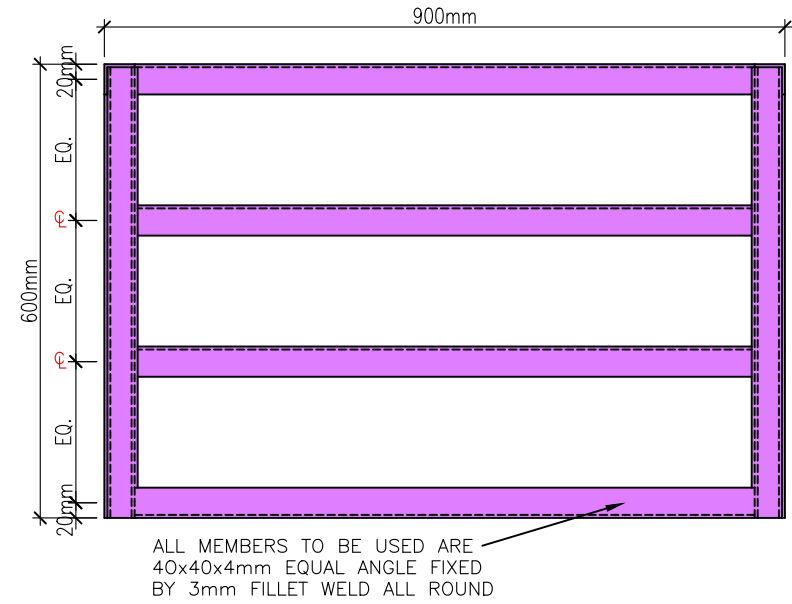
SUPPORTING FRAME FRONT ELEVATION



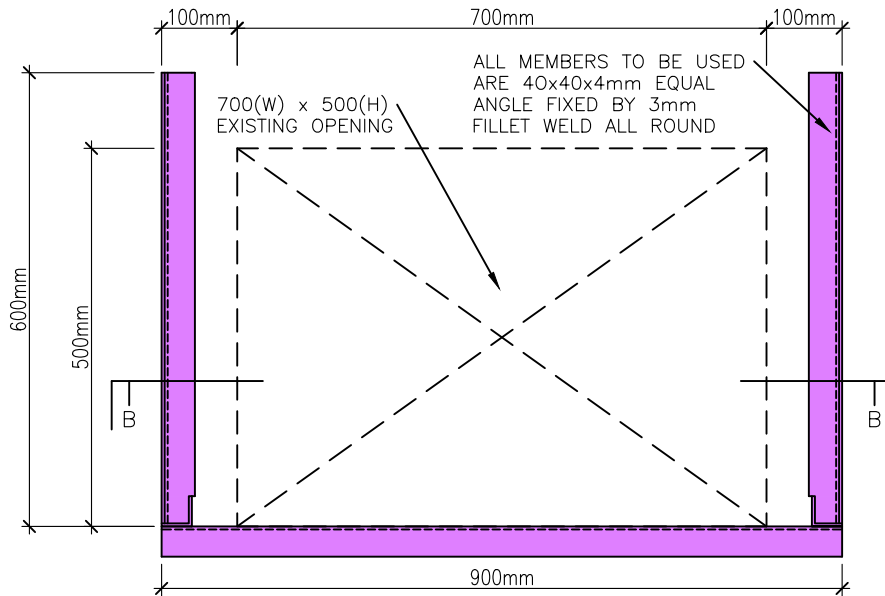
SECTION A-A



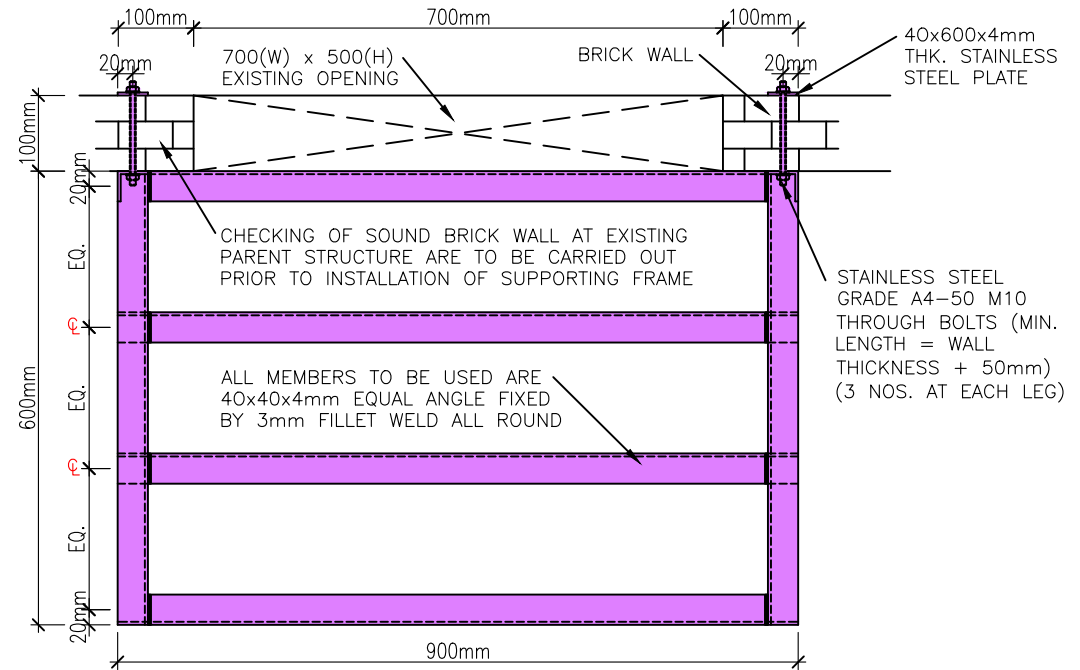
SUPPORTING FRAME FOR BRICK WALL (CASE 2)



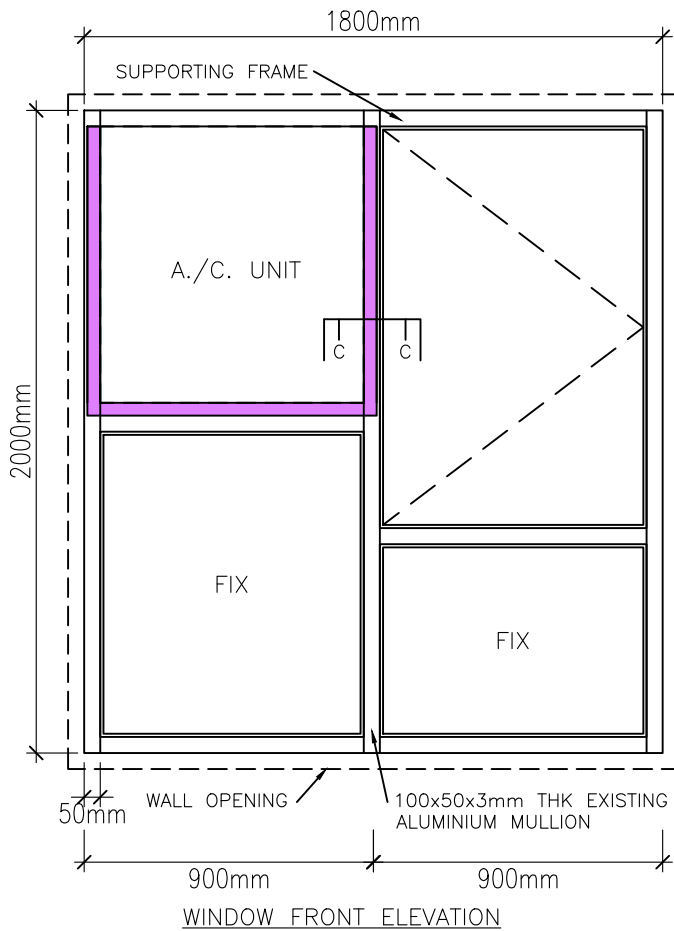
SUPPORTING FRAME LAYOUT PLAN



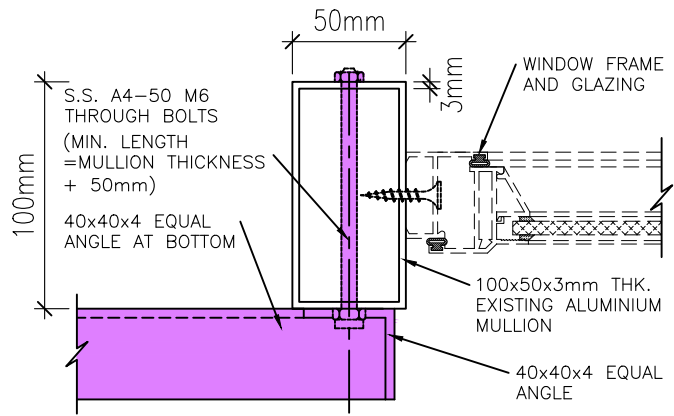
SUPPORTING FRAME FRONT ELEVATION



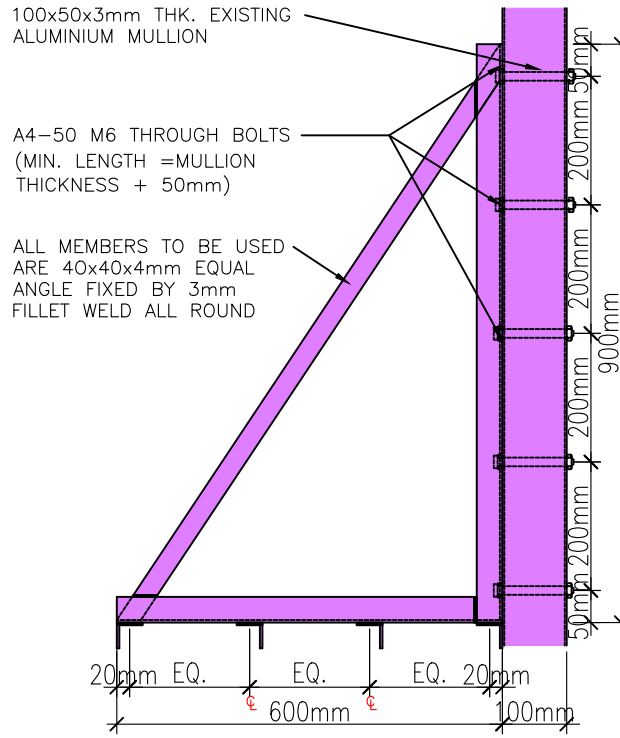
SECTION B-B



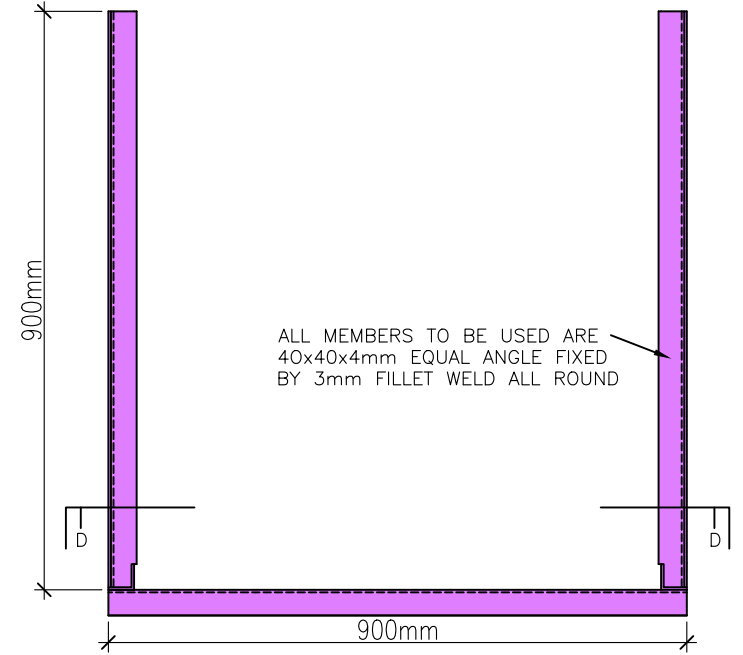
WINDOW FRONT ELEVATION



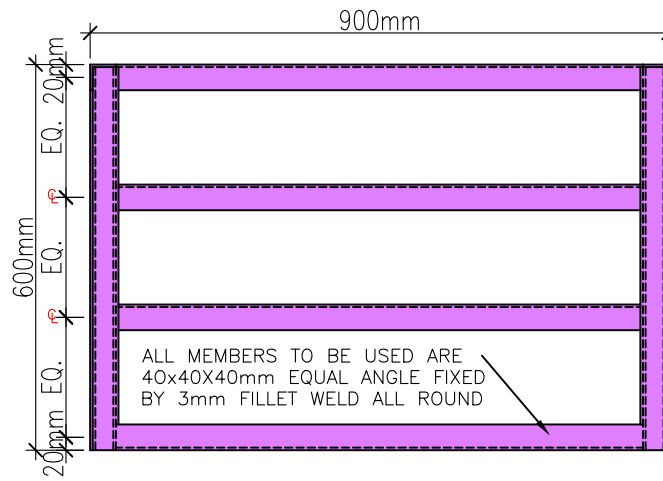
SECTION C-C



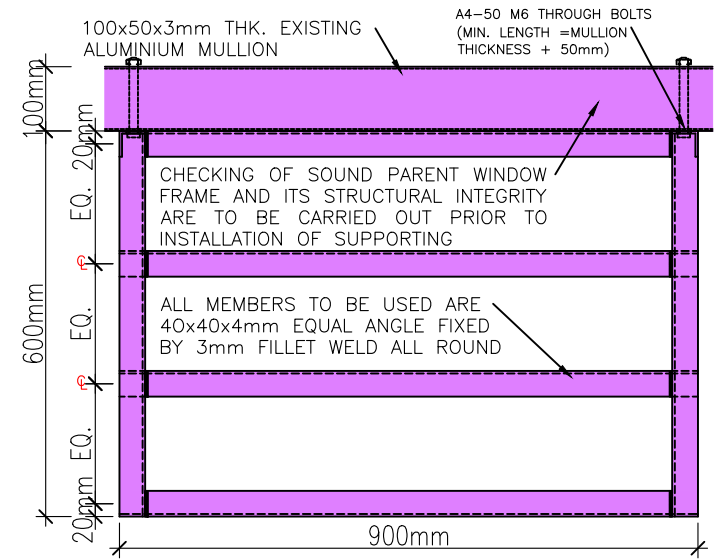
SUPPORTING FRAME FOR WINDOW (CASE 3)



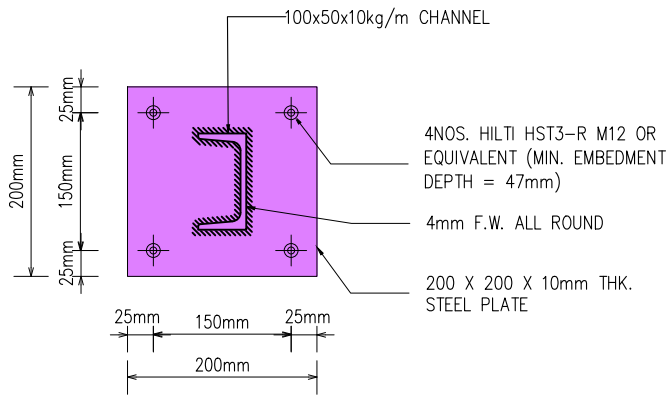
SUPPORTING FRAME FRONT ELEVATION



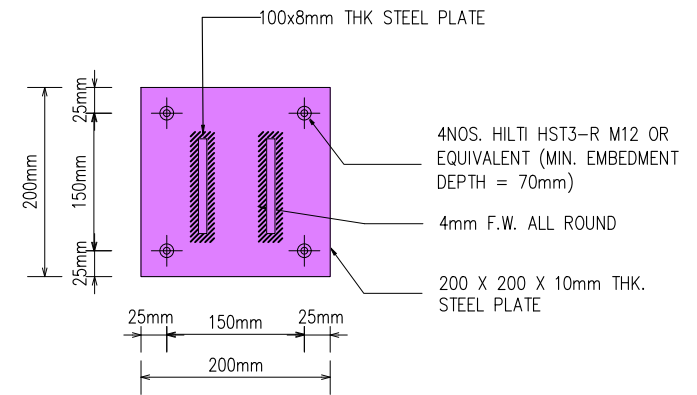
SUPPORTING FRAME LAYOUT PLAN



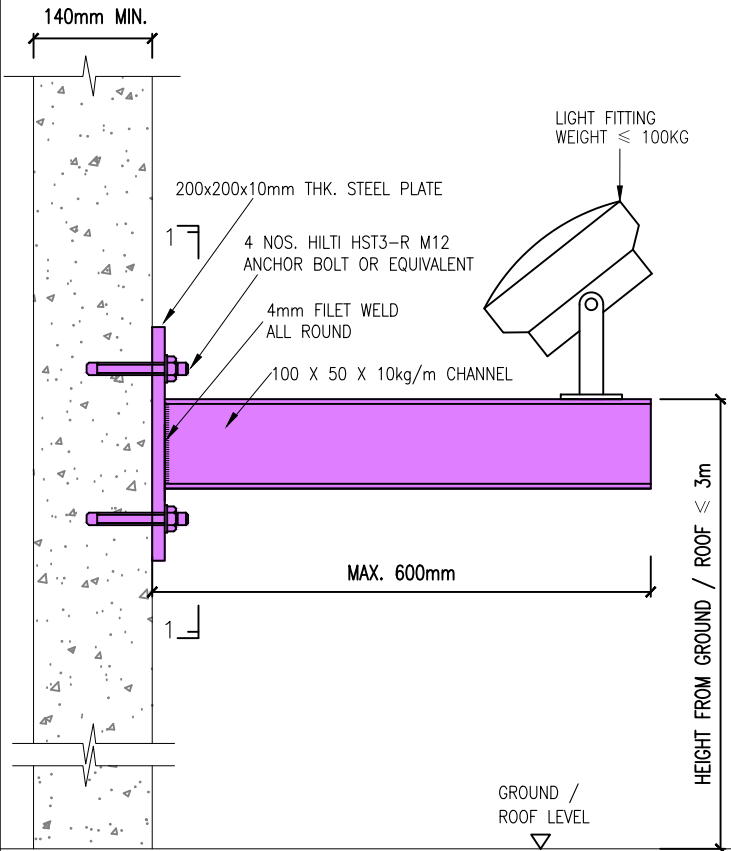
SECTION D-D



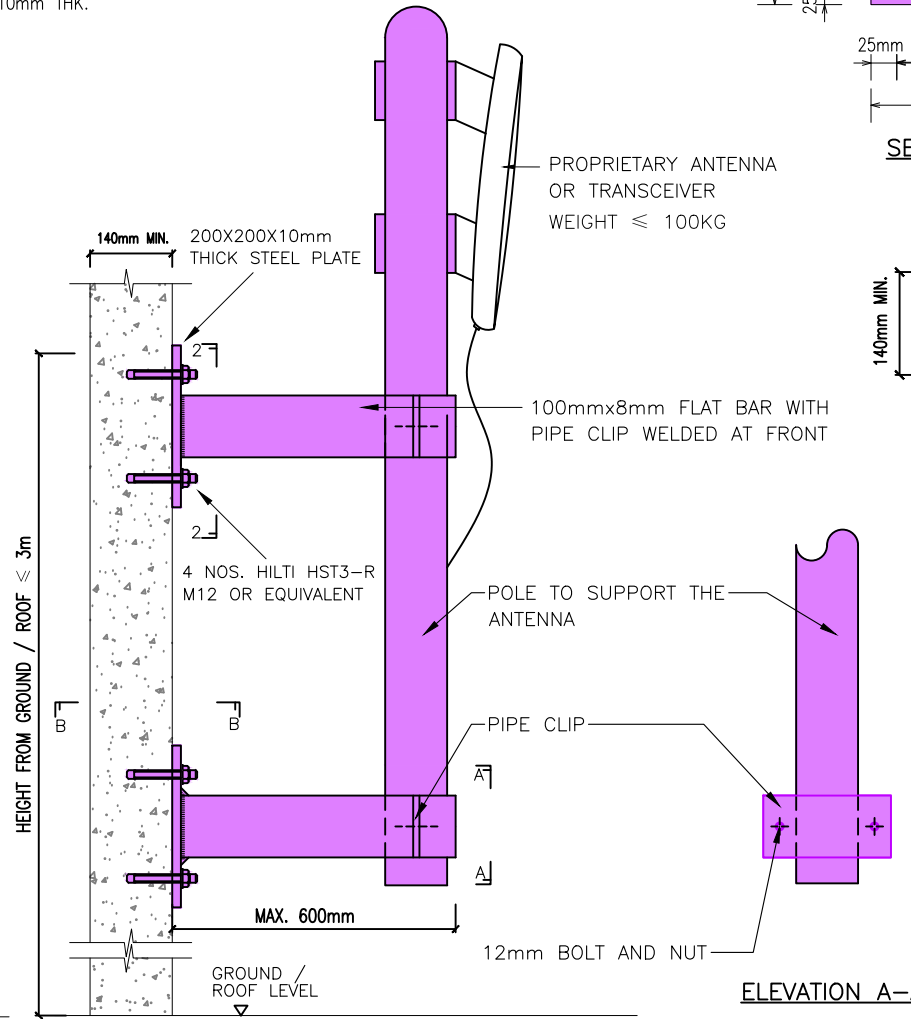
SECTION 1-1



SECTION 2-2

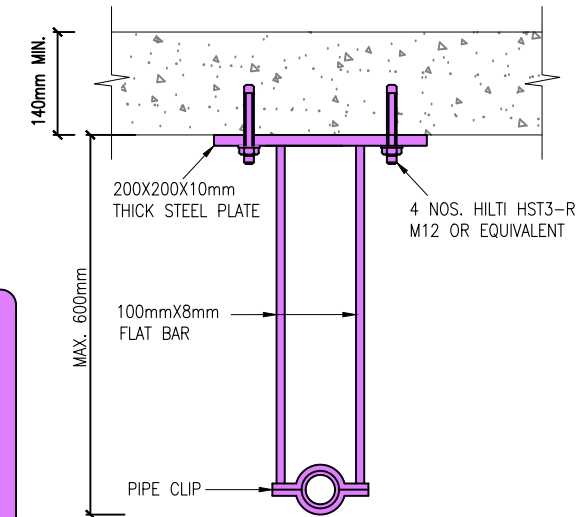


SUPPORTING FRAME FOR LIGHT FITTING



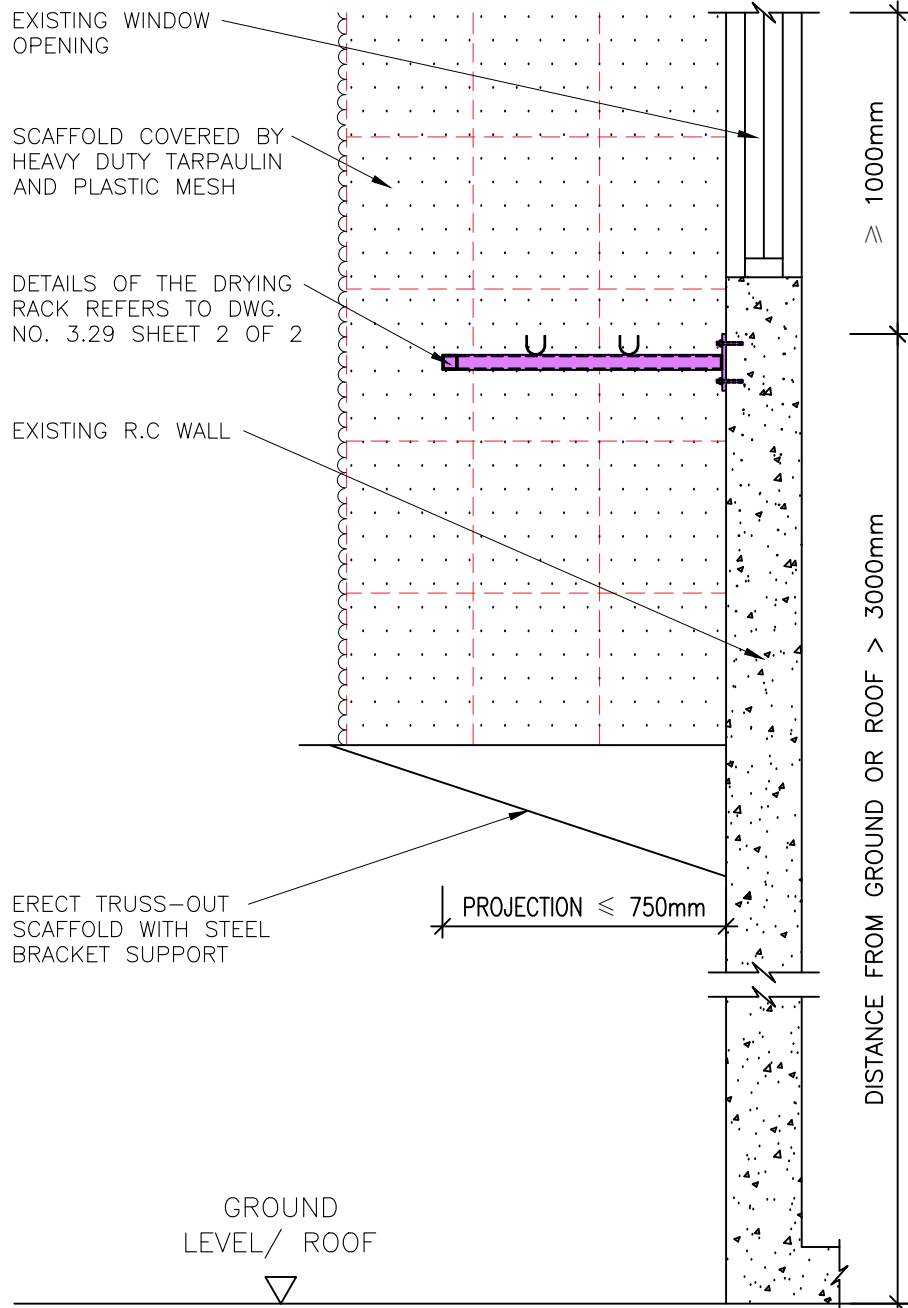
SIDE ELEVATION

SUPPORTING FRAME FOR ANTENNA OR TRANSCEIVER



SECTION B-B

ELEVATION A-A



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
- All stainless steel to be grade 304L to BS EN 10088.
- All connections to be 3 mm fillet weld all round with weld strength, $p_w = 180 \text{ N/mm}^2$ to BS EN 1011-3 and electrode to BS EN ISO 2560 : 2009
- For R.C. Wall – All anchor bolts to be Hilti HSA-R M10 or equivalent and shall be installed according to the manufacturer's specification.
- Existing concrete grade to be grade 20 with a min. cube strength of 20 N/mm^2 .
- Interface of two different metal (e.g. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Dead Load = 0.25 kN/m^2
- Wind Load = 2.86 kN/m^2 (effective height = 100m) with force coeff. of 1.5 and solidity ratio of 0.5. Assume topography factor, $St=1.0$; wind directionality factor, $S\theta=0.85$; Size factor, $S_s=1.0$.

PREPARATION WORKS :

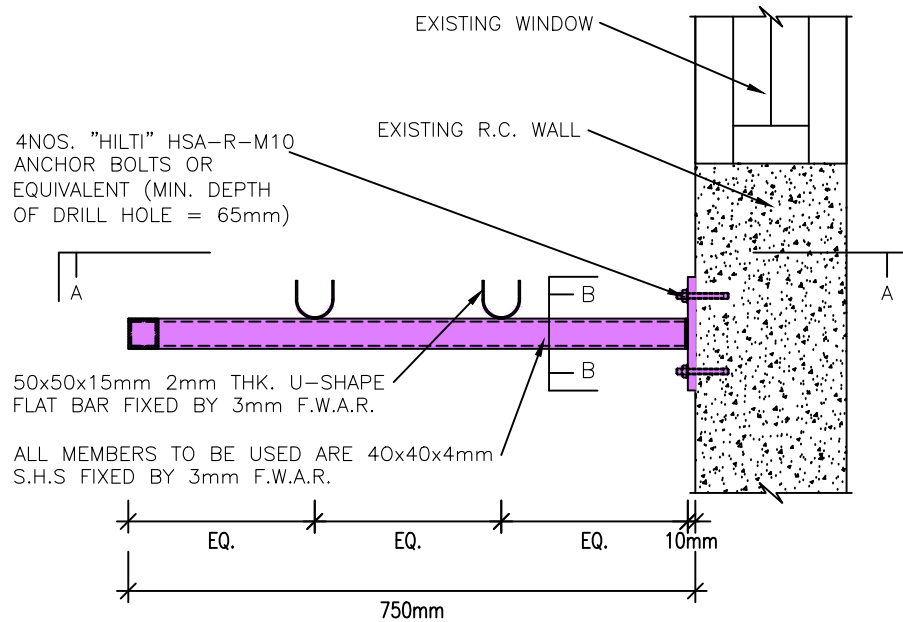
- Obtain the existing design drawings/ information for reference prior to the commencement of works.
- Carry out condition survey and condition of the external wall for which the drying rack is going to be installed prior to the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.
- Existing plaster or finishing of the wall shall be removed where the steel plate will be fixed.
- The structural adequacy of the parent structure due to the additional installation of minor works must be checked to the satisfaction of structural requirements prior to carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

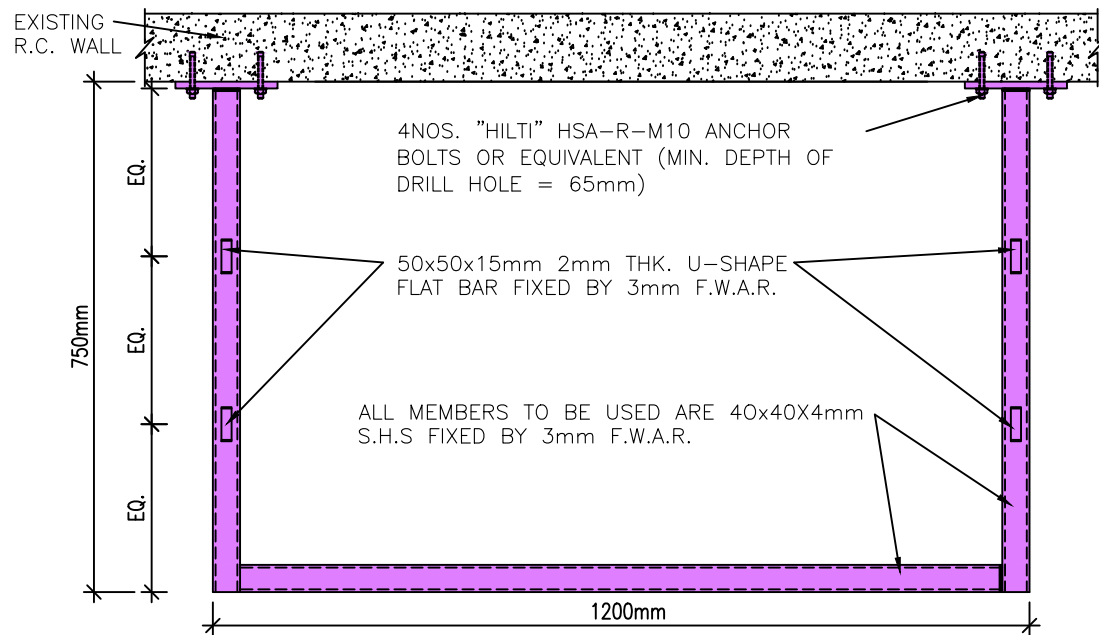
- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
- Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

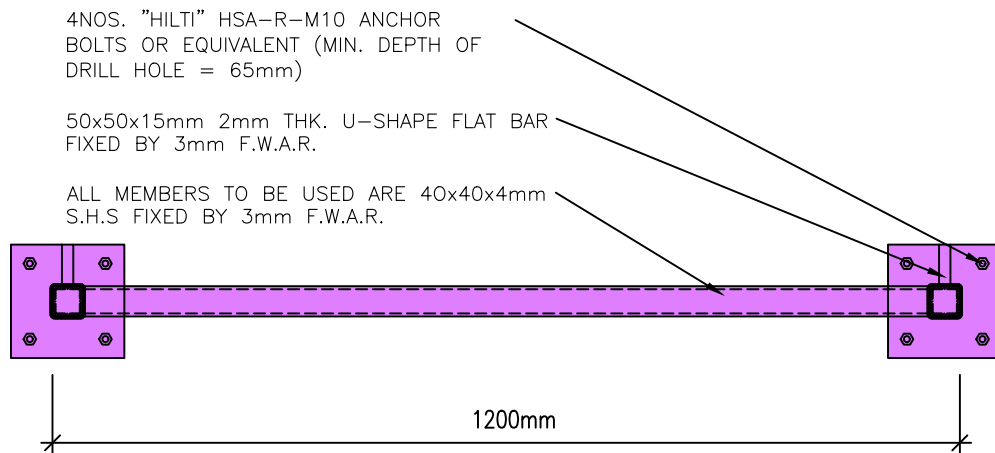
- Erection
 - Install the drying rack as per the attached details.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the scaffold and clean the site.
- Alteration
 - Remove the defective part of the drying rack and replace with the same size of the existing member.
 - Make good and reinstate the affected areas of the parent building.
 - Dismantle the scaffold and clean the site.
- Removal
 - Hold the drying rack by rope (the other end of rope shall be tie to a secure end, i.e. a column).
 - Remove the drying rack using mechanical hand held tools, cut the drying rack into small pieces for construction waste disposal.
 - The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
 - Make good and reinstate the parent structure affected by the work.
 - Dismantle the bamboo scaffold and clean the site.



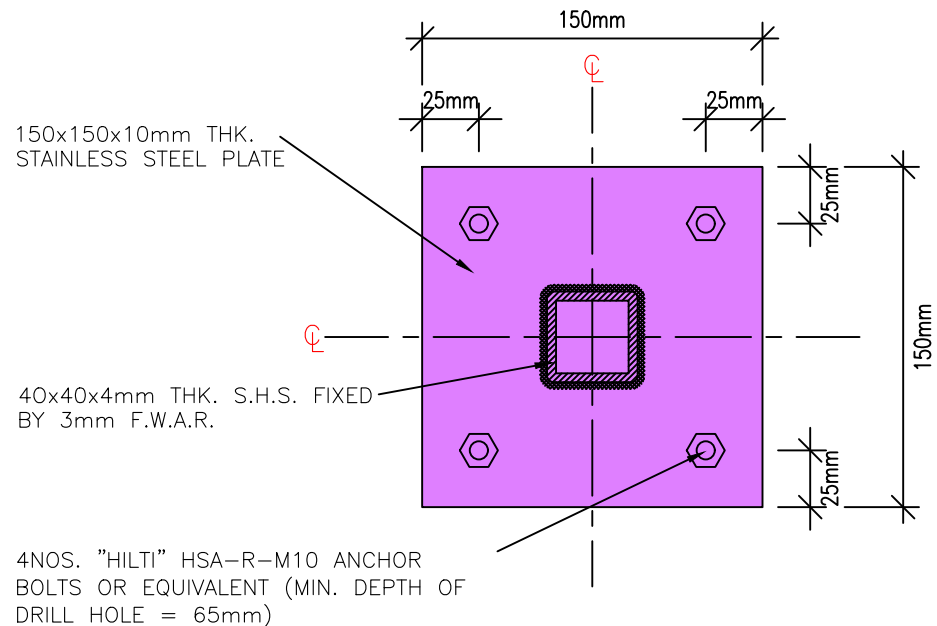
S.S. DRYING RACK FOR R.C. WALL



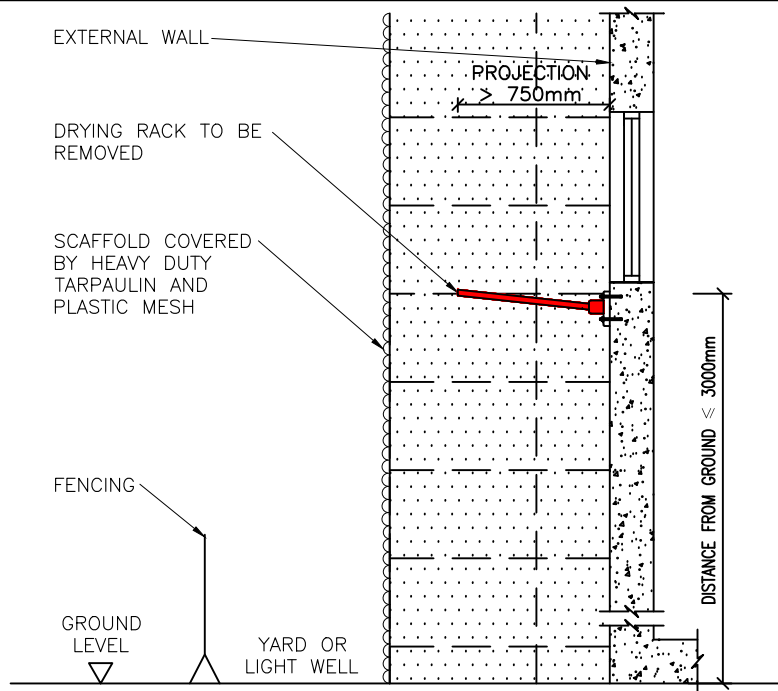
SECTION A-A



S.S. DRYING RACK FRONT ELEVATION

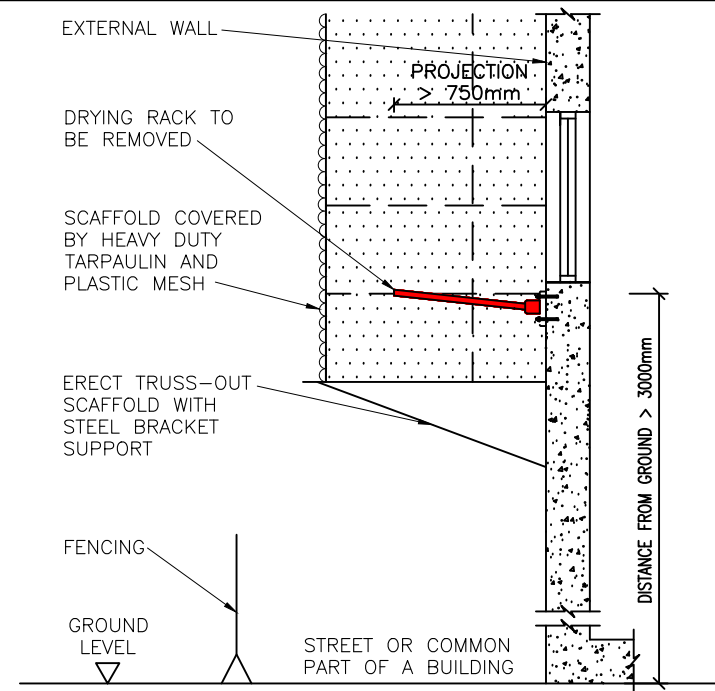


SECTION B-B



CASE 1

OR



CASE 2

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the drying rack for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1:
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

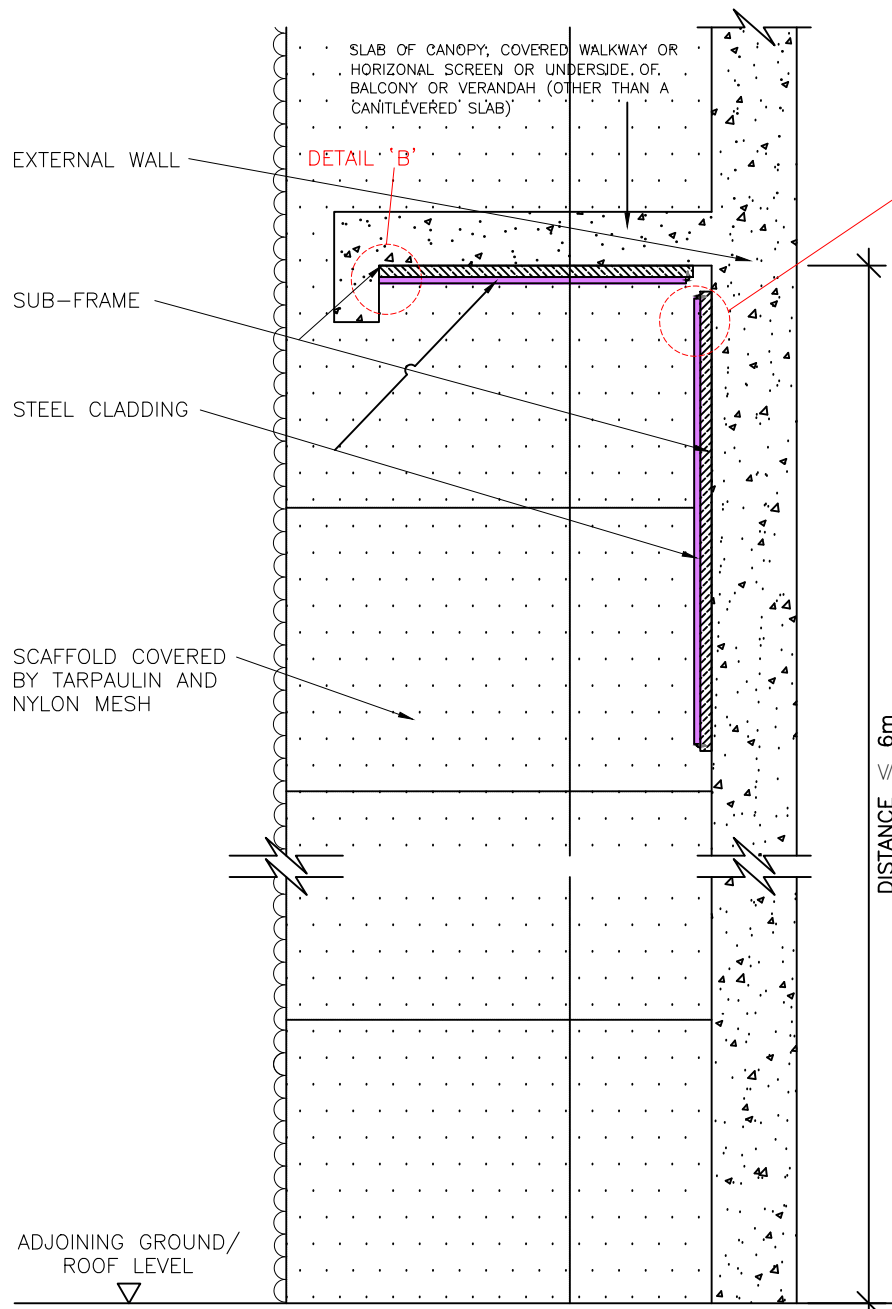
1. Hold the drying rack by rope (the other end of rope shall be tied to a secure end, i.e. a column).
2. Remove the drying rack using mechanically hand held tools. Cut down the drying rack into small pieces for construction waste disposal.
3. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the parent structure affected by the work.
5. Dismantle the bamboo scaffold and clean the site.

Remarks : This case excludes the DEW item 15

DRAWING TITLE :

REMOVAL OF DRYING RACK PROJECTING FROM THE EXTERNAL WALL OF A BUILDING

MINOR WORKS ITEM 3.30



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
3. All structural steel to be stainless steel grade 316 to BS EN 10088.
4. All anchor bolts to be Hilti HSA-R-M8 or equivalent (stainless steel) and shall be installed according to the manufacturer's specification.
5. All connections to be 3mm fillet weld all round or butt weld with weld strength of $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 3560.
6. All stainless steel screws to be grade A2-50 to BS EN ISO 3506 with permissible yield stress of $y_s = 210 \text{ N/mm}^2$.
7. All sealant to be "DOW CORNING" silicone sealant 795 (BD REF. BD-SS-001) or equivalent.
8. Existing concrete grade and minimum thickness of the parent wall are assumed to be Grade 20 and 100 mm respectively.
9. Interface of two different metal (eg. steel and stainless steel; steel and aluminium) shall be isolated by PVC sheet and bituminous paint.

DESIGN LOADS:

1. Dead Load = 0.20 kN/m^2
2. Wind Load = 1.81 kN/m^2 (effective height=6m) with pressure coefficient for fixed on wall $C_p=1.4$ and for hung underneath the soffit of balcony or verandah $C_p = 1.8$
Assume topography factor, $S_t=1.0$, Wind directionality factor, $S_\theta=0.85$; Size Factor, $S_s=1.0$

PREPARATION WORKS :

1. Obtain the existing design drawings/information for reference prior to the commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Inform the utilities company or sector if the works to be involved.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.
5. The structural adequacy of the parent structure due to the addition cladding minor works must be checked to the satisfaction of structural requirements prior to carrying out of minor works.
6. Existing rendering or plastering to be removed before installation of steel frame.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
Figure 1 Double-row bamboo scaffold and working platform over pavement
Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

- A) Erection
 1. Install the cladding as per the drawing.
 2. Make good and reinstate the affected areas of the parent building.
 3. Dismantle the bamboo scaffold and clean the site.
- B) Repair
 1. Remove the defective cladding panel and use the same size of panel for replacement
 2. Make good and reinstate the affected areas of the parent building.
 3. Dismantle the bamboo scaffold and clean the site.
- C) Removal
 1. Remove the cladding using hand-held mechanical tool.
 2. Cut the backing frame into small pieces for construction waste disposal.
 3. Make good and reinstate the affected areas of the parent building.
 4. Dismantle the bamboo scaffold and clean the site.

Remark: For the cladding fixed to a location other than an external wall of a building

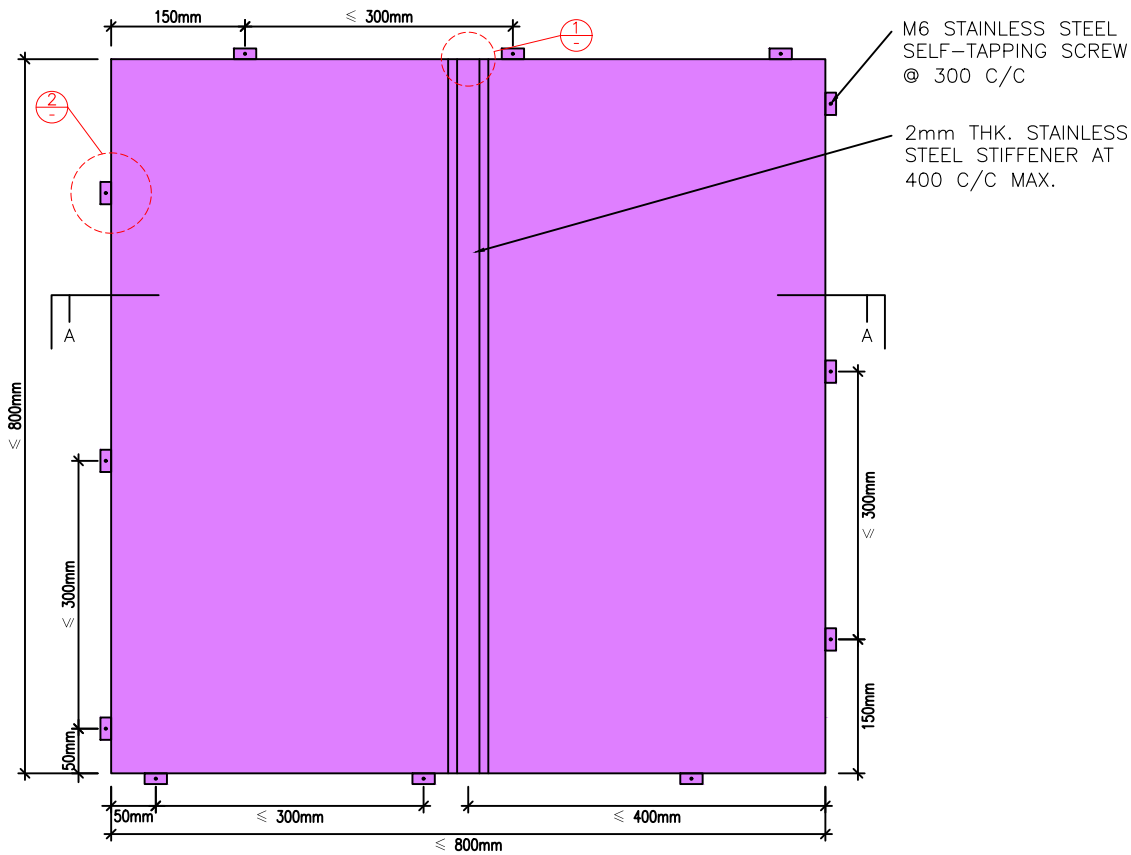
1. it consists of metal cladding only;
2. it is not fixed to a cantilevered slab;
3. distance between any part of the cladding and the adjoining ground or adjoining roof is not more than 6m.
4. setback distance between any part of the cladding from the edge of the adjoining a roof is not more than 600mm; and
5. the case that the cladding is above a roof, the roof is not more than 20m above ground.

ERECTION OF EXTERNAL CLADDING

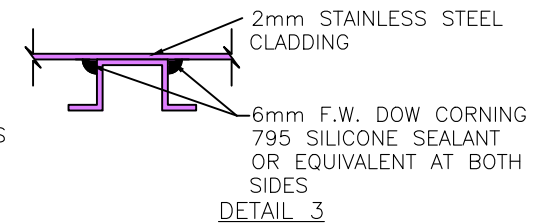
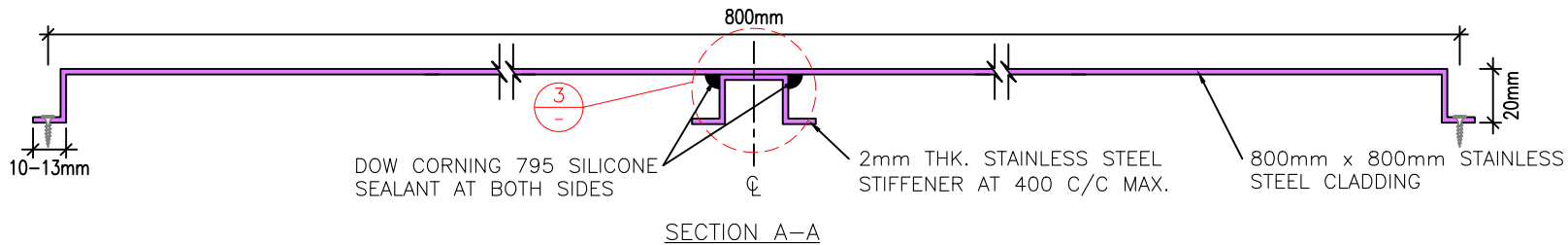
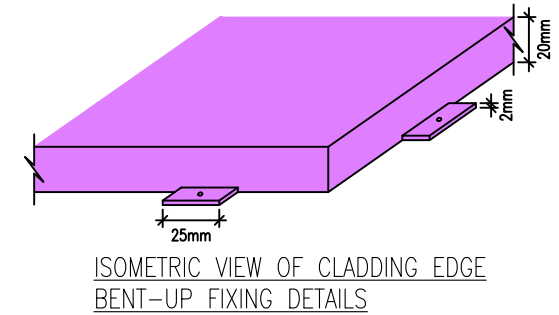
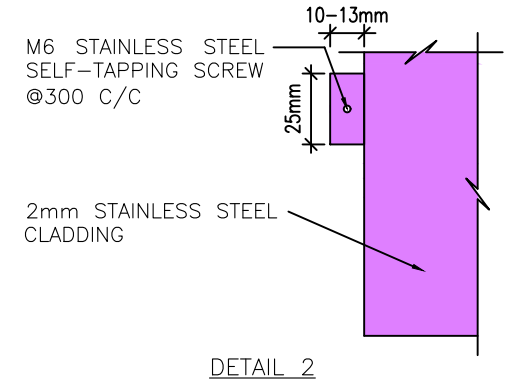
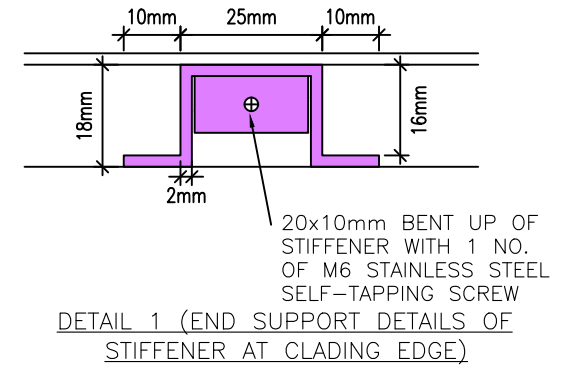
DRAWING TITLE : **ERECTION, REPAIR OR REMOVAL OF EXTERNAL CLADDING**

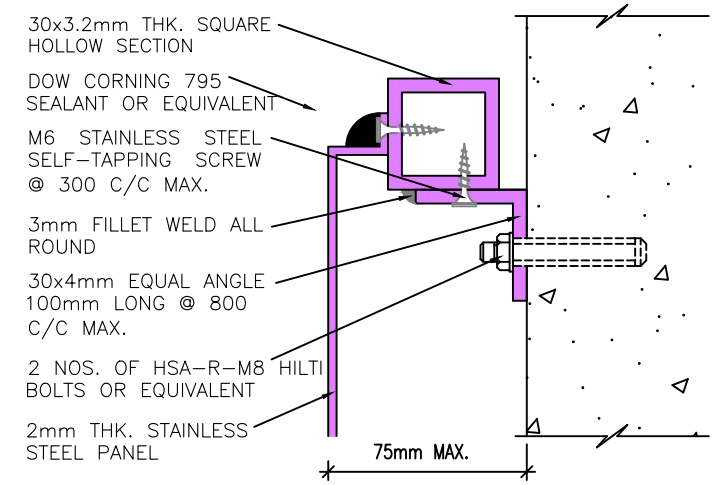
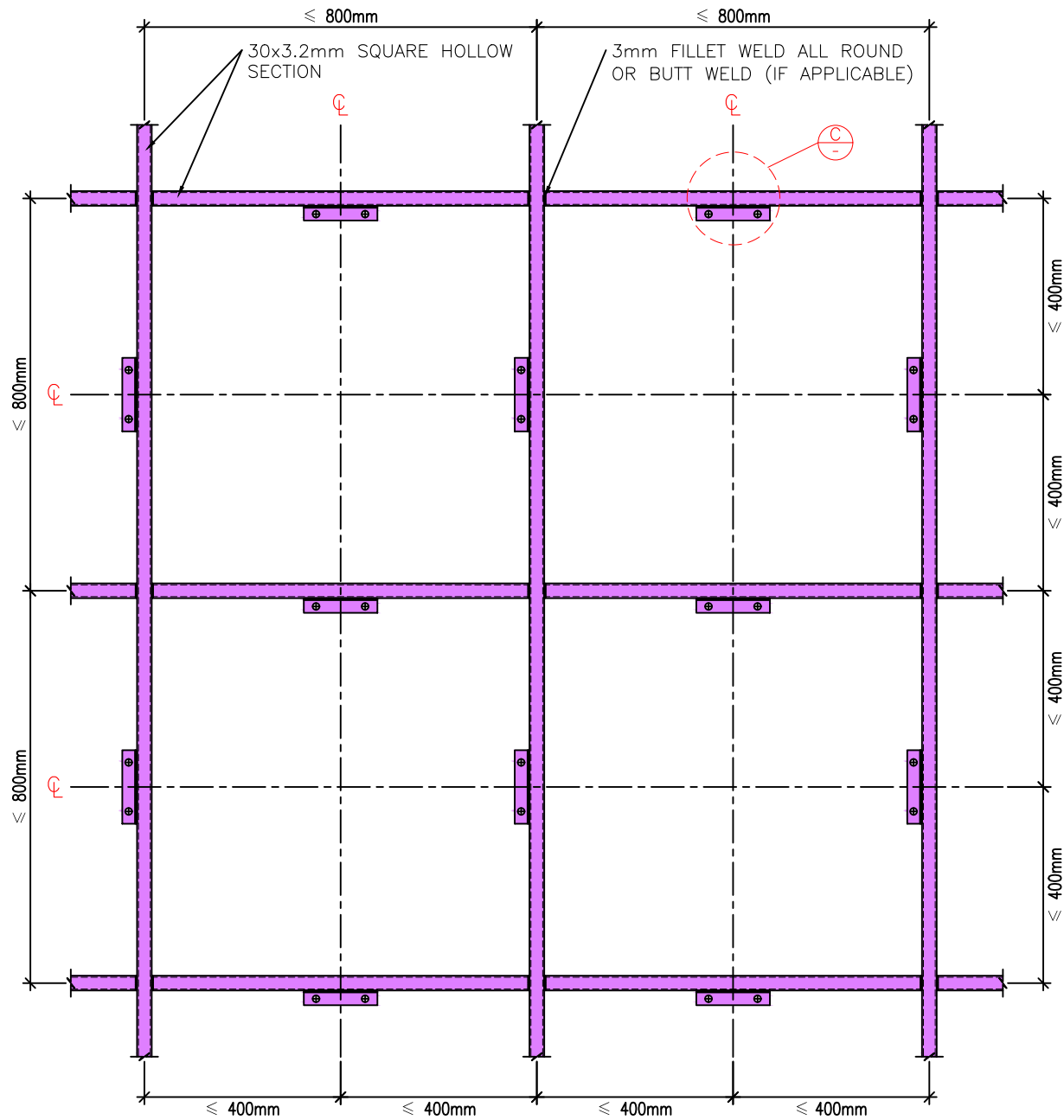
MINOR WORKS ITEM 3.31

SHEET 1 OF 4

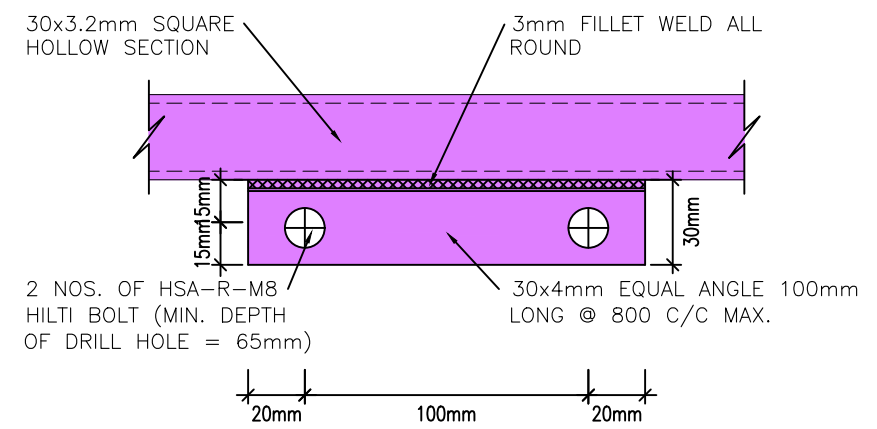


TYPICAL DETAIL FOR STAINLESS STEEL CLADDING





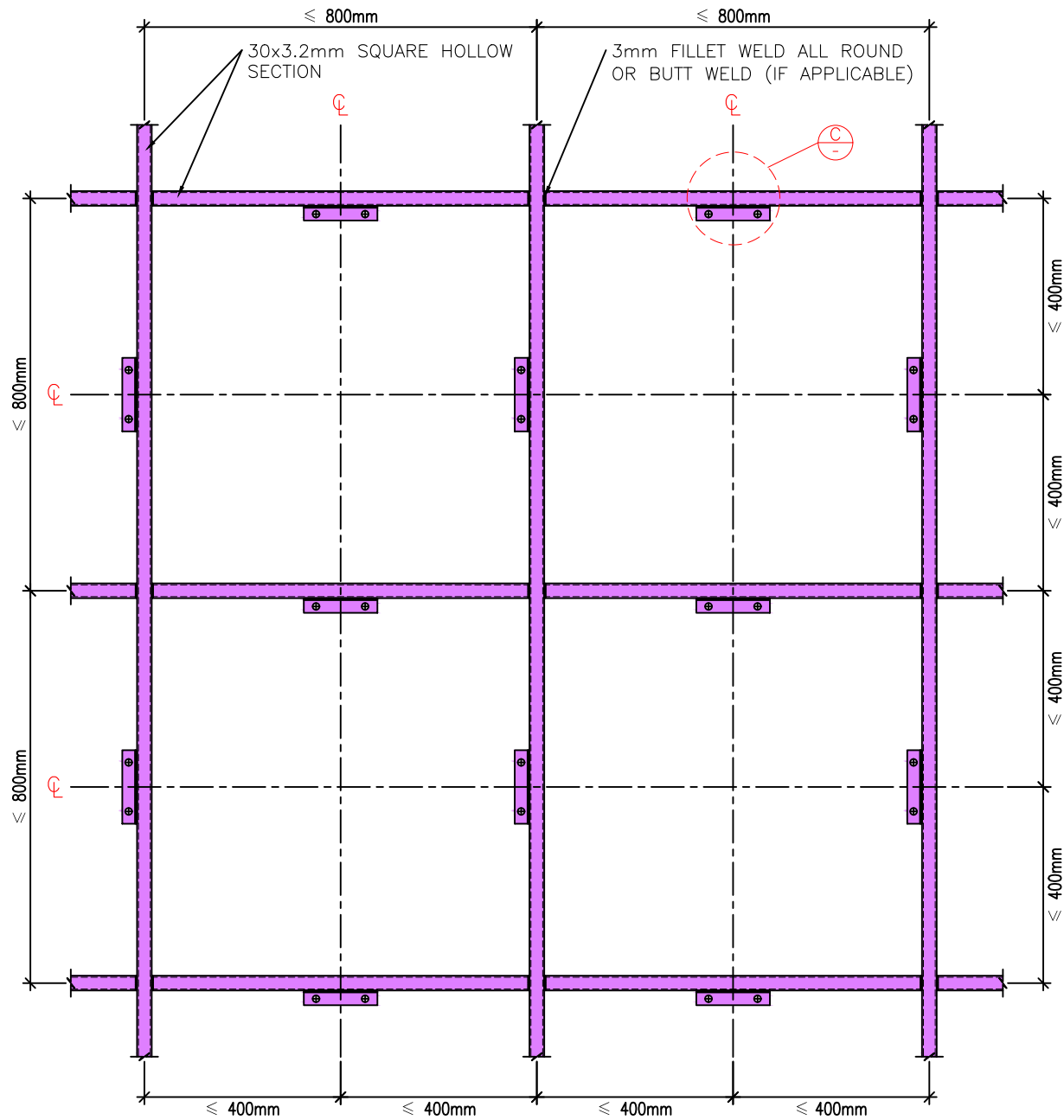
DETAIL A



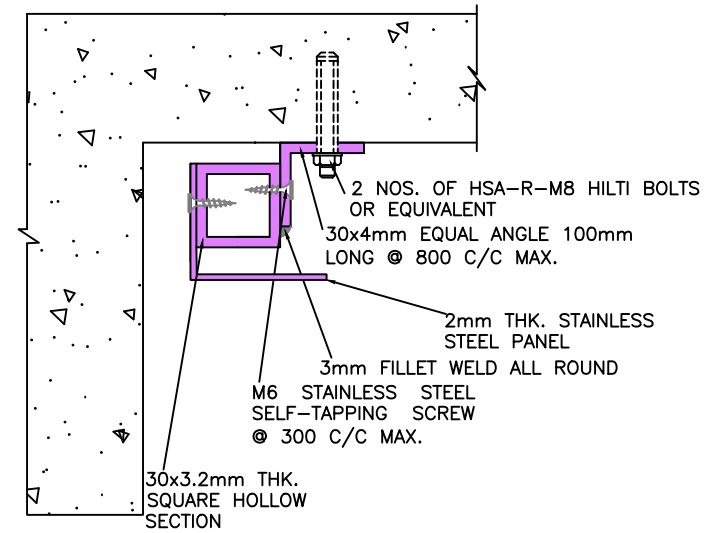
DETAIL C

DETAIL FOR SUB-FRAME ON WALL

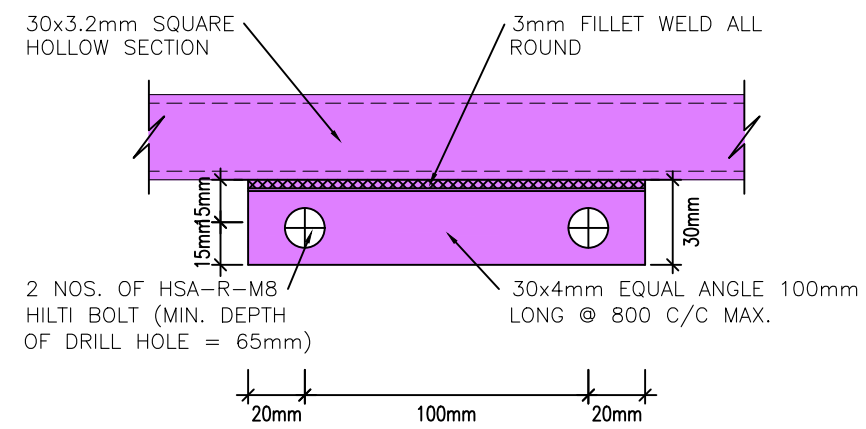
DRAWING TITLE : ERECTION, REPAIR OR REMOVAL OF ANY EXTERNAL CLADDING



DETAIL FOR SUB-FRAME (FIXED ON SLAB SOFFIT)



DETAIL A



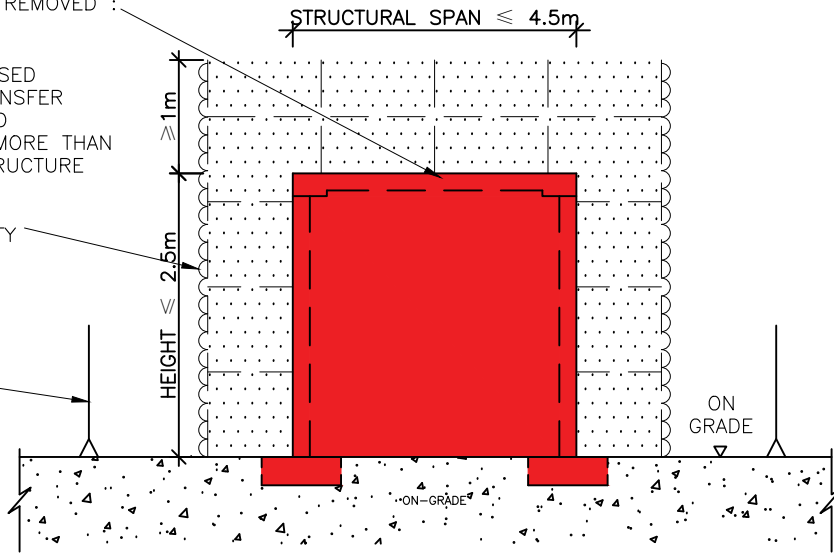
DETAIL C

UNAUTHORIZED STRUCTURE TO BE REMOVED :

1. ROOFED OVER AREA $\leq 20\text{m}^2$
2. NOT A FLAT SLAB, PRE-STRESSED CONCRETE CONSTRUCTION, TRANSFER GIRDER, HANGER, CANTILEVERED STRUCTURE WITH A SPAN OF MORE THAN 1.2m OR EARTH RETAINING STRUCTURE

SCAFFOLD COVERED BY HEAVY DUTY TARPULIN AND PLASTIC MESH

FENCING



CASE 1: ON-GRADE

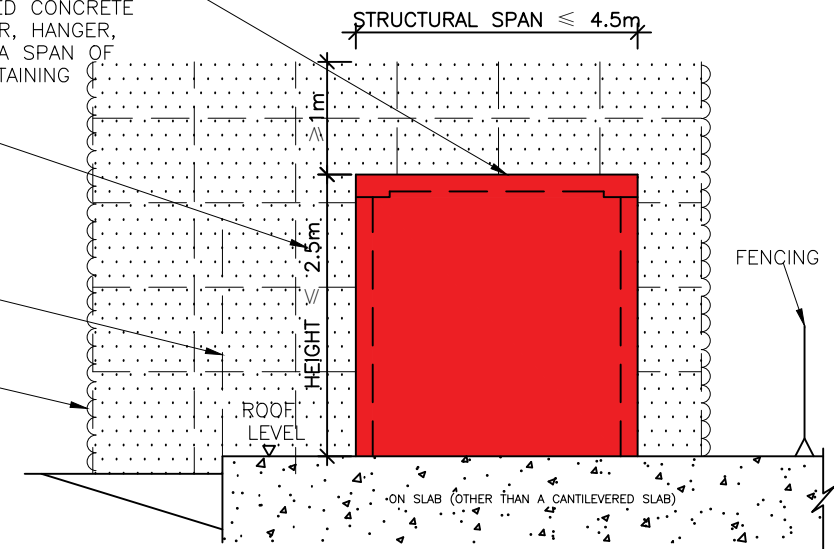
UNAUTHORIZED STRUCTURE TO BE REMOVED:

1. ROOFED OVER AREA $\leq 20\text{m}^2$
2. NOT A FLAT SLAB, PRE-STRESSED CONCRETE CONSTRUCTION, TRANSFER GIRDER, HANGER, CANTILEVERED STRUCTURE WITH A SPAN OF MORE THAN 1.2m OR EARTH RETAINING STRUCTURE

SCAFFOLD COVERED BY HEAVY DUTY TARPULIN AND PLASTIC MESH

EDGE OF ROOF

TRUSS-OUT SCAFFOLD



CASE 2: ON SLAB (OTHER THAN A CANTILEVERED SLAB)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

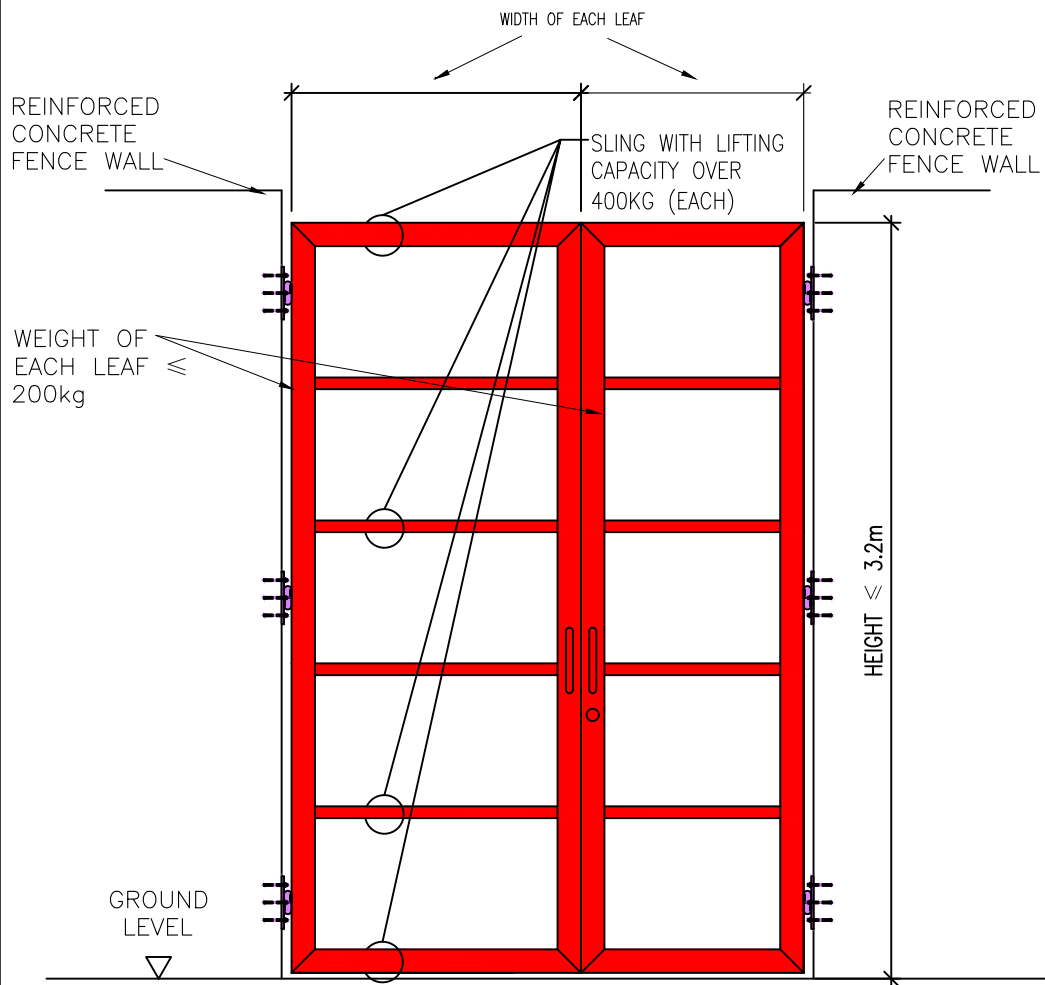
1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
Figure 2 Truss-out bamboo scaffold
Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.

WORKING PROCEDURES :

1. Remove all loose features inside the unauthorized building structures prior to the demolition of walls.
2. Demolish the unauthorized building structure from top to bottom. All structures shall be cut to a manageable size (i.e 300mm x 300mm).
3. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas (including water proofing layer) of the building.
5. Dismantle the bamboo scaffold and clean the site.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the existing design drawings/ information of the metal gate for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. Disconnect the electric locking device (if any) prior to the commencement of work.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department.

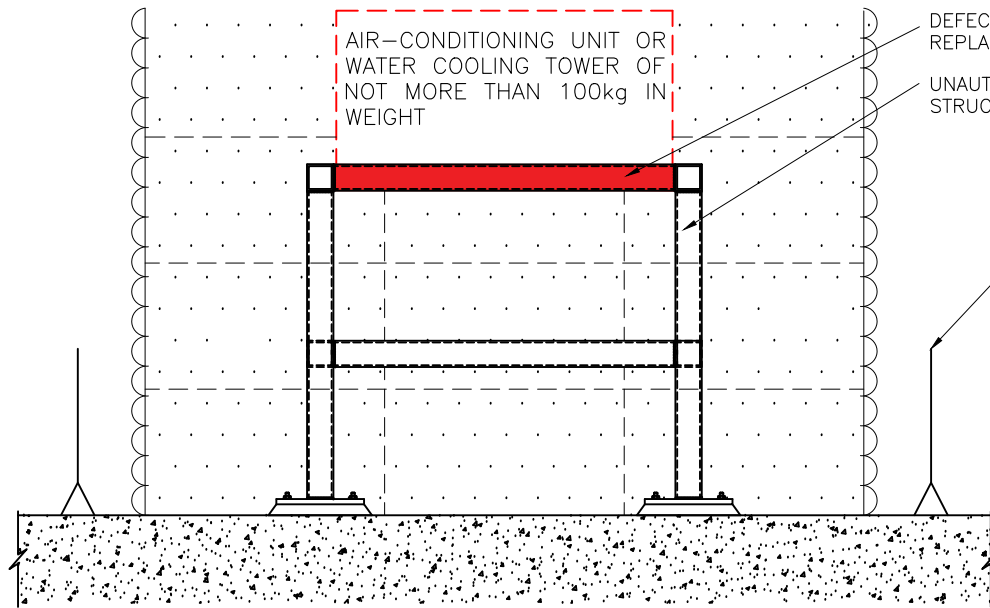
WORKING PROCEDURES :

1. Use of proper lifting device with slings to secure the gate.
2. Cut off the hinges connected to the metal gate.
3. Lower the metal gate onto floor horizontally.
4. Cut the metal gate into manageably small size and remove off site for construction waste disposal.
5. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
6. Make good and reinstate the affected area.

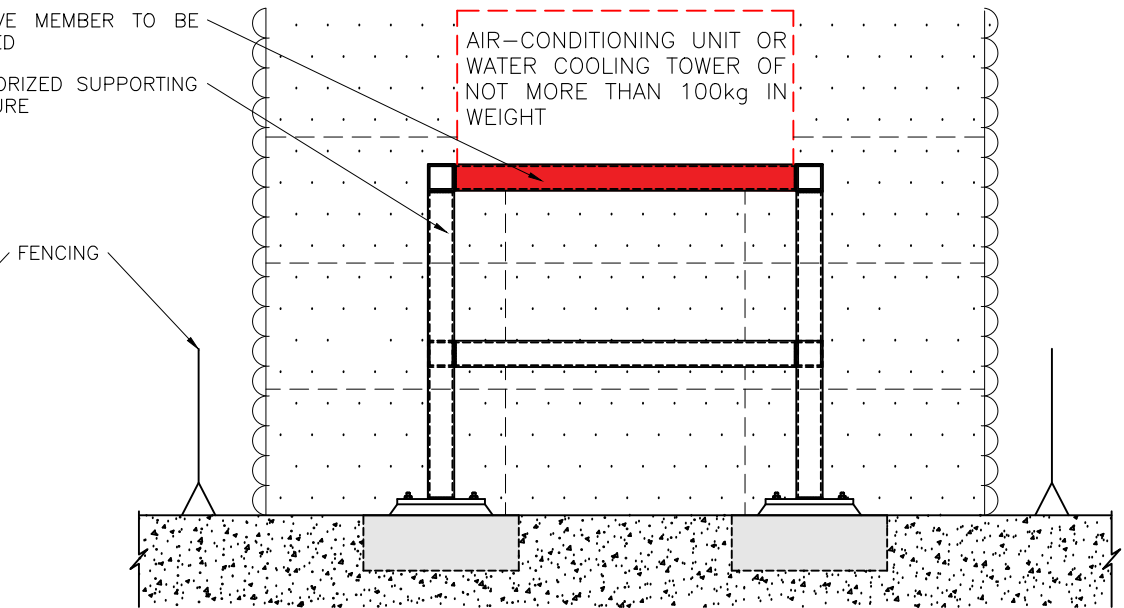
REMARKS :

This case excludes DEW item 8.

MINOR WORKS ITEM 3.33	DRAWING TITLE : REMOVAL OF METAL GATE AT A FENCE WALL OR AT AN ENTRANCE TO A BUILDING	
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ON ROOF OR SLAB (OTHER THAN A CANTILEVERED SLAB)



ON-GRADE

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

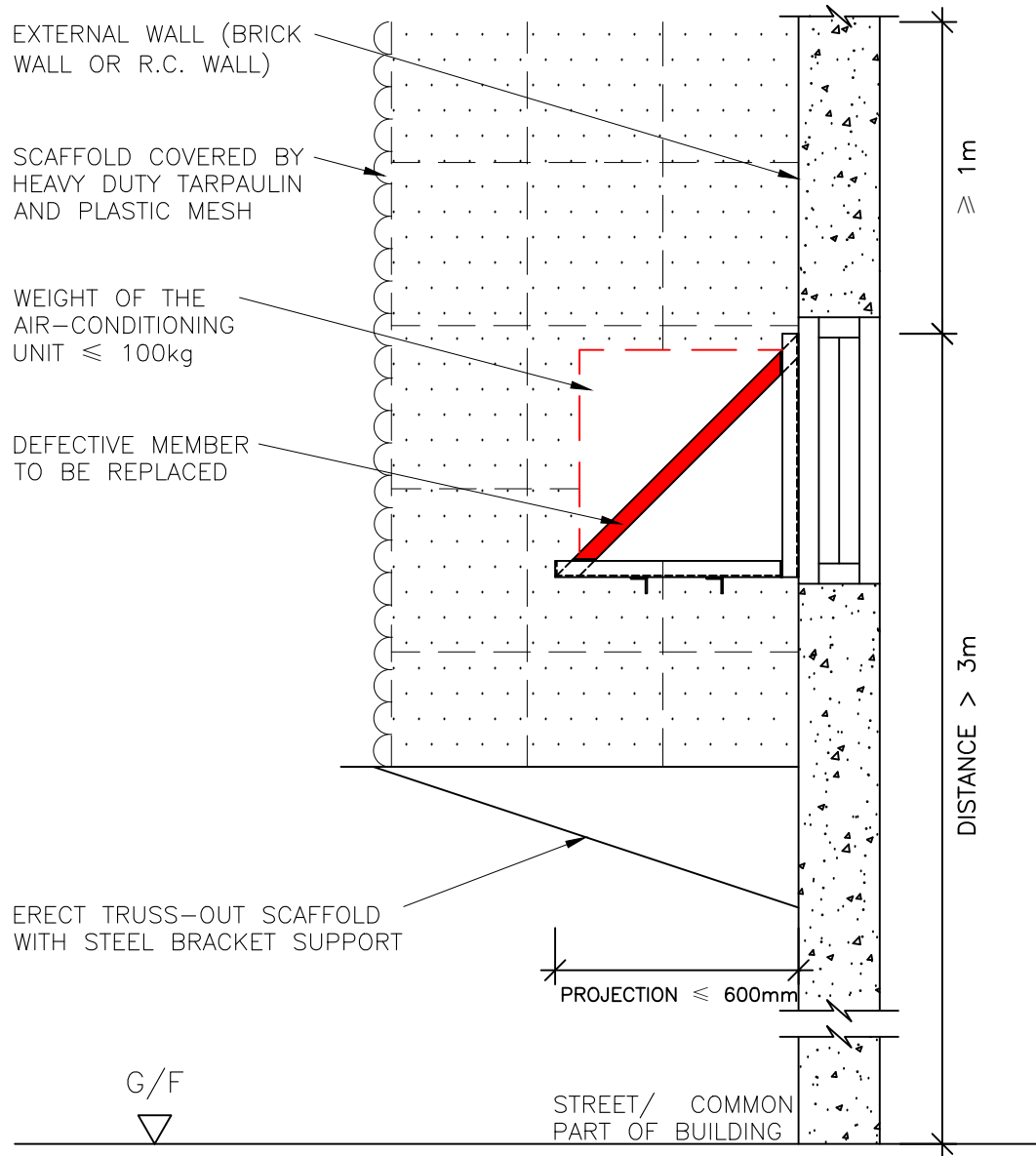
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a bamboo scaffold

WORKING PROCEDURES :

1. Temporarily remove existing air-conditioning unit, water tower or associated ducts if necessary. (Ensure all water pipes and electrical cable or wires were disconnected prior to any removal works.)
2. Remove the defective members and replace with new members having the same size as the existing one.
3. Make good and reinstate the affected areas of the parent building.
4. Remove the bamboo scaffold and clean the site.

REMARKS :

The works include the connection of flexible condensation pipe from the air-conditioning unit to an existing drain pipe. In case the building is not provided with a disposal system for drainage of the condensation, the building management/ IO/ other owners (where appropriate) should be informed for the provision of a proper disposal system.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

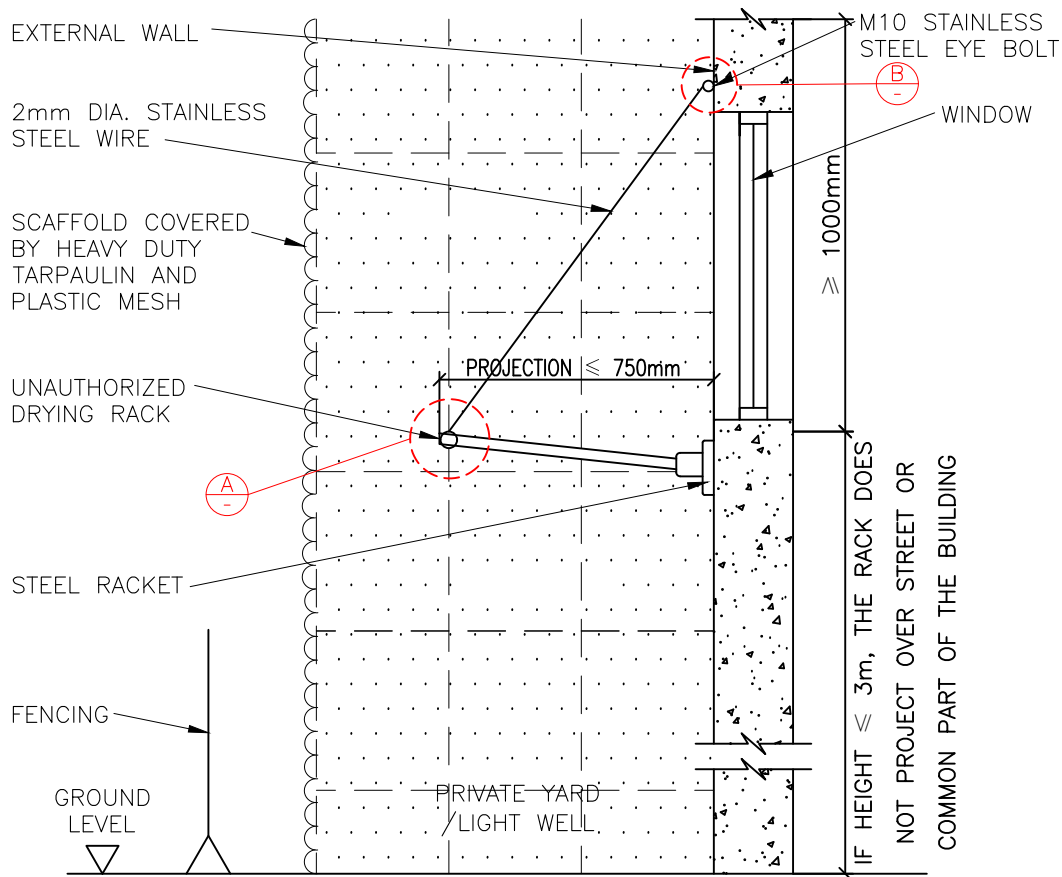
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a bamboo scaffold

WORKING PROCEDURE :

1. Remove the air-conditioning unit sitting on the supporting frame.
2. Remove the defective member and replace with new member having the same size as the removed member.
3. Re-connect the flexible condensation pipe from the air-conditioning unit to the existing drain pipe of building for drainage of the condensation.
4. Make good and reinstate the affected areas of the parent building.
5. Dismantle the bamboo scaffold and clean the site.

REMARKS :

1. If distance is not more than 3m, the frame does not project over any street or common part of building.
2. In case the building is not provide with a disposal system for drainage of the condensation, the building management/ IO/ other owners (where appropriate) should be informed for the provision of a proper disposal system.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

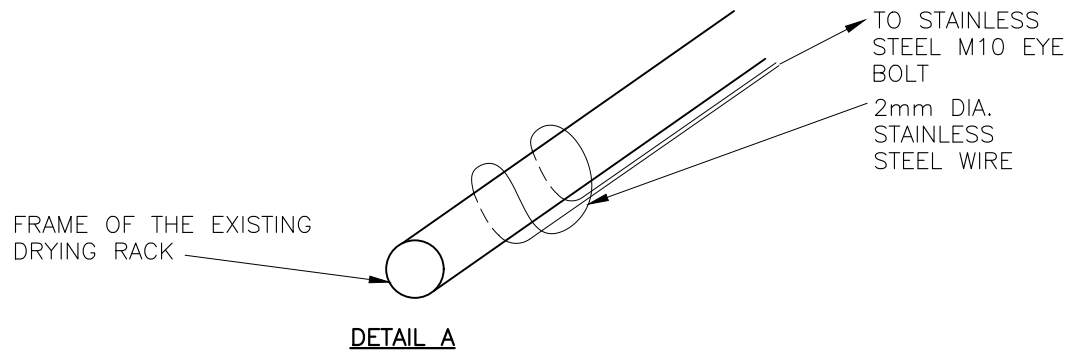
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1
 - Figure 4 Working platform on a double-row bamboo scaffold

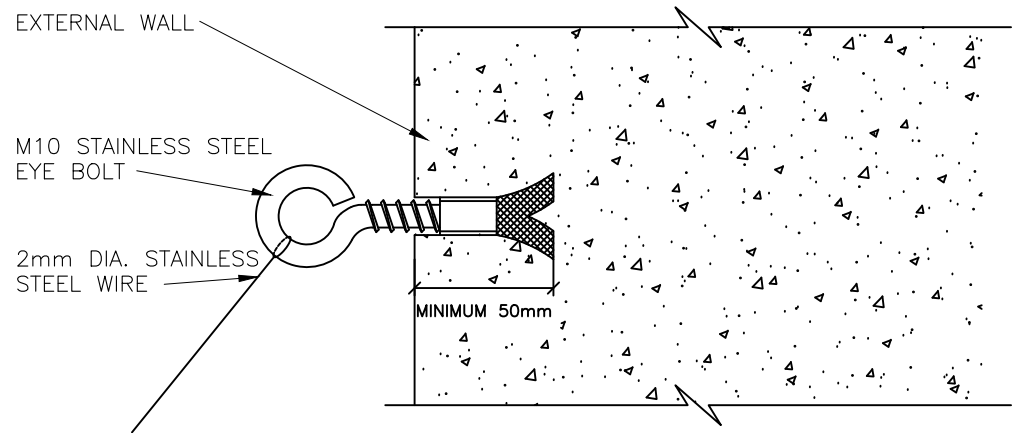
WORKING PROCEDURES :

1. Install the strengthening works (stainless steel eye bolt and wire) as per the drawing.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.

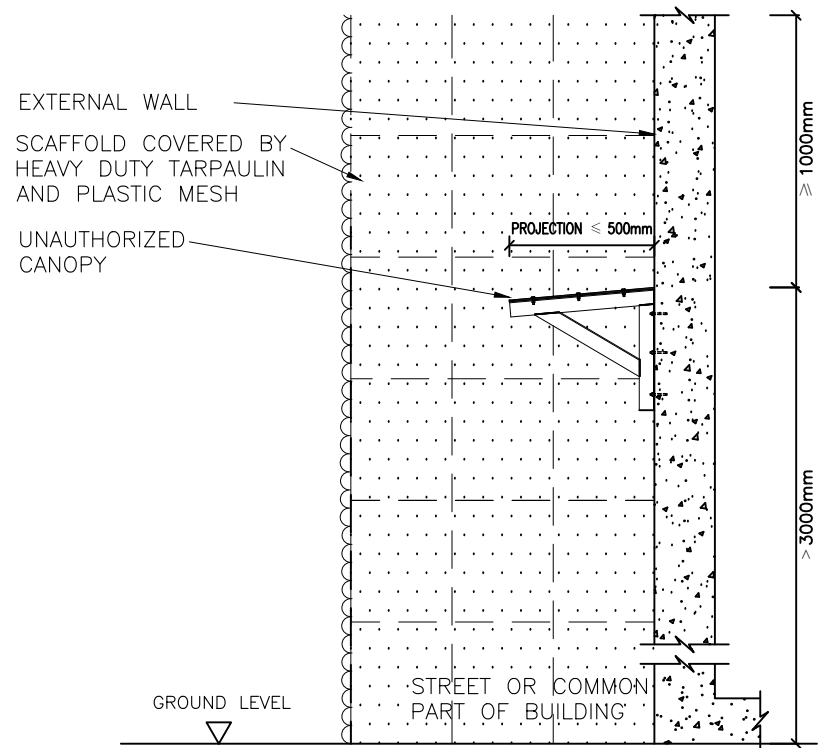
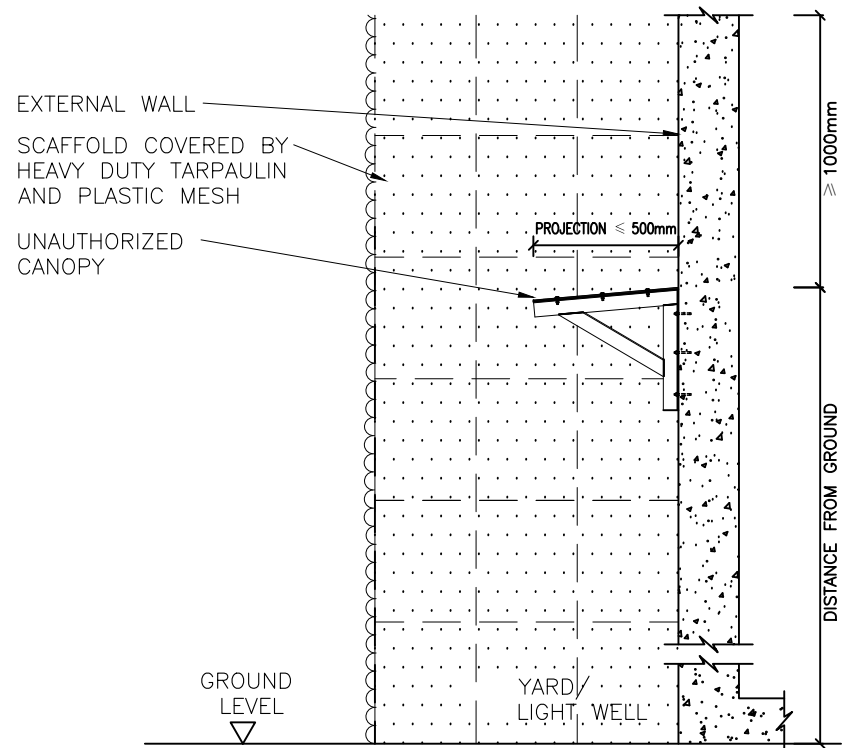
STRENGTHENING OF UNAUTHORIZED DRYING RACK PROJECTING FROM THE EXTERNAL WALL OF A BUILDING



DETAIL A



DETAIL B



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Inform the utilities company or sector if the works to be involved.
2. Carry out condition survey of the parent structure/ existing condition prior to commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

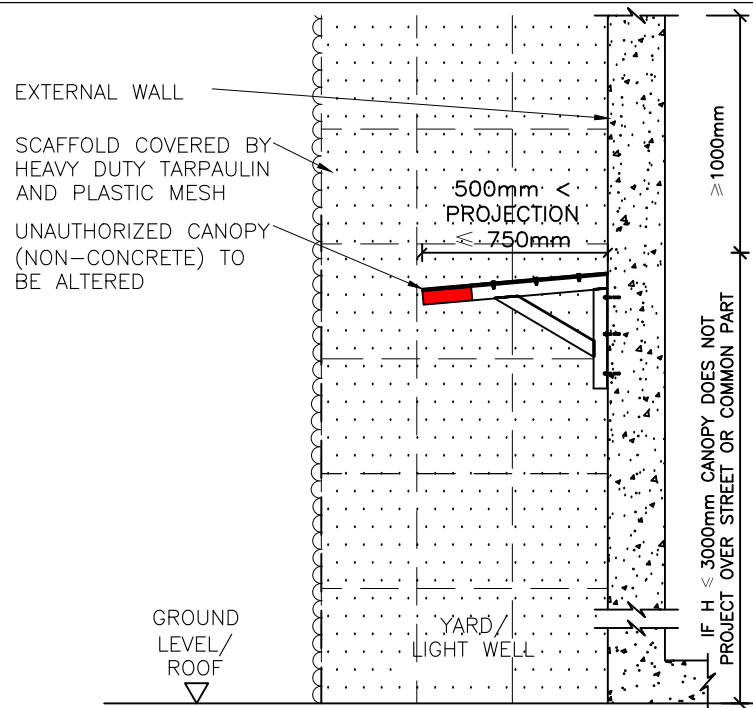
WORKING PROCEDURES :

1. Remove the defective members and replace with a new member with the same size of the existing member.
2. Add additional anchors, struts, and support as necessary.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.

MINOR WORKS ITEM 3.37

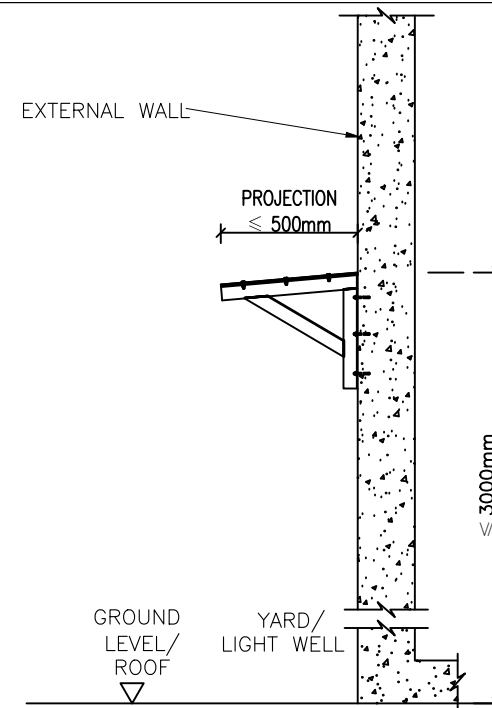
DRAWING TITLE :

STRENGTHENING OF UNAUTHORIZED CANOPY
PROJECTING FROM THE EXTERNAL WALL OF A BUILDING



BEFORE ALTERATION

CASE 1



AFTER ALTERATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Inform the utilities company or sector if the works to be involved.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.

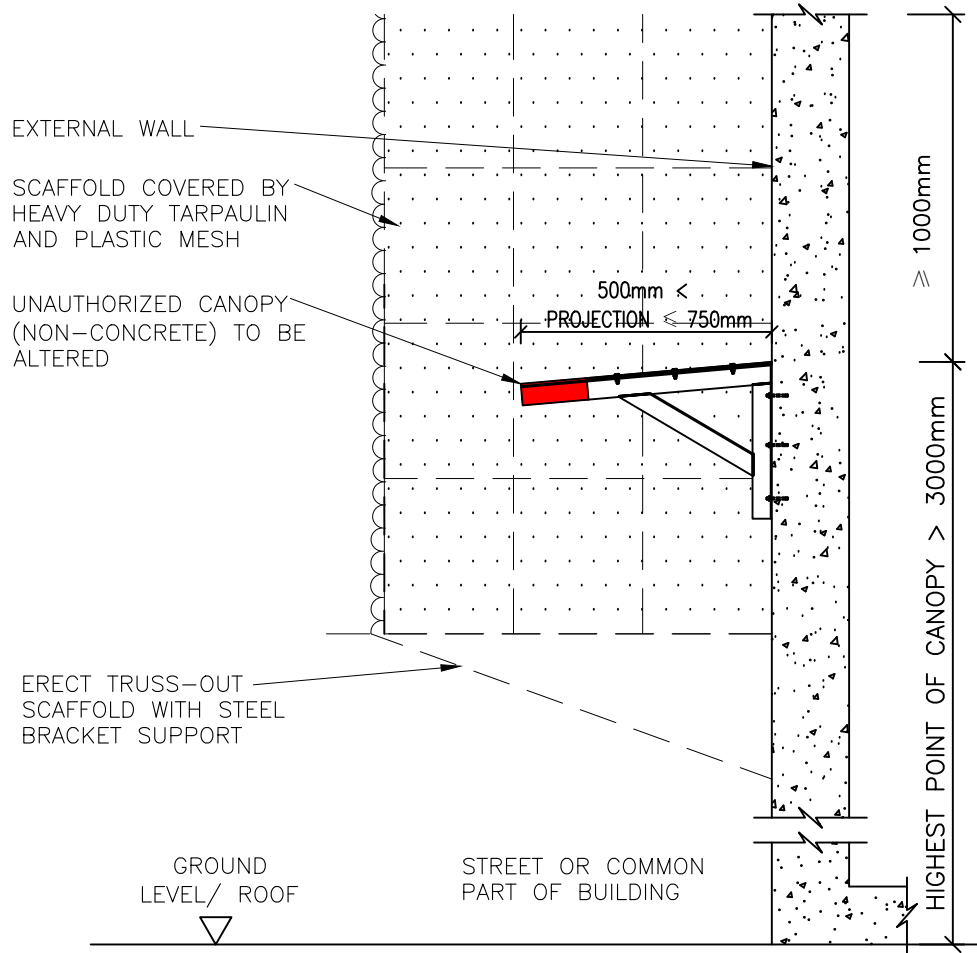
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
 - Figure 2 Truss out scaffolding

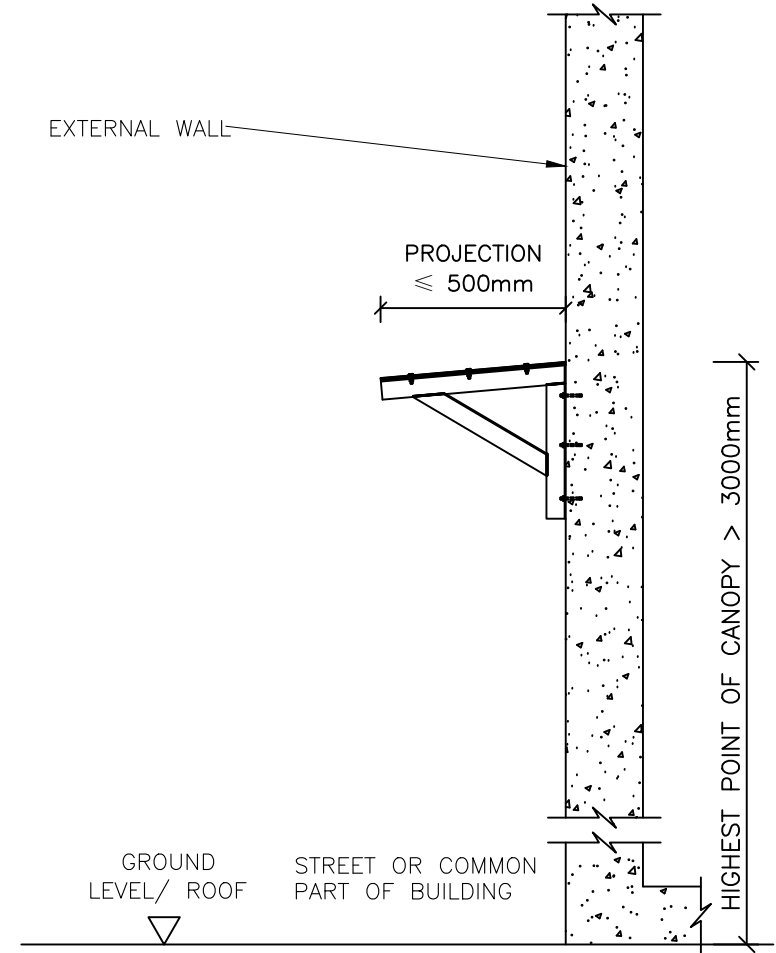
WORKING PROCEDURES :

1. Use mechanical tools to cut the canopy as per the drawing.
2. Make good and reinstate the affected areas of the parent building.
3. Dismantle the bamboo scaffold and clean the site.

REMARK: The canopy is not construct of concrete.

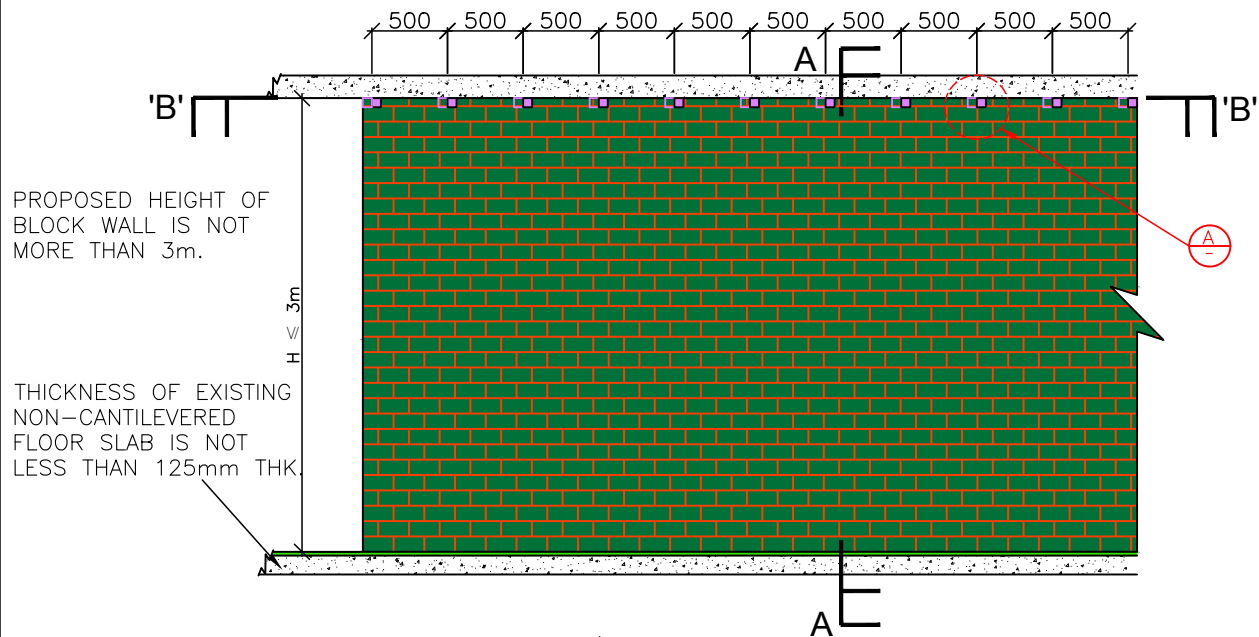


BEFORE ALTERATION



AFTER ALTERATION

CASE 2

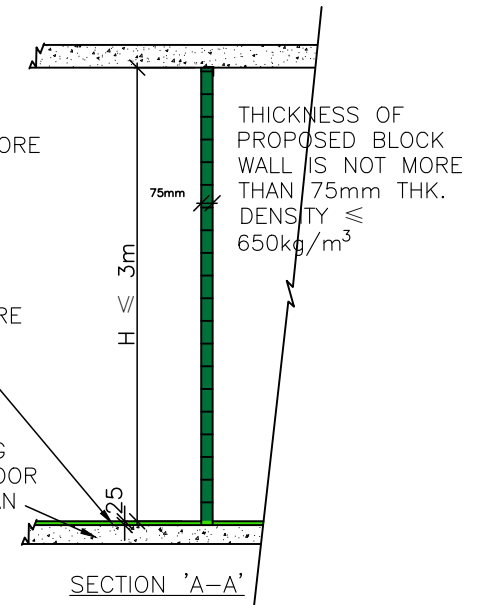


PROPOSED HEIGHT OF BLOCK WALL IS NOT MORE THAN 3m.

THICKNESS OF PROPOSED BLOCK WALL IS NOT MORE THAN 75mm THK.
DENSITY ≤ 650kg/m³

THICKNESS OF FLOOR SCREEDING IS NOT MORE THAN 25mm THK.

THICKNESS OF EXISTING NON-CANTILEVERED FLOOR SLAB IS NOT LESS THAN 125mm THK.



ERECTION/ALTERATION OF ANY NON-LOAD BEARING BLOCK WALL (OTHER THAN AN EXTERNAL BLOCK WALL)

GENERAL NOTES :

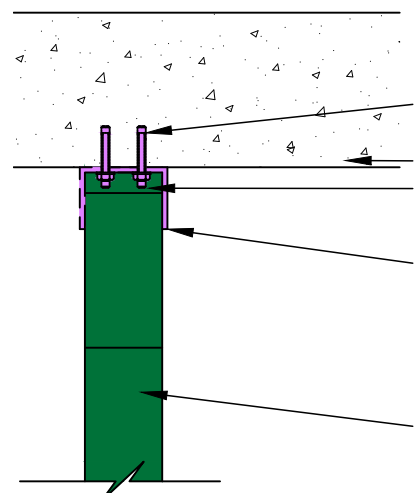
- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - BS 5628 – Code of Practice for the Use of Masonry : Part 1 Structural use of Unreinforced Masonry.
 - Specifications and Method Statement for YTONG AAC Block Wall or Equivalent.
 - Code of Practice for Fire Safety in Building 2011.
- Existing concrete grade is assumed to be Grade 30.
- All YTONG AAC blocks or equivalent shall comply with BS6073-3 as solid block with the minimum compressive strength of 4 N/mm² and the density not more than 650 kg/m³.
- Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm² by site tests.
- All structural steel to be grade S275 JO to BS EN 10025 and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.

PREPARATION WORK:

- Obtain the relevant approved plans to ascertain the slab thickness, internal layout of the flat and that there are no unauthorized building works in the vicinity of the works.
- Carry out condition survey of the parent structure / existing condition prior to the commencement of works.

WORKING PROCEDURES:

- Install the required non-loading bearing block wall as per the drawing.
- Make good and reinstate the affected areas of the parent building.
- Clean the site.
- Verify that the aggregate length of any additional block wall per m² of the floor area of the flat on which the wall is located is more than 0.1m but not more than 0.3m.
- Verify that the thickness of the floor screeding of the floor slab supporting the wall is not more than 25mm.

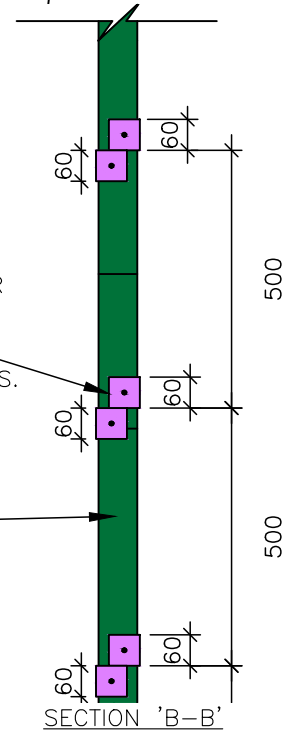


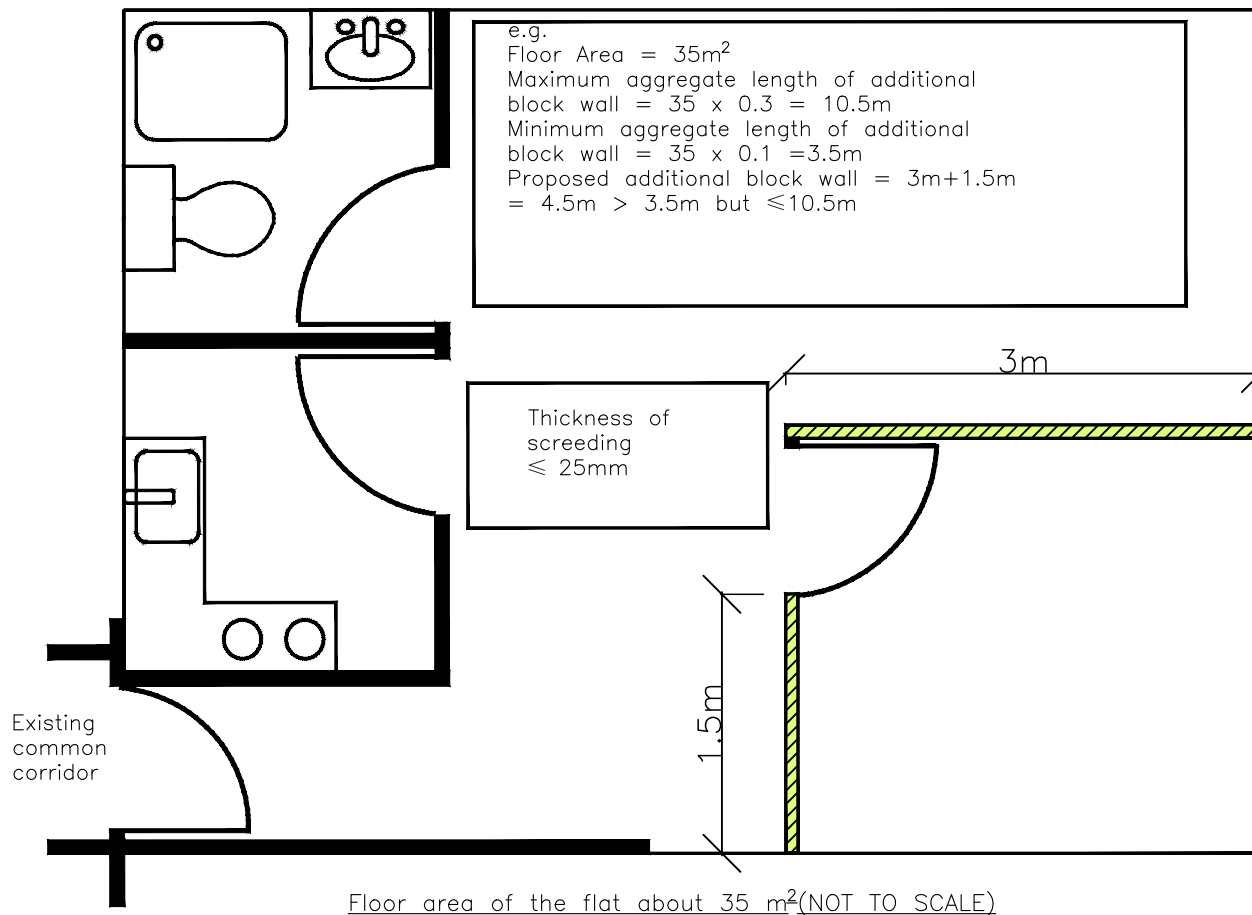
1 NO. HILTI HSA M8 ANCHOR BOLTS OR EQUIVALENT (MIN EFF. EMBEDMENT DEPTH = 40mm)

EXISTING R.C. SLAB
CEMENT SAND MORTAR

PAIRS OF 60mmLong, 60x60x5mmThick G.M.S. ANGLES, AT 500mm CENTRES FIXED TO CONCRETE CEILING AT ALTERNATE POSITIONS.

THICKNESS OF THE WALL ≤ 75mm.





LEGEND:

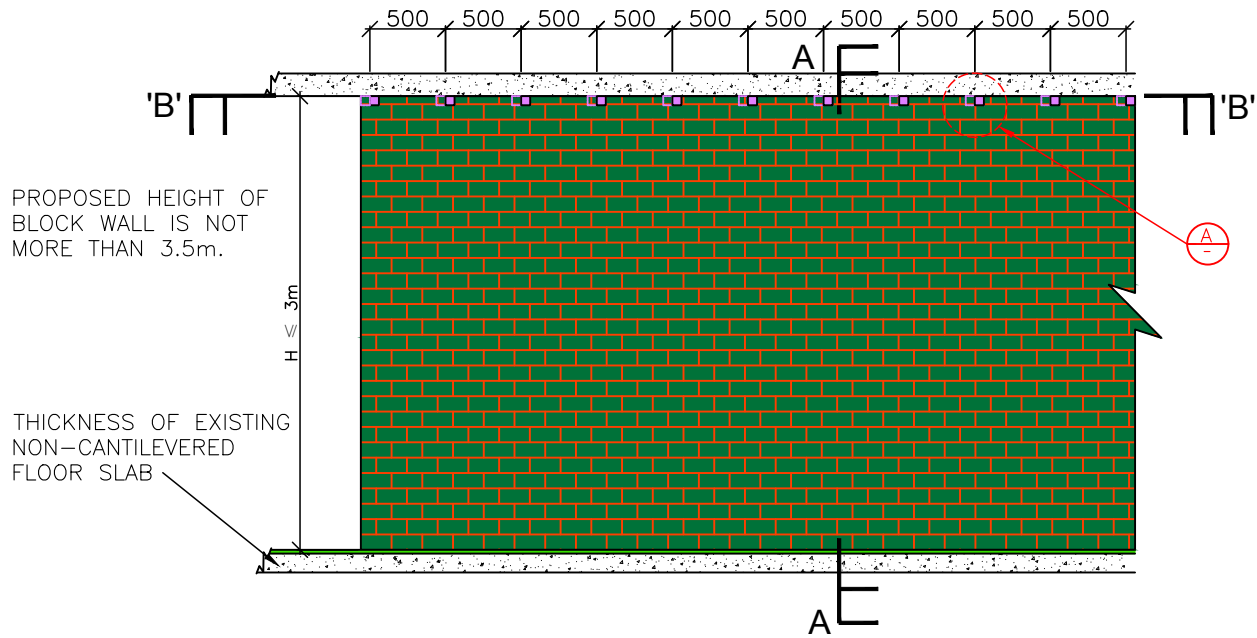
NON-LOAD BEARING WALL SHOWN ON APPROVED PLAN

NON-LOAD BEARING WALL TO BE ERECTED UNDER MINOR WORKS ITEM 3.39

The aggregate length of any additional block wall per m² of the floor area of the flat on which the wall is located is more than 0.1m but not more than 0.3m.

GENERAL NOTES :

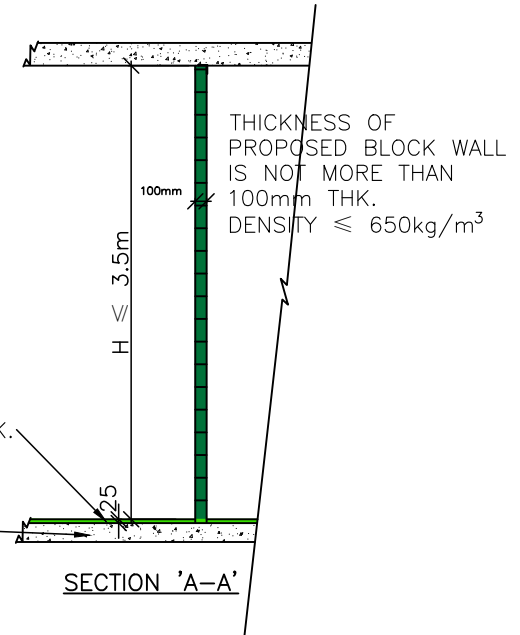
1. Additional block wall not more than 0.1m per m² of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



PROPOSED HEIGHT OF BLOCK WALL IS NOT MORE THAN 3.5m.

THICKNESS OF FLOOR SCREEDING IS NOT MORE THAN 25mm THK.

EXISTING NON-CANTILEVERED FLOOR SLAB



**ERECTION/ALTERATION OF ANY NON-LOAD BEARING BLOCK WALL
(OTHER THAN AN EXTERNAL BLOCK WALL)**

GENERAL NOTES :

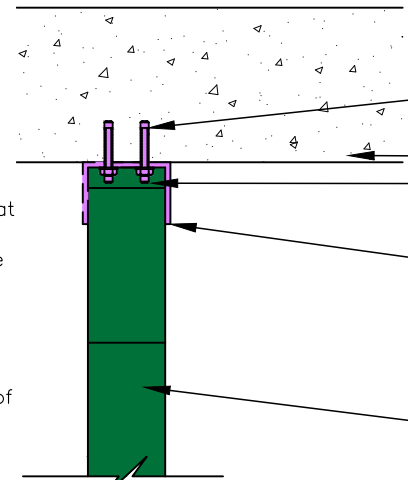
- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - BS 5628 – Code of Practice for the Use of Masonry : Part 1 Structural use of Unreinforced Masonry.
 - Specifications and Method Statement for YTONG AAC Block Wall or Equivalent.
 - Code of Practice for Fire Safety in Building 2011.
- Existing concrete grade is assumed to be Grade 30.
- All YTONG AAC blocks or equivalent shall comply with BS6073-3 as solid block with the minimum compressive strength of 4 N/mm² and the density not more than 650 kg/m³.
- Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm² by site tests.
- All structural steel to be grade S275 JO to BS EN 10025 and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.

PREPARATION WORK:

- Obtain the relevant approved plans to ascertain the slab thickness, internal layout of the flat and that there are no unauthorized building works in the vicinity of the works.
- Carry out condition survey of the parent structure / existing condition prior to the commencement of works.

WORKING PROCEDURES:

- Install the required non-loading bearing block wall as per the drawing.
- Make good and reinstate the affected areas of the parent building.
- Clean the site.
- Verify that the aggregate length of any additional block wall per m² of the floor area of the flat on which the wall is located is more than 0.2m but not more than 0.4m.
- Verify that the thickness of the floor screeding of the floor slab supporting the wall is not more than 25mm.



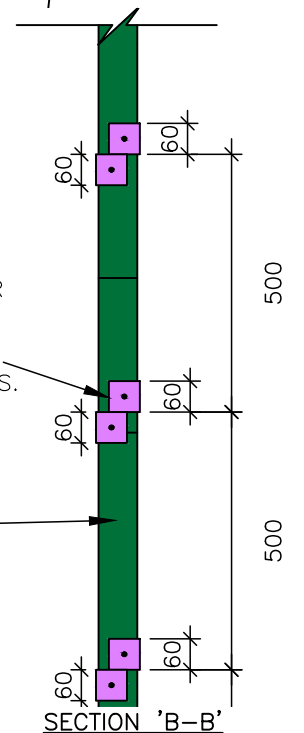
DETAIL 'A'

1 NO. HILTI HSA M8 ANCHOR BOLTS OR EQUIVALENT (MIN EFF. EMBEDMENT DEPTH = 40mm)

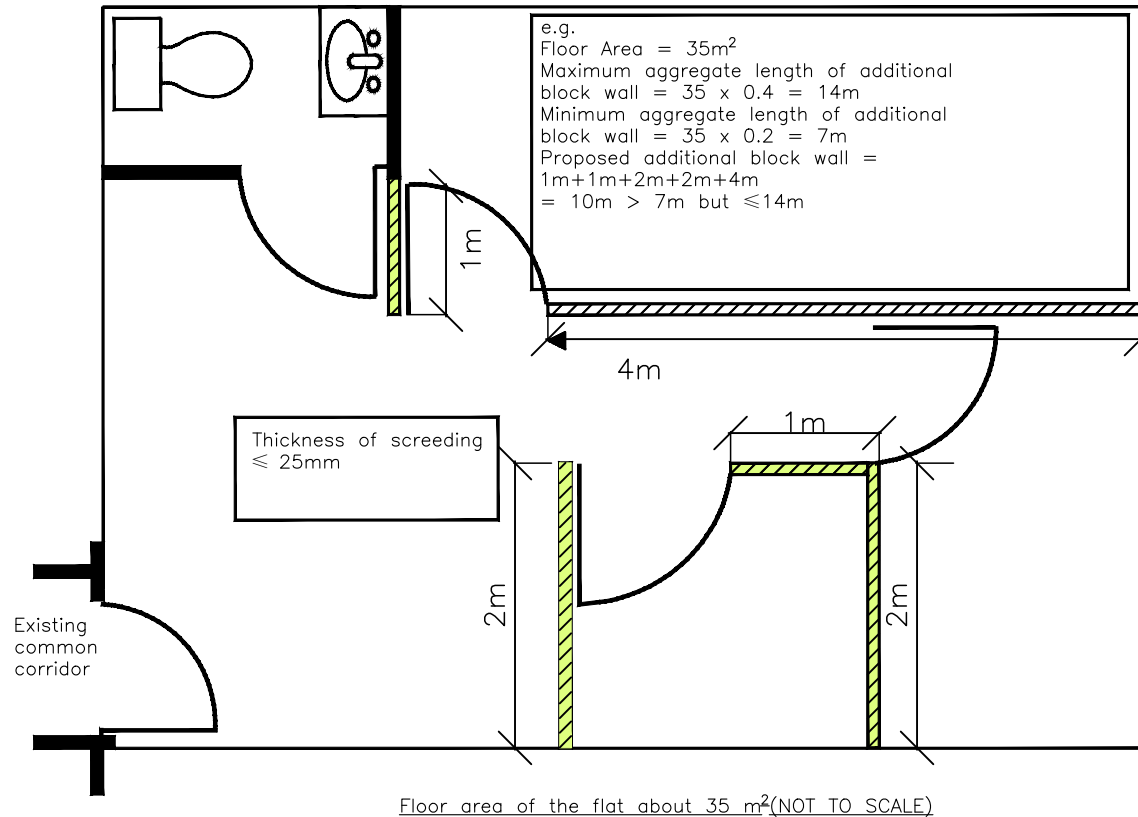
EXISTING R.C. SLAB
CEMENT SAND MORTAR

PAIRS OF 60mmLong, 60x60x5mmThick G.M.S. ANGLES, AT 500mm CENTRES FIXED TO CONCRETE CEILING AT ALTERNATE POSITIONS.

THICKNESS OF THE WALL ≤ 100mm.



SECTION 'B-B'



LEGEND:

NON-LOAD BEARING WALL SHOWN ON APPROVED PLAN

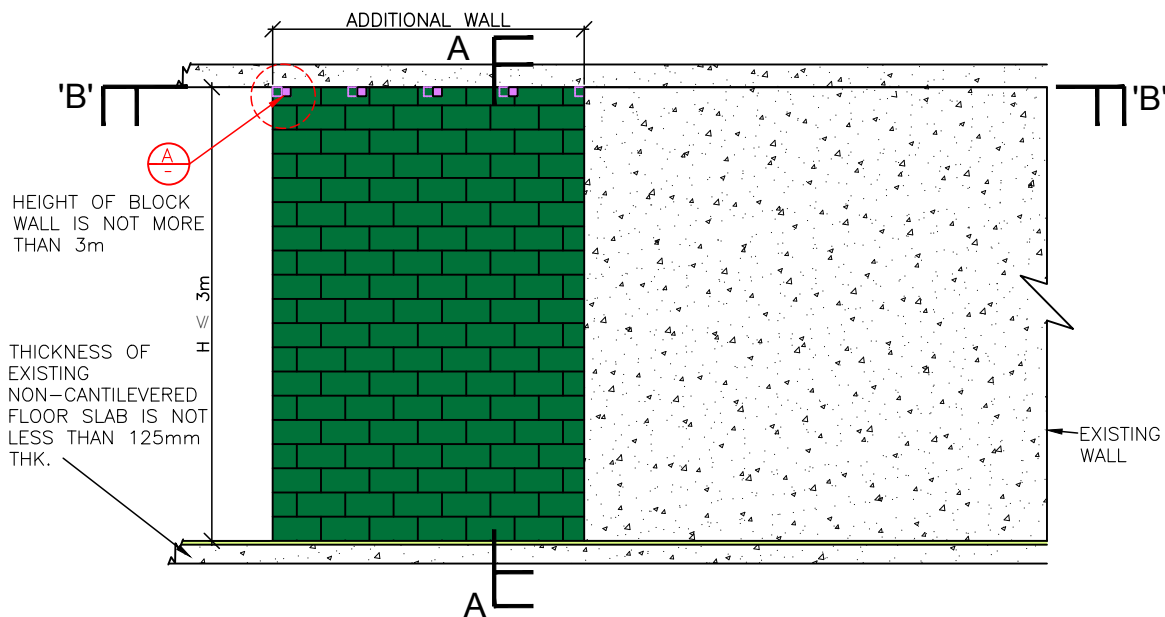
NON-LOAD BEARING WALL TO BE ERECTED UNDER MINOR WORKS ITEM 3.40

NON-LOAD BEARING WALL NOT SHOWN ON APPROVED PLAN

The aggregate length of any additional block wall per m^2 of the floor area of the flat on which the wall is located is more than 0.2m but not more than 0.4m .

GENERAL NOTES :

1. Additional block wall not more than 0.2m per m^2 of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



**ANY NON-LOAD BEARING BLOCK WALL
(OTHER THAN AN EXTERNAL BLOCK WALL)**

GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - BS 5628 – Code of Practice for the Use of Masonry : Part 1 Structural use of Unreinforced Masonry.
 - Specifications and Method Statement for YTONG AAC Block Wall or Equivalent.
 - BS 8204 – Screeds, bases and in site floorings.
 - Code of Practice for Fire Safety in Building 2011.
- Existing concrete grade is assumed to be Grade 30.
- Density of screed is not more than 1200 kg/m³.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm² and the density not more than 650 kg/m³.
- Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm² by site tests.
- All structural steel to be grade S275 JO to BS EN 10025 and BS EN 10029 for plates and shall be hot dip galvanized to BS EN ISO 1461.

PREPARATION WORK:

- Obtain the relevant approved plans to ascertain the slab thickness, internal layout of the flat and that there are no unauthorized building works in the vicinity of the works.
- Carry out condition survey of the parent structure / existing condition prior to the commencement of works.
- Verify the existing screeding thickness by exposing the screeding at the location of any additional wall.

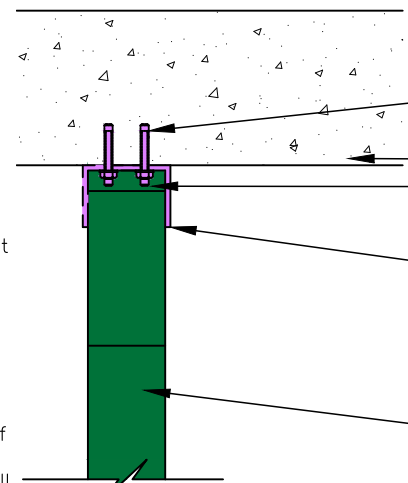
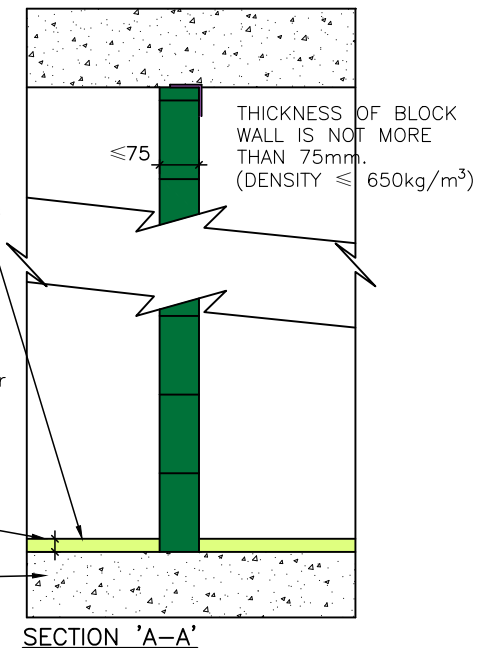
WORKING PROCEDURES:

- Install the non-load bearing block wall and lay screed as per drawing.
- Make good and reinstate the affected areas of the parent building.
- Clean the site.
- Verify the aggregate length of additional block wall and area of the thickening of floor slab.

If density of the screeding is more than 650kg/m³ but not more than 1200kg/m³, the screeding thickness may be more than 25mm but not more than 45mm, or screeding thickness may be more than 25mm but not more than 100mm, where the aggregate area of the screed is not more than 1m² within as floor area of 10m² of the flat and the nearest distance between each of the screeding area is not less than 2m.

If density of the screeding is not more than 650kg/m³, the screeding thickness may be more than 25mm but not more than 75mm, or screeding thickness may be more than 25mm but not more than 150mm, where the aggregate area of the screed is not more than 1.5m² within as floor area of 10m² of the flat and the nearest distance between each of the screeding area is not less than 2m.

THICKNESS OF EXISTING NON-CANTILEVERED FLOOR SLAB IS NOT LESS THAN 125mm THK.



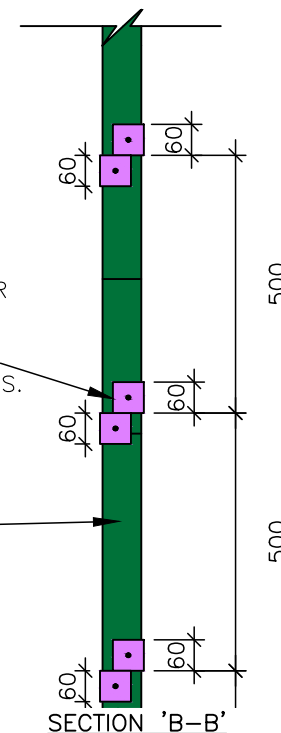
DETAIL 'A'

1 NO. HILTI HSA M8 ANCHOR BOLTS OR EQUIVALENT (MIN EFF. EMBEDMENT DEPTH = 40mm)

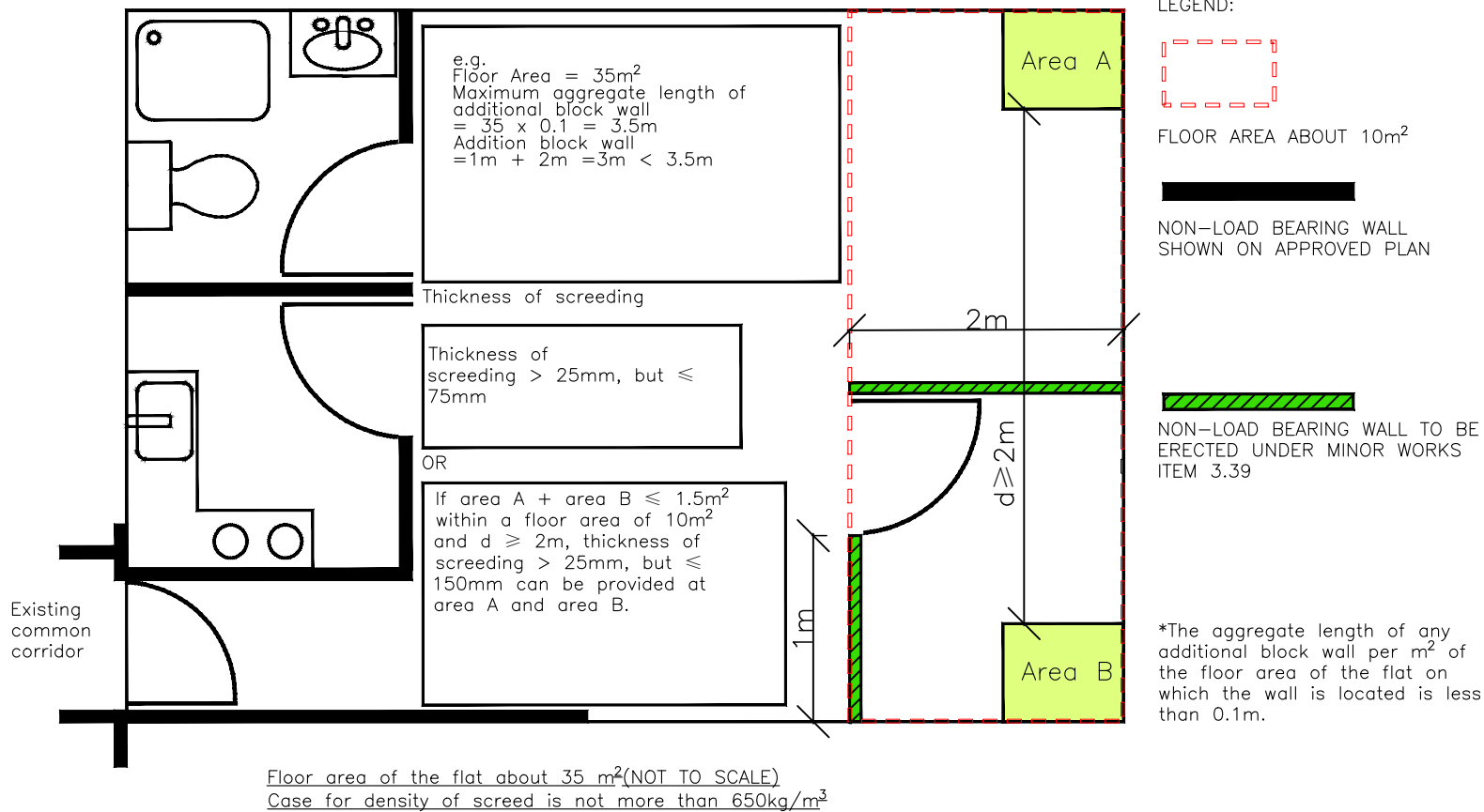
EXISTING R.C. SLAB CEMENT SAND MORTAR

PAIRS OF 60mmLong, 60x60x5mmThick G.M.S. ANGLES, AT 500mm CENTRES FIXED TO CONCRETE CEILING AT ALTERNATE POSITIONS.

THICKNESS OF THE WALL ≤ 75mm.

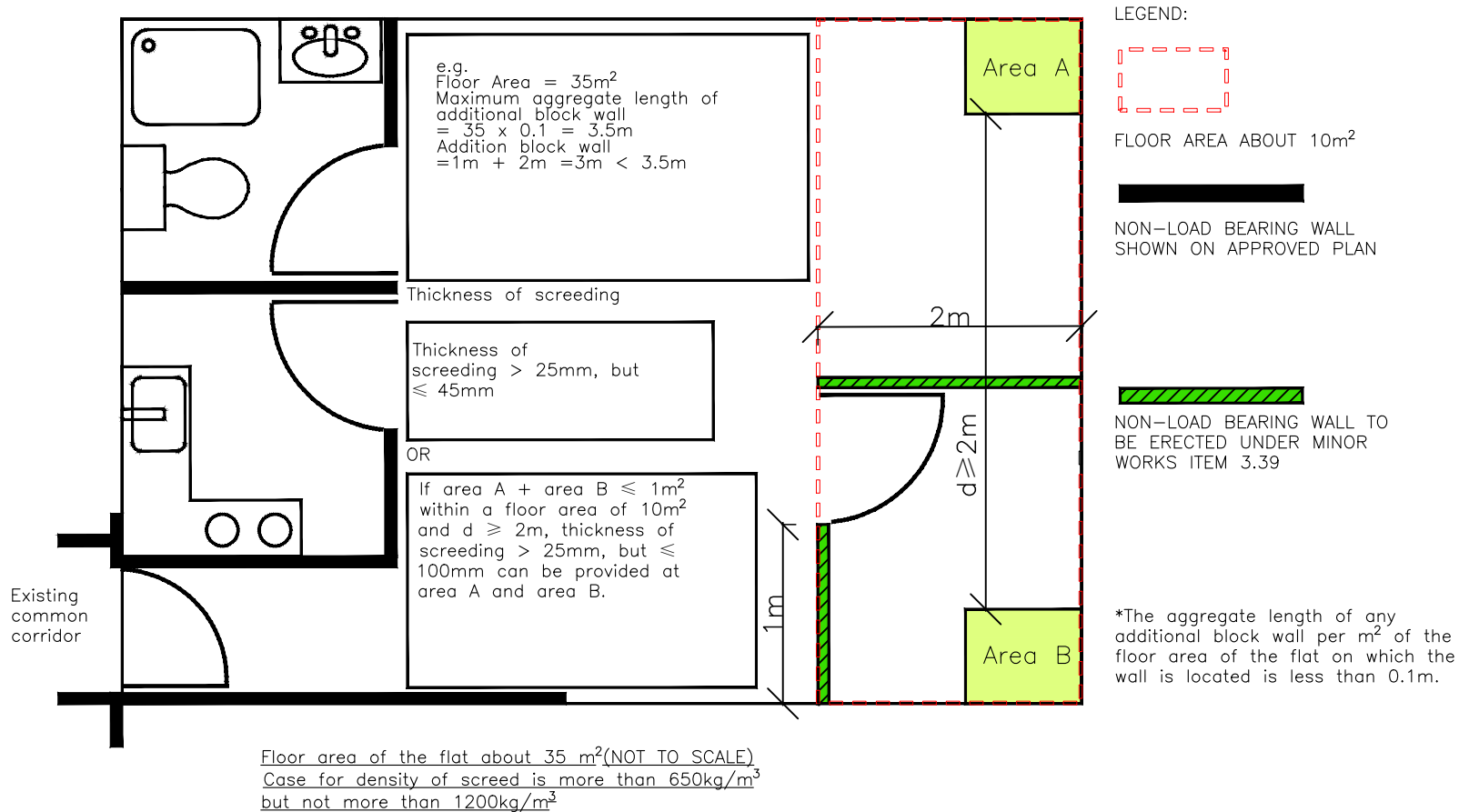


SECTION 'B-B'



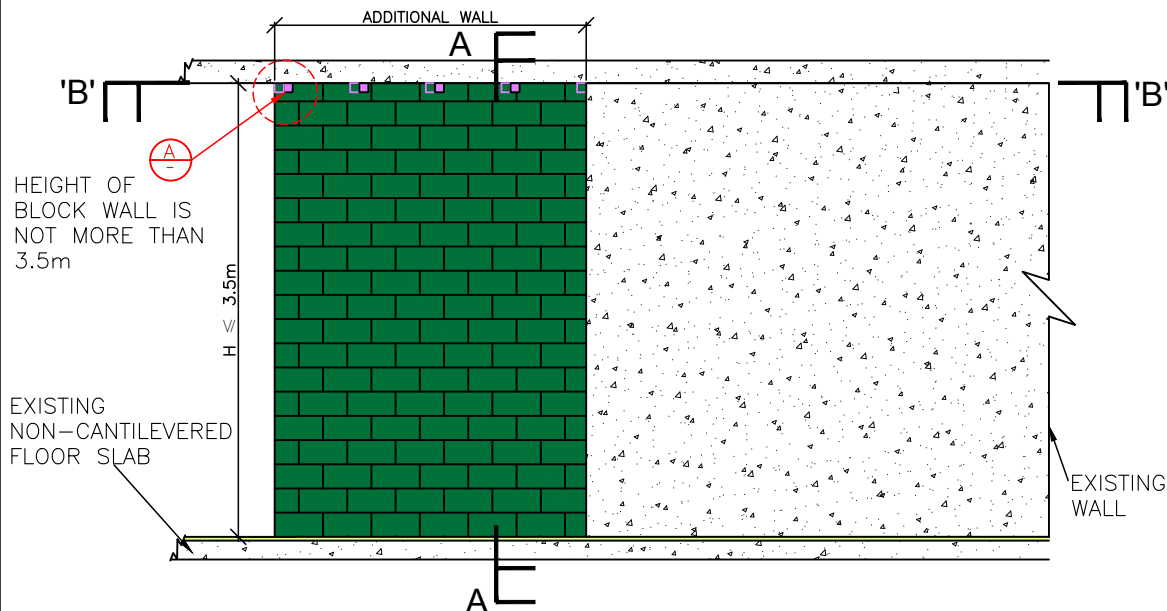
GENERAL NOTES :

1. Additional block wall of less than 0.1m per m² of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



GENERAL NOTES :

1. Additional block wall of less than 0.1m per m² of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



**ANY NON-LOAD BEARING BLOCK WALL
(OTHER THAN AN EXTERNAL BLOCK WALL)**

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - BS 5628 – Code of Practice for the Use of Masonry : Part 1 Structural use of Unreinforced Masonry.
 - Specifications and Method Statement for YTONG AAC Block Wall or Equivalent.
 - BS 8204 – Screeds, bases and in site floorings.
 - Code of Practice for Fire Safety in Building 2011.
3. Existing concrete grade is assumed to be Grade 30.
4. Density of screed is not more than 1200 kg/m³.
5. All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm² and the density not more than 650 kg/m³.
6. Mortar designation shall be Class (ii) to Table 1 of BS5628-1 with the mean compressive strength at 28 days of 4.5 N/mm² by site tests.

PREPARATION WORK:

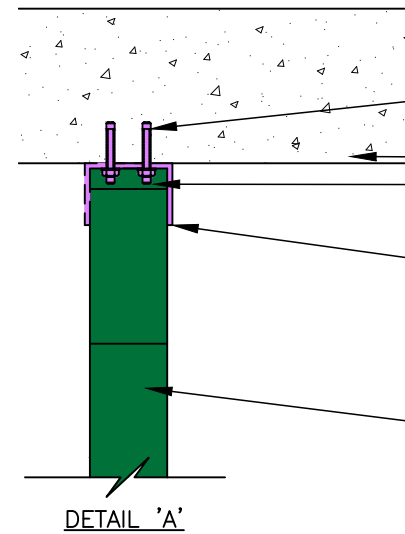
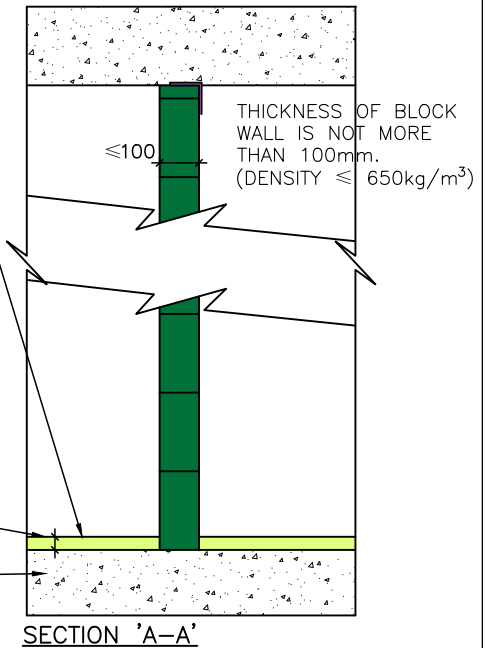
1. Obtain the relevant approved plans to ascertain the slab thickness, internal layout of the flat and that there are no unauthorized building works in the vicinity of the works.
2. Carry out condition survey of the parent structure / existing condition prior to the commencement of works.
3. Verify the existing screeding thickness by exposing the screeding at the location of any additional wall.

WORKING PROCEDURES:

1. Install the non-load bearing block wall and lay screed as per drawing.
2. Make good and reinstate the affected areas of the parent building.
3. Clean the site.
4. Verify the aggregate length of additional block wall and area of the thickening of floor slab.

If density of the screeding is more than 650kg/m³ but not more than 1200kg/m³, the screeding thickness may be more than 25mm but not more than 75mm, or screeding thickness may be more than 25mm but not more than 150mm, where the aggregate area of the screed is not more than 2m² within as floor area of 10m² of the flat and the nearest distance between each of the screeding area is not less than 2m.

If density of the screeding is not more than 650kg/m³, the screeding thickness may be more than 25mm but not more than 125mm, or screeding thickness may be more than 25mm but not more than 200mm, where the aggregate area of the screed is not more than 2.5m² within as floor area of 10m² of the flat and the nearest distance between each of the screeding area is not less than 2m.

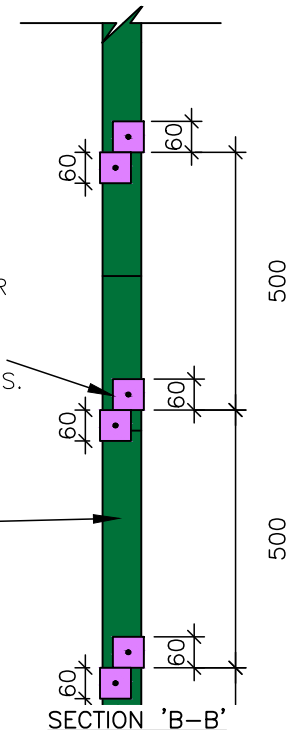


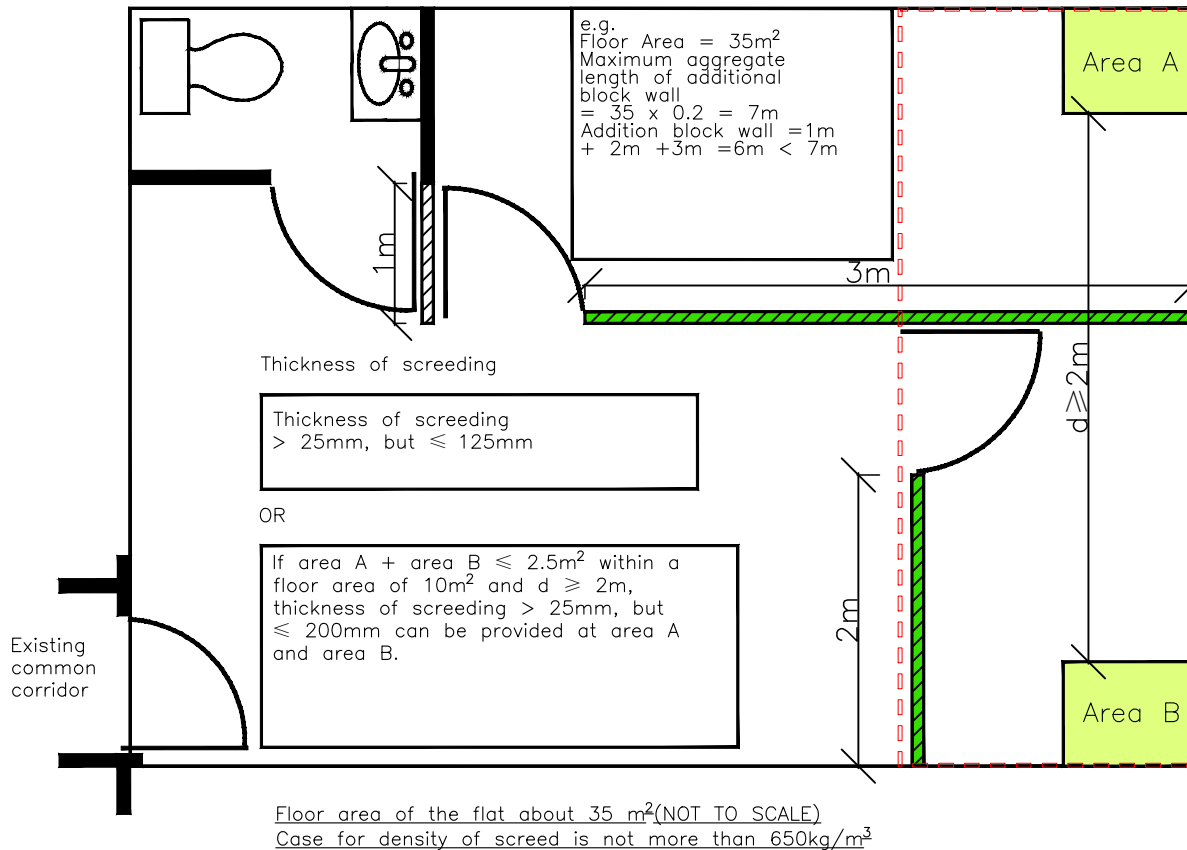
1 NO. HILTI HSA M8 ANCHOR BOLTS OR EQUIVALENT (MIN EFF. EMBEDMENT DEPTH = 40mm)

EXISTING R.C. SLAB
CEMENT SAND MORTAR

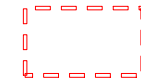
PAIRS OF 60mmLong, 60x60x5mmThick G.M.S. ANGLES, AT 500mm CENTRES FIXED TO CONCRETE CEILING AT ALTERNATE POSITIONS.

THICKNESS OF THE WALL ≤ 100mm.





LEGEND:



FLOOR AREA ABOUT 10m²



NON-LOAD BEARING WALL SHOWN ON APPROVED PLAN



NON-LOAD BEARING WALL NOT SHOWN ON APPROVED PLAN

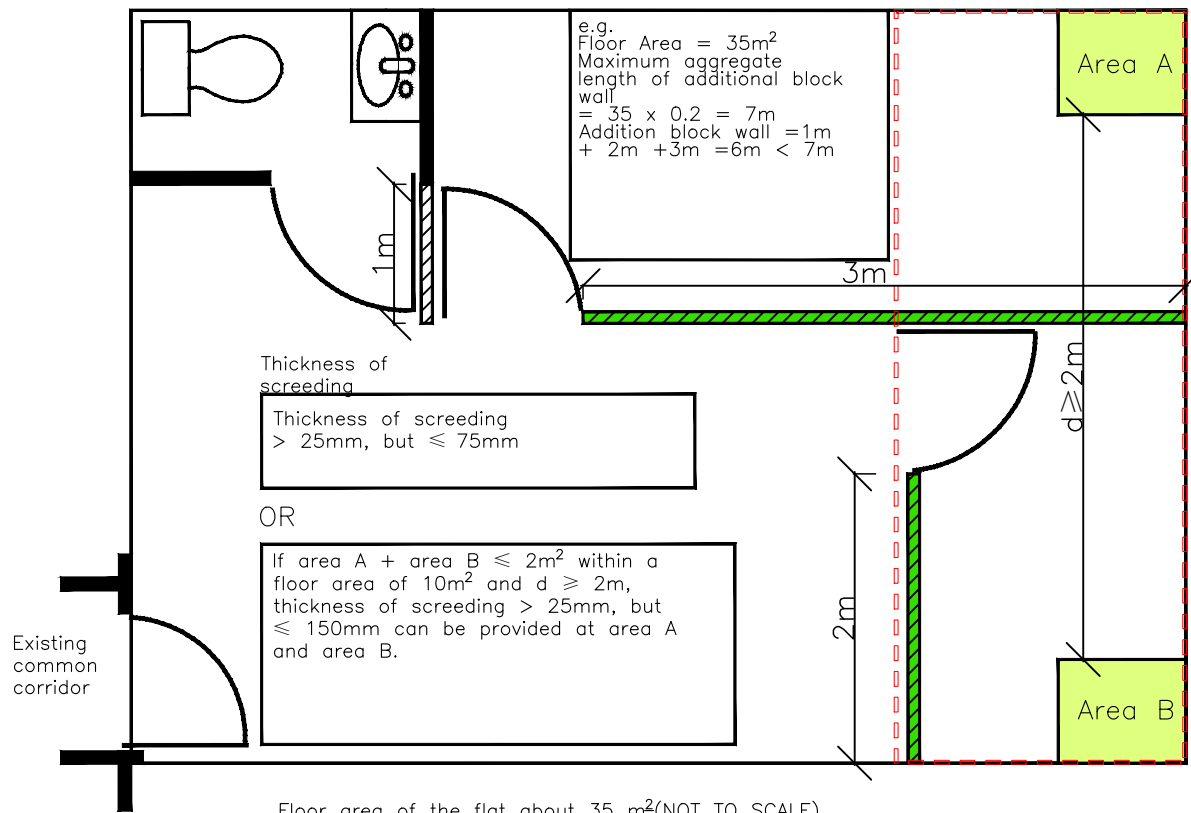


NON-LOAD BEARING WALL TO BE ERECTED UNDER MINOR WORKS ITEM 3.40

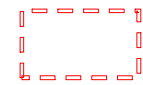
*The aggregate length of any additional block wall per m² of the floor area of the flat on which the wall is located is less than 0.2m.

GENERAL NOTES :

1. Additional block wall of less than 0.2m per m² of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



LEGEND:



FLOOR AREA ABOUT 10m²



NON-LOAD BEARING WALL SHOWN ON APPROVED PLAN



NON-LOAD BEARING WALL NOT SHOWN ON APPROVED PLAN



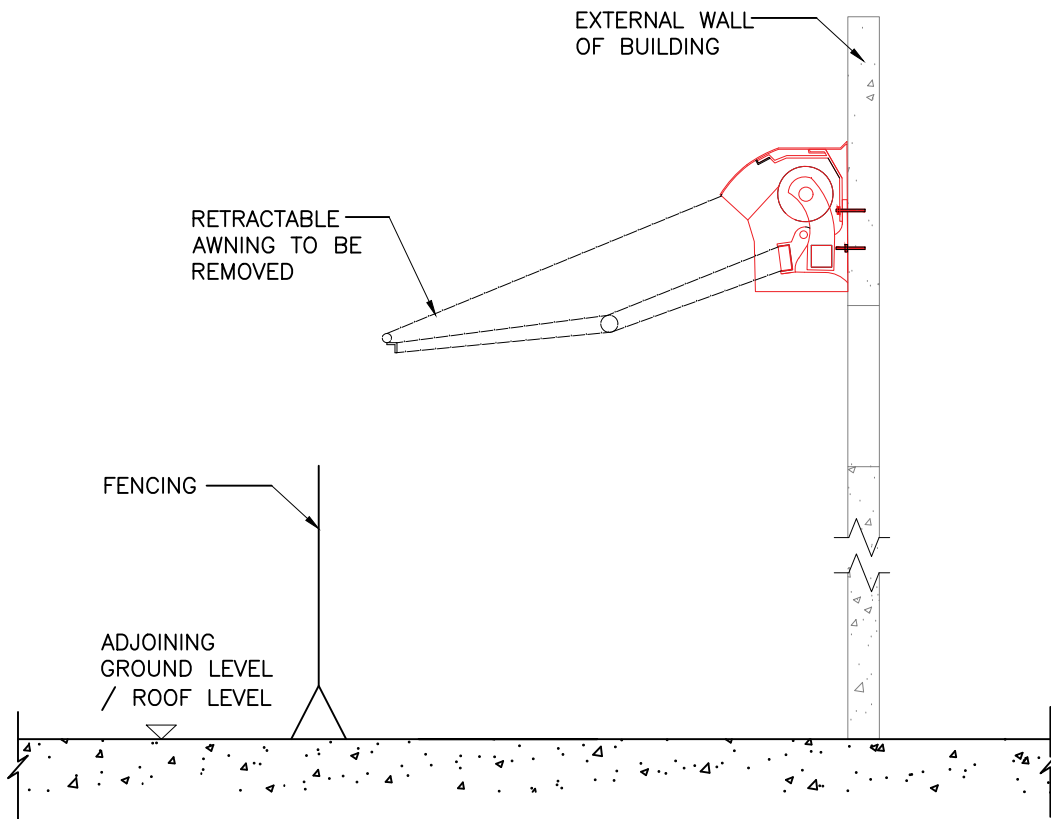
NON-LOAD BEARING WALL TO BE ERECTED UNDER MINOR WORKS ITEM 3.40

*The aggregate length of any additional block wall per m² of the floor area of the flat on which the wall is located is less than 0.2m.

Floor area of the flat about 35 m²(NOT TO SCALE)
 Case for density of screed is more than 650kg/m³ but not more than 1200kg/m³

GENERAL NOTES :

1. Additional block wall of less than 0.2m per m² of the floor area of the flat and floor screeding not more than 25mm thick measured from the structural floor level are exempted works.
2. Aggregate length of any additional wall means the difference between the total length of the non-load bearing walls (excluding the width of any door openings on the walls) in a flat as shown on the approved plan and that as measured after the minor works item is carried out.
3. The wall finishes are not counted in the wall thickness.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION :

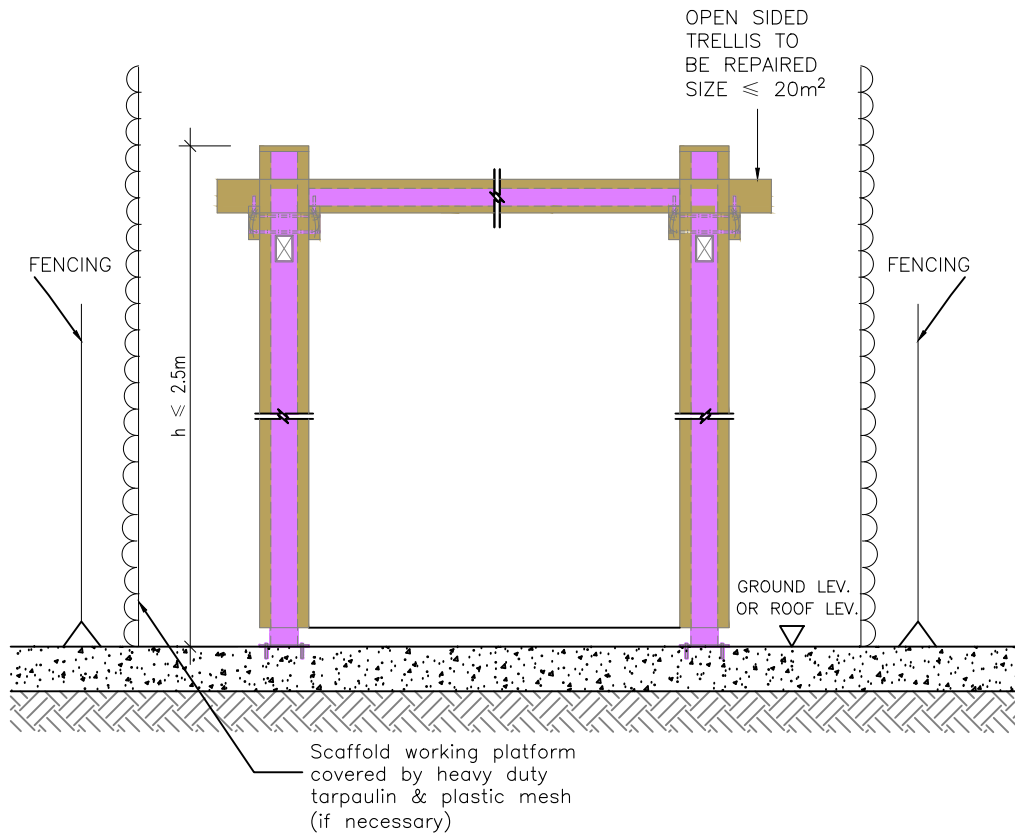
1. Obtain the existing design drawings/ information of the awning for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. Disconnect the electric supply for the electric motor (if any) prior to the commencement of work.

SAFETY AND PRECAUTIONARY MEASURES :

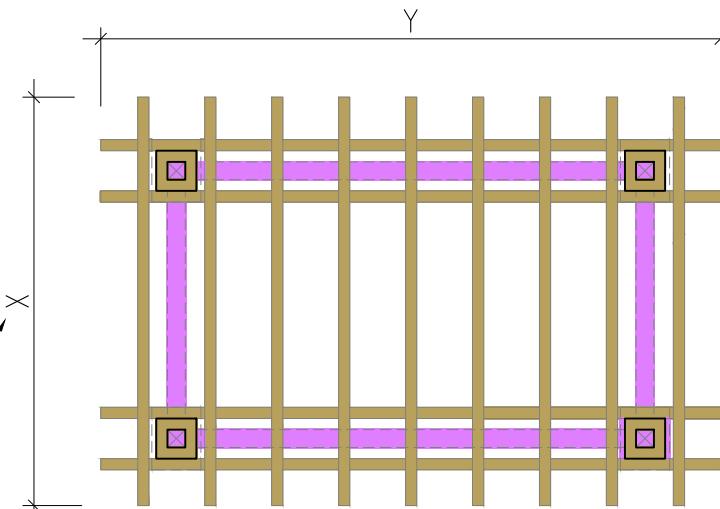
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. The use of lifting device shall be in accordance with relevant Code of Practice/ Guidance Notes issued by the Labour Department.

WORKING PROCEDURES :

1. Retract the awning and locked in position.
2. Use of proper lifting device to temporarily secure the awning.
3. Remove all loose fittings of the awning.
4. Loosen the connection of the awning from the wall and lower it on the floor or roof.
5. Cut the awning into manageable small size for removal.
6. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
7. Make good and reinstate the affected area.



OPEN SIDED TRELLIS TO BE REPAIRED SIZE $(X*Y) \leq 20m^2$



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Obtain the original design drawings/ information for reference prior to the commencement of works
2. Carry condition survey to the parent structure/ existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

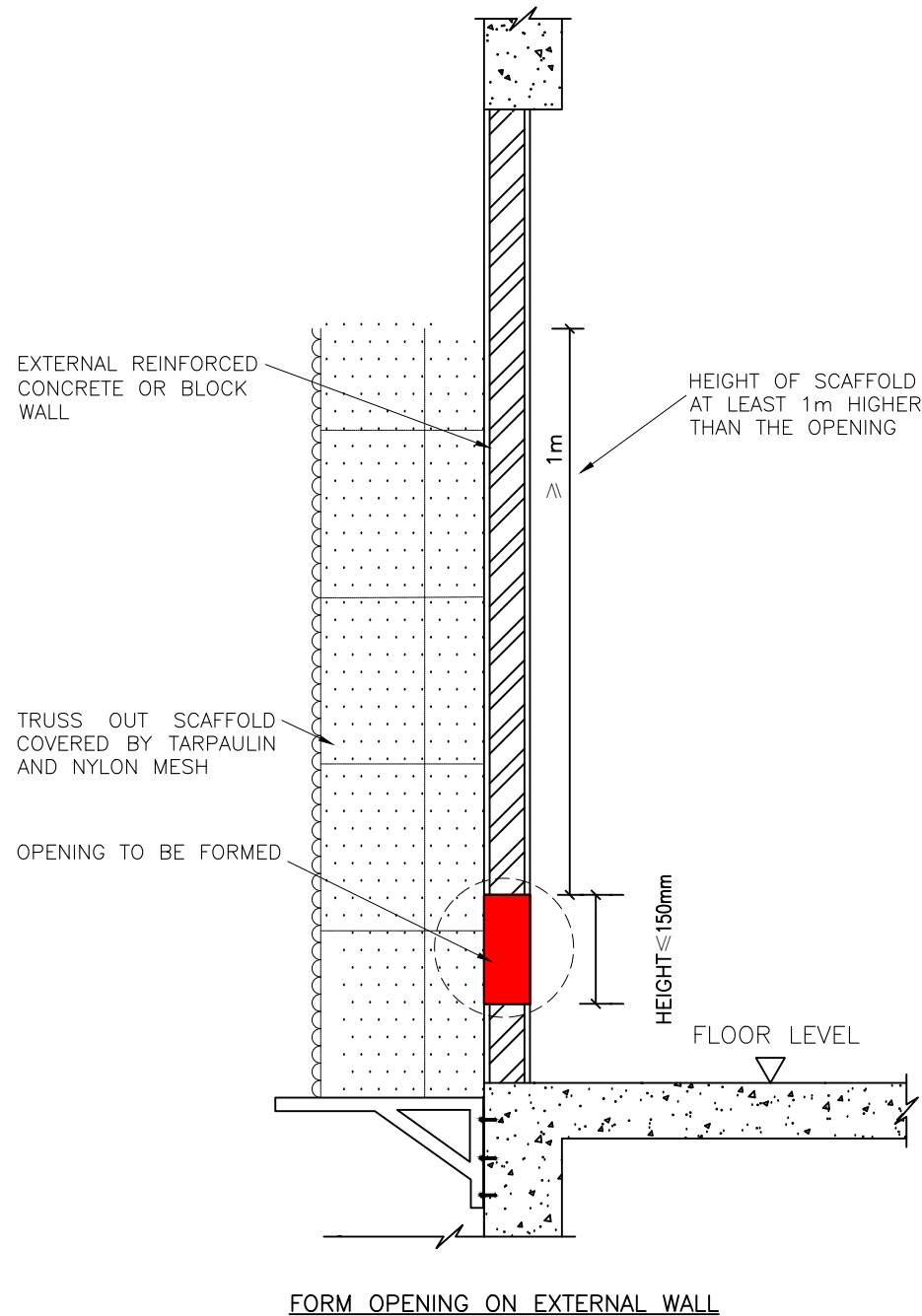
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

A. Repair

1. Remove the defective member of the trellis and replace with a new one in accordance with the original design.
2. Make good and reinstate the affected areas of the parent structure.
3. Remove the fencing and clean the site.
4. All rubbish generated shall be disposed as construction waste.

Remark: The works do not involve alteration of other structural element.



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

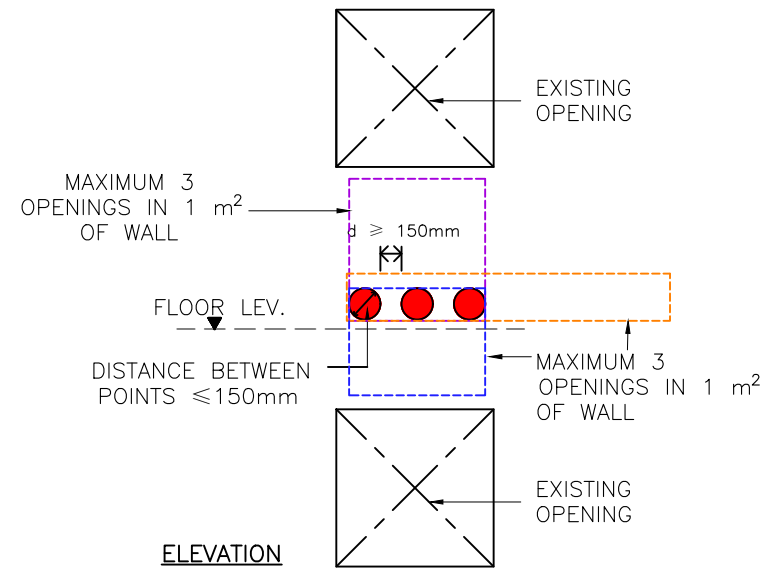
1. Obtain the original approved structure for reference before commencement of works.
2. Inform the utilities company or sector if the works will involve them.
3. Carry condition survey of the parent structure/existing condition prior to the commencement of works.
4. Prevent cutting the existing reinforcement.

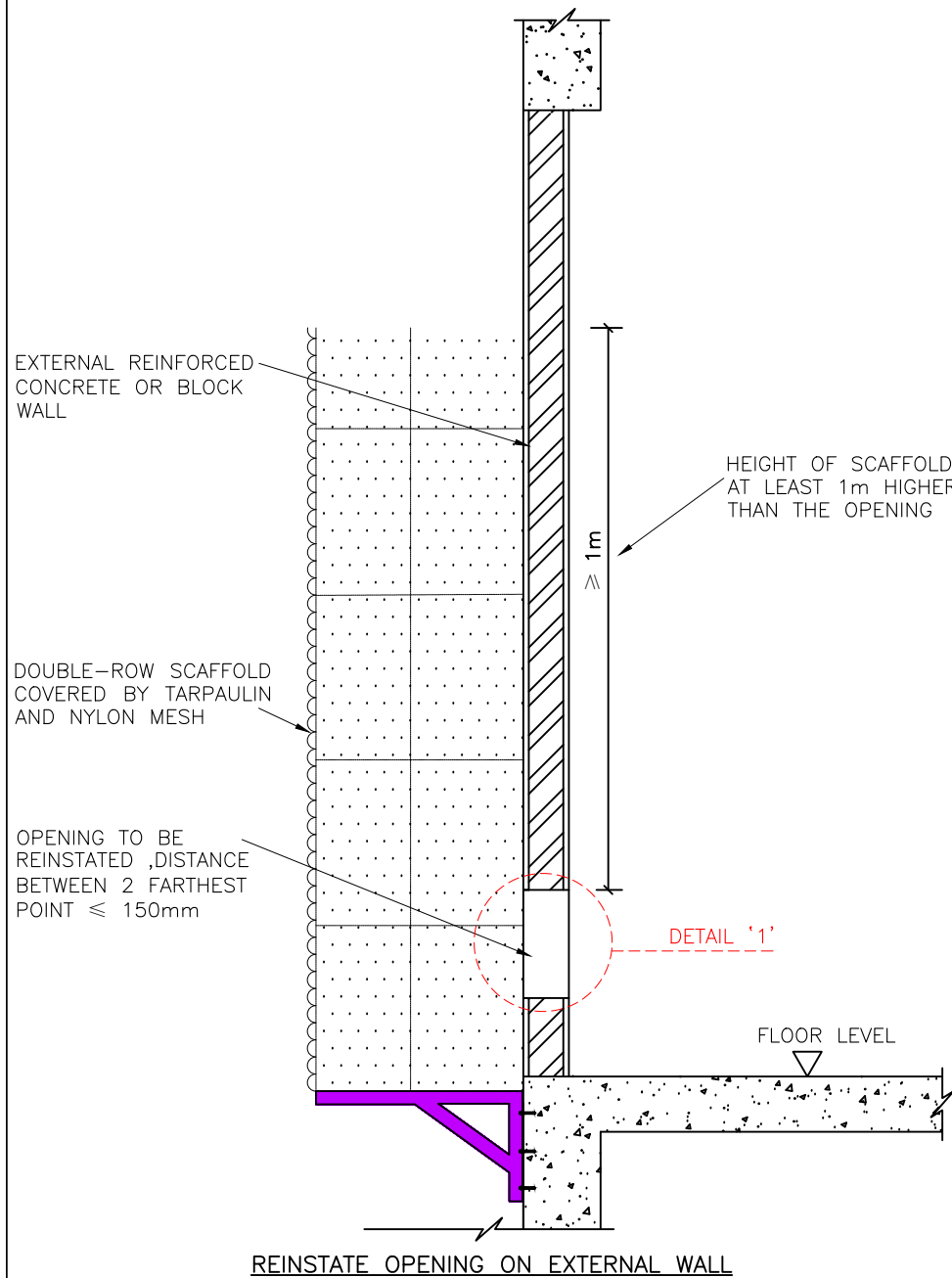
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
Figure 1 Double-row bamboo scaffold and working platform over pavement
Figure 2 Truss out scaffolding
Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Locate and mark the position of opening to be formed on wall and saw cut the rendering
2. Form the opening by using hand-held mechanical tools.
3. Make good and reinstate the affected areas of the parent building.
4. Dismantle the bamboo scaffold and clean the site.





GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

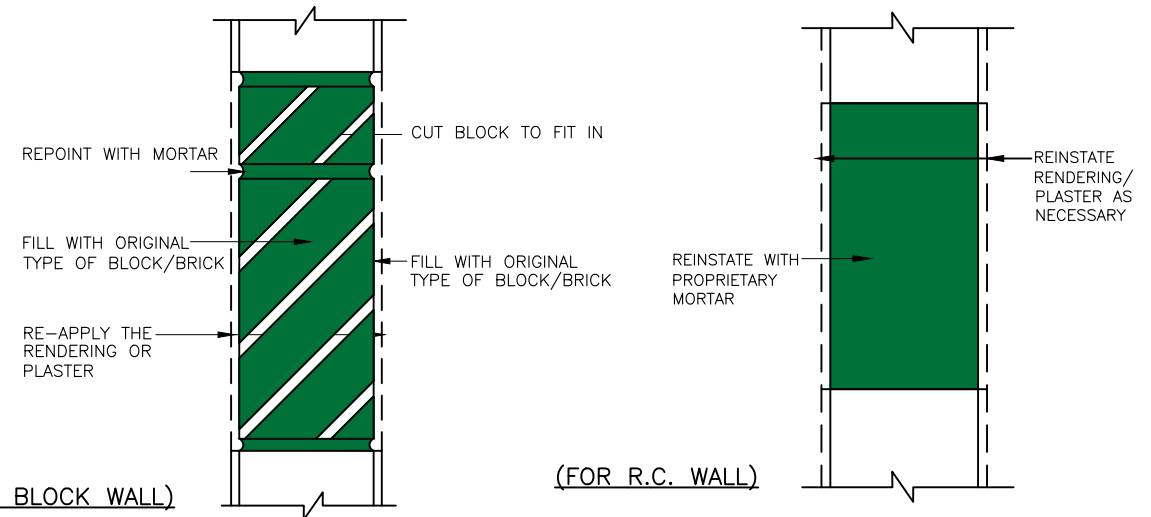
1. Obtain the original approved structure for reference before commencement of works.
2. Inform the utilities company or sector if the works will involve them.
3. Carry condition survey of the parent structure/existing condition prior to the commencement of works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 2 Truss out scaffolding
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Reinforced concrete wall
 - a) Hacked off loose part, clean the hole and reinforcement (if any).
 - b) Wet the surface and apply proprietary repair mortar in accordance in manufacturer's instruction.
 - c) Use formworks where it is necessary.
2. Block wall
 - a) clear away loose part and clean the edges of the holes and wet the surface.
 - b) Use blocks of original design to fill the holes.
 - c) Use cement sand mortar (1:3) or proprietary mortar for the joints.
3. Make good and reinstate the affected areas.
4. Remove the scaffoldings and clean the site.



DETAIL '1' (FOR BLOCK WALL)

(FOR R.C. WALL)

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
3. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μm .
4. Minimum concrete grade for existing structures is 30D/20.
5. Structural steel used for new structure to be grade S275 J0 complying with BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2015.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. Unless noted otherwise, all welding shall be 4mm continuous fillet weld all round.
12. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing r.c. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
13. Wind load design is in accordance with Code of Practice for Wind Effects in Hong Kong 2019.
14. Design wind load shall be 2.87 KPa (effective height = 101.5m) with pressure coefficient c_p of 2.0 for individual members of open frame work building. Assume topography factor, $S_t=1.0$; wind directionality factor, $S_{\theta}=0.85$; Size factor, $S_s=1.0$.
15. Minimum thickness of existing r.c. structure for installation of anchor bolts to be 150mm.
16. Interface of two different metal (eg. steel and stainless steel; steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

1. Obtain existing design drawings/ information for reference prior to commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

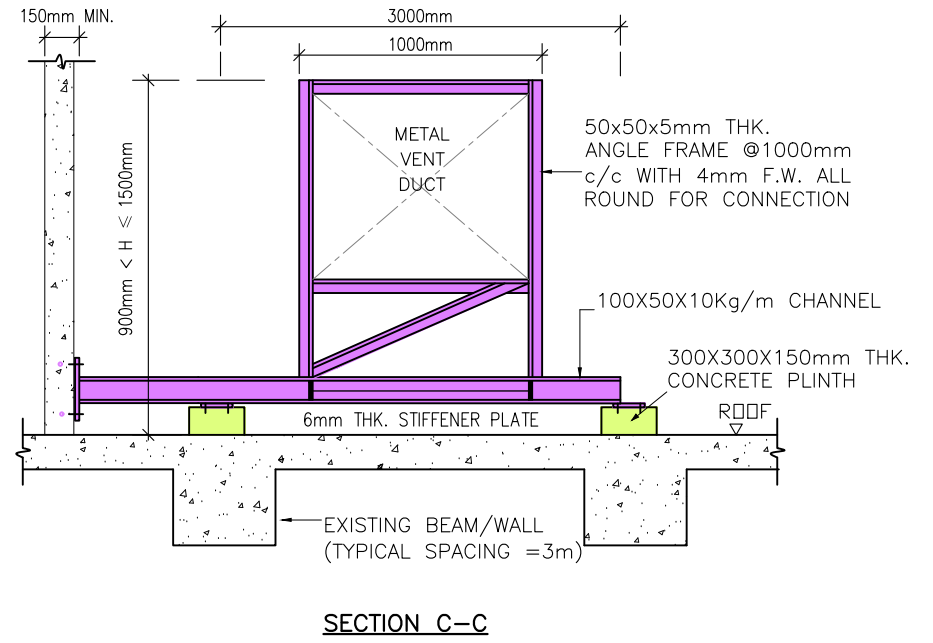
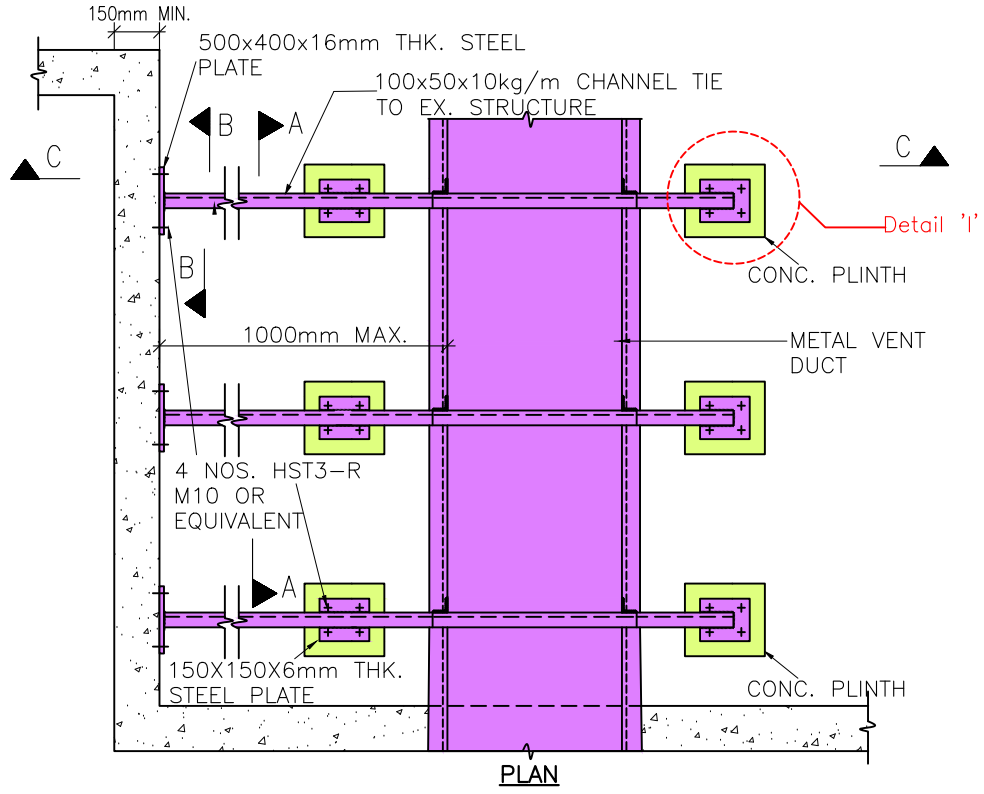
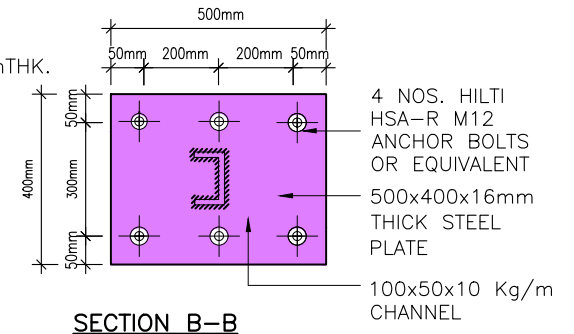
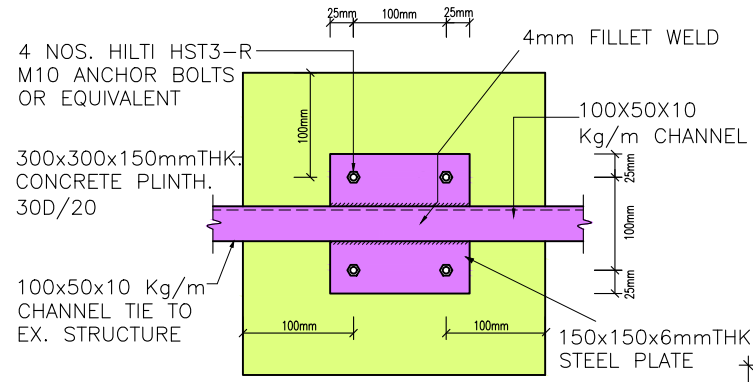
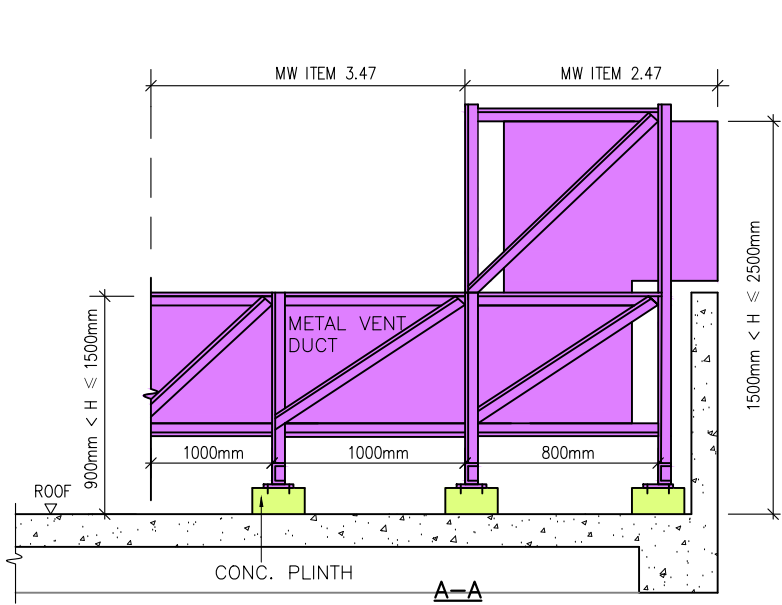
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Do not store building materials on the roof.
3. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working Platform on a double-row bamboo scaffold

WORKING PROCEDURES :

- a) Erection
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.
- b) Alteration
 1. Remove the unwanted part at the duct and supporting frame by hand held tools.
 2. Cut them into small pieces for disposal.
 3. Erect the altered parts as per drawing.
 4. Make good and reinstate the affected areas (including waterproofing layer) of the parent building and clean the site.

NOTE : This case excludes the DEW item 22



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Building (Planning) Regulations.
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
3. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
4. Minimum concrete grade for existing structures is C25/30.
5. Structural steel used for new structure to be grade S275 J0 complying with BS EN 10025.
6. All welding shall comply with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2016.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. Unless noted otherwise, all welding shall be 4mm continuous fillet weld all round.
12. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing r.c. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
13. Wind load design is in accordance with Code of Practice for Wind Effects in Hong Kong 2019.
14. Design wind load shall be 2.87 KPa (height above site ground level \leq 101.5m) with pressure coefficient c_p of 2.0 for individual members of open framework building.
15. All site welds to be treated with two coats of zinc rich paint before application of paint system.
16. Unless noted otherwise, all bolts and nuts are grade 4.6 to BS 4190 : 2014 or BS 3692 : 2014.
17. No ventilation duct or associated structure shall project over a street at height at a height of less than 2.5m above the level of ground.
18. Interface of two different metal (eg. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

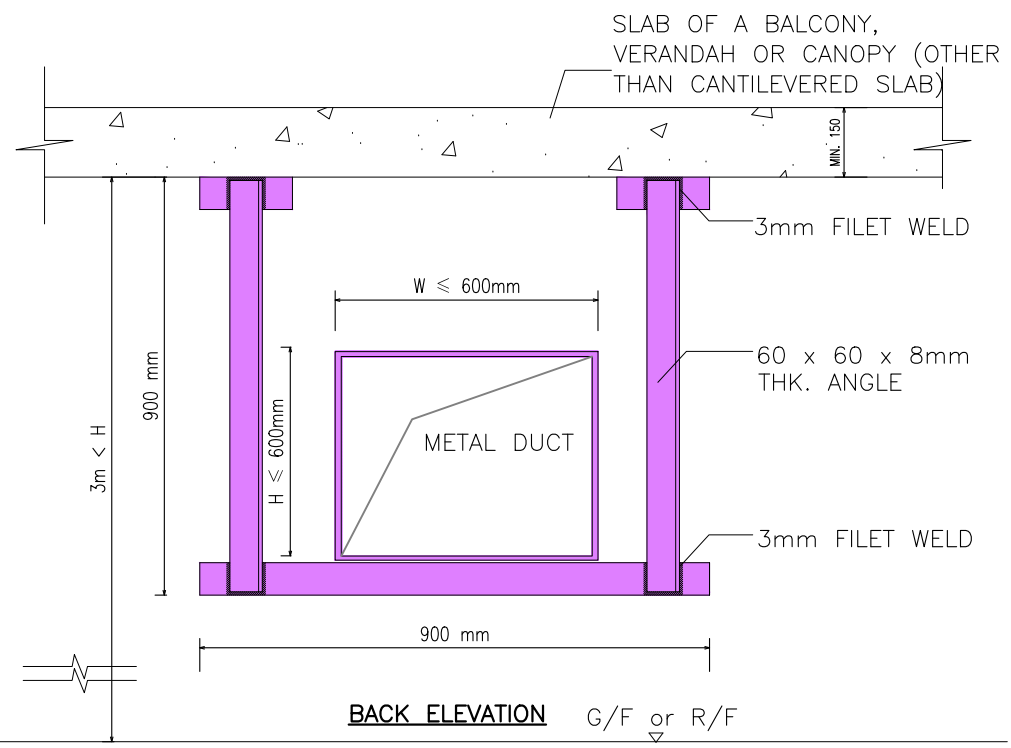
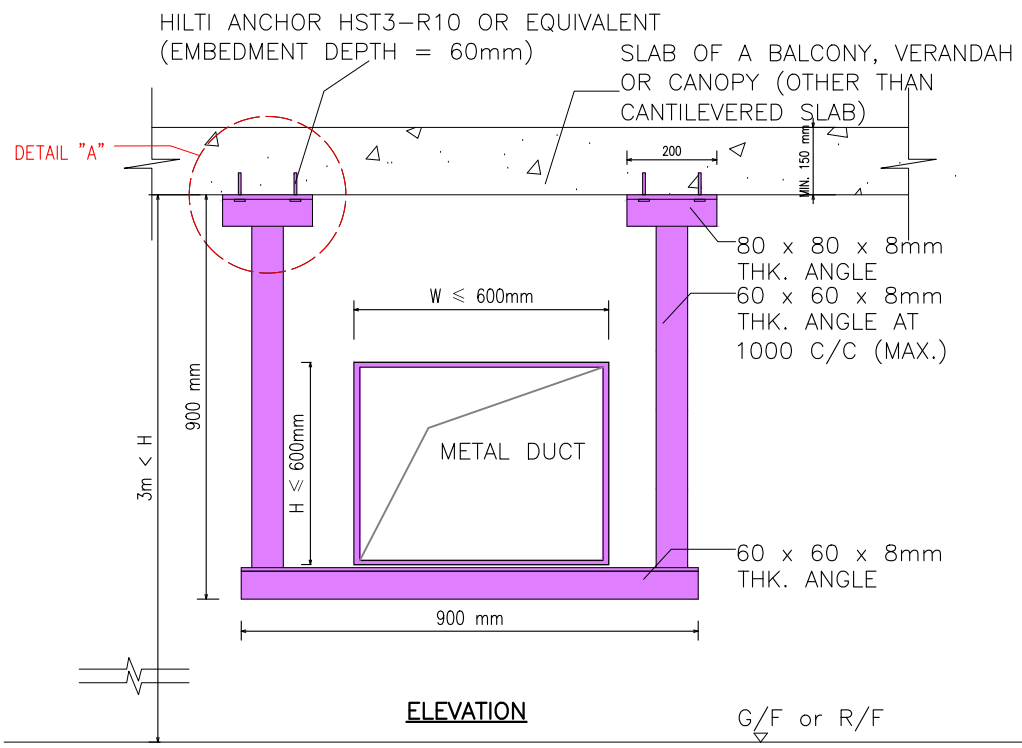
1. Obtain existing design drawings/ information for reference prior to commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.
4. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

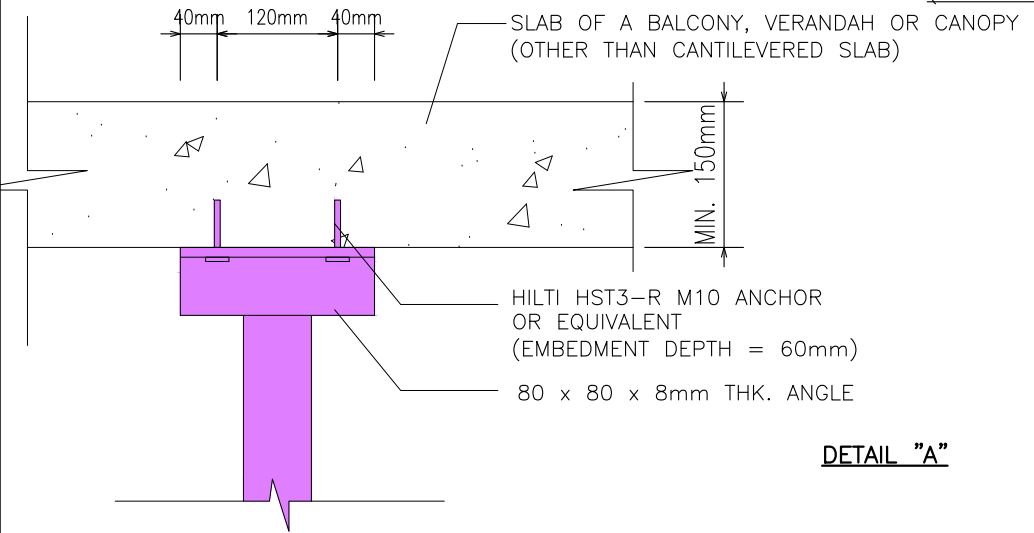
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Do not store building materials on the roof.
3. Bamboo scaffolds details shall refer to the following figure as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working Platform on a double-row bamboo scaffold

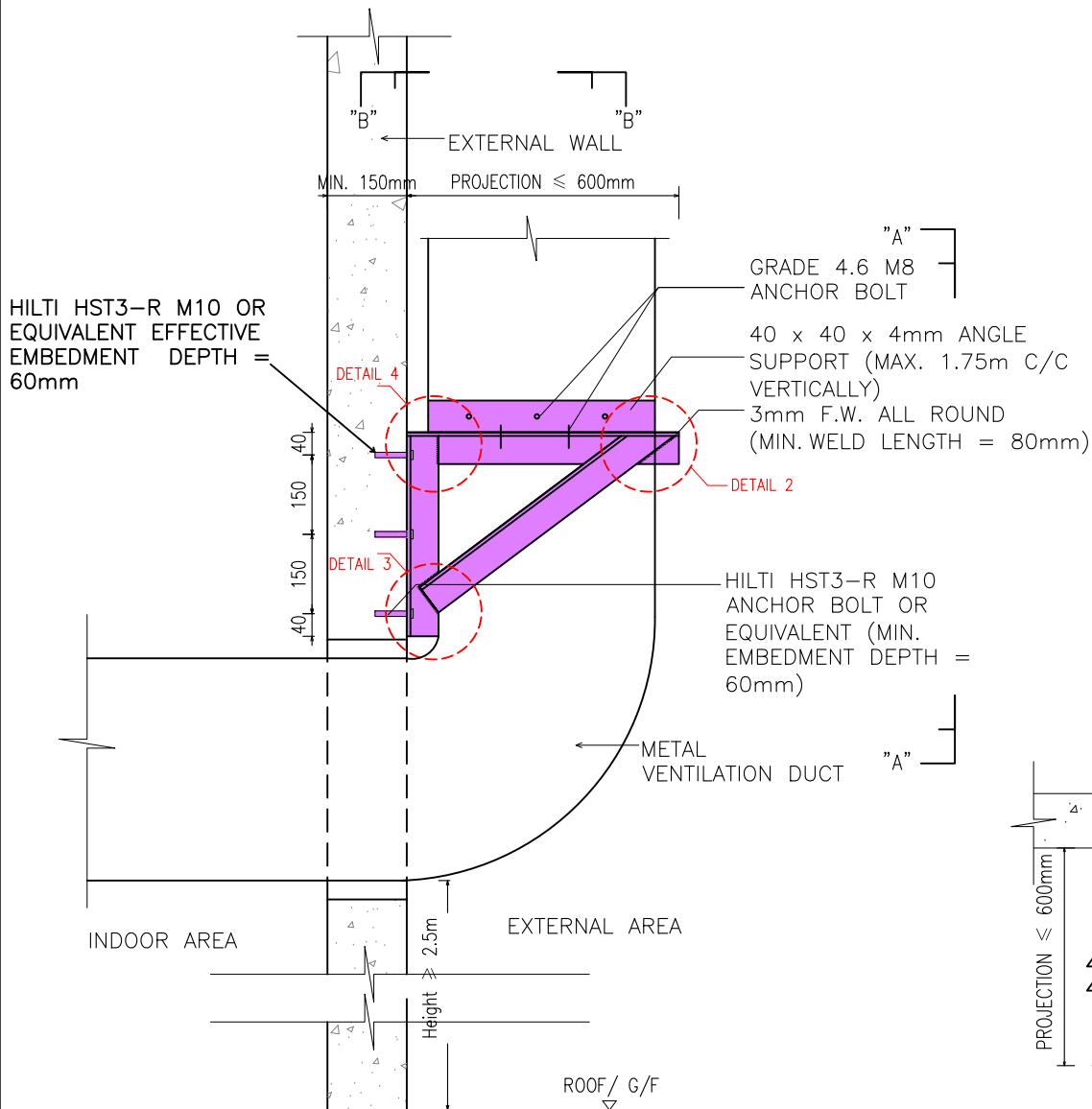
WORKING PROCEDURES :

- a) Erection
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area (including waterproofing layer) of the parent building and clean the site.
- b) Alteration
 1. Remove the unwanted portion of the duct by cutting into small pieces.
 2. Erect the altered parts as per drawing.
 3. Make good and reinstate the affected areas (including waterproofing layer) of the parent building and clean the site.

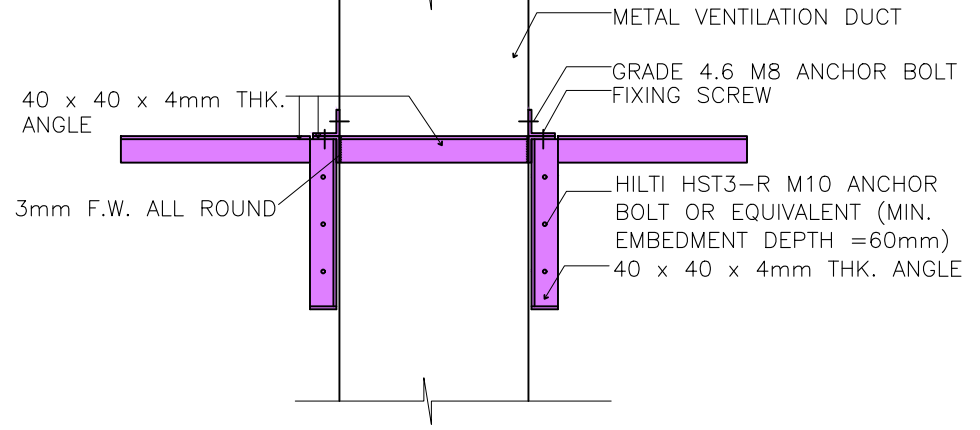


HUNG UNDERNEATH THE SOFFIT OF A BALCONY, VERANDAH OR CANOPY
(OTHER THAN A CANTILEVERED SLAB)

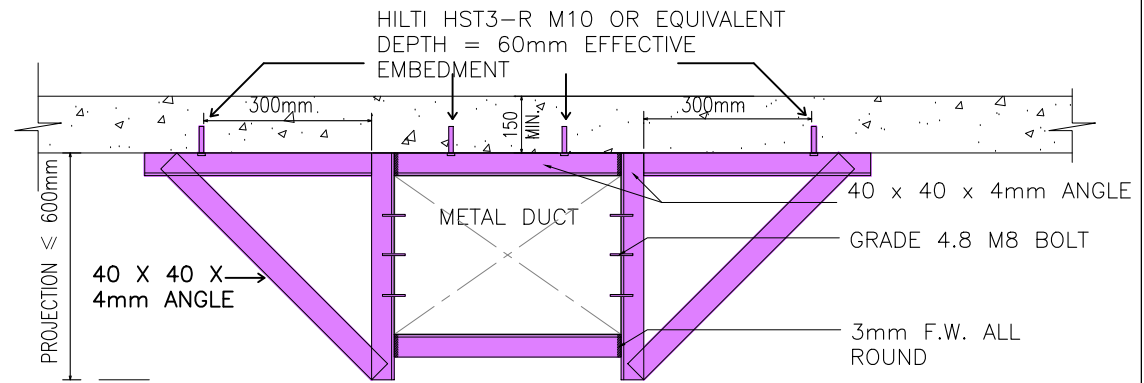




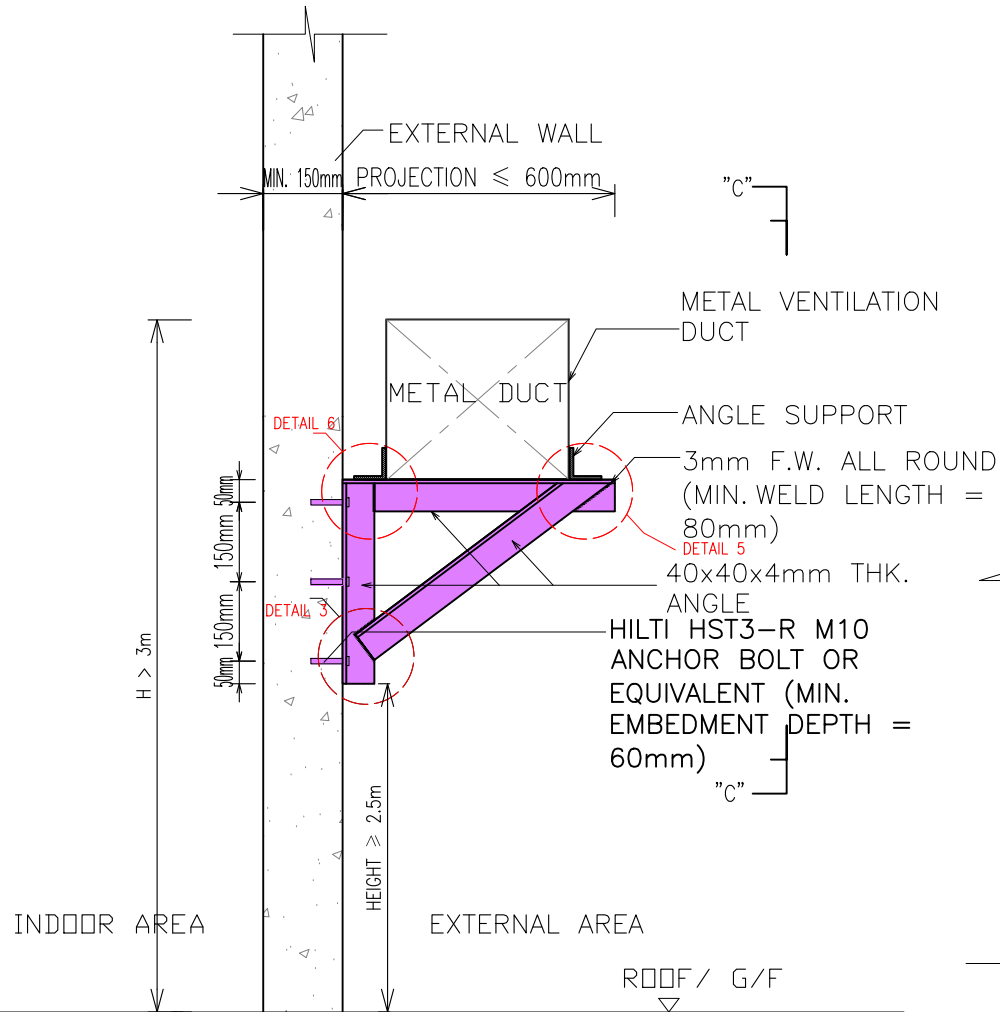
ELEVATION



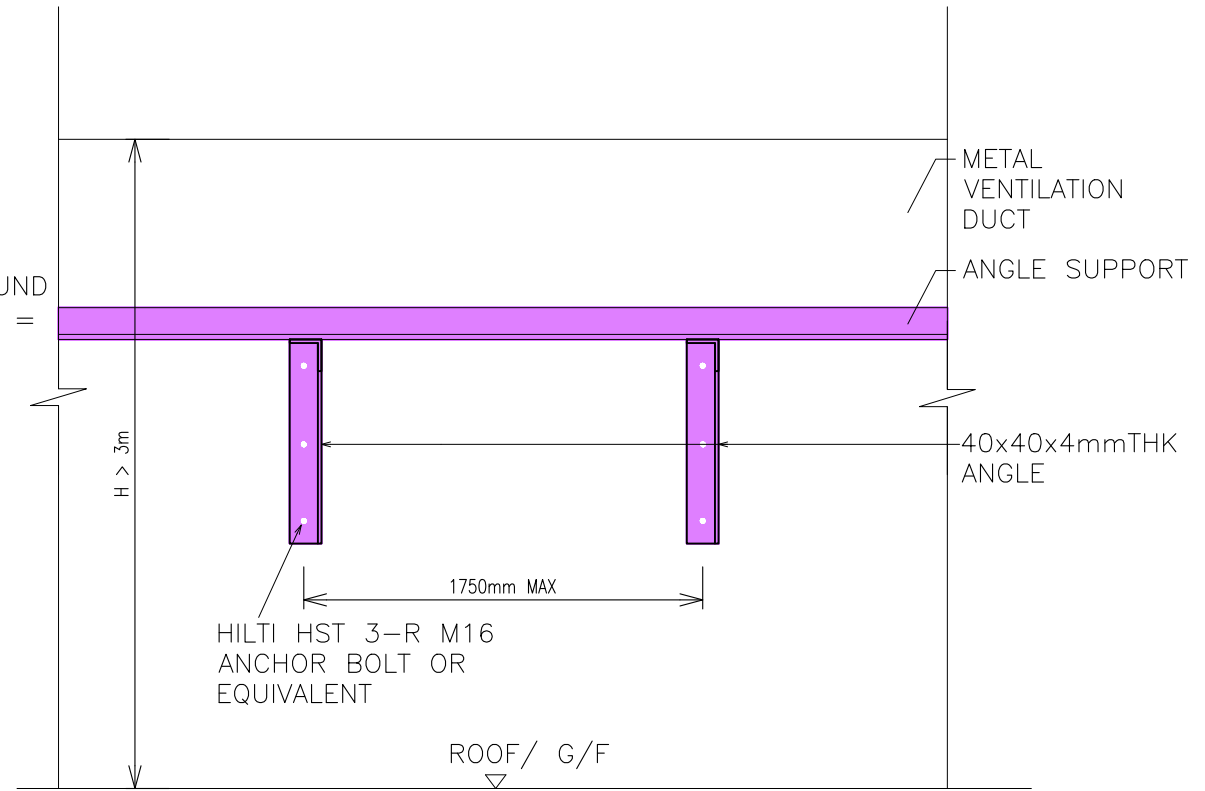
ELEVATION "A"-A"



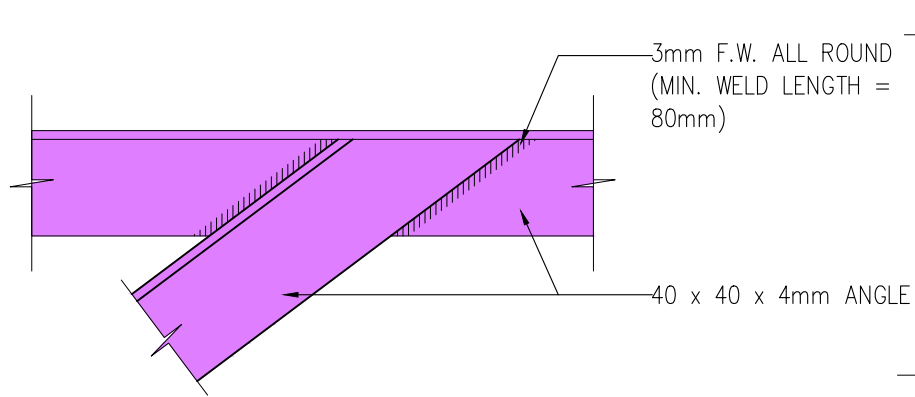
ELEVATION "B"-B" PROJECT FROM EXTERNAL WALL



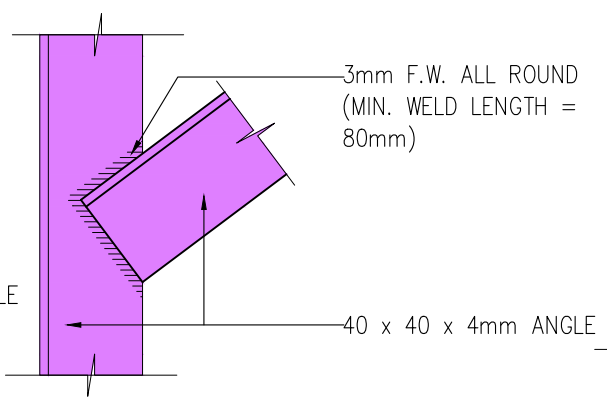
ELEVATION



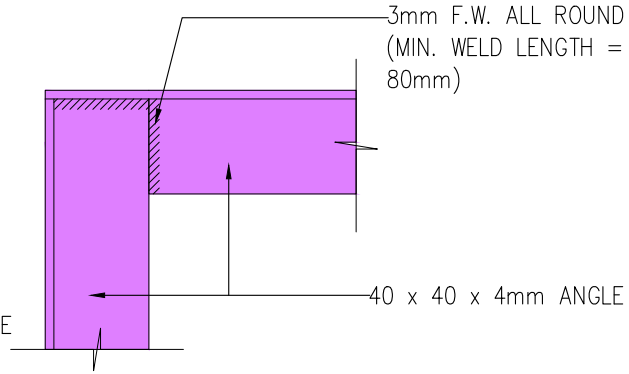
ELEVATION "C"-"C"
PROJECT FROM EXTERNAL WALL



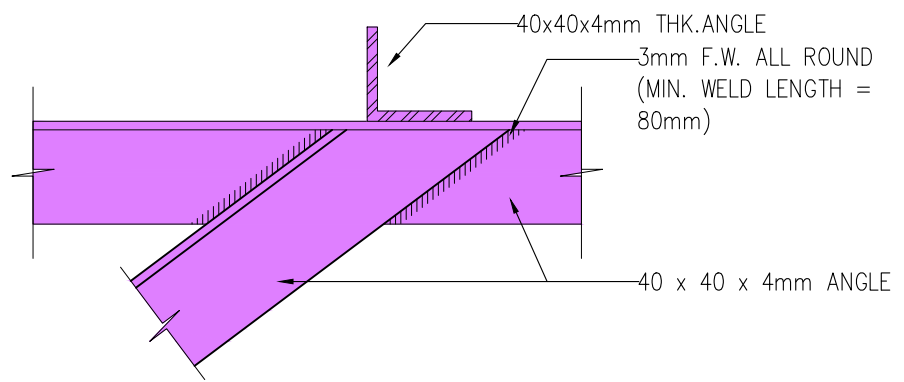
DETAIL 2



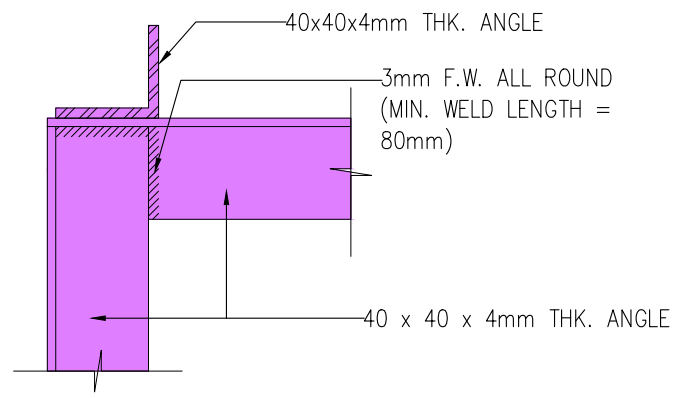
DETAIL 3



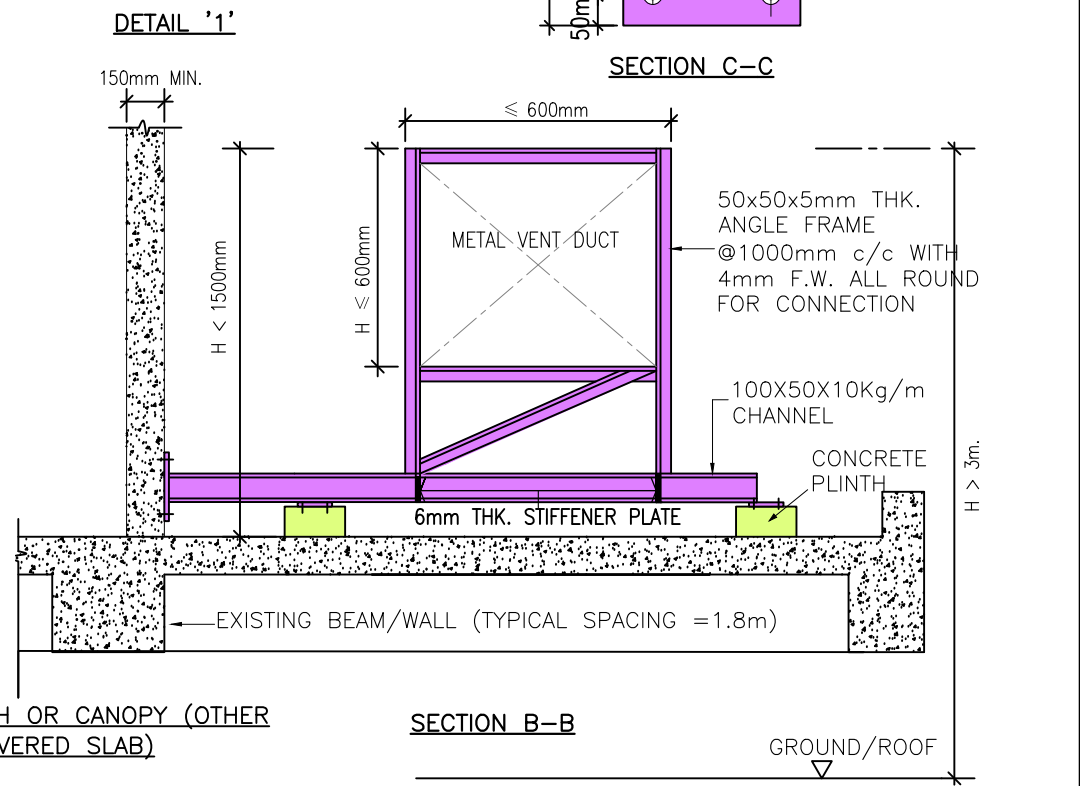
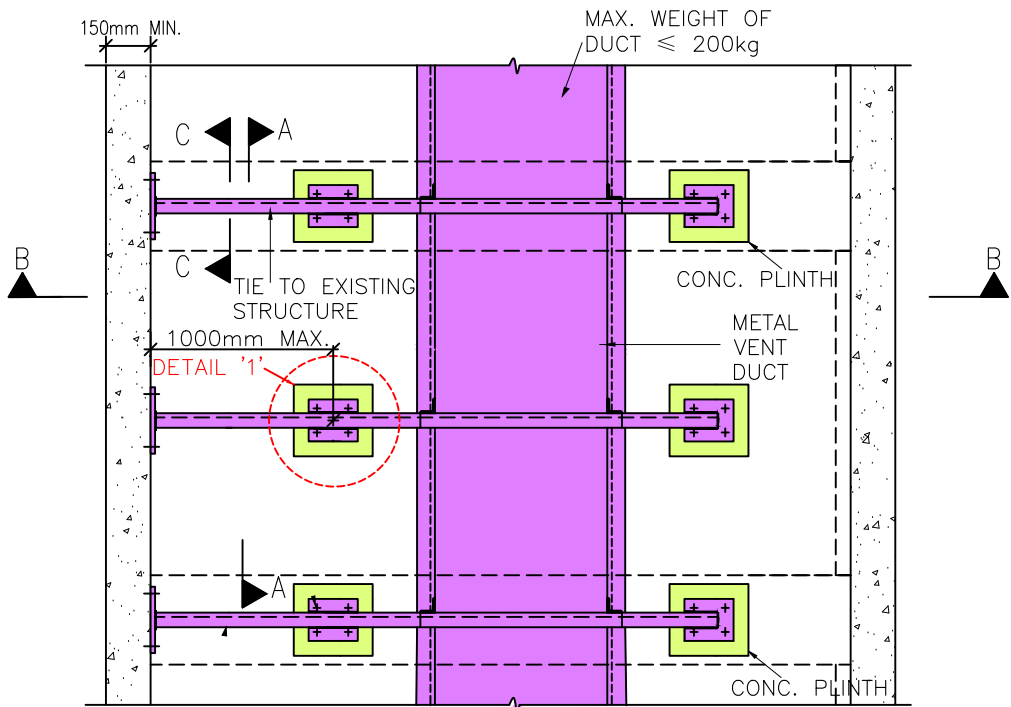
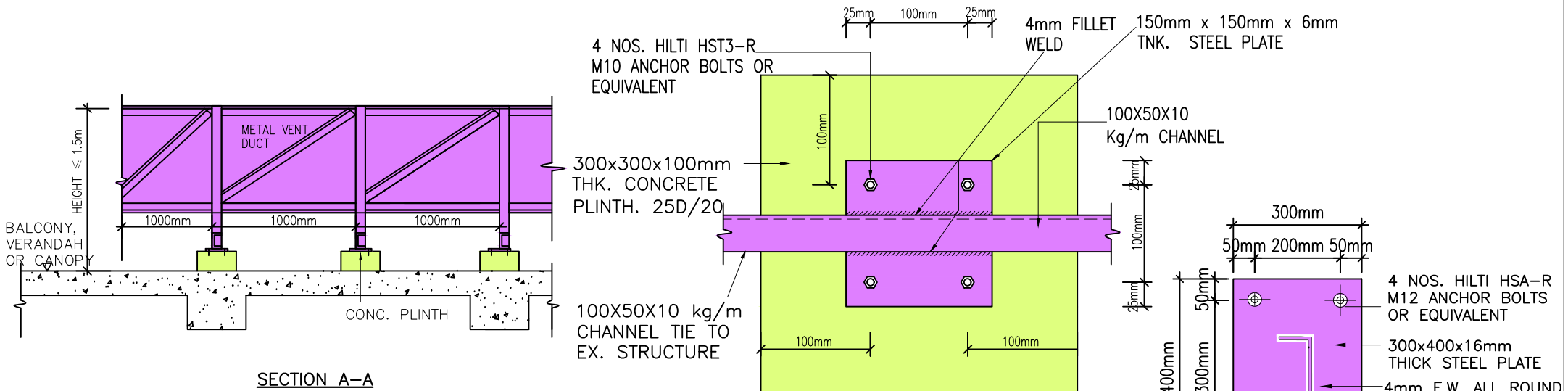
DETAIL 4



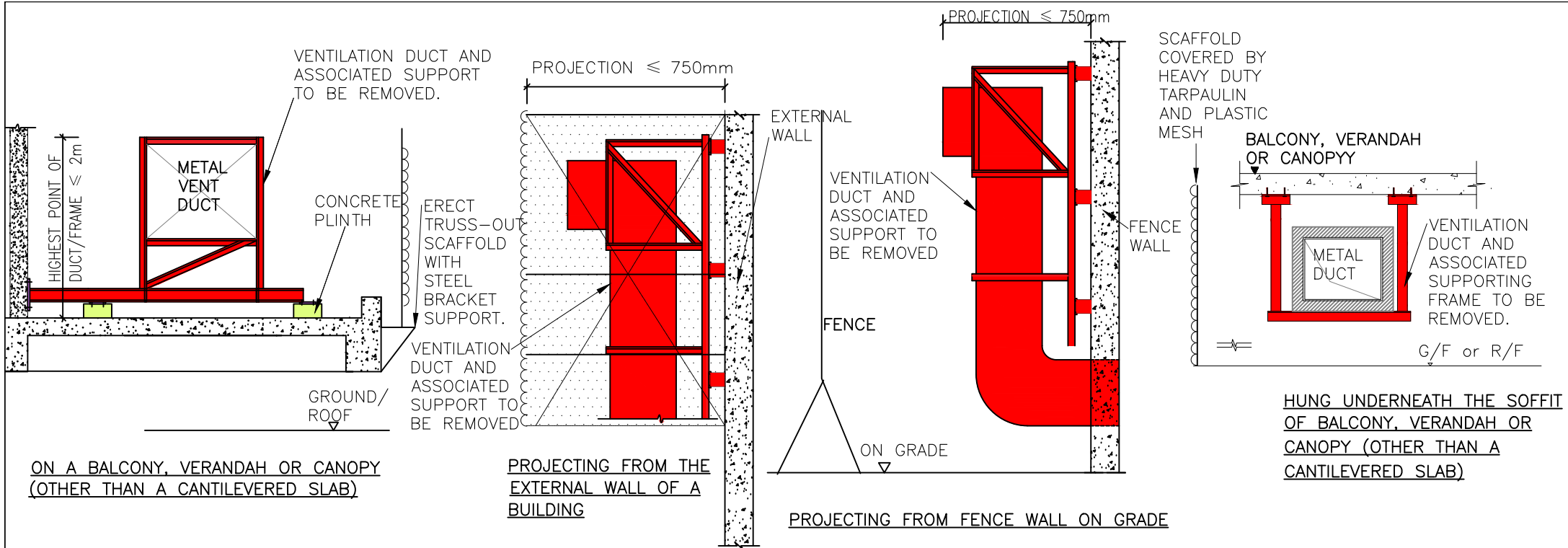
DETAIL 5



DETAIL 6



ON A BALCONY, VERANDAH OR CANOPY (OTHER THAN A CANTILEVERED SLAB)



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Code of Practice for Demolition of Building 2004.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the steel members by oxy-acetylene torch to small pieces.
3. The disposal of waste shall be at designated disposal facilities provided in waste disposal (charges for disposal of construction waste) regulation.
4. Reinstatement the affected areas where necessary.
5. Remove the bamboo scaffold and clean the site.

REMARKS: This case excludes the DEW item 23

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for Structural Use of Concrete 2013
3. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μm .
4. Minimum concrete grade for existing structures is 30.
5. Structural steel used for new structure to be grade S275 J0 complying with BS EN 10056 angles, BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa. electrodes shall comply with BS EN ISO 2560:2009..
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2001.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. Unless noted otherwise, all welding shall be 4mm continuous fillet weld all round.
12. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing r.c. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
13. All bolts to be grade 4.6 and comply with BS 3692:2014 or BS 4190:2014. All nuts and washers to be comply with BS 3692:2014 or BS 4190:2014.
14. Wind load design is in accordance with Code of Practice for Wind Effects in Hong Kong 2019. The maximum height of structure is to be 1.5m or 2.5m (for antenna and transceiver) from roof floor level.
15. Design wind load shall be 2.87 KPa (effective height = 103m) with pressure coefficient c_p of 2.0 for individual members of open framework building and 2.2 for uplift. Assume topography factor, $S_t=1.0$; wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$.
16. Minimum thickness of existing r.c. structure for installation of anchor bolts to be 140mm.

17. The structure shall not affect the means of escape and means of access.
18. The structure shall not affect the drainage system.
19. The metal casing :
 - a. Shall have weight not more than 10% of the weight of the installation ; and
 - b. The shortest distance between any point on the inner surface of the casing and the installation is not more than 200mm.
20. For supporting structure, the installation :
 - a. Shall have weight not more than 200 kg ; and
 - b. The average weight shall not more than 100 kg per m^2 of the ground or slab area.
21. Interface of two different metal (eg. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

PREPARATION WORKS :

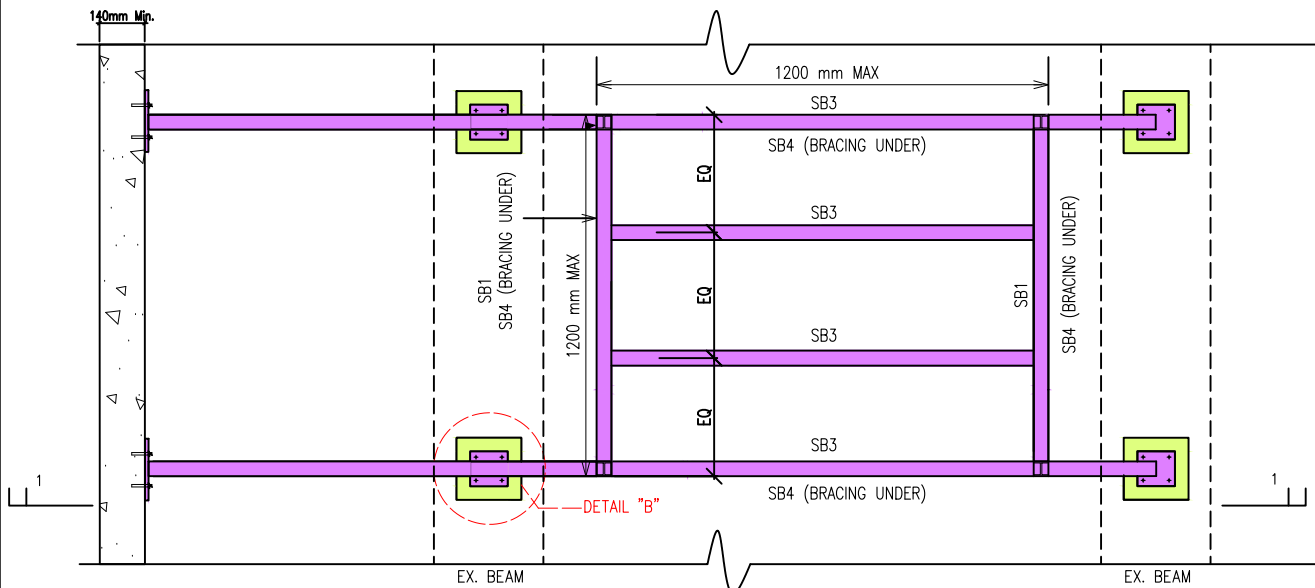
1. Obtain existing design drawings/ information for reference prior to commencement of works.
2. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
3. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

SAFETY AND PRECAUTIONARY MEASURES :

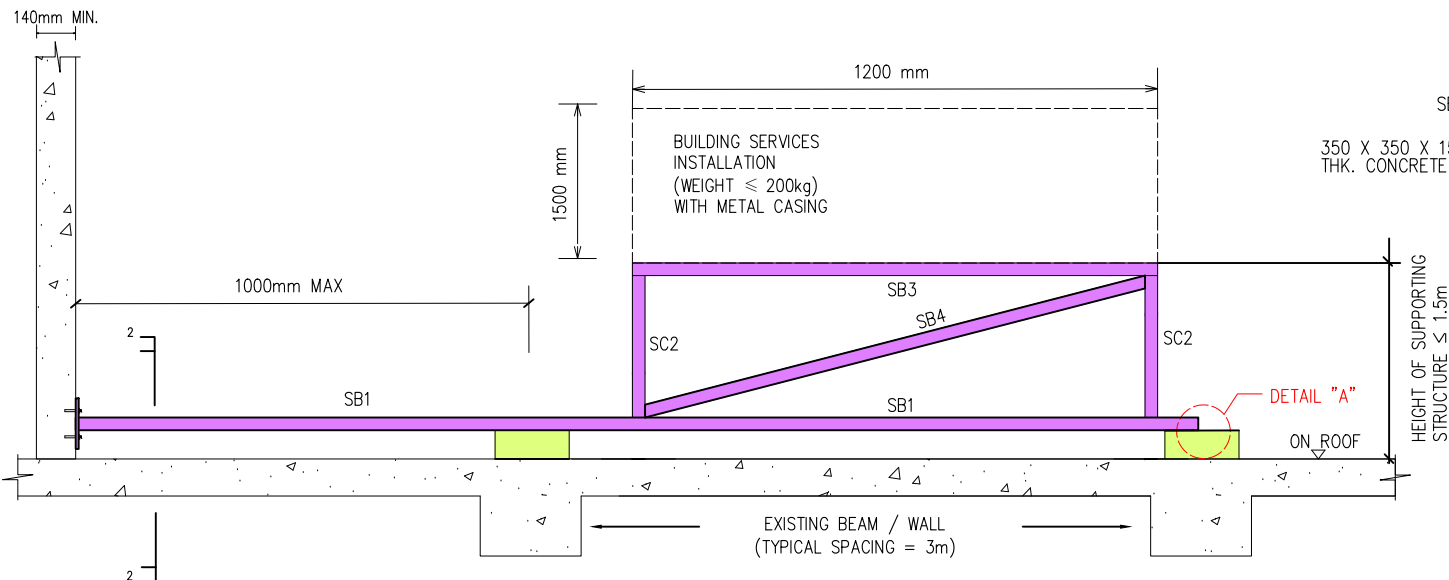
1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Do not store building materials on the roof.

WORKING PROCEDURES :

- a) Erection
 1. Erect the supporting structure as per the drawing.
 2. Make good and reinstate the affected area (including waterproofing layer) of the parent building.
 3. Remove fencing and clean the site.
- b) Alteration
 1. Remove unused or unwanted parts by hand-held tools without affecting the remaining structure.
 2. Erect the structure as per drawing.
 3. Make good and reinstate the affected areas (including waterproofing layer) of the parent building.
 4. Remove fencing and clean the site.

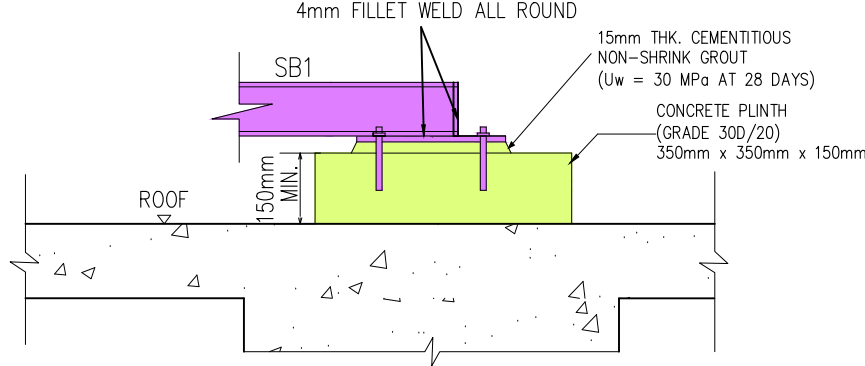


PLAN FOR STRUCTURE ON ROOF

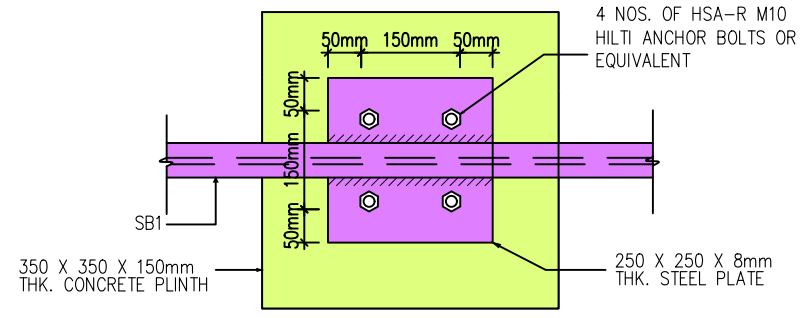


SECTION 1-1

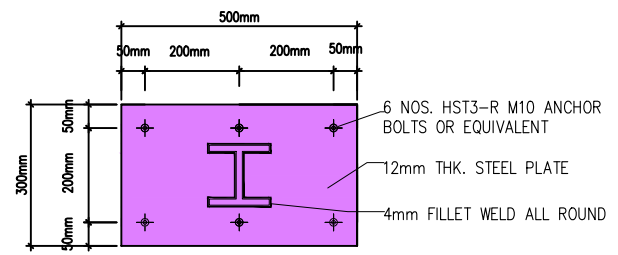
NEW STEEL MEMBER SIZE	
SB1&SB3	127 x 76 x 13 kg/m
UB SC2	127 x 76 x 13 kg/m
UB SB4	100 x 50 x 10 kg/m CHANNEL



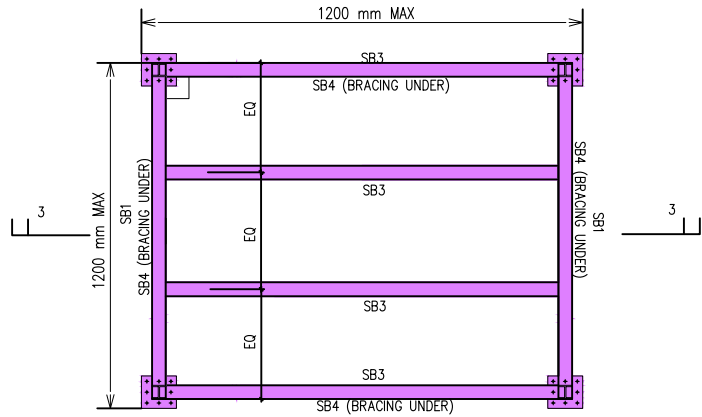
DETAIL "A"



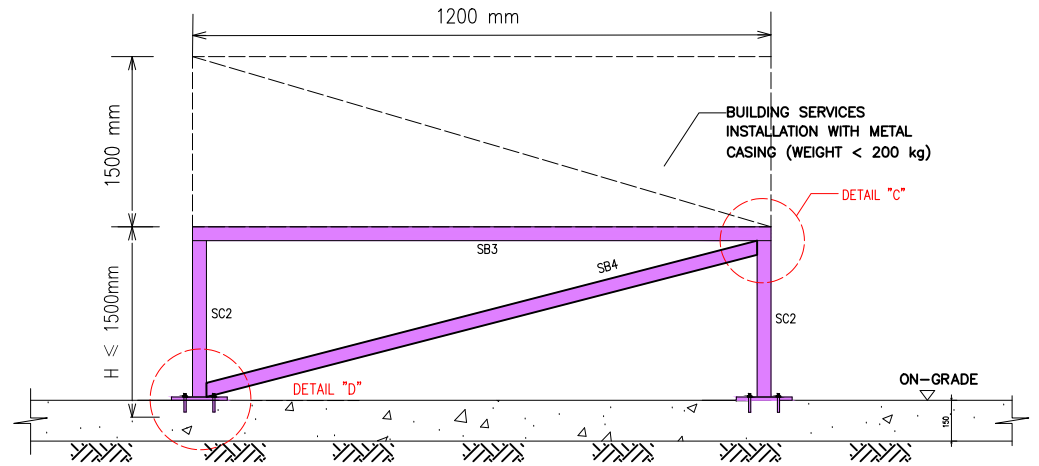
DETAIL "B"



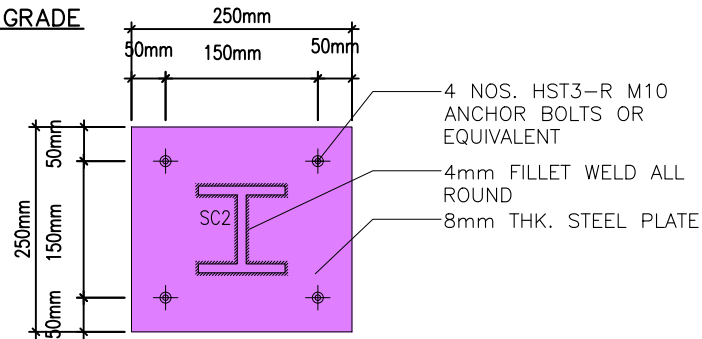
SECTION 2-2



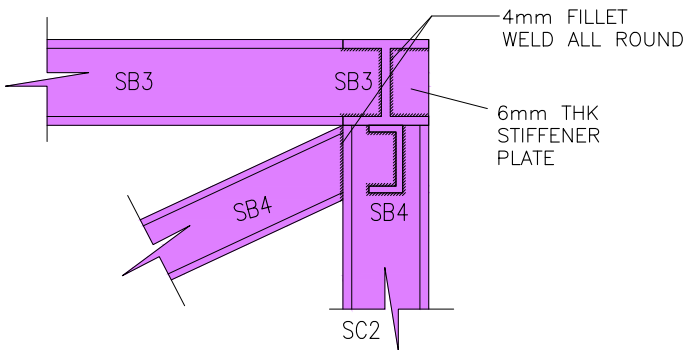
PLAN FOR STRUCTURE ON GRADE



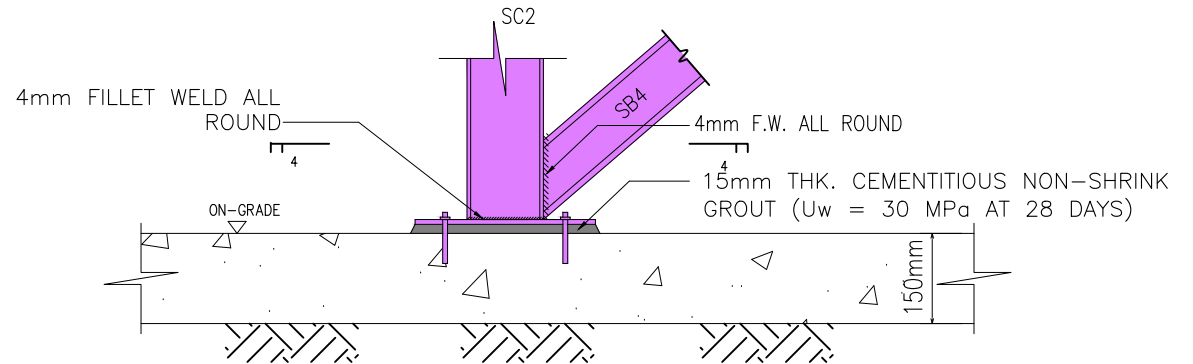
SECTION 3-3



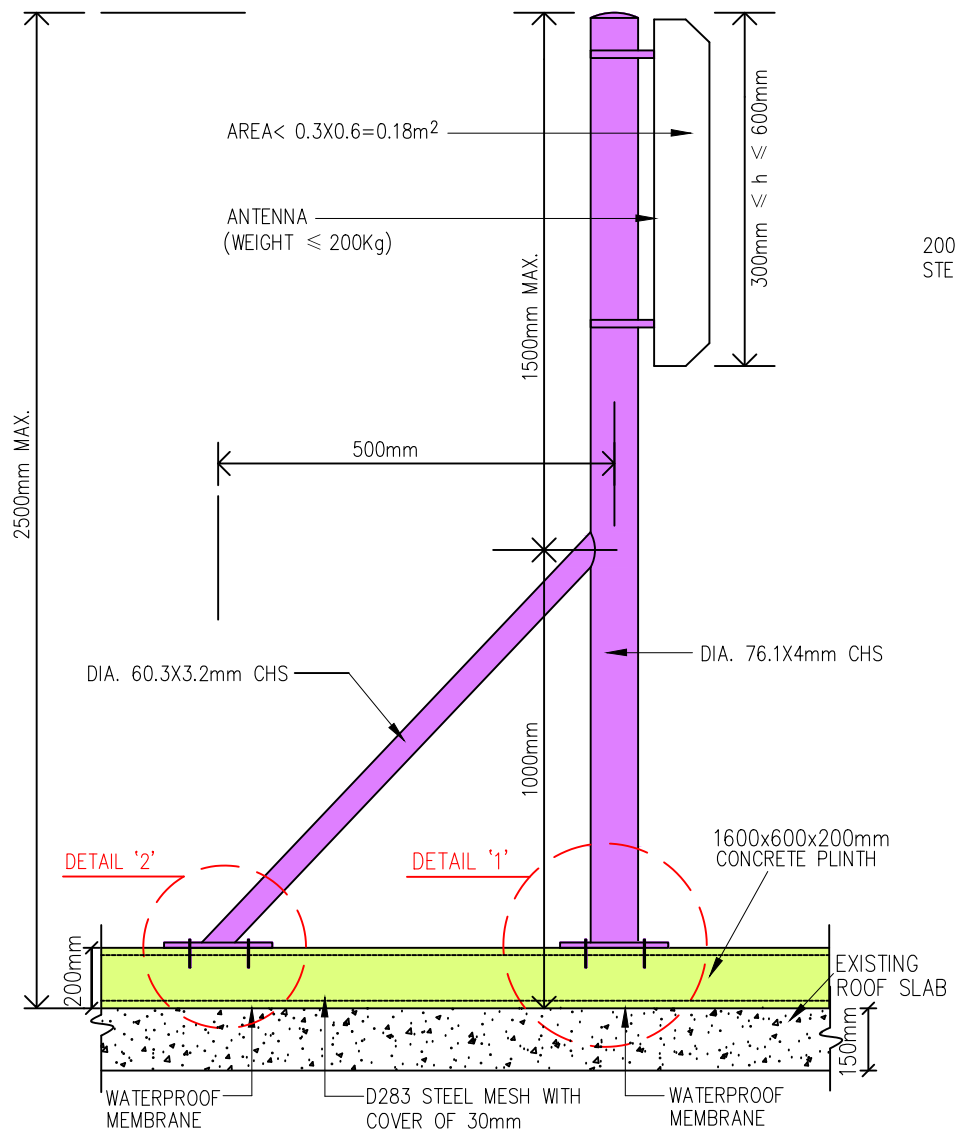
SECTION 4-4



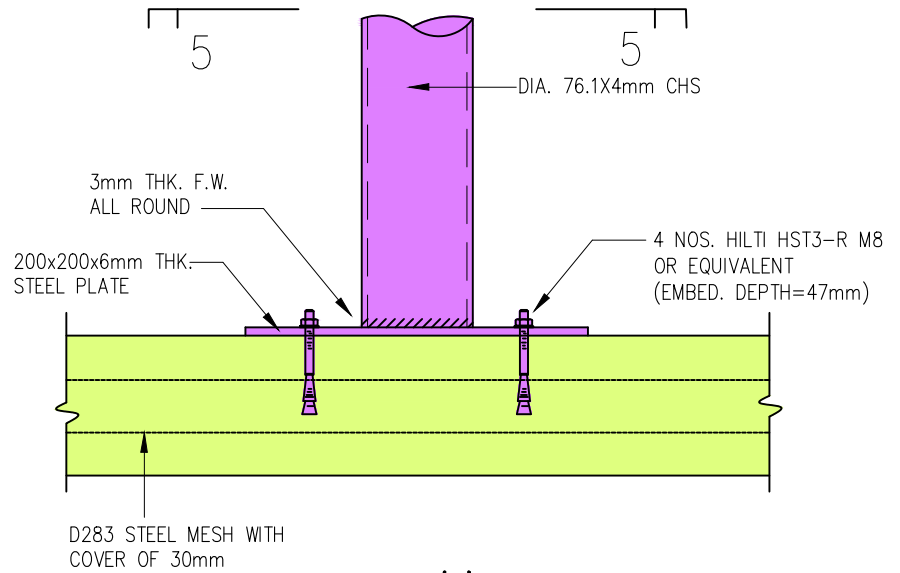
DETAIL "C"



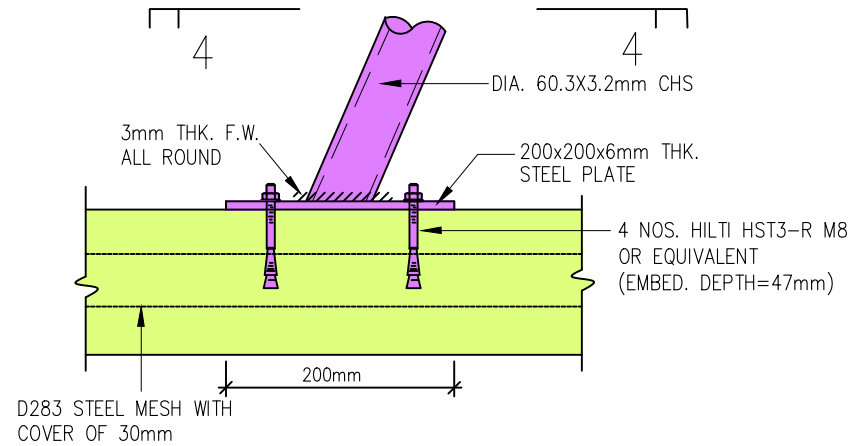
DETAIL "D"



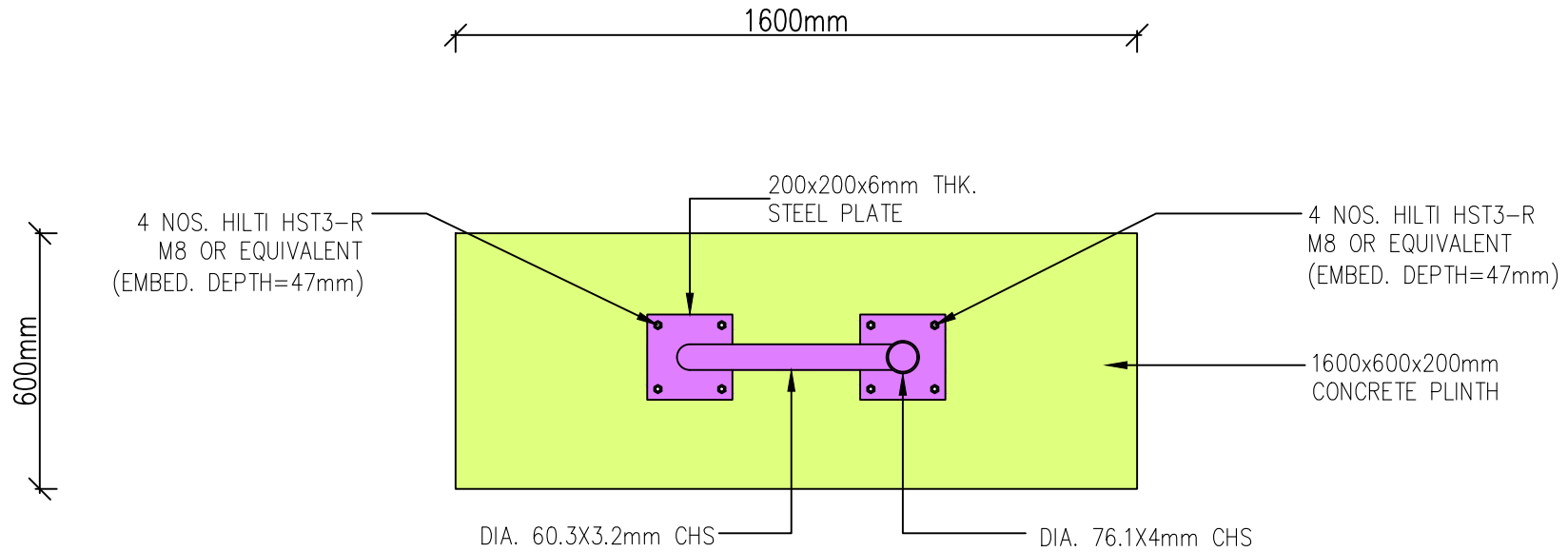
**SECTION OF SUPPORTING
STRUCTURE FOR ANTENNA**



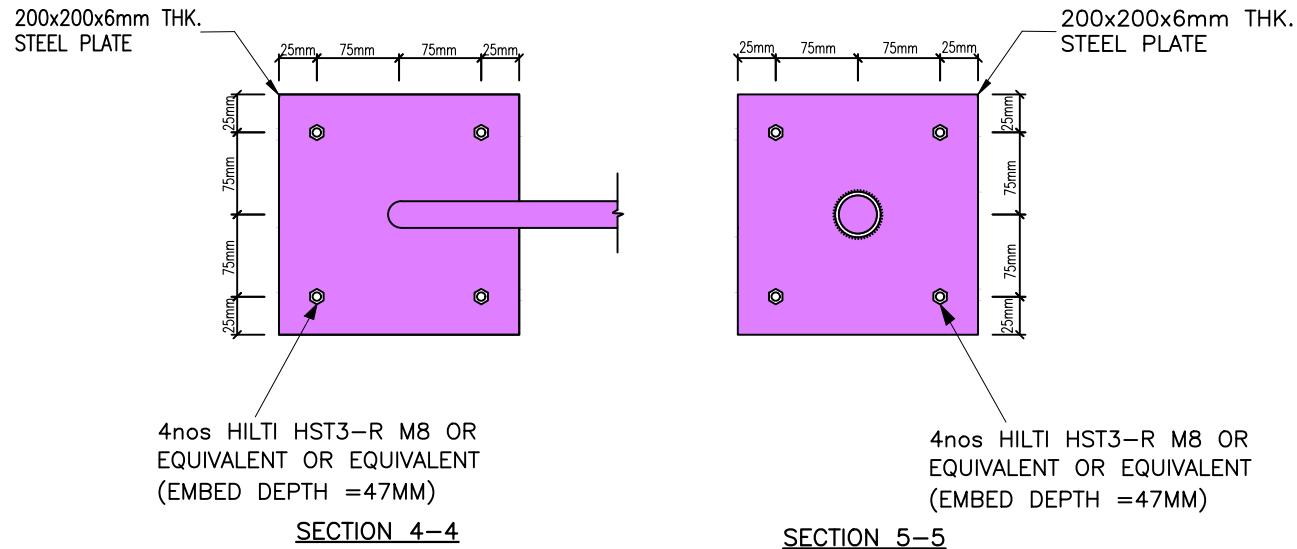
DETAIL '1'

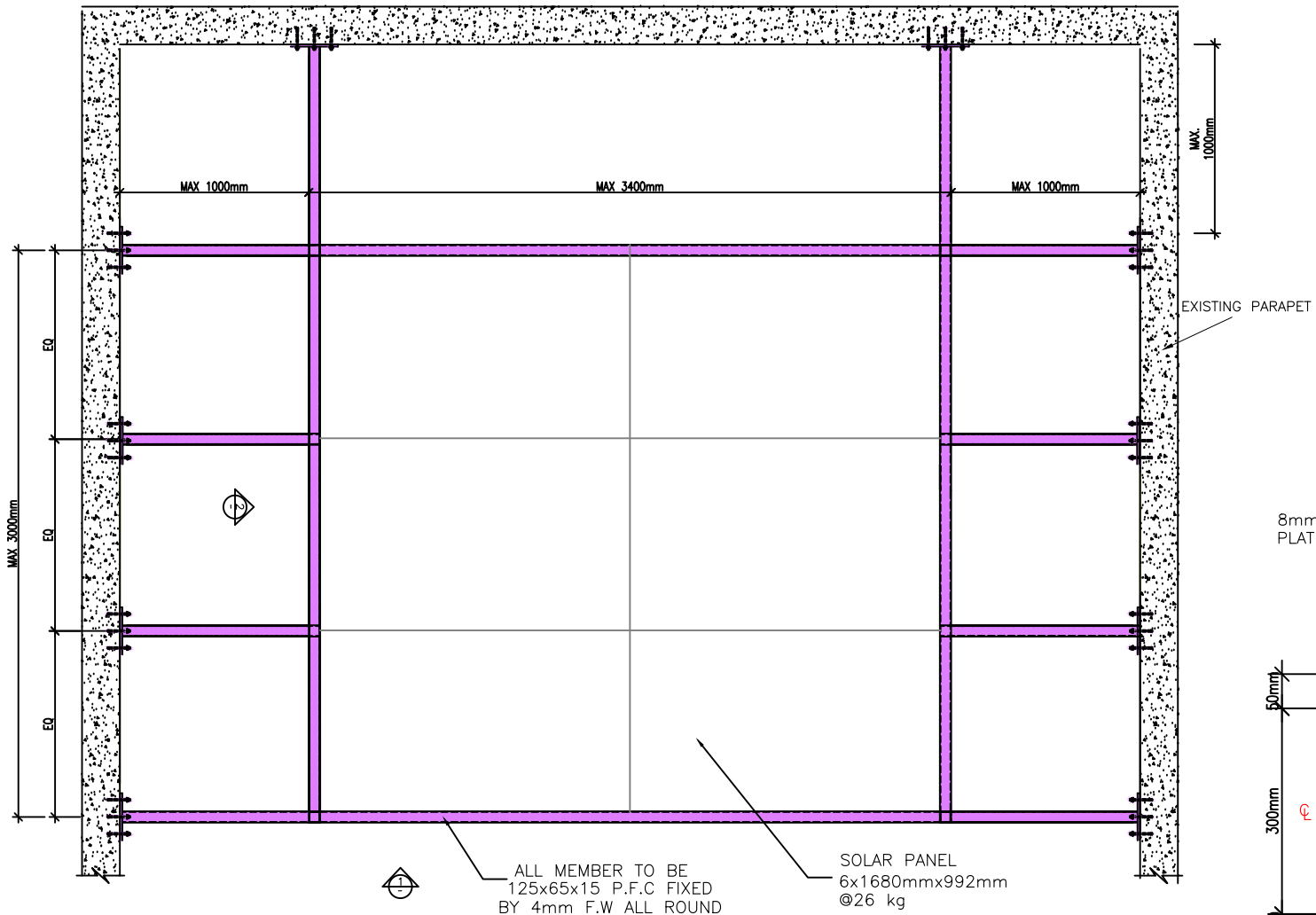


DETAIL '2'



PLAN OF SUPPORTING STRUCTURE FOR ANTENNA





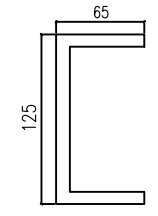
ALL MEMBER TO BE
125x65x15 P.F.C FIXED
BY 4mm F.W ALL ROUND

SOLAR PANEL
6x1680mmx992mm
@26 kg

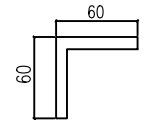
**SUPPORTING FRAME FOR PHOTOVOLTAIC SYSTEM ON ROOF
(LAYOUT PLAN)**

MEMBER SCHEDULE

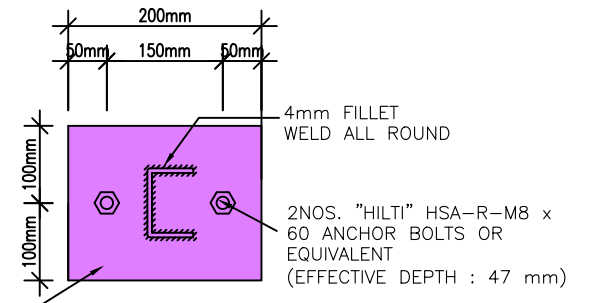
① 125 x 65 x 15
P.F.C



② 60 x 60 x 8 EA

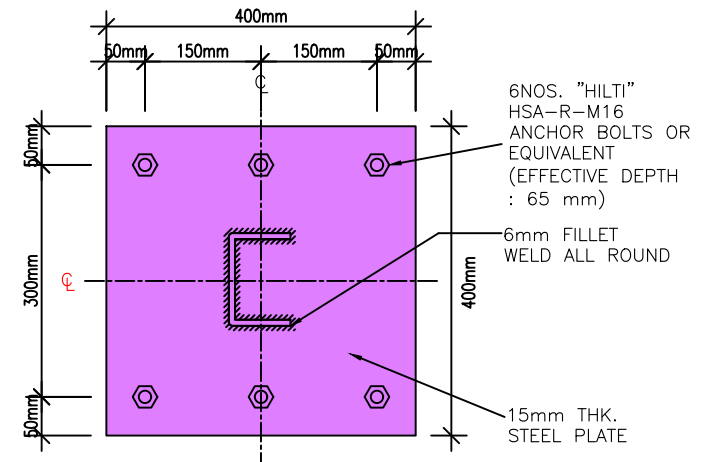


EXISTING PARAPET

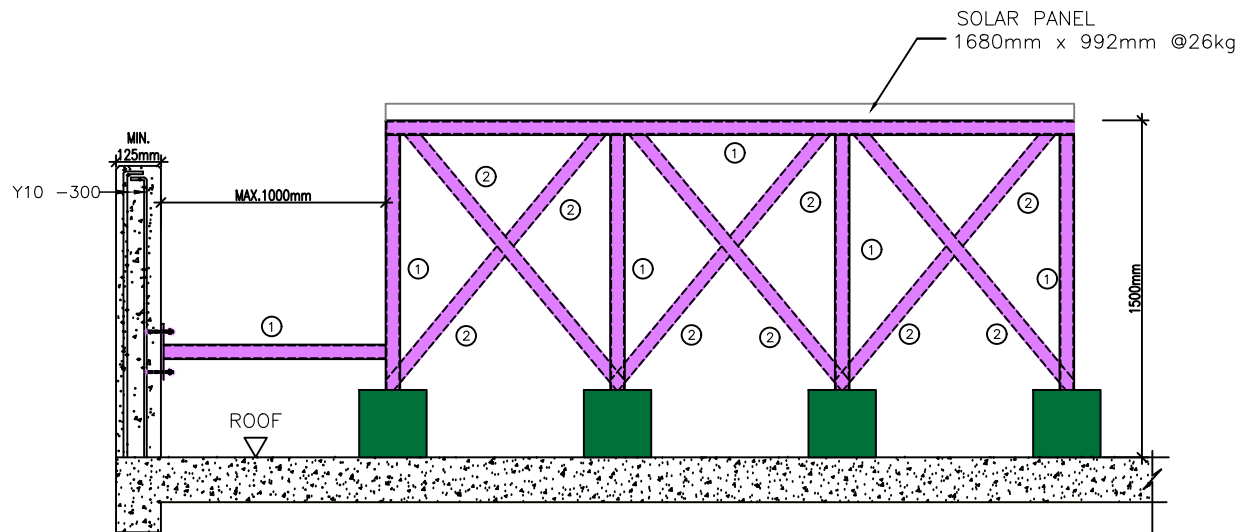
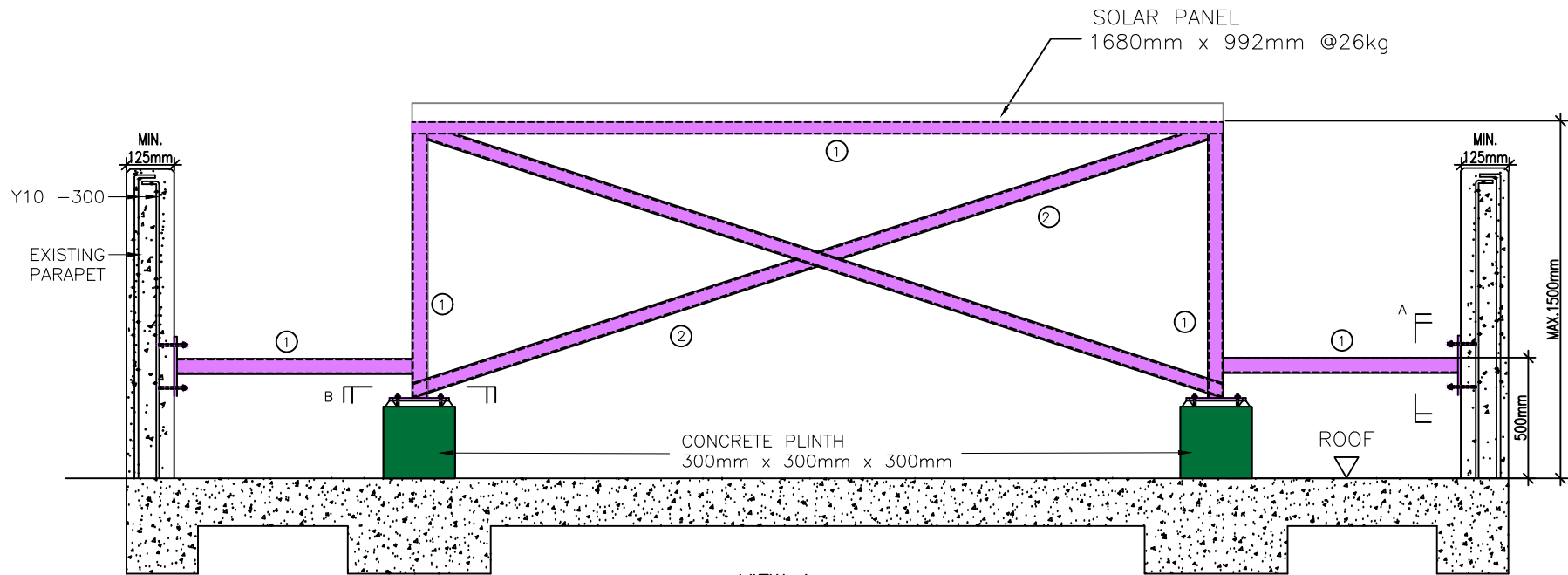


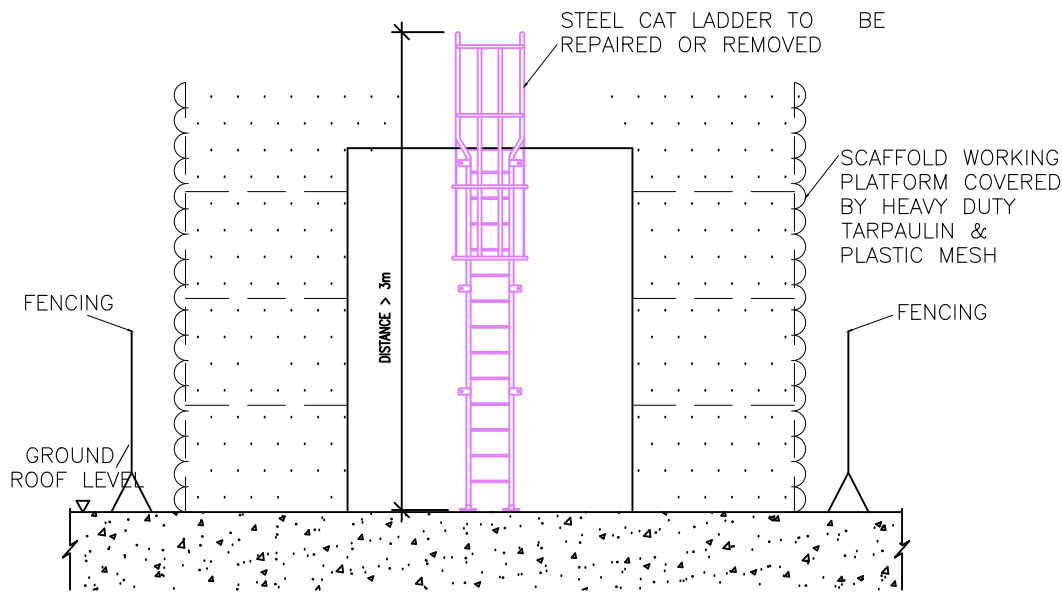
8mm THK. STEEL
PLATE

SECTION B-B



SECTION A-A





WORKING PROCEDURES :

A. REMOVAL

1. Remove all loose features attached to the cat-ladder.
2. Dismantle the steel members by cutting into small pieces with oxy-acetylene torch or other hand held tools. The cat-ladder shall be cut to a manageable size (i.e 300mm x 300mm).
3. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
4. Make good and reinstate the affected areas (including water proofing layer) of the building.
5. Dismantle the bamboo scaffold and clean the site.

B. REPAIR

1. Remove the defective member and replace with member of the same size.
2. Make good and reinstate the affected areas (including water proofing layer) of the building.
3. Dismantle the bamboo scaffold and clean the site.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following COP/ standards
 - Building (Construction) regulations
 - Code of Practice for structural use of steel 2011.
3. All steel components and fixing to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
4. All structural steel to be grade S275 J0/J0H complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections.
5. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220MPa electrodes shall comply with BS EN ISO 2560:2005.
6. All welding works shall be carried out by qualified welders complying with BS EN 287-1:1992.
7. Welding shall be tested in accordance with BS EN ISO 9934 PART 1:2001.
8. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
9. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coat of zinc chromate paint shall be applied according to the manufacturer's specification.

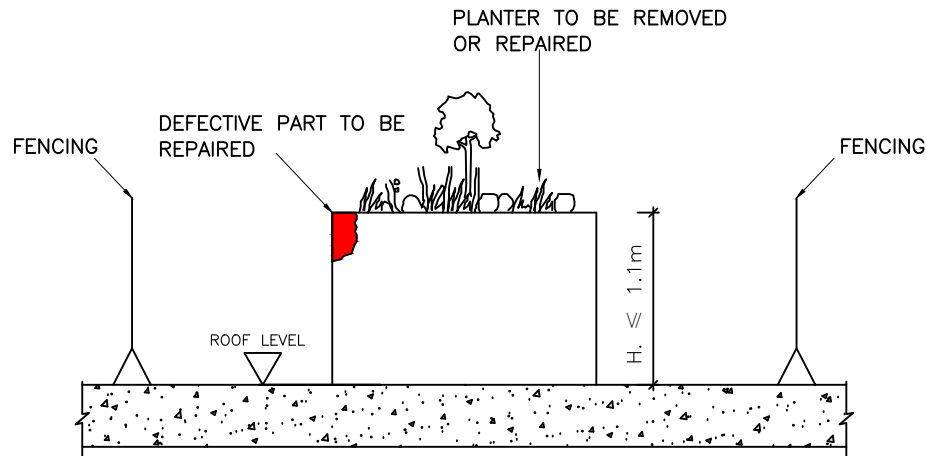
PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 2 Truss-out bamboo scaffold
 - Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

REMARK : This case excludes the DEW item 28



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Concrete 2013
 - Concrete shall comply with CS1:2010.
- Concrete grade and the minimum cover shall be grade 30 and 25mm respectively.
- Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2: 2012.
- Minimum anchorage and lap length are 40 X and 56 X diameter of the existing rebar unless otherwise specified.

PREPARATION WORKS :

- Obtain existing design drawings/ information for reference prior to commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public.
- No accumulation of demolished parts should be stored on roof.
- Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

a) Removal

- Disconnect all services in vicinity that may be affected by the works.
- Break the planter to small pieces.
- Debris from removal works should be put into bags and retrieved into the main building access for construction waste disposal.
- Make good and reinstate the affected areas (including the waterproofing) where necessary.
- Remove the temporary protections and clean the site.

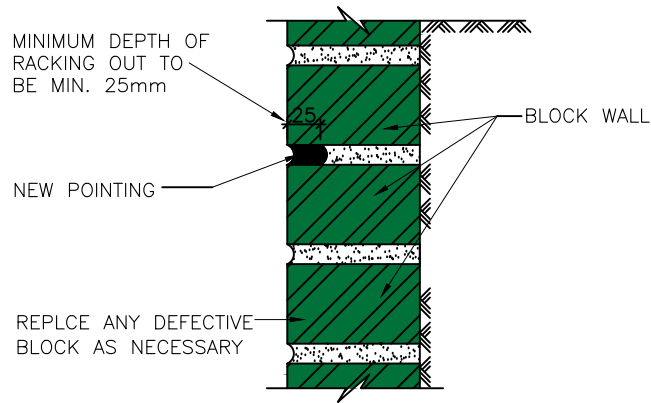
b) Repair

For Block Wall

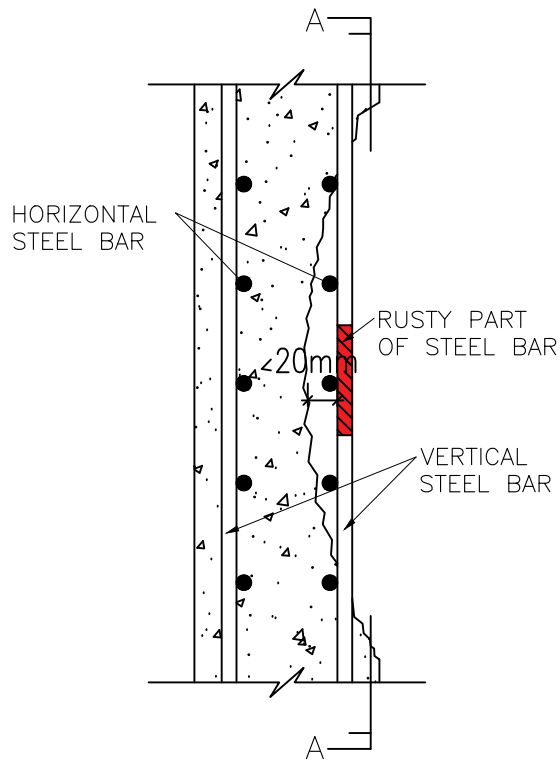
- Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
- Remove the defective part using hand-held mechanical tools.
- Replace any defective blocks by new blocks.
- Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm.
- Apply pointing in cement and sand (1:1) to the exposed joints.
- Apply 20mm thick rendering (cement : sand = 1:3) to the wall of planter as necessary.
- Make good and reinstate the affected areas of the parent building.
- Dismantle the temporary protection and clean the site.

For R.C. Wall

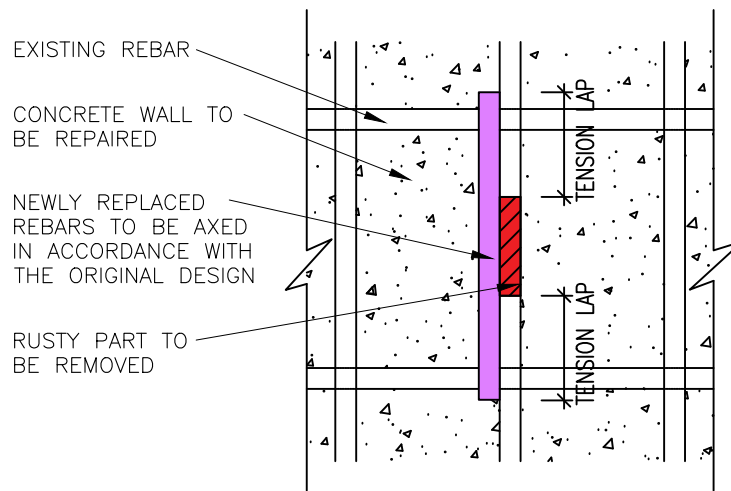
- Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
- Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be depended on the type of repair mortar adopted and shall be in accordance with the supplier's instructions..
- Repeat bonding coat and proprietary specialized repair mortar system according to supplier's instruction.
- Apply procedure 1 to 3 to both vertical and horizontal rebars.
- Make good and reinstate the affected areas of the parent building.
- Remove the temporary protection and clean the site.



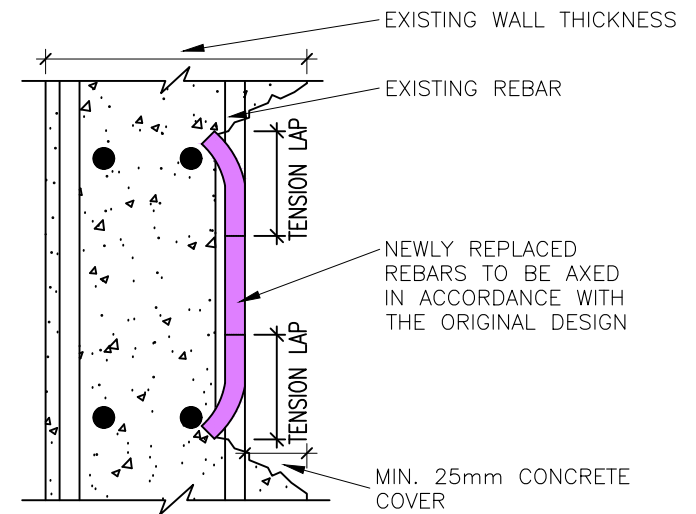
REPAIR OF BLOCK WALL PLANTER



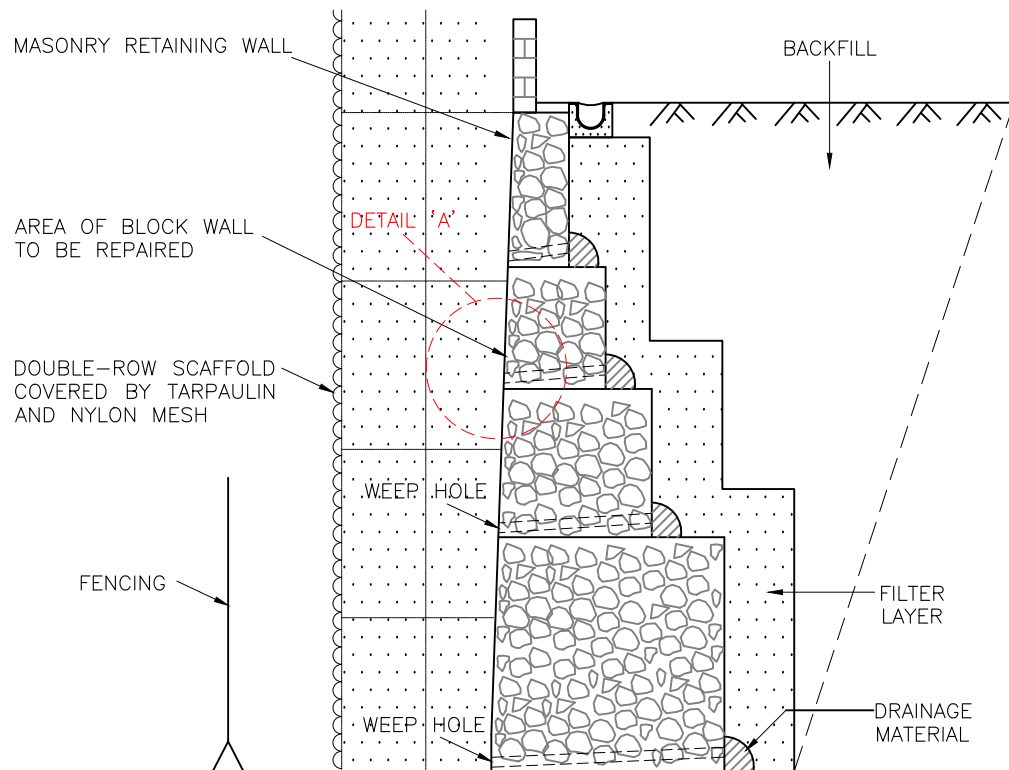
REPAIRING OF R.C. PLANTER



SECTION A - A



REPLACEMENT OF DETERIORATED REBAR AT R.C. WALL



REPAIR POINTING IN MASONRY RETAINING WALL

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. Reference shall be made to the Layman's Guide to Slope Maintenance and Geoguide 5 issued by the CEDD.
3. The works do not involve any replacement or removal of masonry blocks.

PREPARATION WORKS :

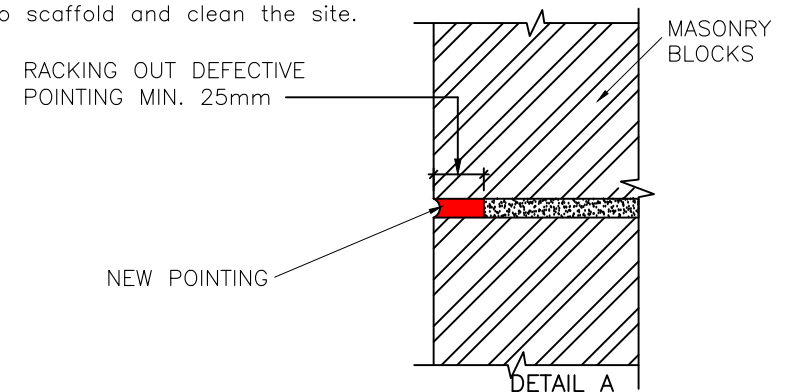
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the surrounding area/existing condition of wall prior to the commencement of works.
4. Obtain any maintenance manual of the retaining wall.

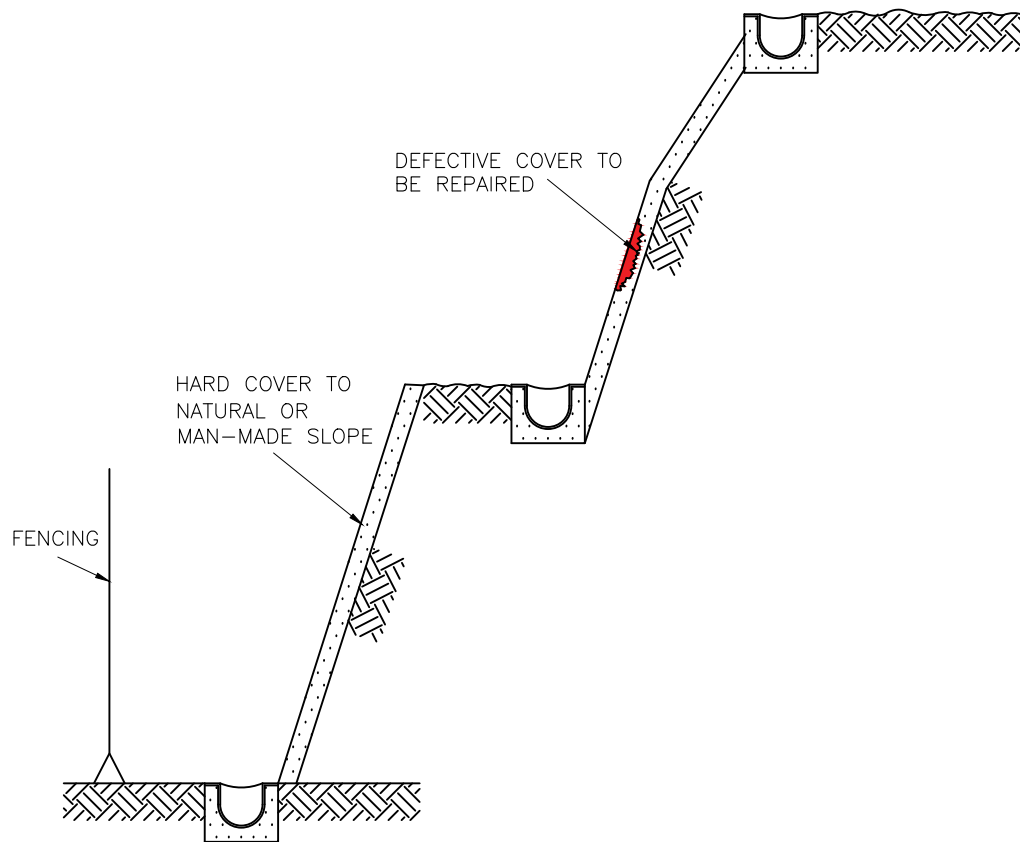
SAFETY AND PRECAUTIONARY MEASURES :

1. When anything considered to be unusual or abnormal is observed during the routine maintenance inspections or during the repair works (e.g. signs of water leakage, widening of cracks, abnormal ground settlement, bulging or distortion of masonry walls), -private owners should be notified promptly and arrangement for an Engineer Inspection for Maintenance by a Registered Professional Engineer (Geotechnical) should be made immediately.
2. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Locate the defective pointing area on wall by visual inspection.
2. Follow the maintenance manual's instructions and rack out the defective/ loosened mortar on the block wall to a minimum depth of 25mm. Remove any vegetation between the joints.
3. Apply pointing with the same material or cement and sand (1:3) by volume to the exposed joints in layers of about 5mm thick.
4. Make good and reinstate the affected areas.
5. Dismantle the bamboo scaffold and clean the site.





REPAIR OF HARD COVER OF NATURAL,
FORMED OR MAN-MADE SLOPE

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. Reference shall be made to the Layman's Guide to Slope Maintenance and Geoguide 5 issued by the CEDD.
3. a). If spray concrete is to be used, water the surface by spray if soil surface exceeds 25°C or the moisture content is less than 10% . Fix securely fabric reinforcement, if any, to the slope by steel nails or anchor bolts and lay without any sharp bend or creases.
b). For wet-mix process, ready mixed concrete shall comply with BS EN 206-1:2000 . For the dry mix process, the air and water supply, the rate of application shall be adjusted to produce dense concrete with no sloughing.
c). Apply spray concrete in layers not exceeding 50mm thick to a total thickness as original.

PREPARATION WORKS :

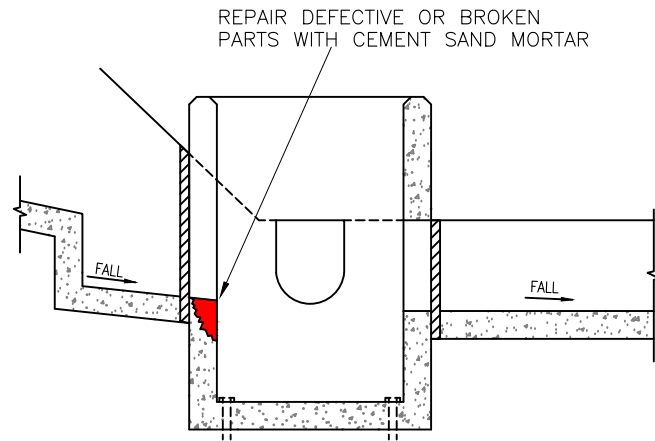
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the surrounding area/existing condition of slope prior to the commencement of works.
4. Obtain any maintenance manual of the slope.

SAFETY AND PRECAUTIONARY MEASURES :

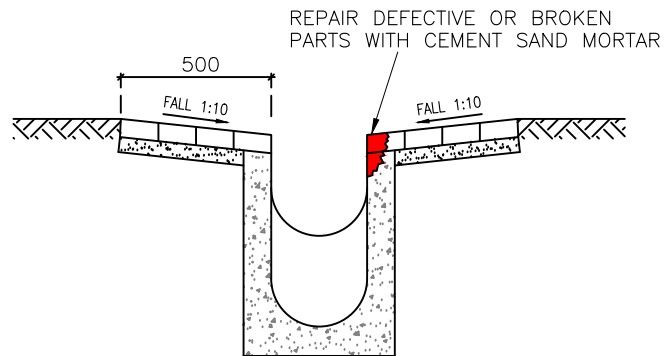
1. When anything considered to be unusual or abnormal is observed during the routine maintenance inspections or during the repair works (e.g. signs of water leakage, widening of cracks, abnormal ground settlement, bulging or distortion of masonry walls),- private owners should be notified promptly and arrangement for an Engineer Inspection for Maintenance by a Registered Professional Engineer (Geotechnical) should be made immediately.
2. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Locate the defective hard cover on the slope by visual inspection.
2. Follow the maintenance manual's instructions and remove the defective/loosened hard cover and weak material.
3. Remove any undesirable vegetation.
4. Repair with cement and sand (1:3) by volume or in accordance with original design, such as spray concrete or chunam.
5. Make good and reinstate the affected areas.
6. Dismantle the fence and clean the site.



SECTION OF CATCH PIT



SECTION OF STEPPED SURFACE CHANNEL

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. Reference shall be made to the Layman's Guide to Slope Maintenance and Geoguide 5 issued by the CEDD.

PREPARATION WORKS :

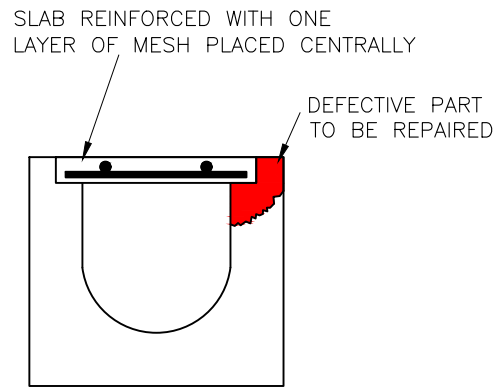
1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the surrounding area/existing condition of slope prior to the commencement of works.
4. Obtain any maintenance manual of the surface drainage channel, catch pit or sand trap.

SAFETY AND PRECAUTIONARY MEASURES :

1. When anything considered to be unusual or abnormal is observed during the routine maintenance inspections or during the repair works (e.g. signs of water leakage, widening of cracks, abnormal ground settlement, bulging or distortion of masonry walls), – private owners should be notified promptly and arrangement for an Engineer Inspection for Maintenance by a Registered Professional Engineer (Geotechnical) should be made immediately.
2. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

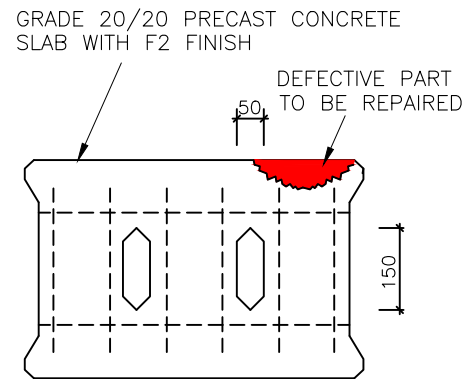
WORKING PROCEDURES :

1. Locate the defective area of the surface channel, catch pit or sand trap by visual inspection.
2. Follow the maintenance manual's instructions and remove the defective/loosened parts and remove any vegetation.
3. Apply cement and sand (1:3) by volume to repair the surface channel, catch pit, or sand trap.
4. Make good and reinstate the affected areas.
5. Dismantle the fence and clean the site.

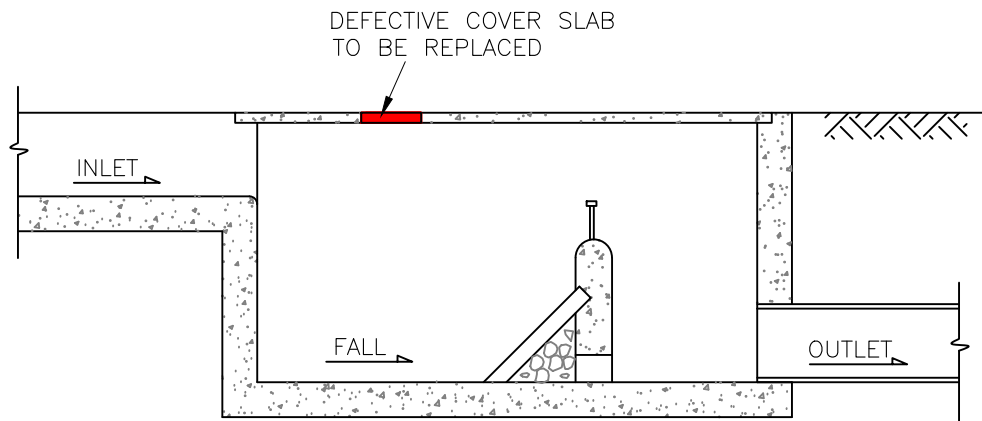


SECTION

SURFACE U-CHANNEL WITH
PRECAST CONCRETE SLAB



PLAN OF SLAB



SECTION OF SAND TRAP

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. Reference shall be made to the Layman's Guide to Slope Maintenance and Geoguide 5 issued by the CEDD.

PREPARATION WORKS :

1. Obtain the existing design drawings/ information for reference prior to the commencement of works.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the surrounding area/existing condition of slope prior to the commencement of works.
4. Obtain any maintenance manual of the surface drainage channel, catch pit or sand trap.

SAFETY AND PRECAUTIONARY MEASURES :

1. When anything considered to be unusual or abnormal is observed during the routine maintenance inspections or during the repair works (e.g. signs of water leakage, widening of cracks, abnormal ground settlement, bulging or distortion of masonry walls), – private owners should be notified promptly and arrangement for an Engineer Inspection for Maintenance by a Registered Professional Engineer (Geotechnical) should be made immediately.
2. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
3. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 1 Double-row bamboo scaffold and working platform over pavement
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Locate the defective area of the surface channel, catch pit or sand trap by visual inspection.
2. Follow the maintenance manual's instructions and remove the defective/loosened parts remove any vegetation.
3. Apply cement and sand (1:3) by volume to repair the surface channel, catch pit, or sand trap.
4. Make good and reinstate the affected areas.
5. Dismantle the fence and clean the site.

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Steel 2011
 - Code of Practice on Wind Effects in Hong Kong 2019
 - BS EN 40-3-1 with modifications on topography factor, mean return period and reference wind pressure
3. Minimum concrete grade for existing structures is 25D/20.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1461:2009 with min. thickness 85 μ m.
5. Structural steel used for new structure to be grade s275 JOH complying with BS EN 10029 for plates and BS EN 10210 for hollow sections.
6. All welding shall comply with BS EN 1011-1:1998 with design strength equal to 220mpa. electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2004.
8. Welding to be tested in accordance with BS EN ISO 9934 part 1:2006.
9. All structural steel shall be cleared and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. All anchor bolts to be stainless steel bolt :
 - a. Prior to installation of any anchor bolt, reinforcement in adjacent existing r.c. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - b. All anchor bolts to be installed of strict compliance with manufacturer's specification and recommendations;
 - c. All base plates and end plates to be installed after the finishes of the affected area removed;
 - d. The gap between the base plate/end plate and the structural concrete shall be cementitious grouted with strength not less than 30 MPa.
12. All site welds shall be polished to bare metal and treated with two coats of zinc rich primer before application of 2 coats of zinc chromate paint according to manufacturer's specification.
13. Interface of two different metal (eg. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. Do not store building material on the roof.

Note: This case excludes DEW item 19.

DESIGN PARAMETERS:

1. Wind load design shall be in accordance with Code of Practice on Wind Effects in Hong Kong 2019.
2. Design loads:
 - a. Design dead load = weight of pole = 100 Kg
 - b. Design wind load :

Based on Code of Practice on Wind Effects in Hong Kong 2019:

- (I) Design wind pressure = 2.87 kpa (effective height = 100m + 1.5m)
- (II) Total pressure coefficient, c_p for individual members of open framework = 2 assume topography factor, $S_t=1.0$; wind directionality factor, $S_\theta=0.85$; size factor, $S_s=1.0$.

Based on BS EN40-3-1:2013 with modifications on topography factor f, mean return period and reference wind pressure $q(10)$

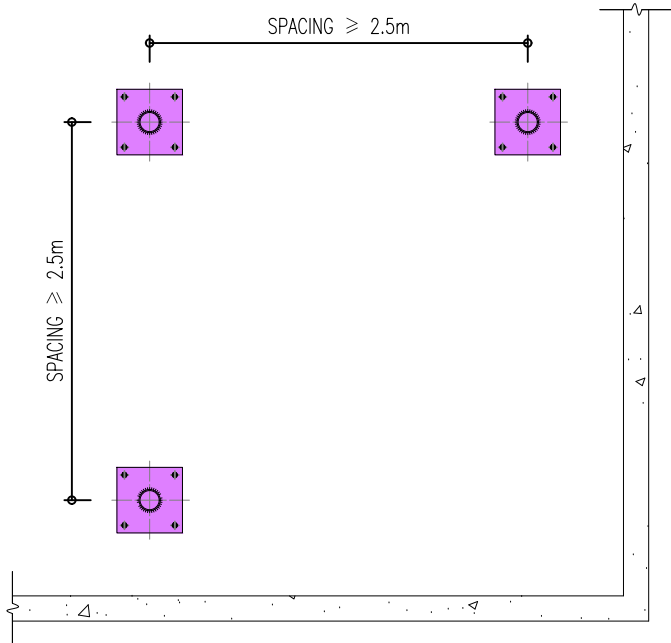
- (I) Design wind pressure = 2.64 kpa where reference wind pressure $q(10)=1.095$ kpa and terrain category 1 is taken
 - (II) Shape coefficient , $c = 1.2$
3. The maximum height of pole is to be 1.5m from roof level.
 4. Minimum thickness of existing roof slab supporting the pole should be at least 150mm thick.
 5. The spacing between poles is not less than 2.5m in any direction.
 6. No part of the pole shall project beyond the external wall.
 7. No part of the pole shall be exceed the highest point of the building.
 8. The pole shall not affect the MOE and MOA of roof.
 9. The pole shall not affect the drainage system of roof.

PREPARATION WORKS :

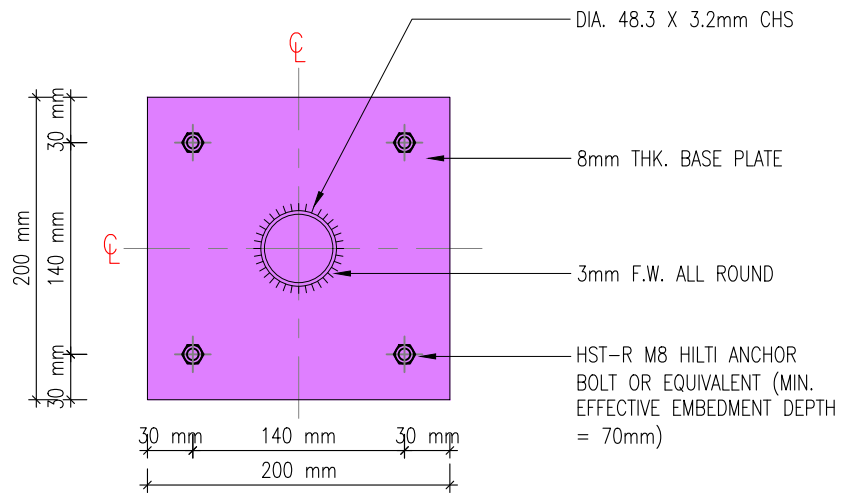
1. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the additional installation of minor works must be checked to satisfaction of structural requirement prior to the carrying out of minor works.

WORKING PROCEDURES :

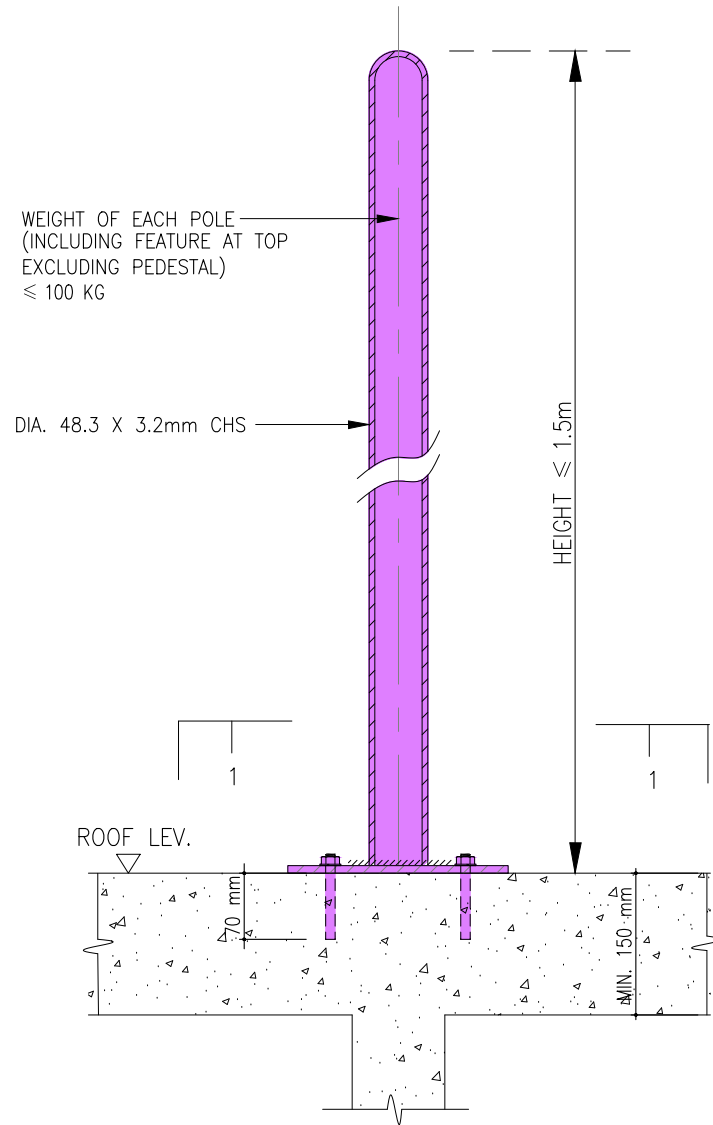
- a) Erection
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area of the parent building and clean the site.
 3. Make good the water proofing of the roof.
- b) Alteration
 1. Alter the external pole in accordance with the new design.
 2. Make good and reinstate the affected area of the parent building and clean the site.
 3. Make good the water proofing of the roof.



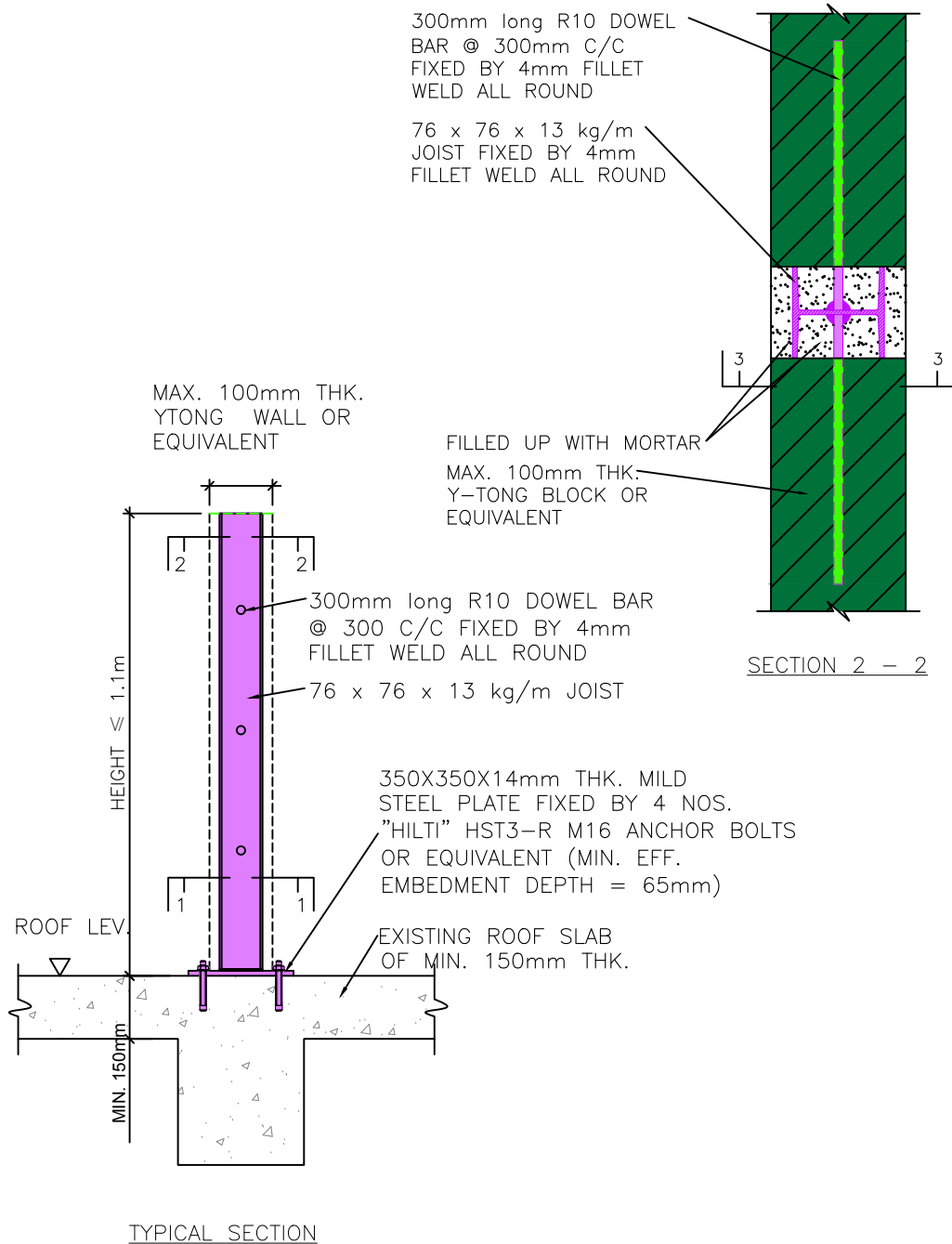
ROOF PLAN OF POLE
N.T.S.



SECTION '1'-'1''
SCALE: 1:5



SECTION OF POLE
SCALE: 1:10



GENERAL NOTES :

- The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Section 3 and 10 of the Guidelines.)
- All works shall comply with the following CoP/ standards:
 - Code of Practice on Wind Effects in Hong Kong 2019
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for the Structural Use of Concrete 2013
 - BS 5628: Part 1: 2005 Code of Practice for the Use of Masonry. Structural Use of Unreinforced Masonry
 - Specifications and Method Statements for YTONG AAC Block Wall or equivalent.
- All structural steel to be grade S275 J0 to BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461.
- All connections to be 4mm fillet weld all round with weld strength, $p_w = 220 \text{ N/mm}^2$ to BS EN 1011 and all electrodes to BS EN ISO 2560.
- All anchor bolts to be Hilti HST3-R M16 or equivalent and shall be installed according to the manufacturer's specification.
- All YTONG AAC blocks or equivalent shall comply with BS6073-1 as solid block with the minimum compressive strength of 4 N/mm^2 and the density not more than 650 kg/m^3 .
- Mortar designation shall be Class (ii) to Table 1 of BS 5628-1 with the mean compressive strength at 28 days of 4.5 N/mm^2 by site tests.
- Existing concrete grade is assumed to be Grade 30 with 75 mm concrete cover.
- Interface of two different metal (eg. steel and stainless steel; steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

DESIGN LOADS :

- Wind Load = 2.86 kN/m^2 with pressure coeff. 3.4 (Zone A) and 2.1 (Other than Zone A) (Effective height = $100\text{m} + 1.5\text{m}$). Assume topography factor, $S_t=1.0$; wind directionality factor, $S_{\theta}=0.85$; size factor, $S_s=1.0$.

SAFETY AND PRECAUTIONARY MEASURES :

- Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.

PREPARATION WORKS :

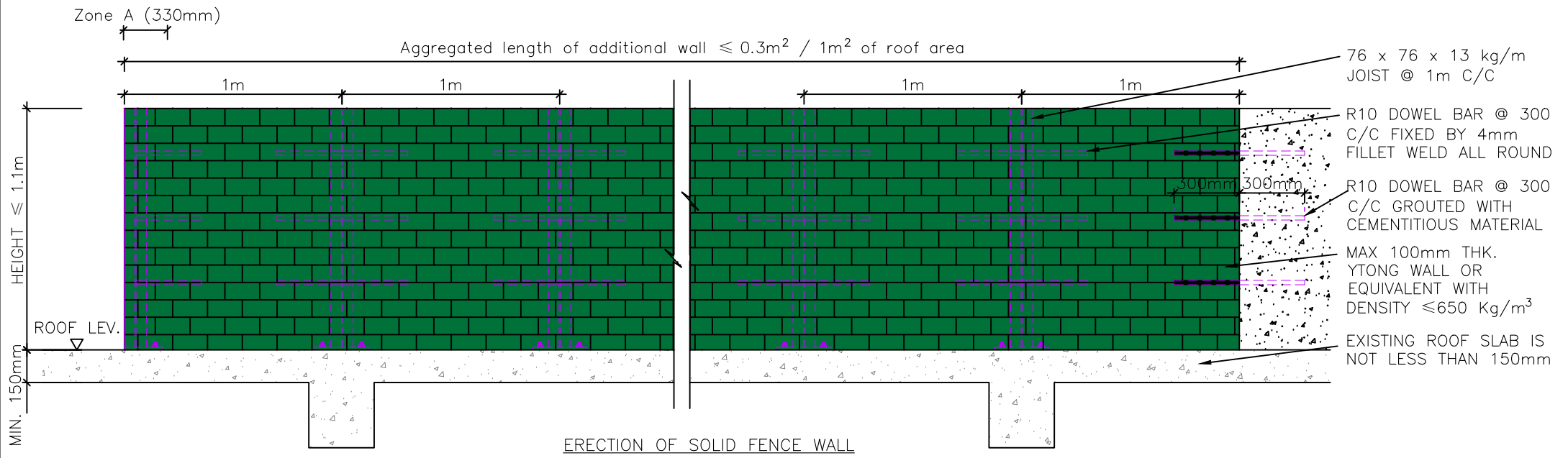
- Obtain existing design drawings/ information for reference prior to commencement of works.
- Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
- The structural adequacy of the supporting parent structure due to the addition of the wall(s) works must be checked to the satisfaction of structural requirement prior to the carrying out of minor works.

WORKING PROCEDURES :

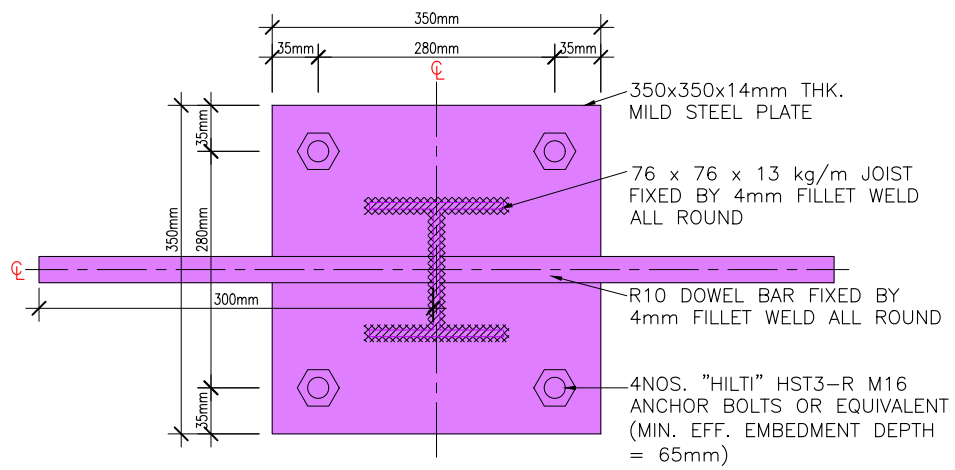
- Erection
 - Drill hole to existing structure.
 - Install dowel bar, base plate and joist as per the drawing.
 - Erect the block wall.
 - Make good and reinstate the affected areas (including water-proofing) of the parent building and clean the site.
- Alteration
 - Break down the part of the wall to be altered (from top to bottom and bay to bay) into small pieces for construction waste disposal.
 - Replace the existing joist/dowel bar or add new joist/dowel bar.
 - Erect the block wall in accordance with the new design.
 - Make good and reinstate the affected areas (including water-proofing) of the parent building and clean the site.

REMARKS :

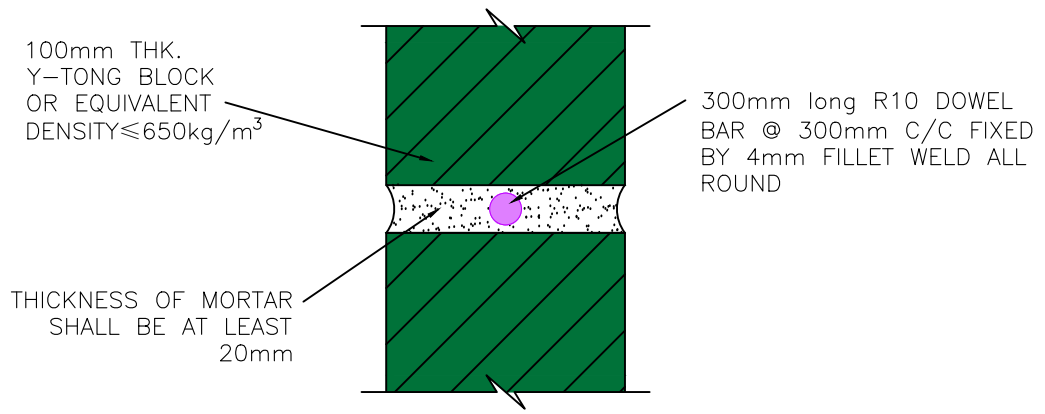
- This case excludes DEW item 20.
- The wall shall not project beyond the external wall.
- The wall shall not exceed the highest point of the building.
- The aggregated length of the additional wall per m^2 of roof area $\leq 0.3\text{m}$.
- The works shall not affect the MOE and MOA and obstruct drainage of the roof.



- 76 x 76 x 13 kg/m JOIST @ 1m C/C
- R10 DOWEL BAR @ 300 C/C FIXED BY 4mm FILLET WELD ALL ROUND
- R10 DOWEL BAR @ 300 C/C GROUTED WITH CEMENTITIOUS MATERIAL
- MAX 100mm THK. YTONG WALL OR EQUIVALENT WITH DENSITY $\leq 650 \text{ Kg/m}^3$
- EXISTING ROOF SLAB IS NOT LESS THAN 150mm



SECTION 1 - 1



SECTION 3 - 3

GENERAL NOTES :

1. The works carried out shall comply with The Building Ordinance and provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/standards
 - Building (Construction) Regulations.
 - Code Of Practice For Structural Use Of Steel 2011.
 - Code Of Practice On Wind Effects In Hong Kong 2019.
 - Code Of Practice For Fire Safety in Buildings 2011.
3. Minimum concrete for existing structures is 25D/20 and minimum thickness of existing R.C. structure for installation of anchor bolt shall be 150mm.
4. All steel components and fixings to be hot dip galvanized to BS EN ISO 1464:2009 with min. thickness 85µm.
5. Structural steel used for new structure to be grade S275 J0/JOH complying with BS EN 10210 for hollow sections, BS EN 10029 for plates and BS EN 10025 for other sections.
6. All welding shall be with BS EN 1011-1:2009 with design strength equal to 220MPa. Electrodes shall comply with BS EN ISO 2560:2009.
7. All welding works shall be carried out by qualified welders complying with BS EN 287-1:2011.
8. Welding to be tested in accordance with BS EN ISO 9934 PART 1:2016.
9. All structural steel shall be cleaned and free of scale and rust prior to welding and galvanization.
10. Damaged area of galvanization due to site welding shall be polished to bare metal and one coat of zinc-rich primer and 2 coats of zinc chromate paint shall be applied according to the manufacturer's specification.
11. All anchor bolts to be stainless steel bolt :
 - (a) Prior to installation of any anchor bolt, reinforcement in adjacent existing R.C. member is to be surveyed by means of a covermeter to ensure no clash occurs;
 - (b) All anchor bolts are to be installed in strict compliance with manufacturer's specification and recommendations;
 - (c) All base plates and end plates are to be installed after the finishes of the affected area removed;
 - (d) The gap between the base plate/ end plate and structural concrete shall be cementitious grouted with strength not less than 30MPa.
12. All chain link fence to be zinc coated to GLS 180 of BS 1722 part 1 and application of 2 coats of zinc chromate paint according to manufacturer's specification.
13. Interface of two different metal (eg. steel and stainless steel, steel and aluminium) shall be isolated by PVC sheet or bituminous paint.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public, diversion arrangement shall be taken if necessary.
2. Do not store building material on the roof.

DESIGN PARAMETERS:

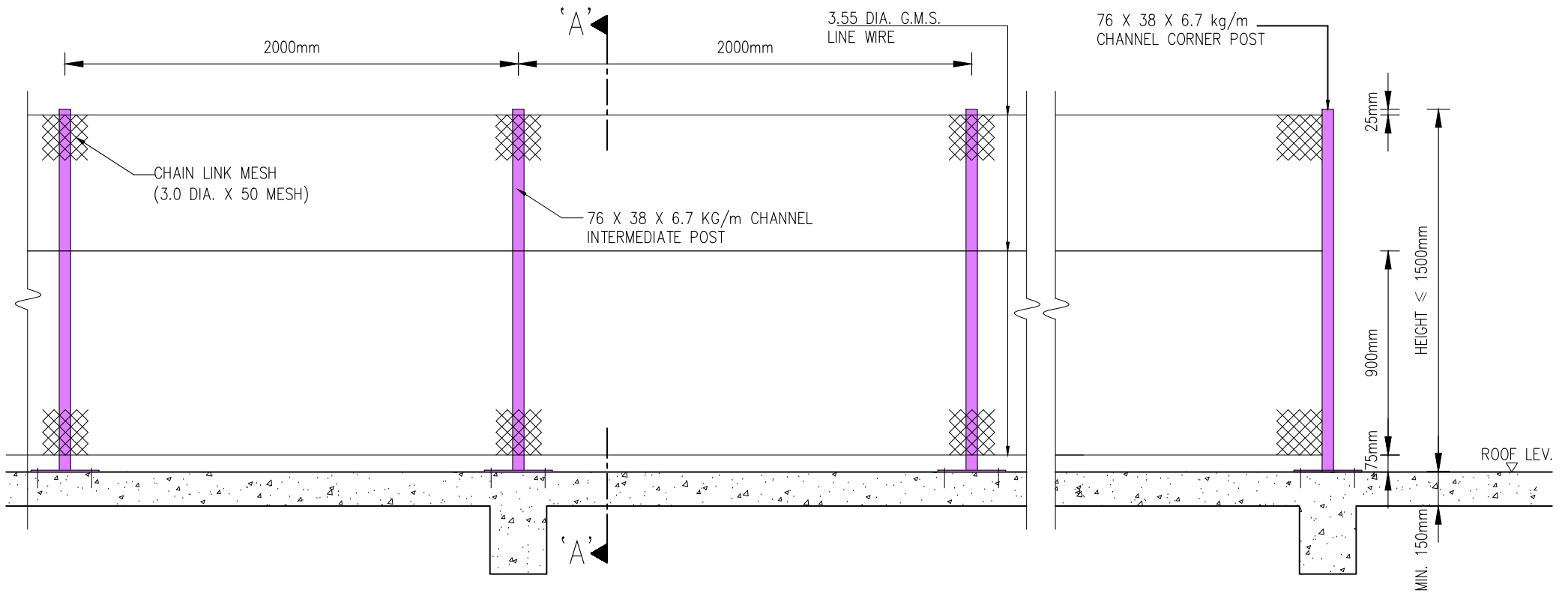
1. Wind load design for mesh fence/ metal railing is in accordance with Code Of Practice on Wind Effects In Hong Kong 2019.
2. Design wind loads shall be 2.87KPa (height above ground level ≤101.5m) with pressure coefficient CP of 1.8 (for railing) or 1.9 (for mesh fence) for individual members of open framework building. Assume topography factor, St=1.0; wind directionality factor, Sθ=0.85; Size factor Ss=1.0.
3. The maximum height of mesh fence or railing is to be 1.5m from roof level.
4. Minimum thickness of existing roof slab supporting the fence should be at least 150mm thick.
5. No part of the fence or railing shall project beyond the external wall.
6. No part of the fence or railing shall exceed the highest point of the building.
7. The mesh fence/ metal railing shall not be used as protective barrier.
8. The lowest part of it may be solid block wall construction with a thickness not more than 100mm, a density of not more than 650 kg per m³ and a height of not more than 300mm.
9. The height of the structure, including any feature at top is more than 1.1m. No part of it shall be covered by any retractable awning, or is within a horizontal clearance of 500mm from any retractable awning when the awning is fully extended.
10. The fence or railing shall not affect the MOE and MOA of roof.
11. The fence or railing shall not affect the drainage system of roof.
12. Aggregate length of additional block wall per m² of the roof area is not more than 0.3m.

PREPARATION WORKS :

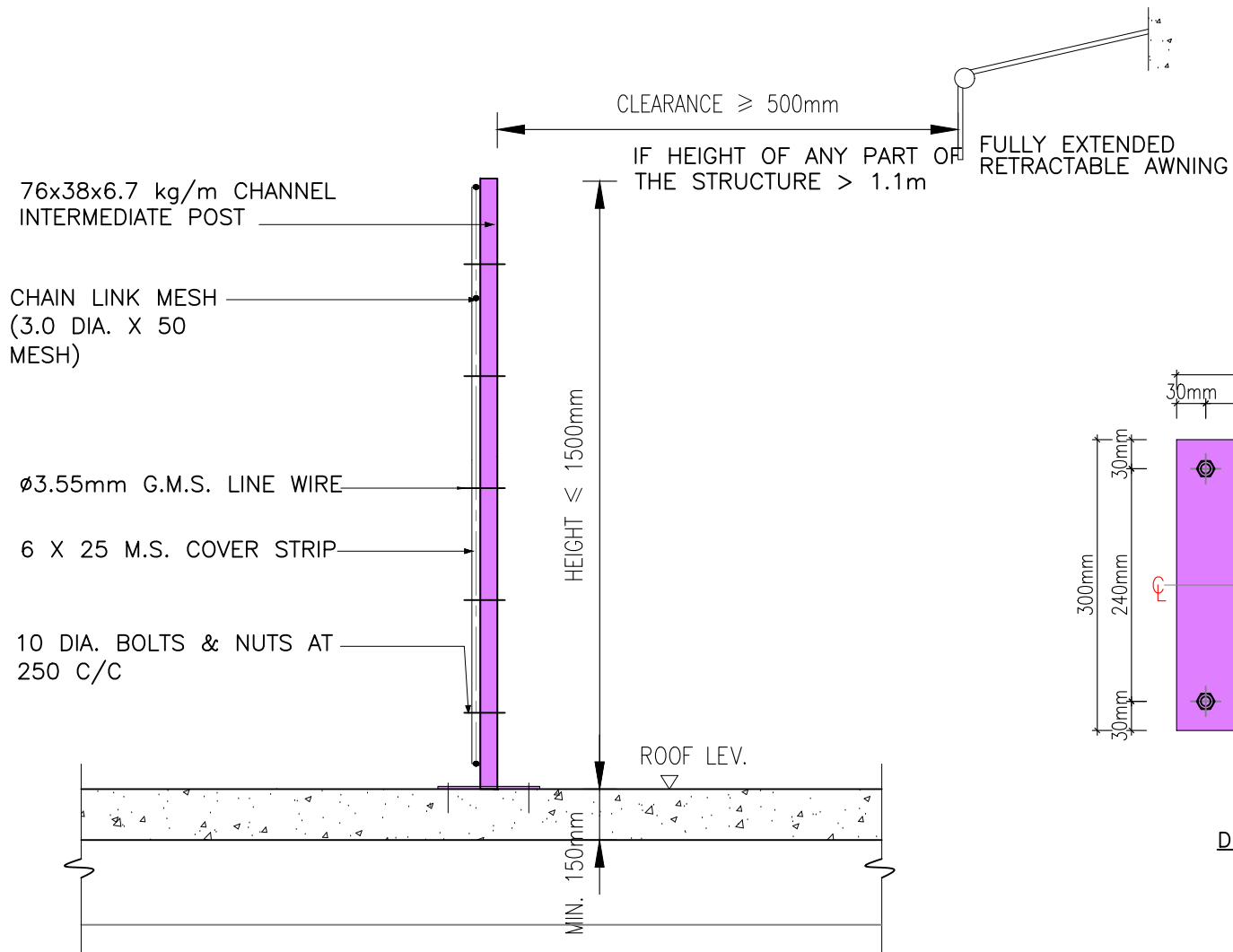
1. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. The structure adequacy of the supporting parent structure due to the additional installation of these minor works must be checked to satisfy all structural requirements prior to the carrying out of the minor works.

WORKING PROCEDURES :

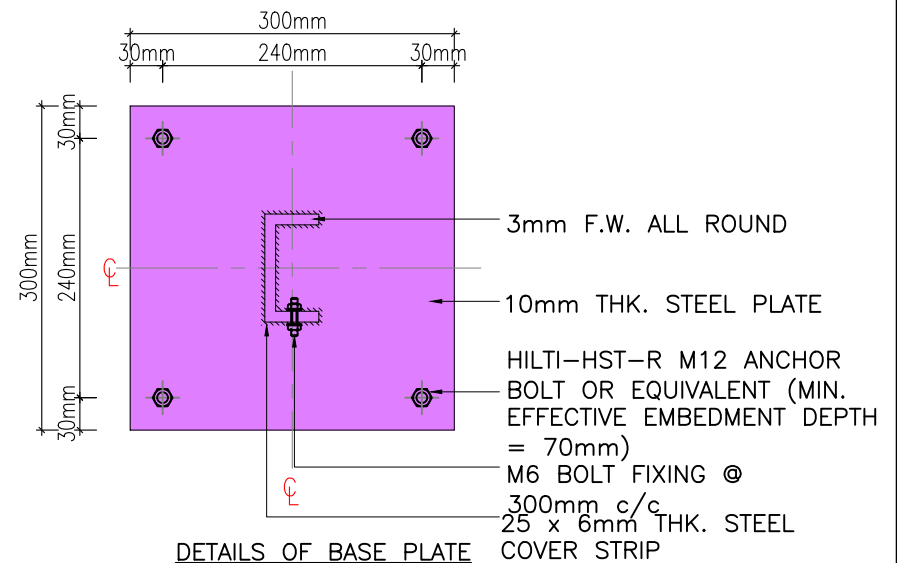
- a) Erection
 1. Erect the structure as per the drawing.
 2. Make good and reinstate the affected area of the parent building and clean the site.
 3. Make good the water proofing of the roof.
- b) Alteration
 1. Remove the member required to be altered without affecting the remaining structure and install new/ altered members.
 2. Make good and reinstate the affected area and clean the site..
 3. Make good the water proofing of the roof.

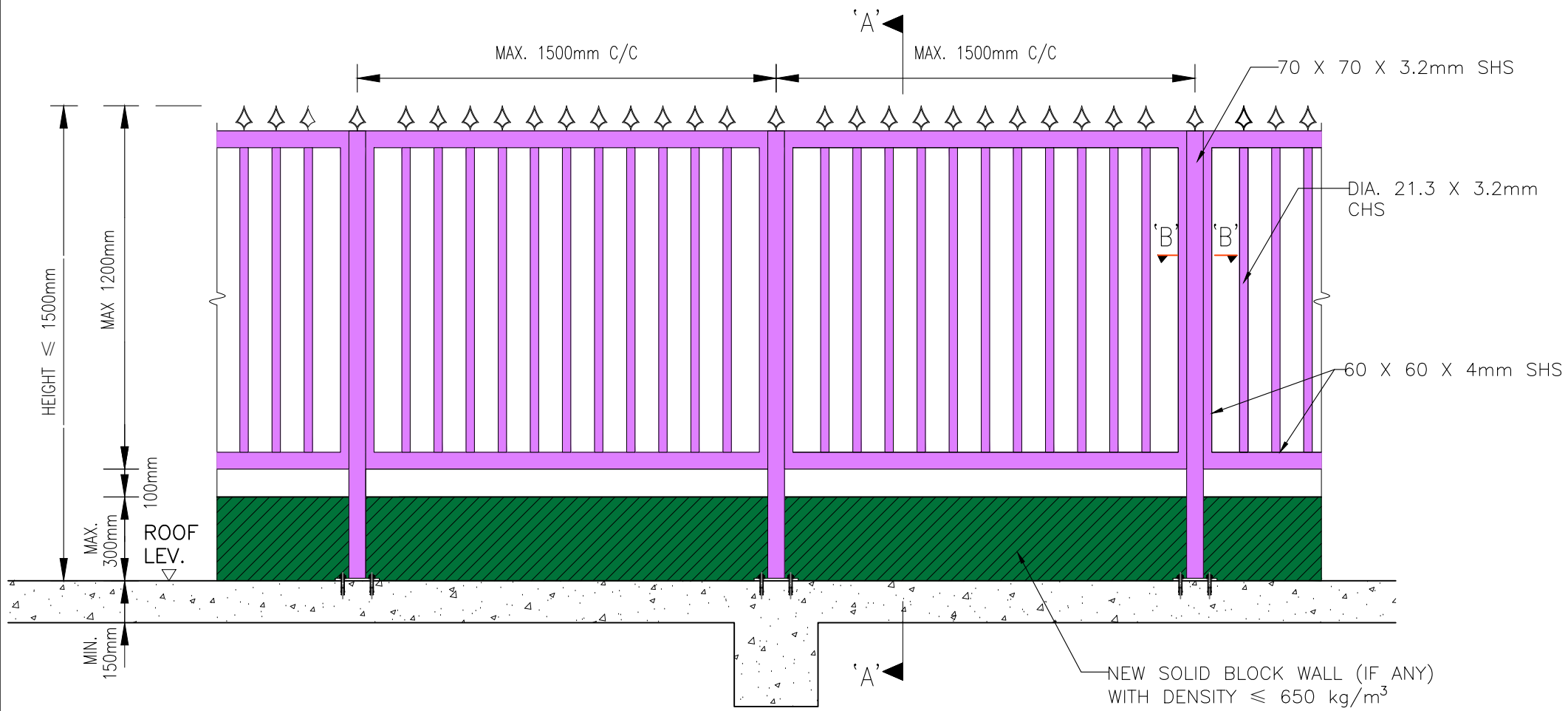


ELEVATION OF MESH FENCE ON ROOF
SCALE: 1:25



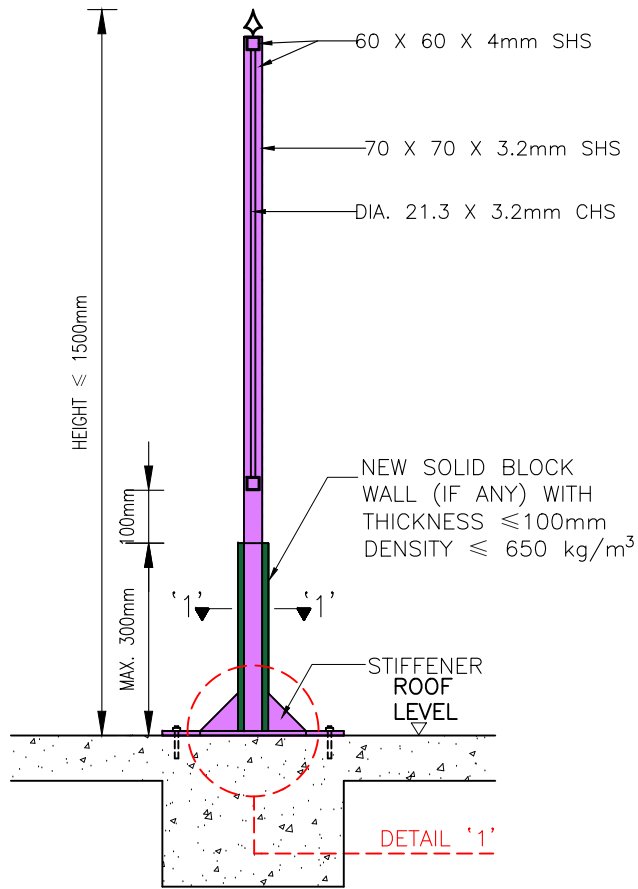
SECTION 'A'-'A'



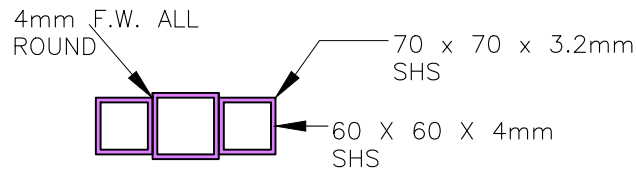


ELEVATION OF METAL RAILING
SCALE 1:20

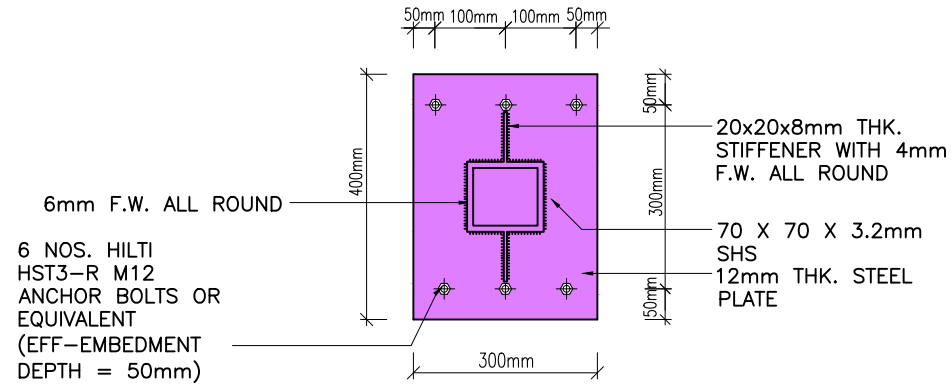
NEW SOLID BLOCK WALL (IF ANY)
WITH DENSITY $\leq 650 \text{ kg/m}^3$
THE THICKNESS $\leq 100\text{mm}$
THE AGGREGATE LENGTH OF
ADDITIONAL WALL $\leq 0.3/\text{m}^2$ OF
ROOF AREA



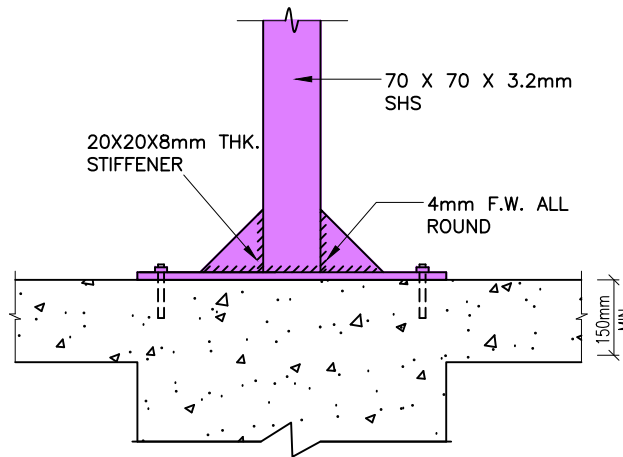
SECTION A-A



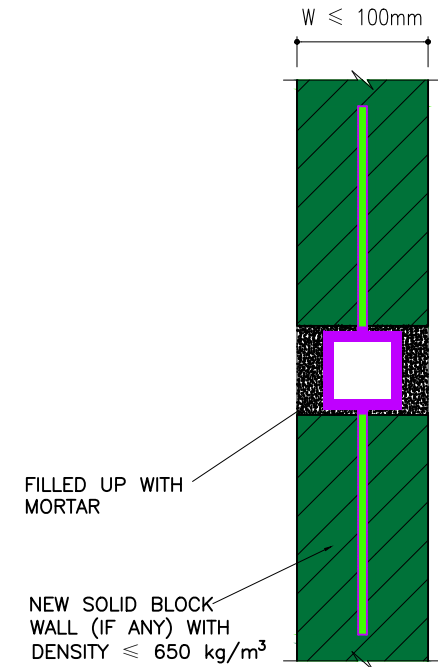
SECTION B-B



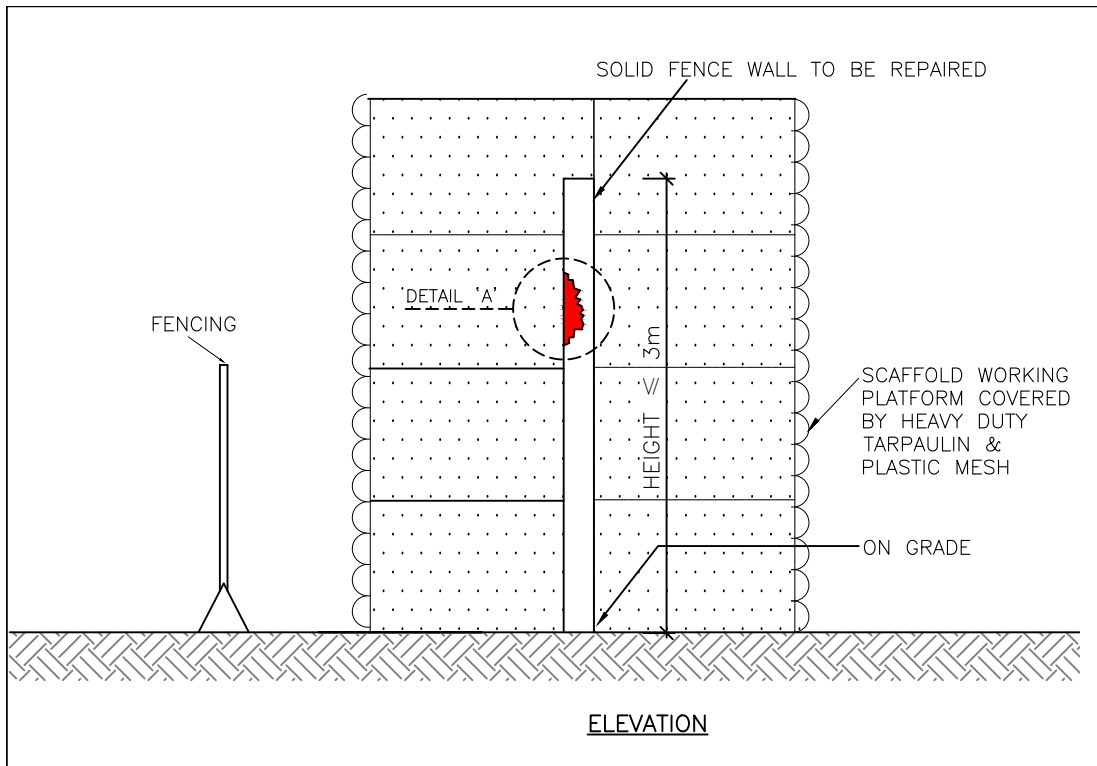
DETAIL OF BASE PLATE



DETAIL '1'



SECTION '1'-'1'

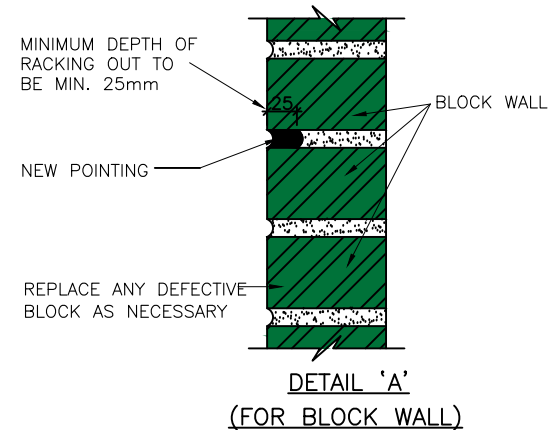


GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Concrete 2013
 - Concrete shall comply with CS1:2010
3. Concrete grade and the minimum cover shall be grade 30 and 25mm respectively.
4. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2: 2012
5. Minimum anchorage and lap length are 52 x diameter of the existing rebar unless otherwise specified.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.



SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

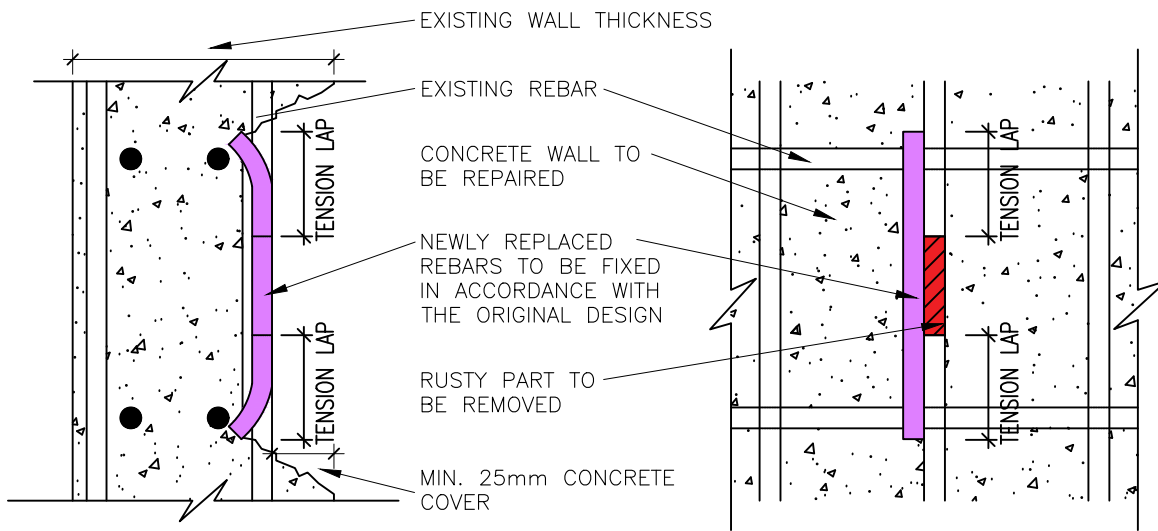
For Block Wall

1. Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
2. Remove the defective part using hand-held mechanical tools.
3. Replace any defective blocks by new blocks.
4. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm.
5. Apply pointing in cement and sand (1:1) to the exposed joints.
6. Apply 20mm thick rendering (cement : sand = 1:3) to the wall as necessary.
7. Make good and reinstate the affected areas of the parent building.
8. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

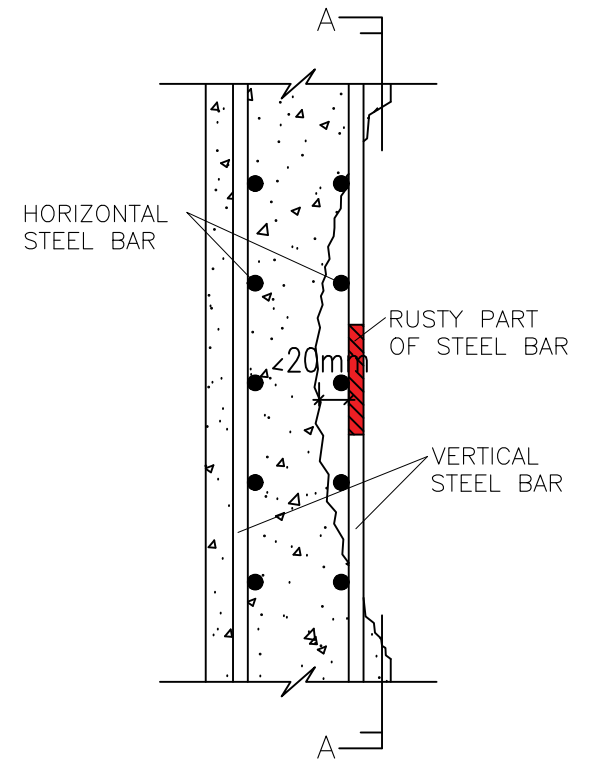
1. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
2. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
3. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
4. Apply procedure 1 to 3 to both vertical and horizontal rebars.
5. Make good and reinstate the affected areas of the parent building.
6. Remove the bamboo scaffold and clean the site.

MINOR WORKS ITEM 3.57	DRAWING TITLE : REPAIR OF SOLID FENCE WALL ON GRADE	SHEET 1 OF 2
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REPLACEMENT OF DETERIORATED REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL

SCAFFOLD WORKING PLATFORM COVERED BY HEAVY DUTY TARPAULIN & PLASTIC MESH

MESH FENCE OR METAL RAILING TO BE REPAIRED (NOT USED AS PROTECTIVE BARRIER)

FENCING

SOLID FENCE WALL TO BE REPAIRED

GRD. LEV.

DETAIL 'A'

HEIGHT \leq 5m

2.5m

SOLID WALL (e.g. R.C. WALL /BLOCK WALL)

ELEVATION

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

For mesh fence/ metal railing:

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the defective steel member by hand tools to manageable size for disposal.
3. Debris from removal works should be put into bags and disposed as construction waste.
4. Repair the mesh fence or metal railing.
5. Make good and reinstate the affected areas where necessary.
6. Remove the bamboo scaffold and clean the site.

For Block Wall

1. Dismantle the part of mesh fence/ railing which may be affected by the repair work.
2. Locate the defective area on wall by visual inspection and saw cut the rendering around the area to be repaired.
3. Remove the defective part using hand-held mechanical tools.
4. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm.
5. Replace the defective blocks.
6. Apply pointing in cement and sand (1:3) to the exposed joints.
7. Reinstall the metal fence/ railing.
8. Make good and reinstate the affected areas.
9. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

1. Dismantle the part of mesh fence/ railing which may be affected by the repair work.
2. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
3. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
4. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
5. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
6. Reinstall the metal fence/ railing.
7. Make good and reinstate the affected areas.
8. Remove the bamboo scaffold and clean the site.

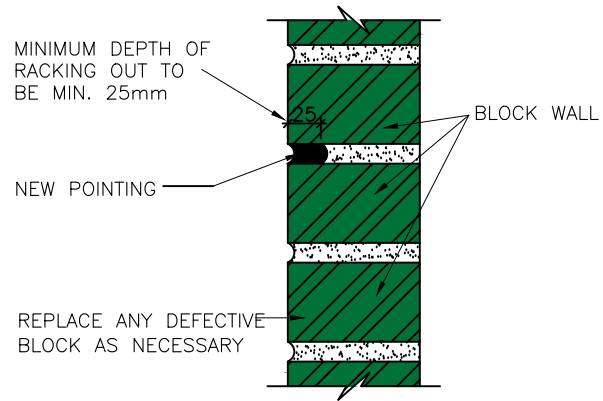
Remarks : This case excludes the DEW item 6

GENERAL NOTES :

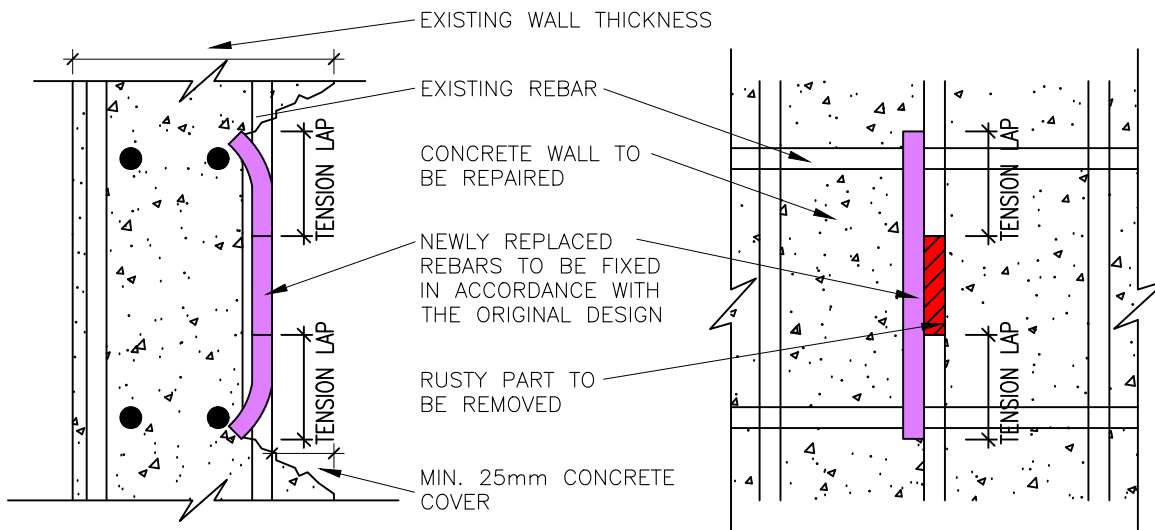
1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural use of Steel 2011
 - Code of Practice for Structural use of Concrete 2013
 - Concrete shall comply with CS1:2010
3. All structural steel to be grade S275 J0/J0H complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009.
4. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.
5. Concrete grade and the minimum cover shall be grade 30 and 25mm respectively.
6. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2: 2012.
7. Minimum anchorage and lap length are 52 x diameter of the existing rebar unless otherwise specified.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

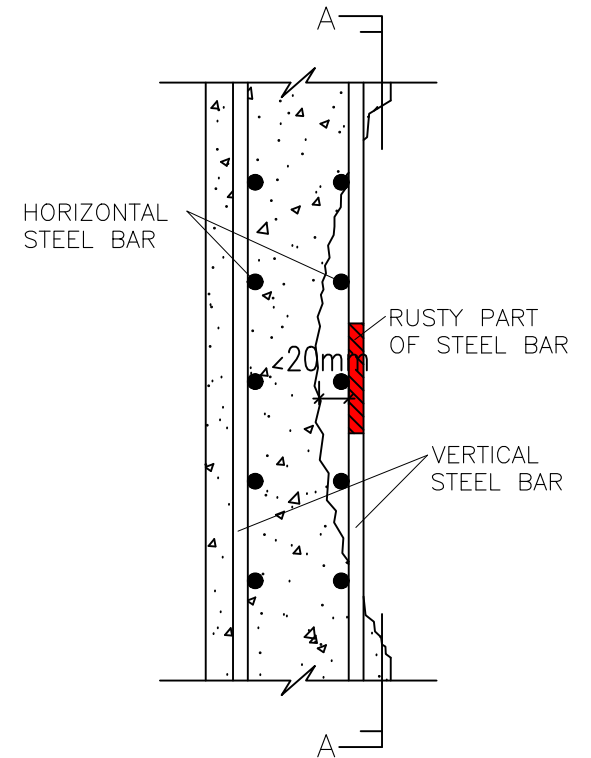


DETAIL 'A'
(FOR BLOCK WALL)

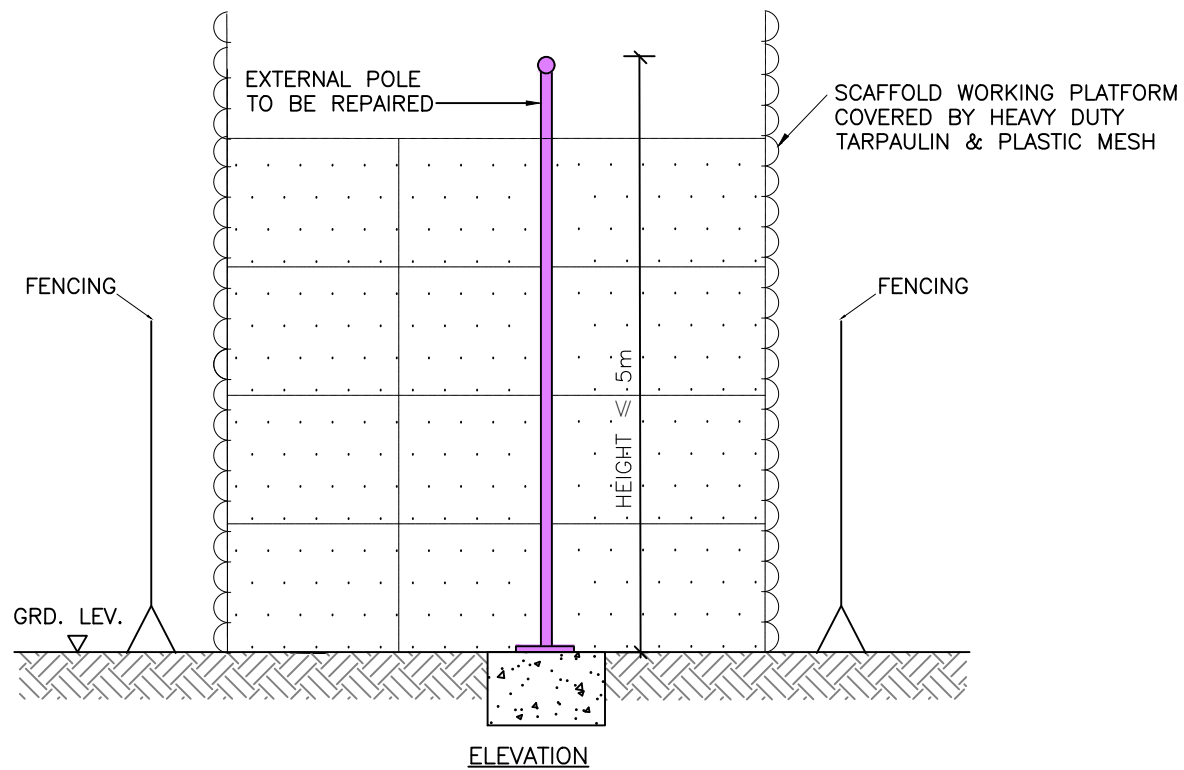


REPLACEMENT OF DETERIORATED
REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011.
3. All structural steel to be grade S275 J0/J0H complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS ISO 1461: 2009.
4. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

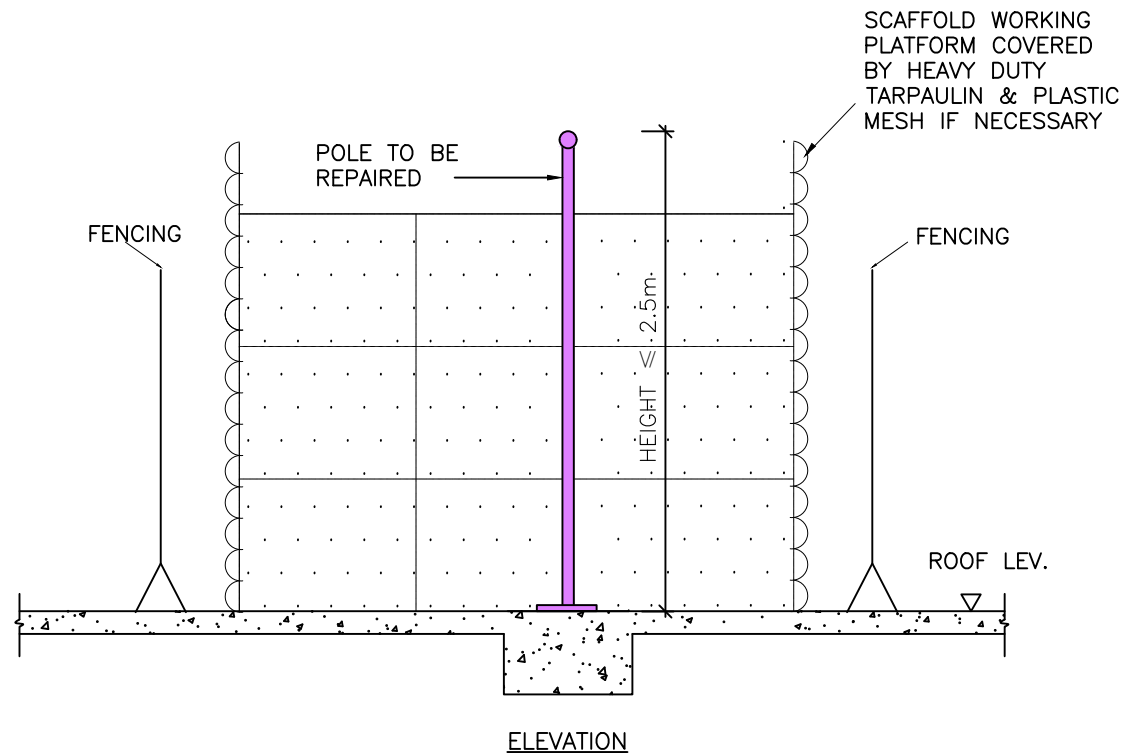
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Repair the pole
3. Reinststate the affected areas where necessary.
4. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes the DEW item 17



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011.
3. All structural steel to be grade S275 JO/JOH complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009.
4. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

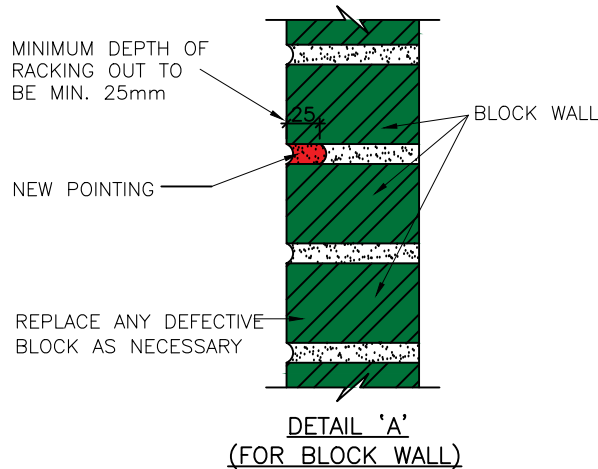
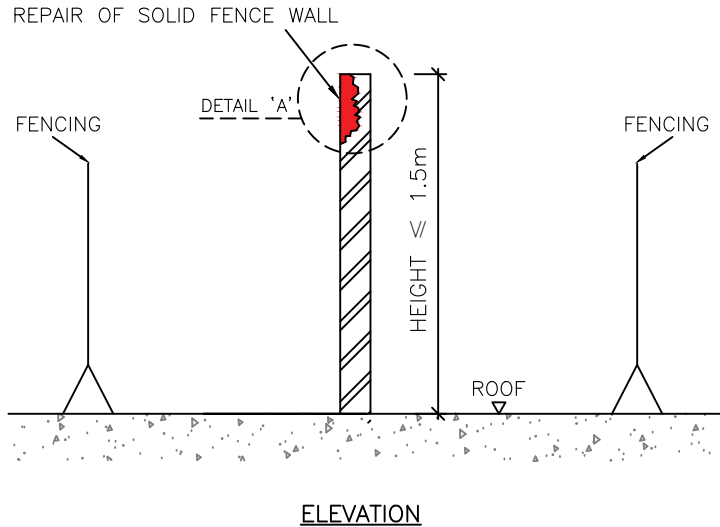
1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Repair the pole.
3. Reinstatement the affected areas where necessary.
4. Remove the bamboo scaffold and clean the site.

Remarks : This case excludes the DEW item 19

MINOR WORKS ITEM 3.60	DRAWING TITLE : REPAIR OF POLE ON THE ROOF OF A BUILDING	
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GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for Structural Use of Concrete 2013
 - Concrete shall comply with CS1:2010
3. Concrete grade and the minimum cover shall be grade 30 and 25mm respectively.
4. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2: 2012.
5. Minimum anchorage and lap length are 52 X diameter of the existing rebar unless otherwise specified.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

For Block Wall

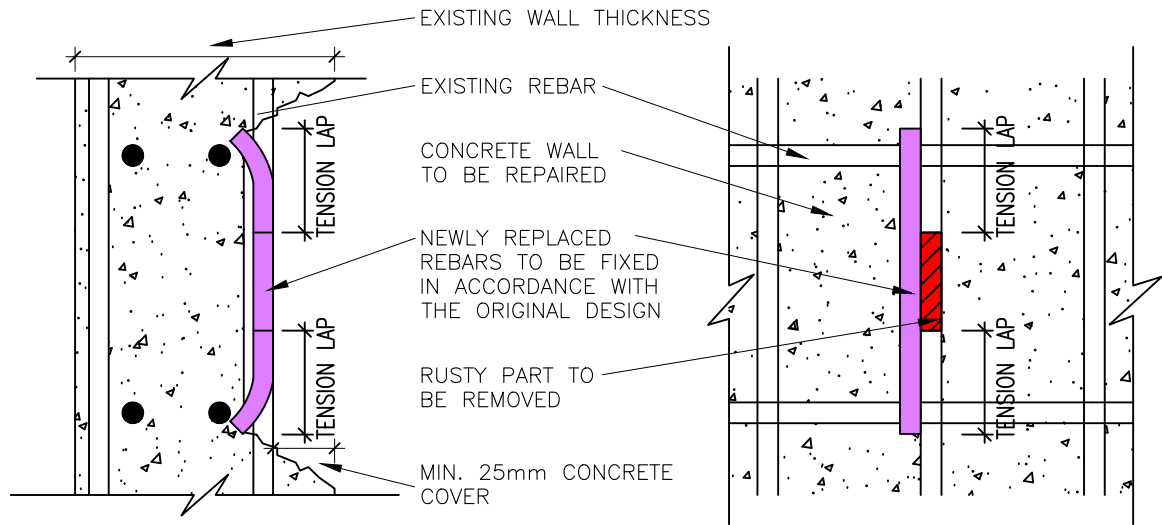
1. Locate the defective area on wall by visual inspection and saw cut around the area to be repaired.
2. Remove the defective part using hand-held mechanical tools.
3. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm. Replace any defective blocks by new blocks.
4. Apply pointing in cement and sand (1:1) to the exposed joints.
5. Apply 20mm thick rendering (cement : sand = 1:3) to the wall as necessary.
6. Make good and reinstate the affected areas of the parent building.
7. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

1. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
2. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
3. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
4. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
5. Make good and reinstate the affected areas of the parent building.
6. Remove the fence and clean the site.

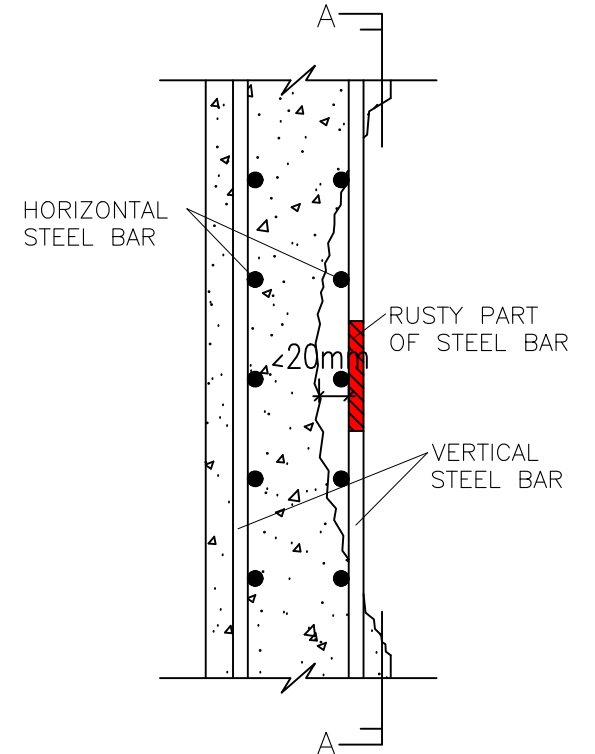
Remarks :

1. This case excludes DEW item 20.
2. The wall is not used as a protective barrier.

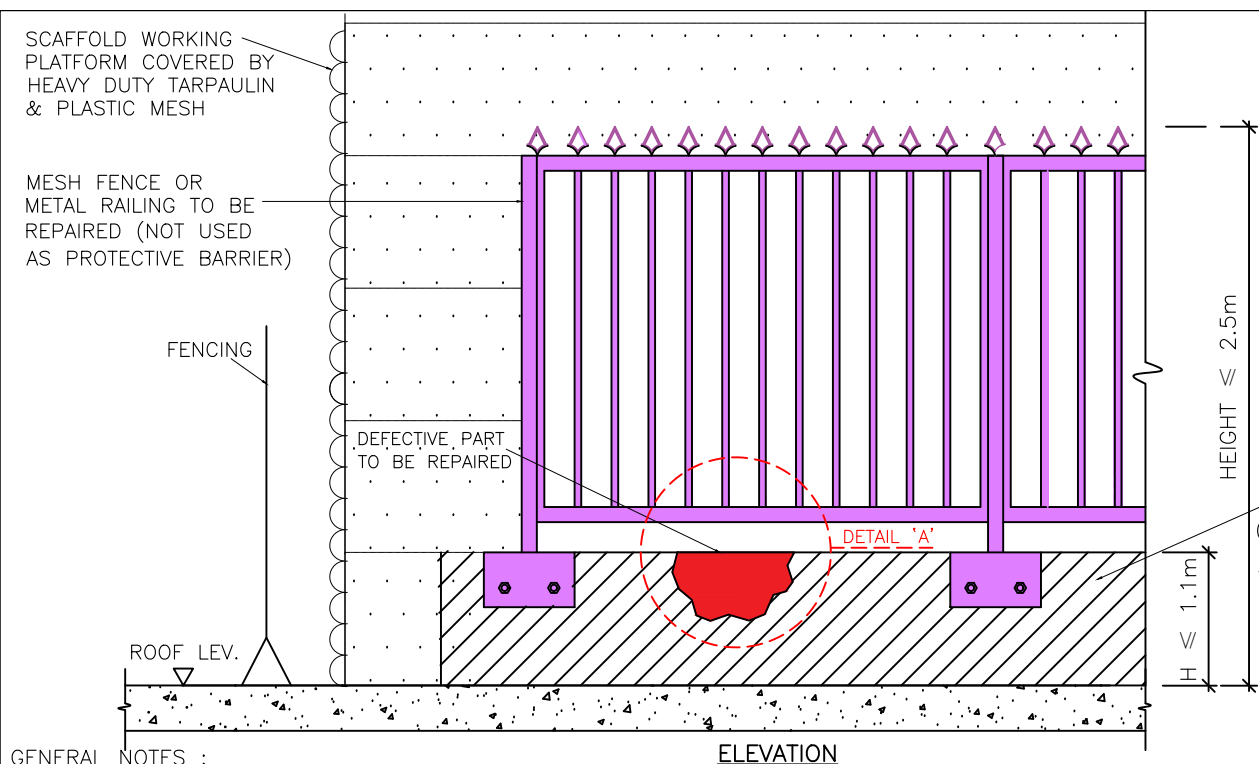


REPLACEMENT OF DETERIORATED REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' - REPAIRING OF R.C. WALL



SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold

WORKING PROCEDURES :

For mesh fence/ metal railing:

1. Disconnect all services in vicinity that may be affected by the works.
2. Dismantle the defective steel member by hand tools to manageable size for disposal.
3. Debris from removal works should be put into bags and disposed as construction waste, do not stored any waste on the roof.
4. Repair the mesh fence or metal railing.
5. Make good and reinstate the affected areas where necessary.
6. Remove the fence and clean the site.

For Block Wall

1. Dismantle the part of metal fence/ railing which may be affected by the repair works.
2. Locate the defective area on wall by visual inspection and saw cut the rendering around the area to be repaired.
3. Remove the defective part using hand-held mechanical tools.
4. Rack out the defective/ loosen mortar along the fault line on the block wall to a minimum depth of 25mm.
5. Replace the defective blocks.
6. Apply pointing in cement and sand (1:3) to the exposed joints.
7. Reinstall the metal fence/ railing.
8. Make good and reinstate the affected areas of the parent building.
9. Dismantle the bamboo scaffold and clean the site.

For R.C. Wall

1. Dismantle the part of mesh fence/railing which may be affected by the repair works.
2. Saw cut and hack off finishes/concrete at the repair area using hand held mechanical tools to expose the steel bar and sound concrete substrate.
3. Remove rust on the steel bar and apply primer to steel bar. If the corroded steel bar is found substantially less than its original size after derusting, replacement of the steel bar with the same size is required. The lap length for the existing/ new steel bar shall be dependent on the type of repair mortar adopted and shall be in accordance with the supplier's instructions
4. Apply bonding coat and proprietary specialized repair mortar system according to supplier's instructions.
5. Repeat procedure 1 to 3 to both vertical and horizontal rebars.
6. Reinstall the metal fence/ railing.
7. Make good and reinstate the affected areas of the parent building.
8. Remove the bamboo scaffold and clean the site.

Remarks :

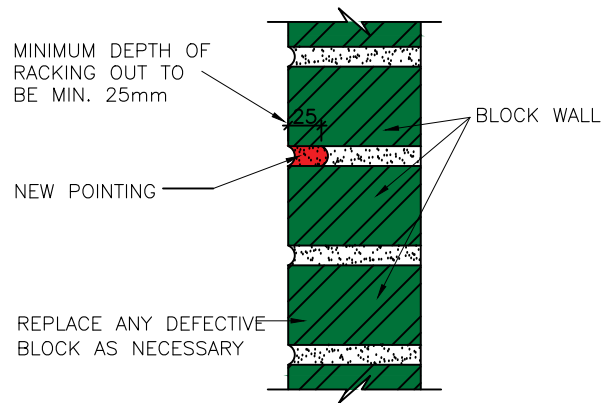
1. This case excludes DEW item 18.
2. The mesh fence or metal railing is not used as a protective barrier.

GENERAL NOTES :

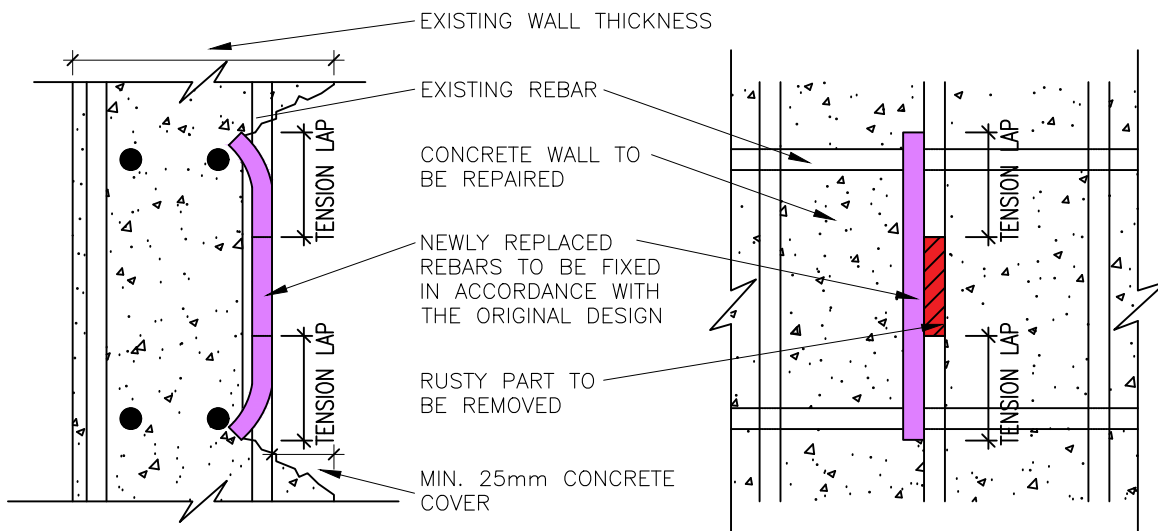
1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment.
2. All works shall comply with the following CoP/ standards:
 - Building (Construction) Regulations
 - Code of Practice for the Structural Use of Steel 2011
 - Code of Practice for Structural Use of Concrete 2013
 - Concrete shall comply with CS1:2010
3. All structural steel to be grade S275 J0/J0H complying with BS EN 10210 for hollow sections, BS EN 10056 for angles, BS EN 10029 for plates and BS EN 10025 for other sections and shall be hot dip galvanized to BS EN ISO 1461: 2009.
4. All welds should be comply with BS EN 1011-1: 2009 and all welding works to be carried out by qualified welder.
5. Concrete grade and the minimum cover shall be grade 30 and 25mm respectively.
6. Steel reinforcement shall be high yield type II deformed bar with the characteristic strength of 500 N/mm² and comply with CS2: 2012
7. Minimum anchorage and lap length are 52 x diameter of the existing rebar unless otherwise specified.

PREPARATION :

1. Obtain the existing design drawings/ information for reference.
2. Inform the utilities company or sector as necessary.
3. Carry out condition survey of the parent structure/ existing condition prior to the commencement of works.
4. Obtain the original design of the approved structure for reference of any required reinstatement works.

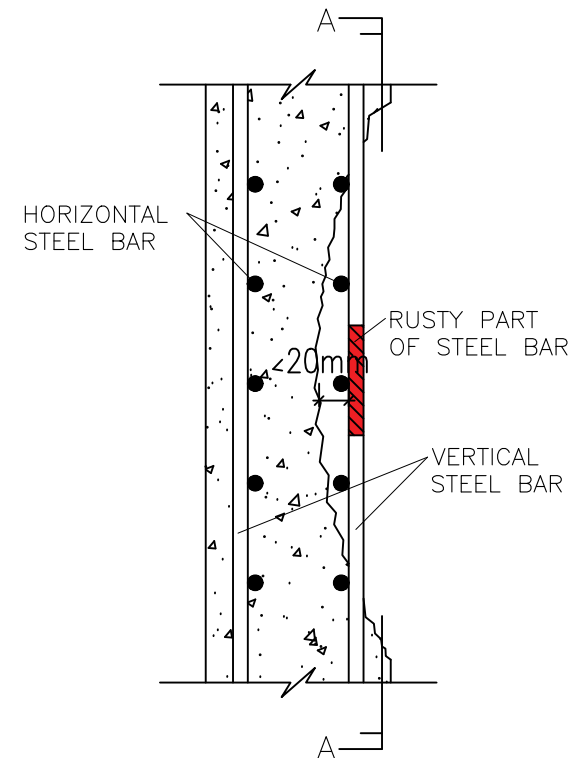


DETAIL 'A'
(FOR BLOCK WALL)

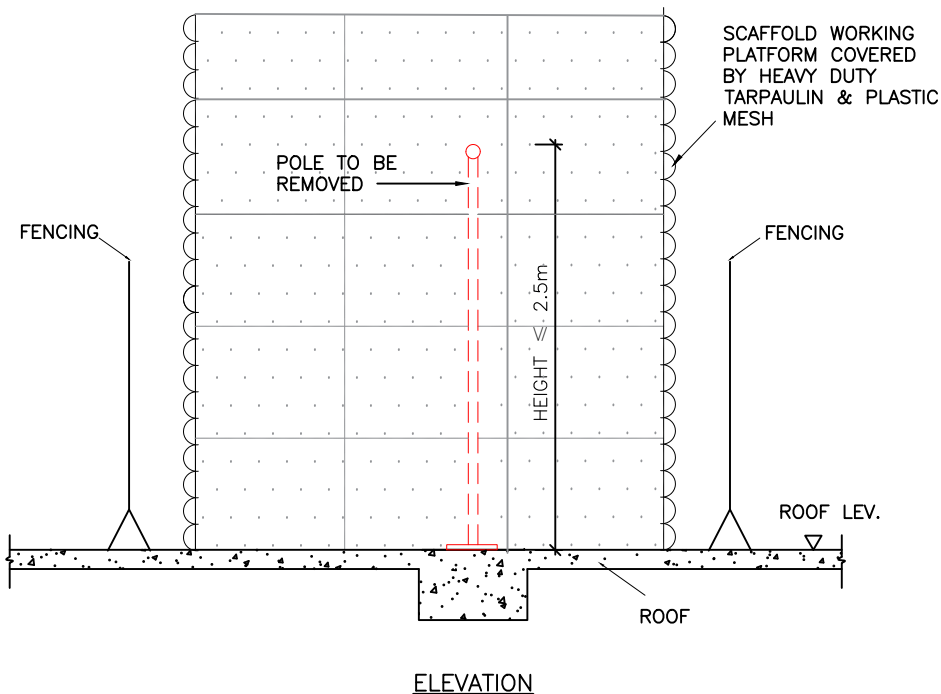


REPLACEMENT OF DETERIORATED REBAR AT R.C. WALL

SECTION A - A



DETAIL 'A' -
REPAIRING OF R.C.
WALL



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. Inform utilities company or sector as necessary.

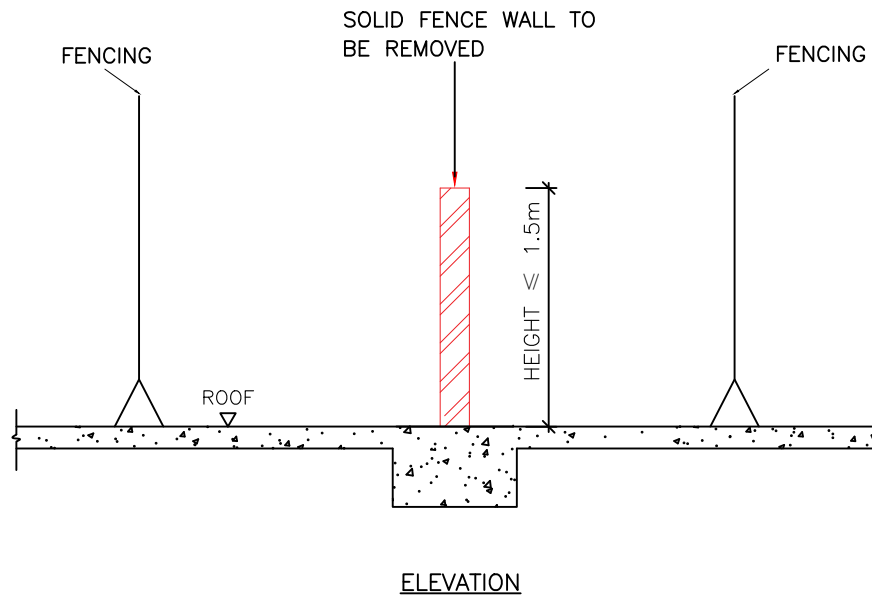
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the pole by wire & winch to existing structures to prevent the pole collapse suddenly.
3. Remove all features attached to the pole.
4. Cut the pole (if necessary, cut into small piece from top to bottom) and lower down to the roof slowly for construction waste disposal.
5. The removed pole and debris should not be accumulated on the roof and should be disposed as construction waste immediately.
6. Proper disposal shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
7. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes the DEW item 19



GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. No accumulation of demolished parts should be stored on roof.
3. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the wall by wire & winch to existing structures to prevent the wall collapse suddenly.
3. Remove all features attached to the wall.
4. Remove the wall (if necessary, cut into small piece from top to bottom and bay by bay). The contractor may refer to Figure 4.6 from Code of Practice for Demolition Works as appropriate.
5. The removed wall and debris should not be accumulated on the roof and should be disposed as construction waste immediately.
6. Proper disposal shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
7. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes the DEW item 20

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.

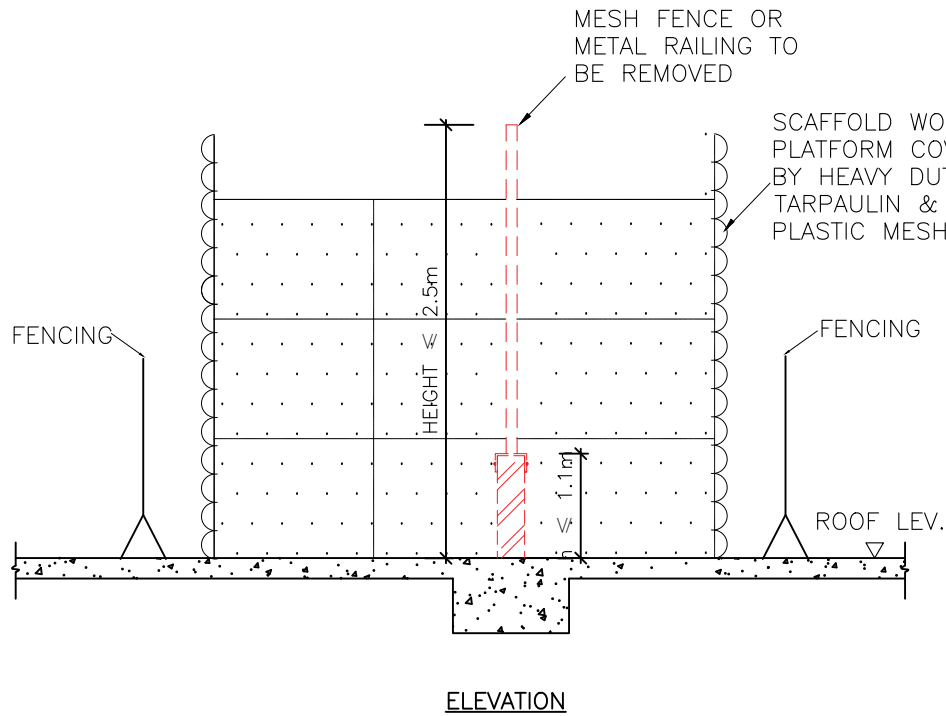
SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
3. No accumulation of demolished parts should be stored on roof.
4. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the mesh fence/metal railing by wire & winch to the existing structures to prevent the metal fence/metal railing collapse suddenly.
3. Remove all loose features attached to the mesh fence or metal railing.
4. Cut the mesh fence/metal railing (if necessary, cut into small piece from top to bottom and removed in bay by bay) and lower down to the roof slowly for construction waste disposal.
5. Remove the wall if any from top to bottom.
6. The removed mesh fence/metal railing should not be accumulated on the roof and be disposed as construction waste immediately.
7. Proper disposal shall be at prescribed facilities as provided in waste disposal (charges for disposal of construction waste) regulation.
8. Make good and reinstate the affected areas (including water proofing layer) of the roof of the building.
9. Dismantle the bamboo scaffold and clean the site.

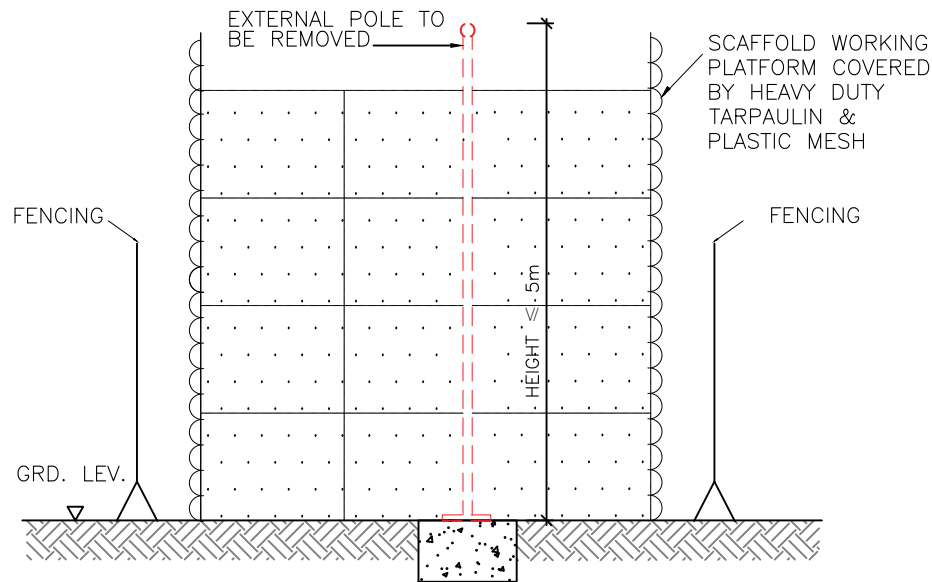
REMARK : This case excludes the DEW item 18



MINOR WORKS ITEM 3.65

DRAWING TITLE :

REMOVAL OF ANY MESH FENCE OR METAL RAILING, WITH OR WITHOUT A SOLID FENCE WALL AS ITS LOWER PART, ON THE ROOF OF A BUILDING



ELEVATION

GENERAL NOTES :

1. The works carried out shall comply with the Buildings Ordinance and the provisions of other enactment. (Reference can be made to the examples listed in Sections 3 and 10 of the Guidelines.)

PREPARATION WORKS :

1. Carry out condition survey of the parent structure/existing condition prior to the commencement of works.
2. Obtain the original design of the approved structure for reference of any required reinstatement works.
3. Inform utilities company or sector as necessary.

SAFETY AND PRECAUTIONARY MEASURES :

1. Fence-off the working area from the public. Diversion arrangement shall be taken if necessary.
2. Bamboo scaffolds details shall refer to the following figures as shown on drawing no. GN-1.
 - Figure 4 Working platform on a double-row bamboo scaffold
3. Reference shall be made to Code of Practice for Demolition of Building 2004.

WORKING PROCEDURES :

1. Disconnect all services in vicinity that may be affected by the works.
2. Secure the pole by wire & winch to existing structures to prevent the pole collapse suddenly.
3. Remove all features attached to the pole.
4. Cut the pole (if necessary, cut into small piece from top to bottom) and lower down to the ground slowly for construction waste disposal.
5. The removed pole should be disposed as construction waste immediately.
6. Proper disposal shall be at designated disposal facilities provided in Waste Disposal (Charges for Disposal of Construction Waste) Regulation.
7. Make good and reinstate the affected areas.
8. Dismantle the bamboo scaffold and clean the site.

REMARK : This case excludes the DEW item 17

Appendix X

Window or Window Wall acting as a Protective Barrier

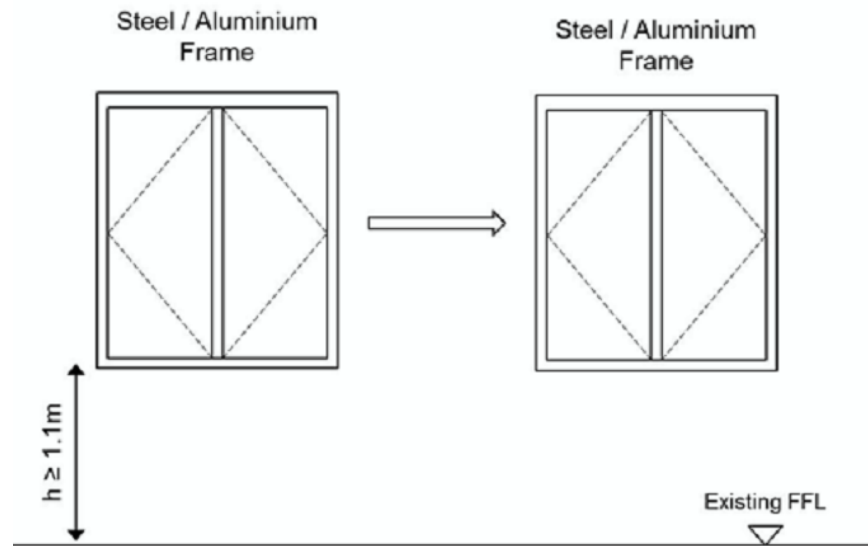
General notes for aluminum windows (For all cases):

1. All fixing lugs shall be of stainless steel or hot dip galvanized steel having a minimum material thickness of 1.5mm and be placed at 300mm centre maximum.
2. All structural members of a window section shall have a minimum aluminum thickness of 2 mm and the depth of the mullion section shall not be less than 38 mm.
3. 4-bar hinges shall be manufactured from stainless steel with adjustable friction shoe, and all stainless steel bars of the hinge shall have a minimum thickness of 2.5 mm.
4. Stainless steel rivets/screws shall be used for the fixing of hinges.
5. At least 3 Nos. of 4.8 mm diameter stainless steel rivets or 5 mm diameter stainless steel screws shall be used to fix each bottom and top bars of the hinge to the window frame and the openable sash.
6. Due consideration and measures should be taken to prevent contact between dissimilar metals.
7. A secure mechanical fixing, for example by inserting a stainless steel or hot dip galvanized steel plate or bar/angle of not less than 3 mm thick inside the section to provide sufficient threads for the screw(s) shall be adopted. As an alternative, the window sections for fixing the hinge may be thickened locally to not less than 5 mm.
8. The length of the 4-bar hinge should be at least 60% of the width of the side hung casement window.

General notes for the enhancement works (For Cases B and C):

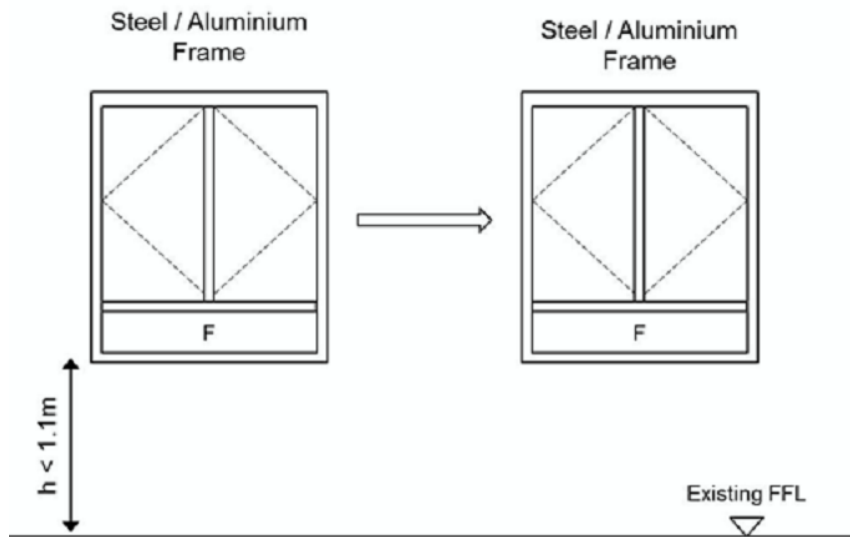
1. The distance between the highest point of the window or window wall and the ground is not more than 100 m;
2. Wall opening should not be altered.
3. For transom section B or section C in enhancement works type C(I) and mullion details in enhancement works type C(II), a galvanized steel flat plate of appropriate size to be fixed inside the transom located at 1100 mm from finished floor level or mullion by round head screws at spacing 300mm centre to centre, and extent to full length of opening width or height with both ends of flat plate rigidly fixed in place to main frame of window. Structural steel plates to be grade S275 to BS EN 10029 and shall be hot-dip galvanized to BS EN ISO1461. The steel plate should be isolated by bitumen paint from the aluminium sections. (Record photos showing the embedded galvanized steel flat plate should be submitted together with Form MW04.)
4. Fixed glass panel to be safety tempered glass or laminated glass in accordance with PNAP APP-110.

Case A: $h \geq 1.1\text{m}$



- Construction, alteration or repair of the window main frame in accordance with item 2.8 and its entire requirement.

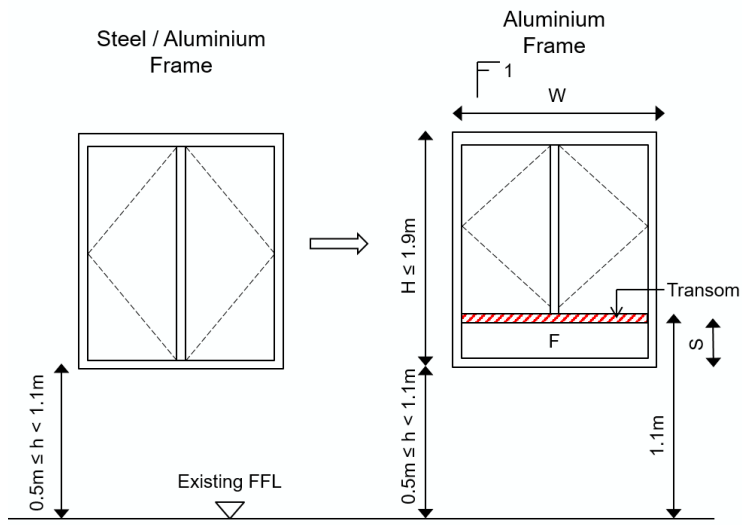
Case B: $h \leq 1.1\text{m}$



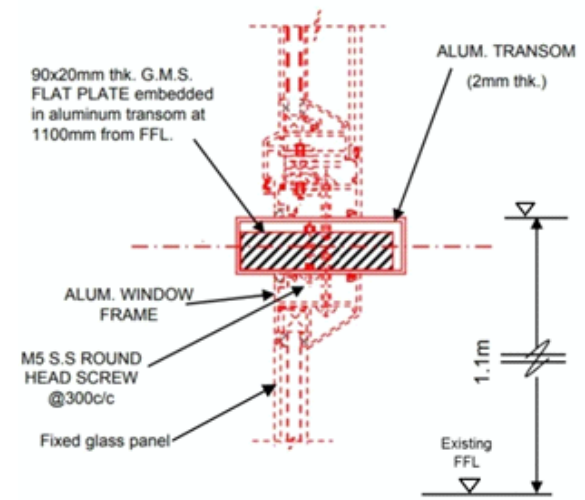
F - Fixed glass

- MW items 2.5 and 2.8 for replacement of the window main frame according to original design

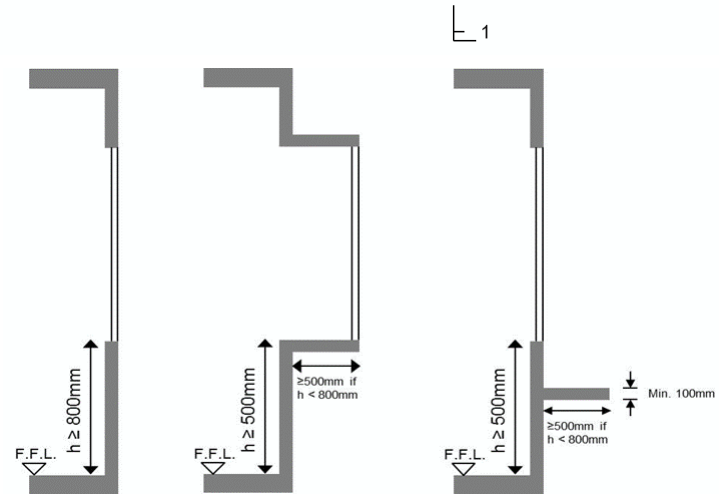
Case C : Enhancement Works type **C(I) (Reinforcement of transom)** for window or window wall of staircase (include landing) and premises for domestic Use.



- MW item 2.8 for replacement of the window main frame and enhancement works Type C(I)



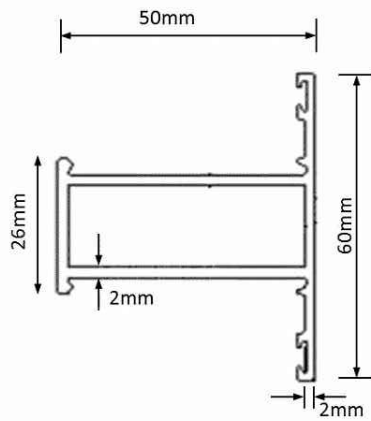
Design and installation of window that can comply with FS Code 2011 subsection C11.1 regarding protection against external spread of fire.



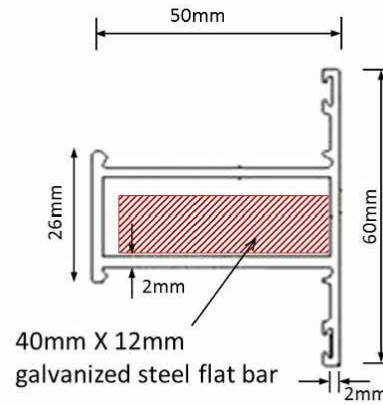
h = height from the lowest point of window to the finishes level of the adjoining floor
 W = Width of window opening; H = Height of window opening S= Span of fixed glass

Section 1-1

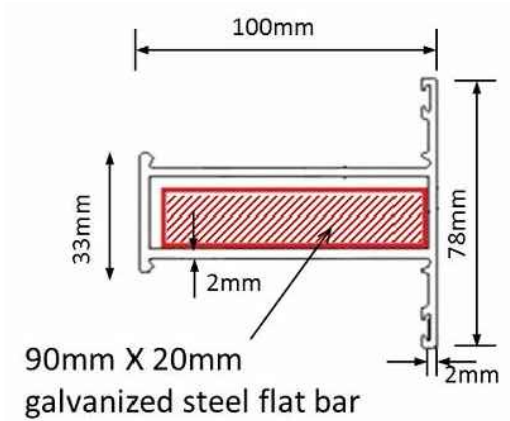
Remark: If h < 800 mm, the window should be a bay window with projection ≥ 500 mm or there is a 100 mm min. thick concrete projection ≥ 500 mm from the external wall below the window shown above. Otherwise enhancement works cannot be applied and MW item 1.6 will be involved.



TRANSOM SECTION A



TRANSOM SECTION B



TRANSOM SECTION C

Remark: The dimensions shown in the details are minimum value.

Size of transom for enhancement works type C(I) with various width of window :

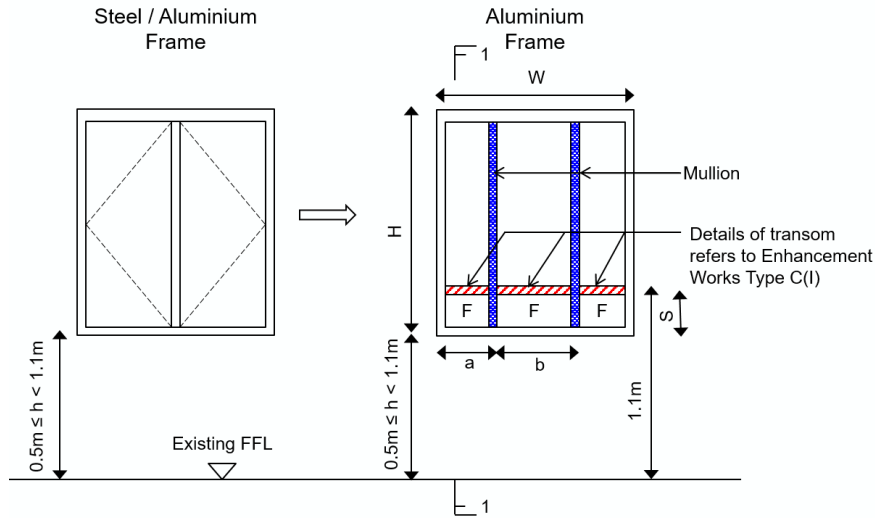
W \ h	500 - 1100mm ³
≤700 mm	26 x 50 x 2 mm thick aluminum extrusion (Transom Section A)
≤1200 mm	40 x 12 mm thick galvanized steel flat bar embedded in 26 x 50 x 2 mm thick aluminum extrusion (Transom Section B)
≤2500 mm	90 x 20 mm thick galvanized steel flat bar embedded in 78 x 100 x 2 mm thick aluminum extrusion (Transom Section C)

Size and types of fixed glass with various span (S) of fixed glass :

Max.span	Type of glass
≤300 mm	6 mm tempered glass OR 4mm+0.38mm PVB+4mm laminated glass
≤600 mm	6 mm tempered glass OR 8mm+0.38mm PVB+8mm laminated glass

³ Height between lowest frame of window or window wall and the existing finished floor level with design and installation of window comply with FS Code 2011 subsection C11.1

Case C : Enhancement works type C(II) (Reinforcement of transom and mullion) for domestic uses, stairs and landings only

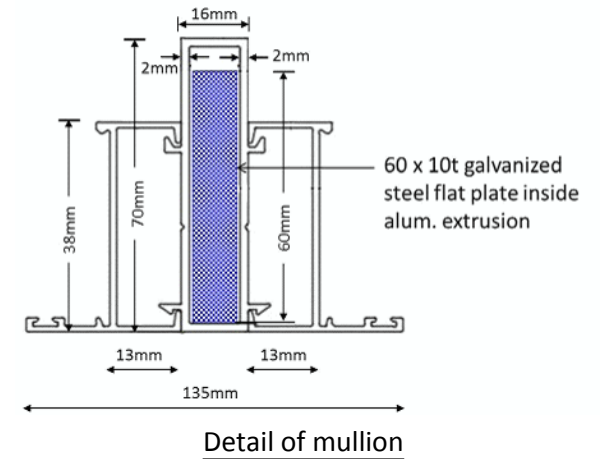


- MW item 2.8 for replacement of the window main frame and enhancement works Type C(II)

H	(a+b)/2
≤1700 mm	≤900 mm
≤1900 mm	≤700 mm
≤2100 mm	≤500 mm

(Section 1-1 refers to Sheet 3 of 5)

a = the horizontal distance between the concerned mullion and the adjacent mullion or the edge of window opening (as appropriate) on the left hand side
 b = the horizontal distance between the concerned mullion and the adjacent mullion or the edge of window opening (as appropriate) on the right hand side



Case D: Height between the lowest frame of the window or window wall and the existing finished floor level is less than 0.5 m.

- MW item 1.6 and 2.8

