Transitional Housing Projects

2024-10-04 HKIPD CPD

By Paul Chung – Astute Building Construction Company Limited

Transitional Housing Projects

Steel Structure

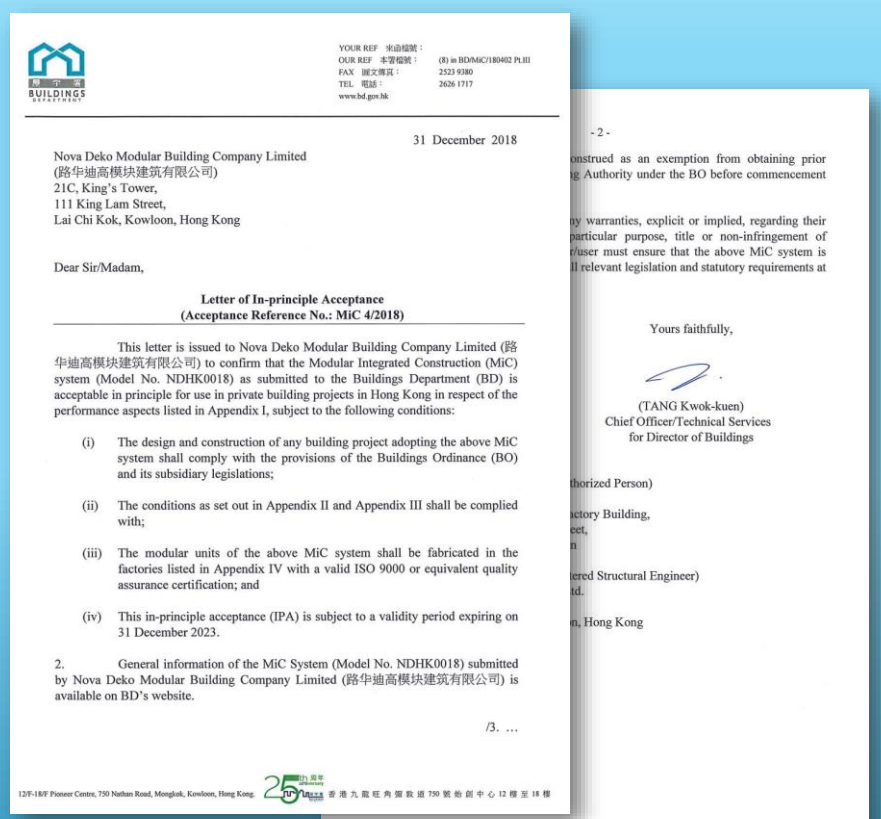
Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

In Principle Acceptance (IPA)



YOUR REF 來函檔號：
OUR REF 本署檔號： (8) in BD/MiC/180402 Pt.III
FAX 圖文傳真： 2523 9380
TEL 電話： 2626 1717
www.bd.gov.hk

31 December 2018

Nova Deko Modular Building Company Limited
(路华迪高模块建筑有限公司)
21C, King's Tower,
111 King Lam Street,
Lai Chi Kok, Kowloon, Hong Kong

Dear Sir/Madam,

Letter of In-principle Acceptance
(Acceptance Reference No.: MiC 4/2018)

This letter is issued to Nova Deko Modular Building Company Limited (路华迪高模块建筑有限公司) to confirm that the Modular Integrated Construction (MiC) system (Model No. NDHK0018) as submitted to the Buildings Department (BD) is acceptable in principle for use in private building projects in Hong Kong in respect of the performance aspects listed in Appendix I, subject to the following conditions:

(i) The design and construction of any building project adopting the above MiC system shall comply with the provisions of the Buildings Ordinance (BO) and its subsidiary legislations;

(ii) The conditions as set out in Appendix II and Appendix III shall be complied with;

(iii) The modular units of the above MiC system shall be fabricated in the factories listed in Appendix IV with a valid ISO 9000 or equivalent quality assurance certification; and

(iv) This in-principle acceptance (IPA) is subject to a validity period expiring on 31 December 2023.

2. General information of the MiC System (Model No. NDHK0018) submitted by Nova Deko Modular Building Company Limited (路华迪高模块建筑有限公司) is available on BD's website.

/3. ...

12/F-18/F Pioneer Centre, 750 Nathan Road, Mongkok, Kowloon, Hong Kong.

- 2 -

...onstrued as an exemption from obtaining prior
...g Authority under the BO before commencement

...ny warranties, explicit or implied, regarding their
...particular purpose, title or non-infringement of
...r/user must ensure that the above MiC system is
...ll relevant legislation and statutory requirements at

Yours faithfully,

(TANG Kwok-kuen)
Chief Officer/Technical Services
for Director of Buildings

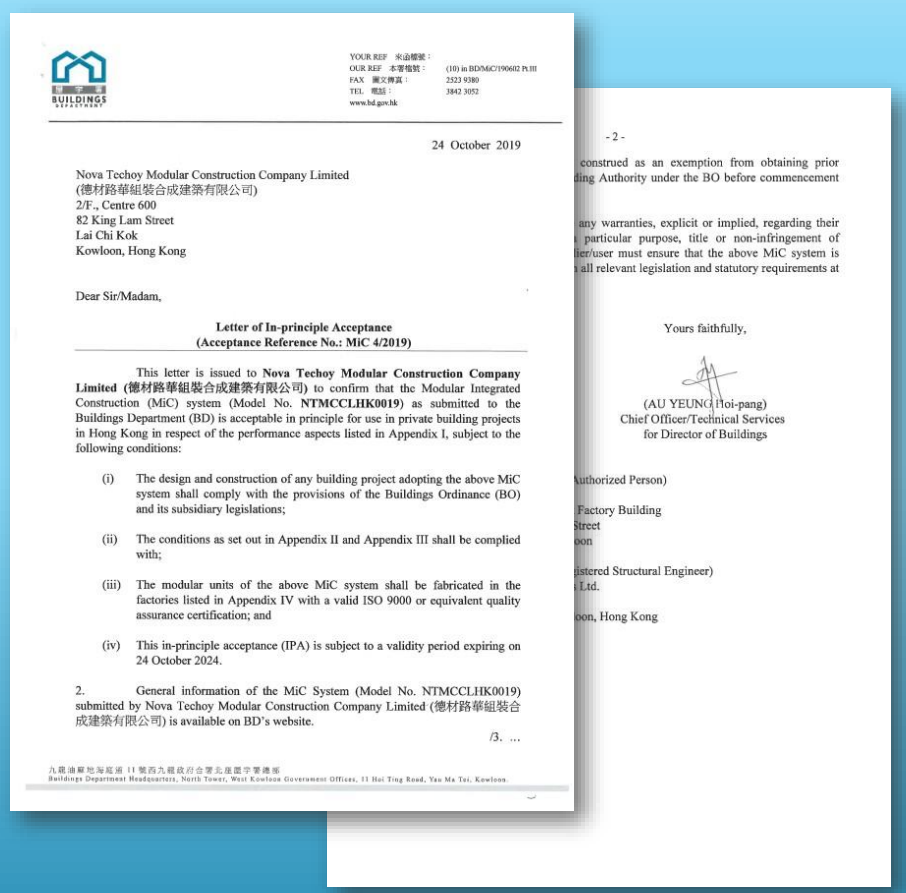
...thorized Person)

...ctory Building,
...eet,
...n

...tered Structural Engineer)
...td.

...n, Hong Kong

MiC 4/2018: Granted on 31 Dec 2018
[NAM CHEONG STREET]



YOUR REF 來函檔號：
OUR REF 本署檔號： (10) in BD/MiC/190602 Pt.III
FAX 圖文傳真： 2523 9380
TEL 電話： 3842 3052
www.bd.gov.hk

24 October 2019

Nova Techoy Modular Construction Company Limited
(德材路華組裝合成建築有限公司)
2/F., Centre 600
82 King Lam Street
Lai Chi Kok
Kowloon, Hong Kong

Dear Sir/Madam,

Letter of In-principle Acceptance
(Acceptance Reference No.: MiC 4/2019)

This letter is issued to **Nova Techoy Modular Construction Company Limited (德材路華組裝合成建築有限公司)** to confirm that the Modular Integrated Construction (MiC) system (Model No. **NTMCCLHK0019**) as submitted to the Buildings Department (BD) is acceptable in principle for use in private building projects in Hong Kong in respect of the performance aspects listed in Appendix I, subject to the following conditions:

(i) The design and construction of any building project adopting the above MiC system shall comply with the provisions of the Buildings Ordinance (BO) and its subsidiary legislations;

(ii) The conditions as set out in Appendix II and Appendix III shall be complied with;

(iii) The modular units of the above MiC system shall be fabricated in the factories listed in Appendix IV with a valid ISO 9000 or equivalent quality assurance certification; and

(iv) This in-principle acceptance (IPA) is subject to a validity period expiring on 24 October 2024.

2. General information of the MiC System (Model No. NTMCCLHK0019) submitted by Nova Techoy Modular Construction Company Limited (德材路華組裝合成建築有限公司) is available on BD's website.

/3. ...

九龍油麻地海庭道 11 號西九龍政府合署北座屋宇署總部
Buildings Department Headquarters, North Tower, West Kowloon Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon.

- 2 -

...construed as an exemption from obtaining prior
...ding Authority under the BO before commencement

...any warranties, explicit or implied, regarding their
...particular purpose, title or non-infringement of
...lier/user must ensure that the above MiC system is
...all relevant legislation and statutory requirements at

Yours faithfully,

(AU YEUNG Hoi-pang)
Chief Officer/Technical Services
for Director of Buildings

...Authorized Person)

...Factory Building
...Street
...oon

...istered Structural Engineer)
...Ltd.

...oon, Hong Kong

MiC 4/2019: Granted on 24 Oct 2019
[NAM CHEONG STREET]

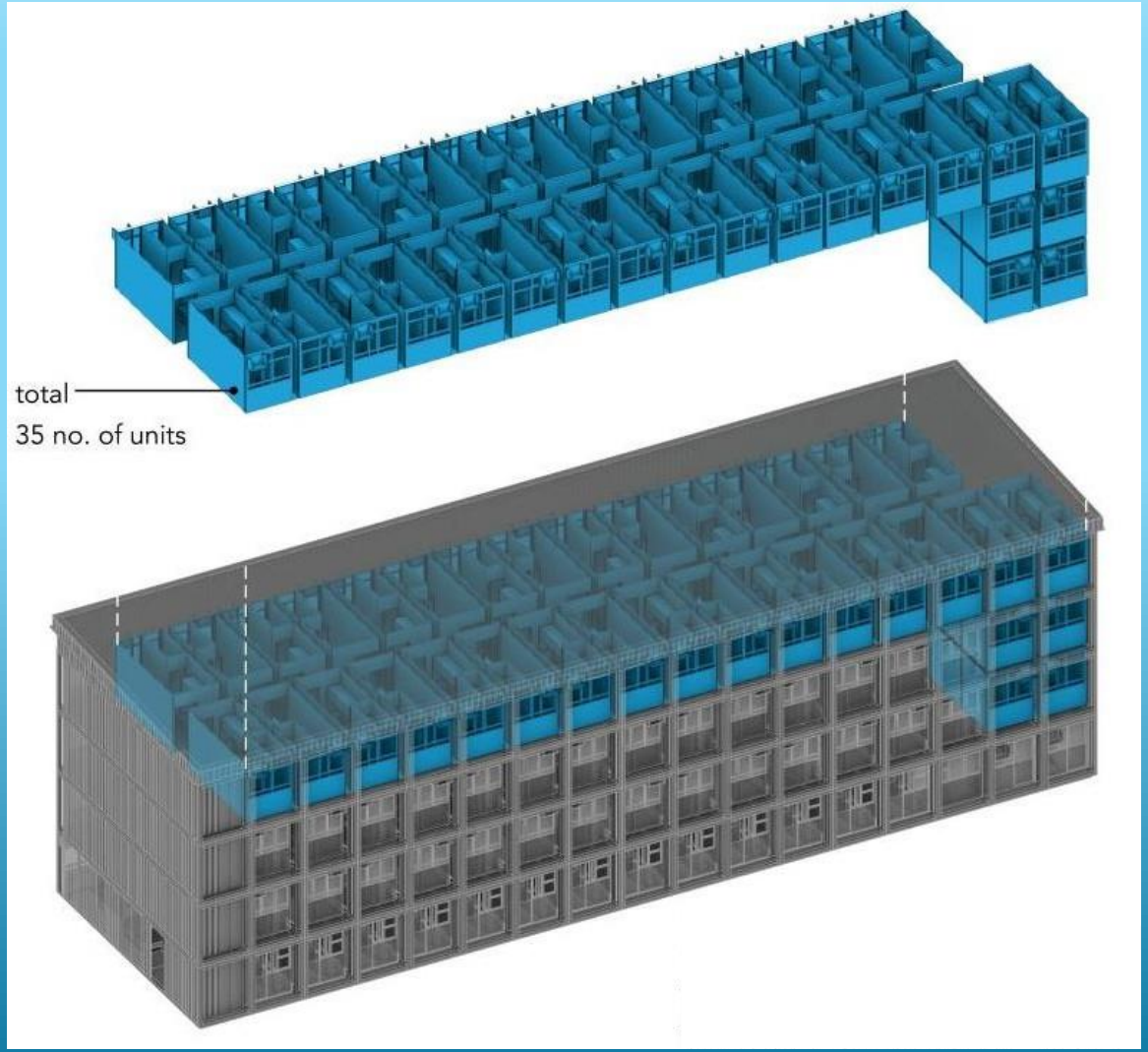
Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

1-Person Unit

「 1人 」單位約13.36平方米, 共35個, 主要位於3/F



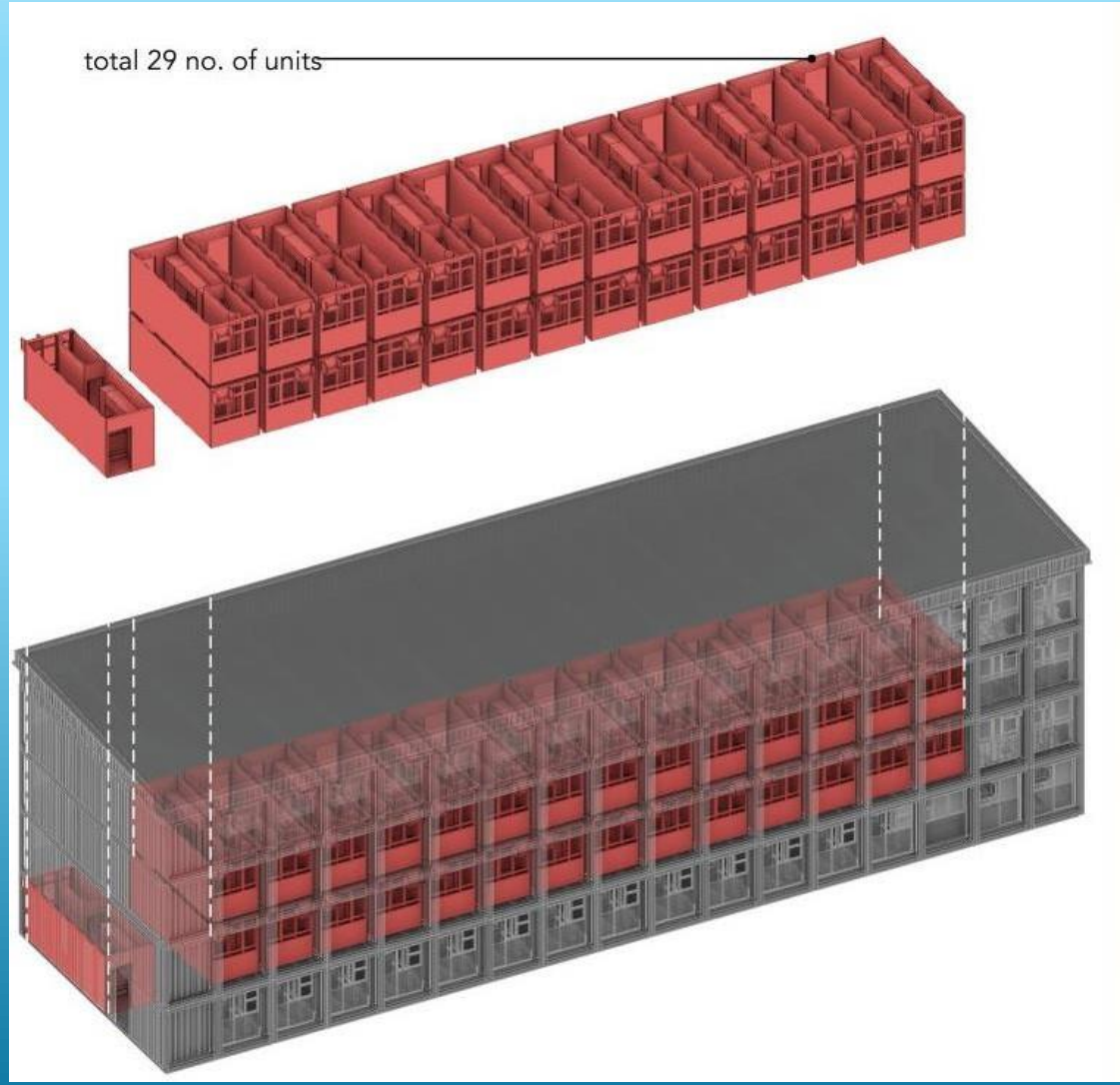
Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

2-Person Unit (Type A)

「 2人 」單位約20平方米, 共29個, 主要位於1-2/F



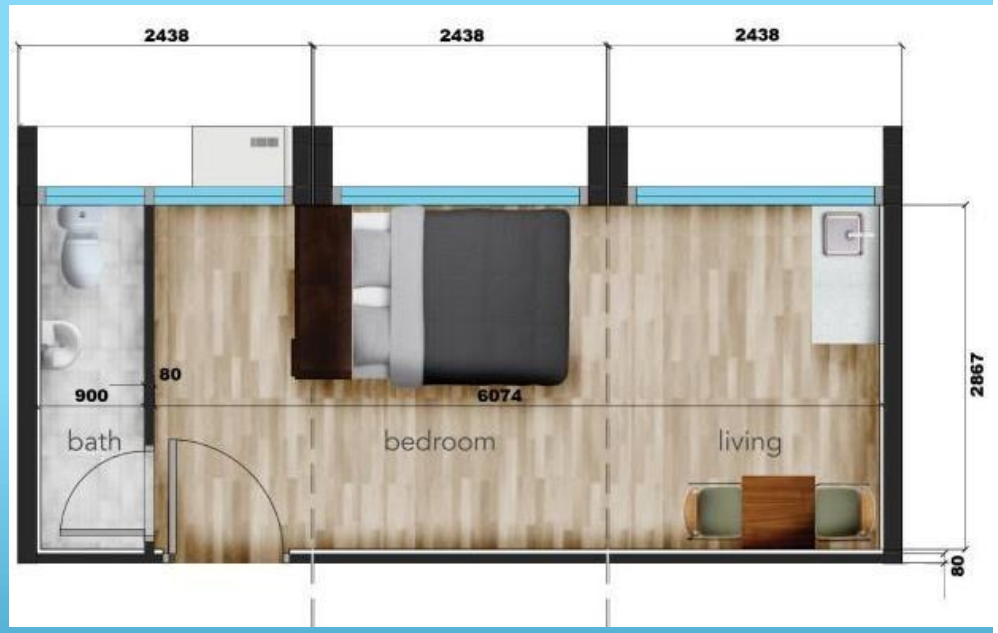
Transitional Housing Projects

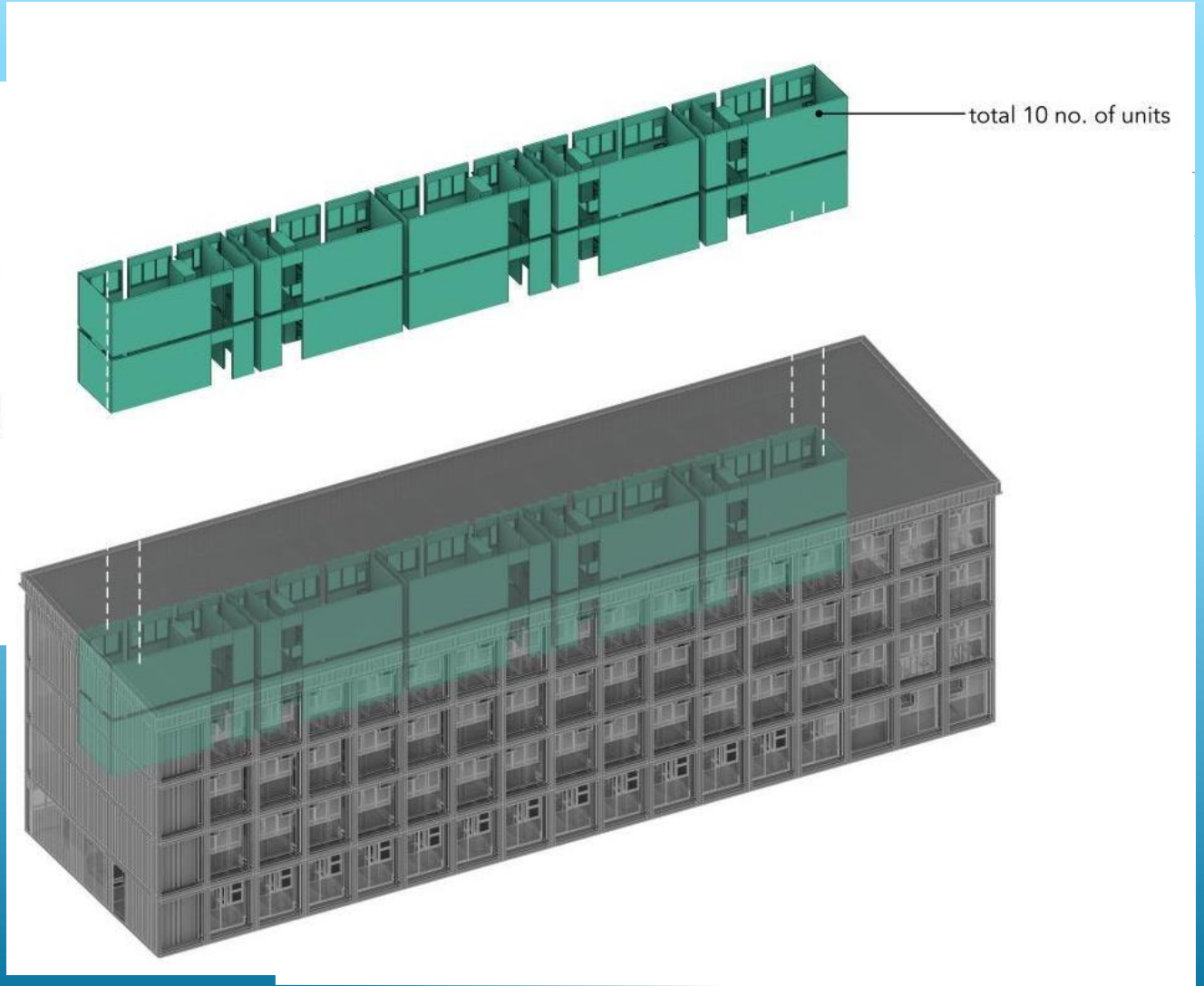
Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

2-Person Unit (Type B)

「 2人 」單位約20平方米, 共10個, 主要位於1-2/F





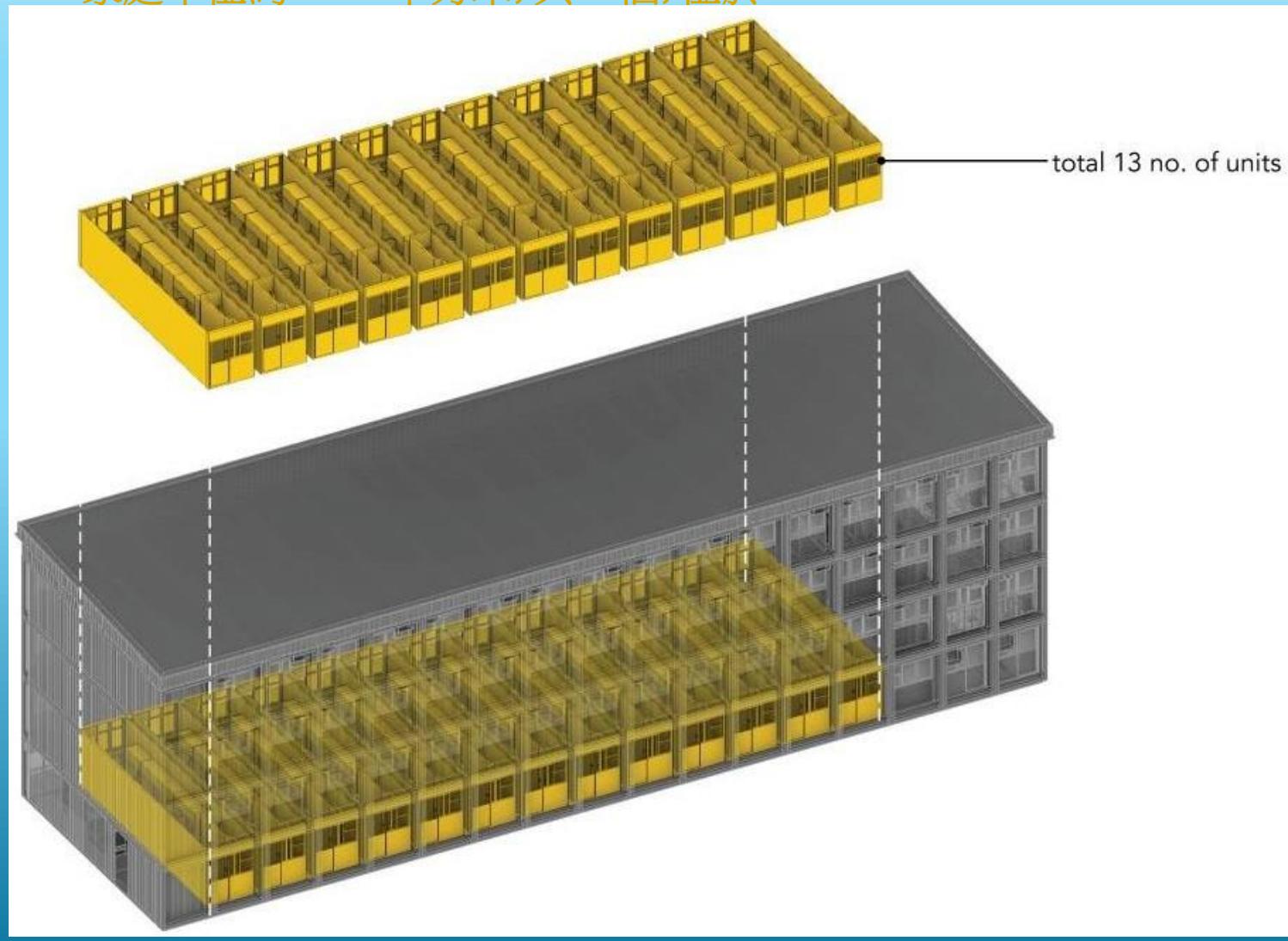
Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Family Unit

家庭單位約26.73平方米, 共13個, 位於G/F



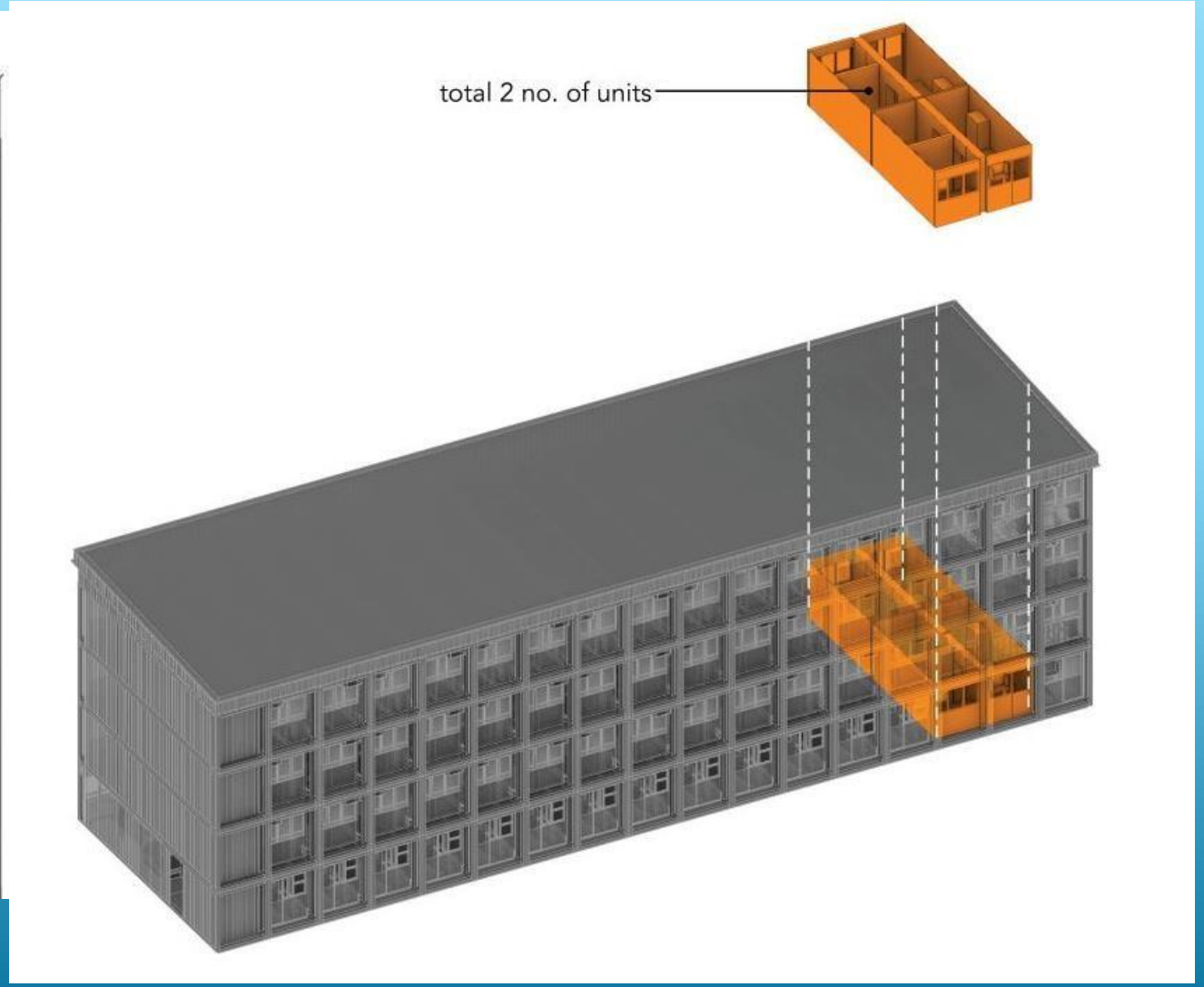
Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220"):

Accessible Unit

無障礙單位約20.07平方米, 共2個, 位於G/F



Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Structural Design (EEEEs)

WHAT IS EEEEs?

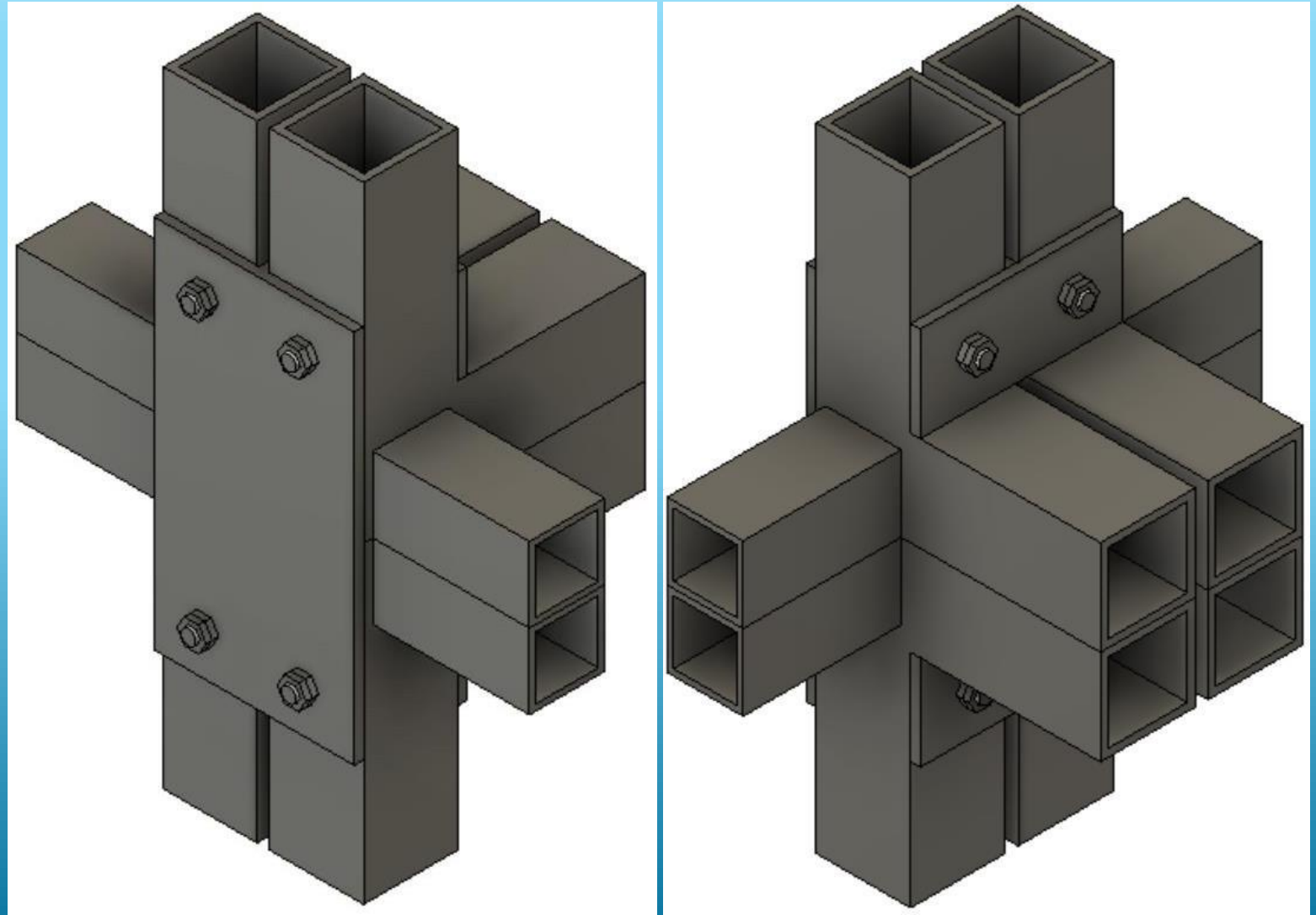
- Easy handling
- Easy assemble
- Easy disassemble
- Easy accessible
- Shallow foundation

Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Typical Steel Structural Connection



This is a tube-in-tube connection with bolts and nuts, positioned at the external of the living units.

Easy assemble!
Easy disassemble!
Easy accessible!

Transitional Housing Projects

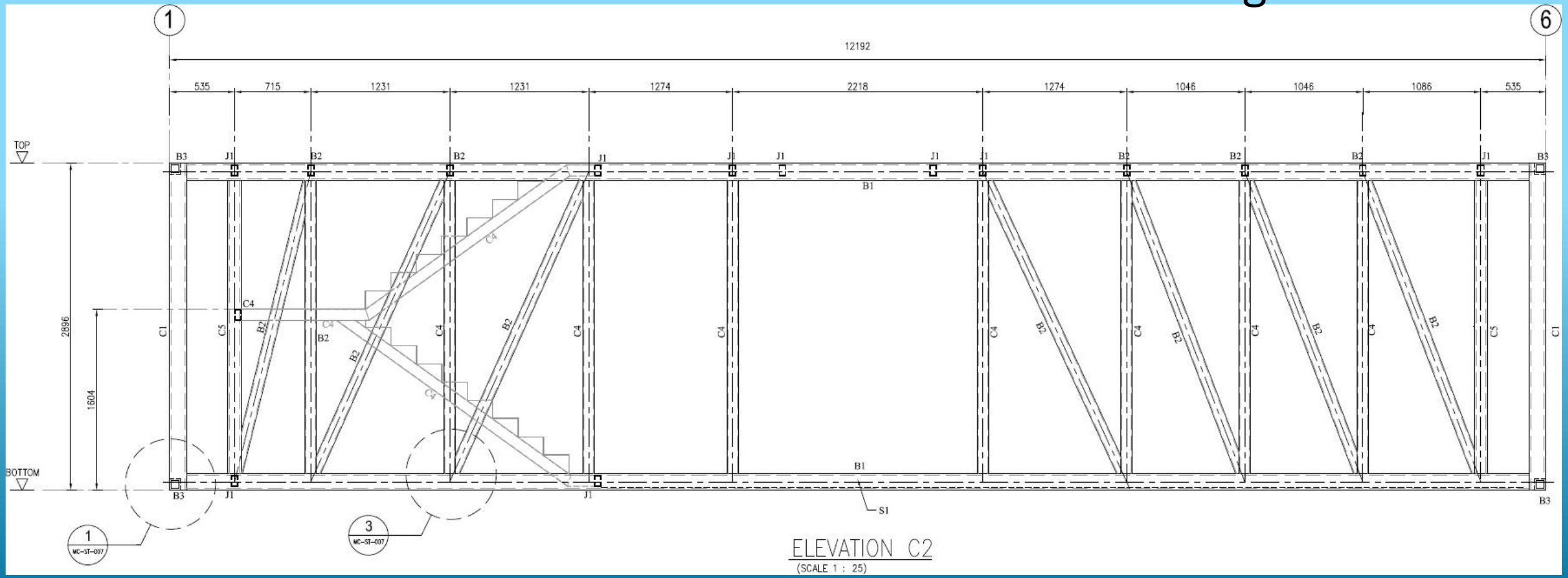
Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

G/F Structural Elevation

Easy handling!

Lifting at 4 corners.



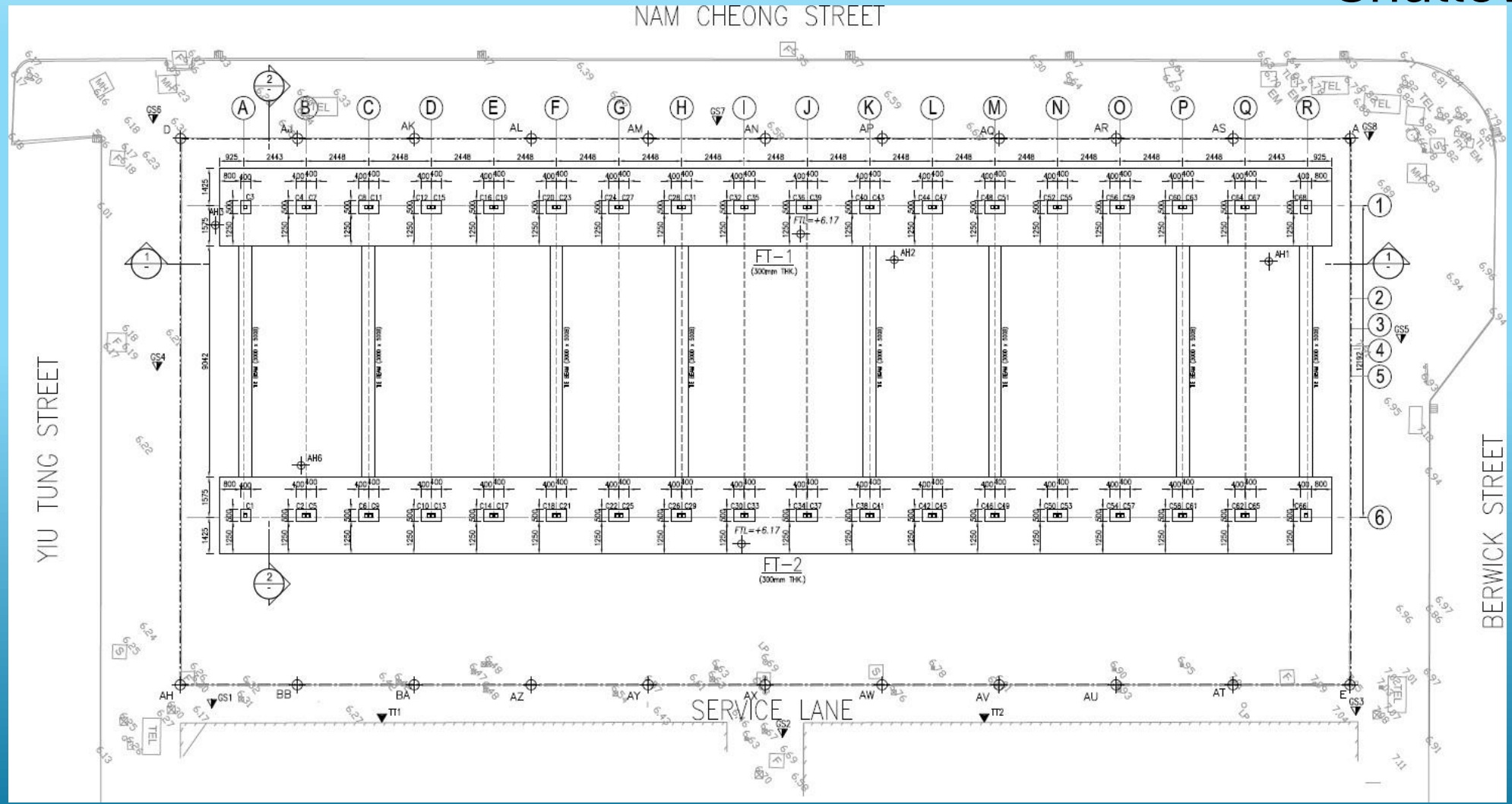
Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Footing Layout Plan

Shallow foundation!

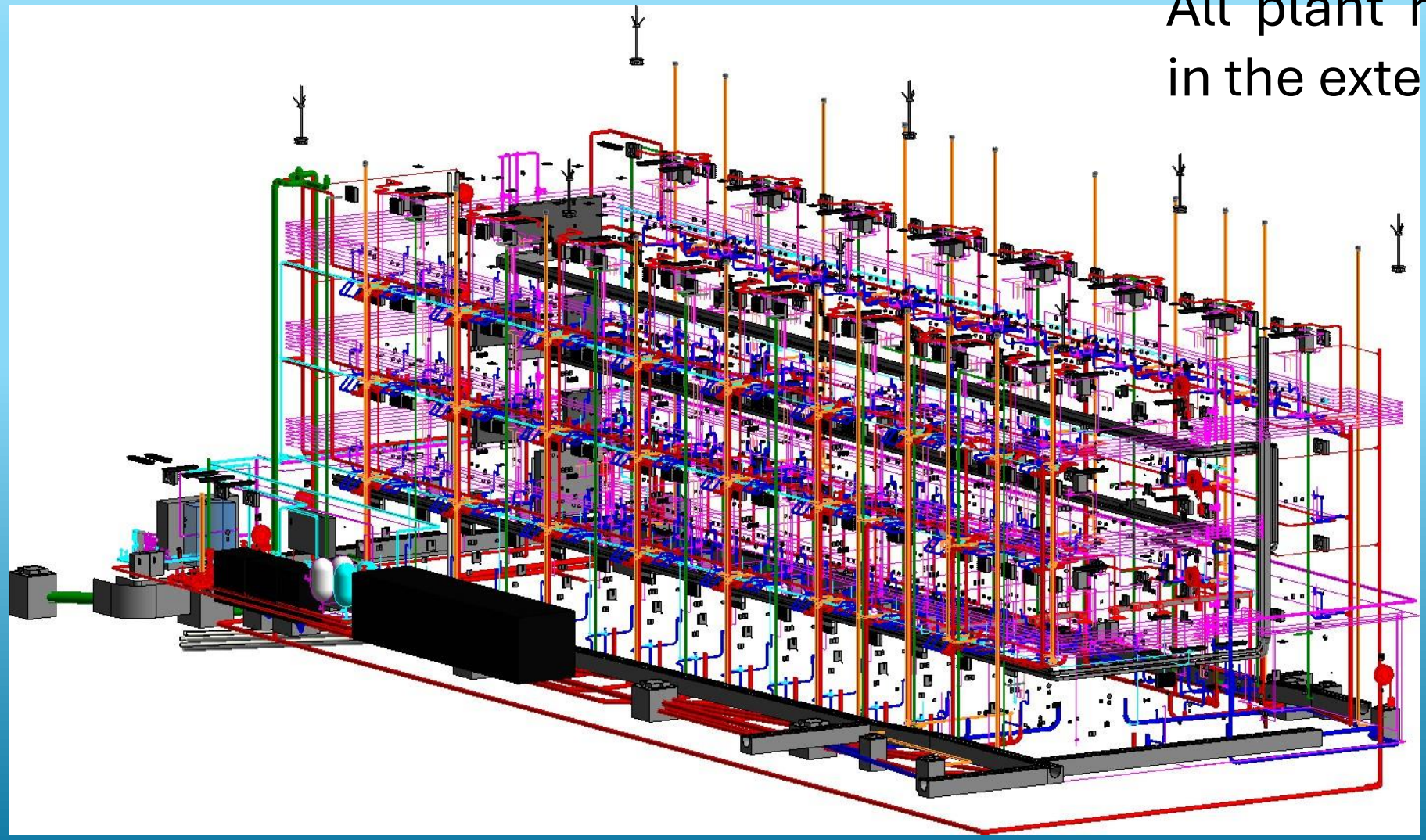


Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Building Services



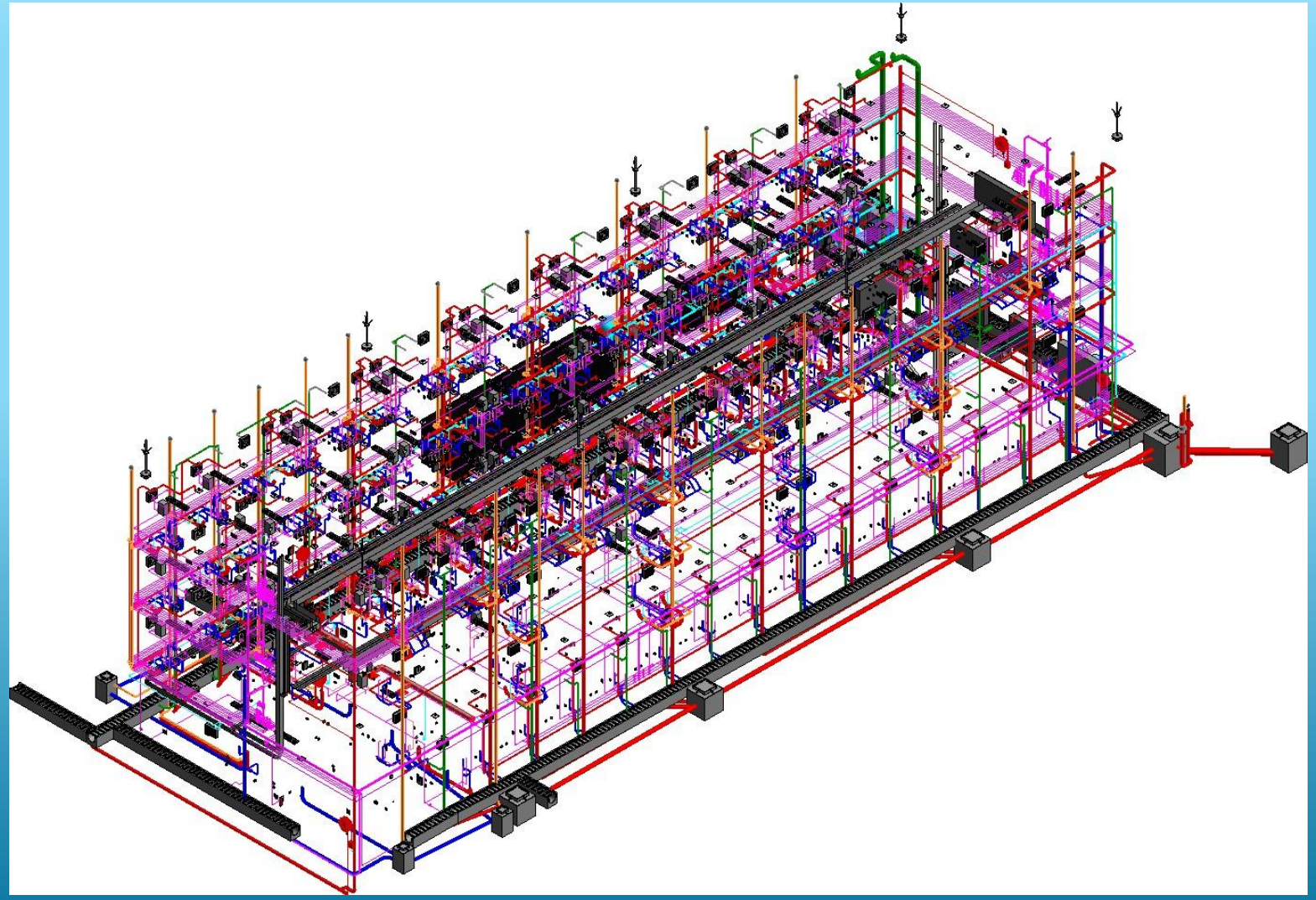
All plant rooms are positioned in the external area.

Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Building Services



Underground manhole and piping are kept to be minimum and running outside of the building footprint

Fire Service : Improvised Sprinkler system using direct town main in lieu of storage tank and booster pump system

Electricity supply : 2 nos. of 400 Ampere cut out

Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

Building Services, Actual Completion

- External mounted piping
- Anti-syphonic W trap
- Power cable in fire protected ceiling void
- No internal pipe duct
- Window type AC, indoor accessible

Transitional Housing Projects

Steel Structure

Nam Cheong Street Modular Social Housing Project ("Nam Cheong 220“):

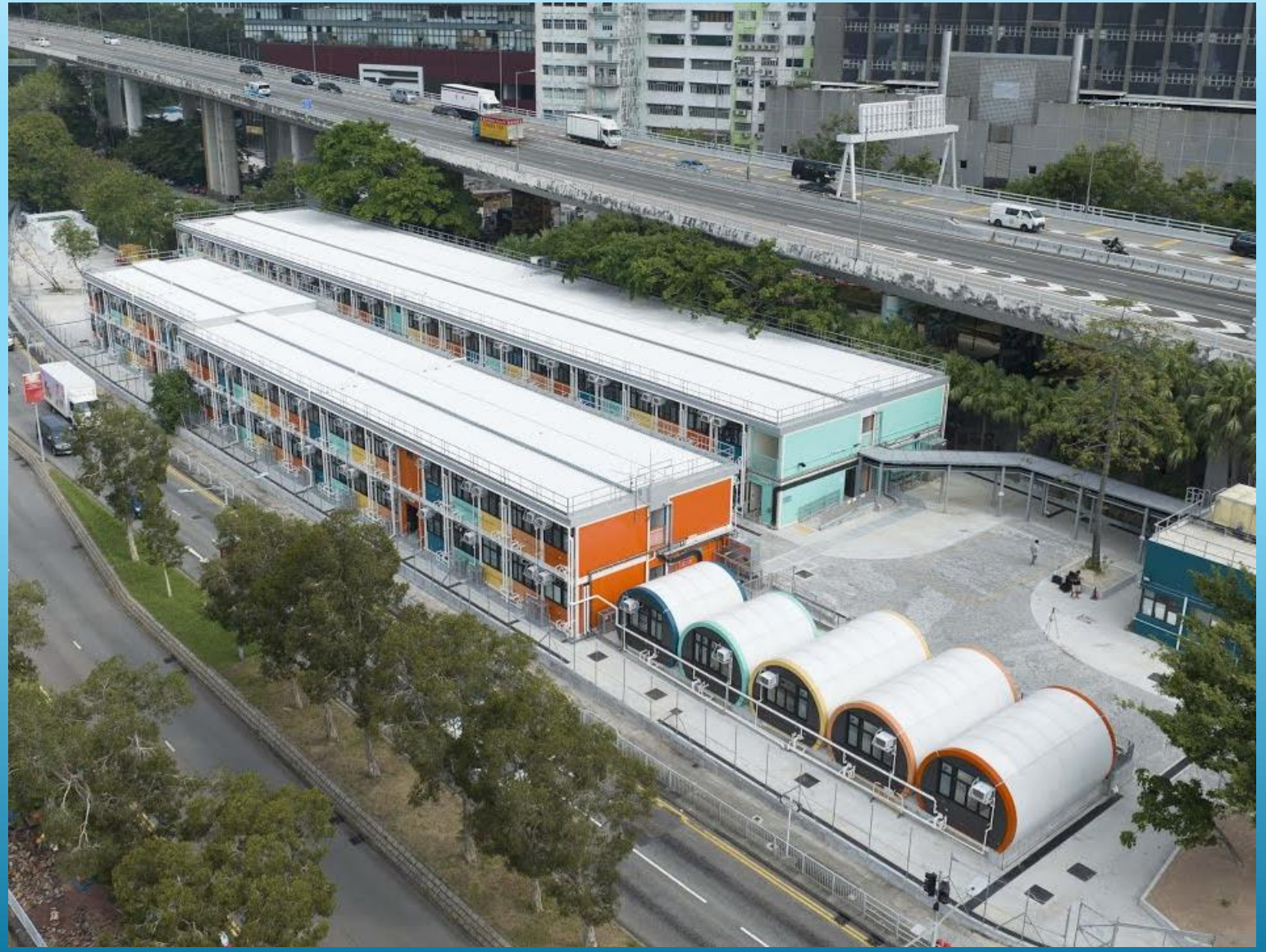
Fitting Out

- Surface mounted conduits and boxes
- Interior protective board on walls
- Wood pattern PVC floor tile
- Ceiling and dry wall are of FRR system

Transitional Housing Projects

Steel Structure

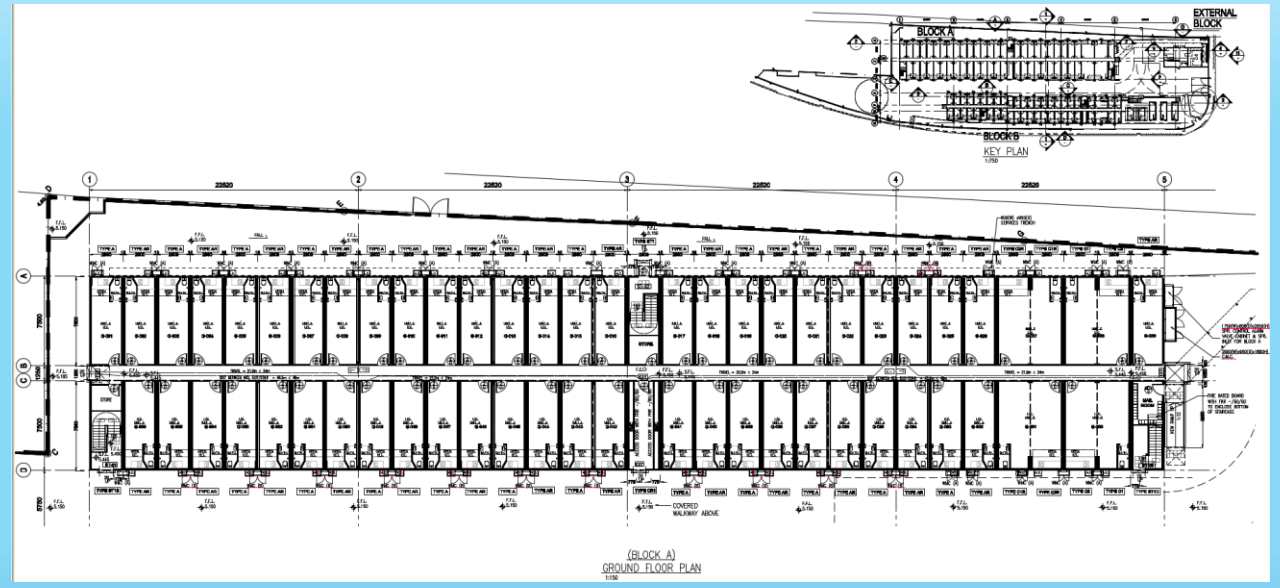
Transitional Housing at "Yan Chai Residence" at Hoi Hing Road, Tsuen Wan:

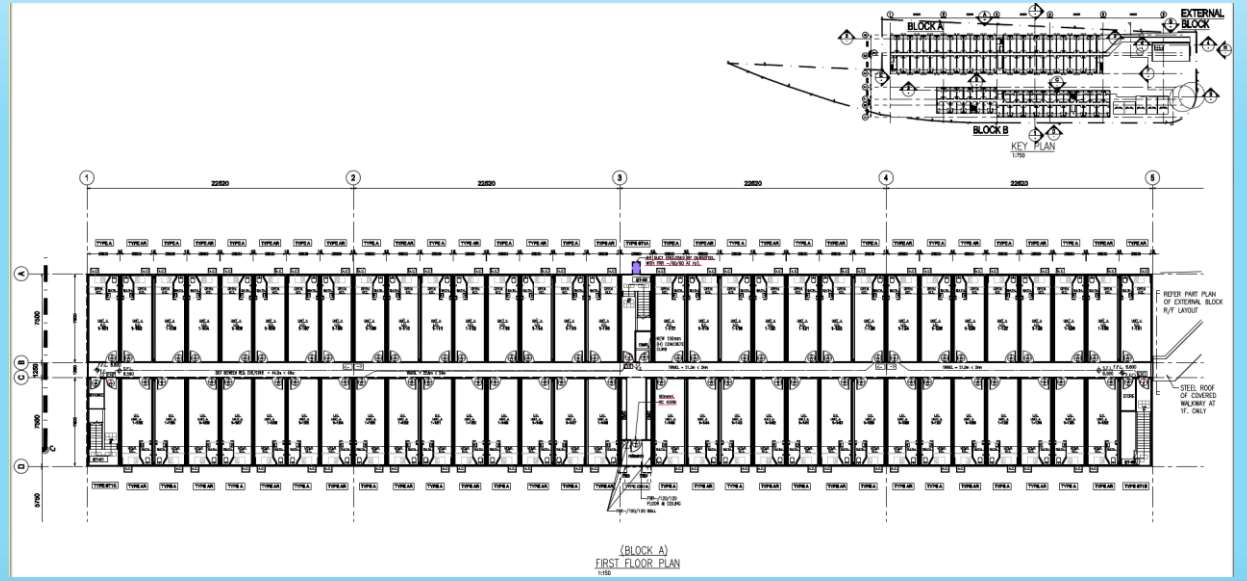


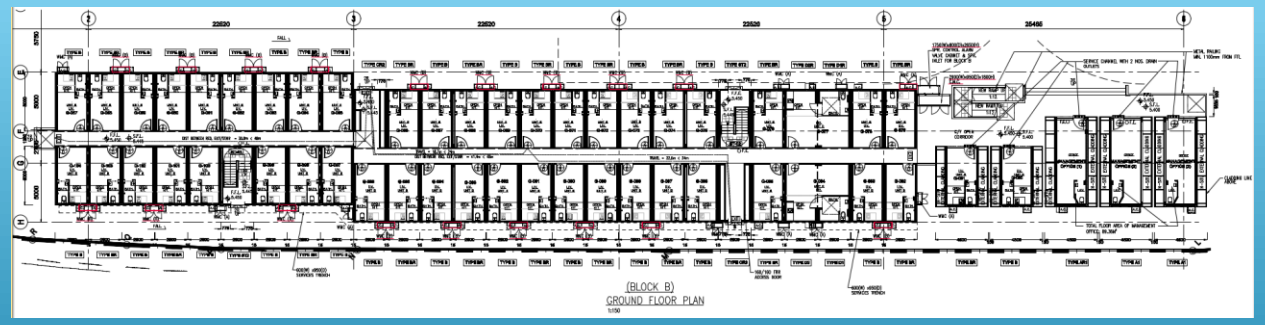
Transitional Housing Projects

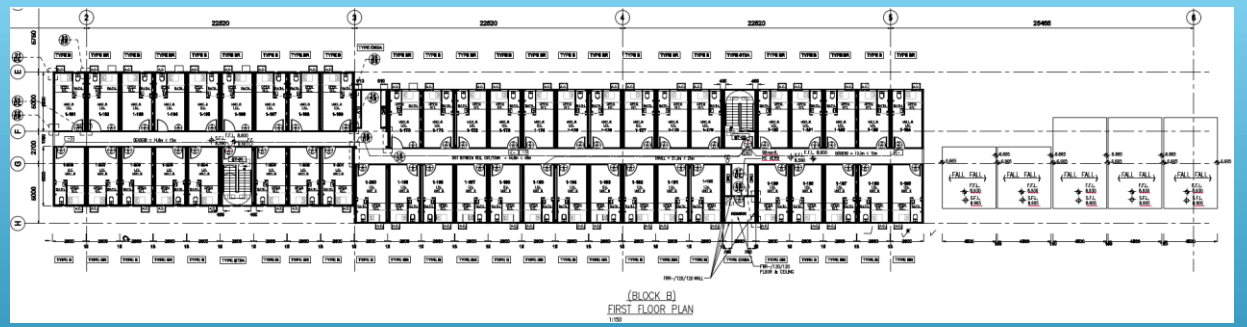
Steel Structure

Transitional Housing at "Yan Chai Residence" at Hoi Hing Road, Tsuen Wan:





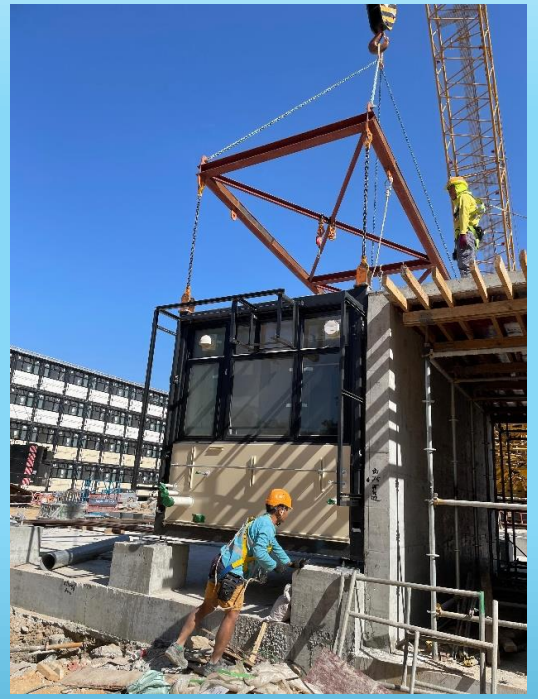




Transitional Housing Projects

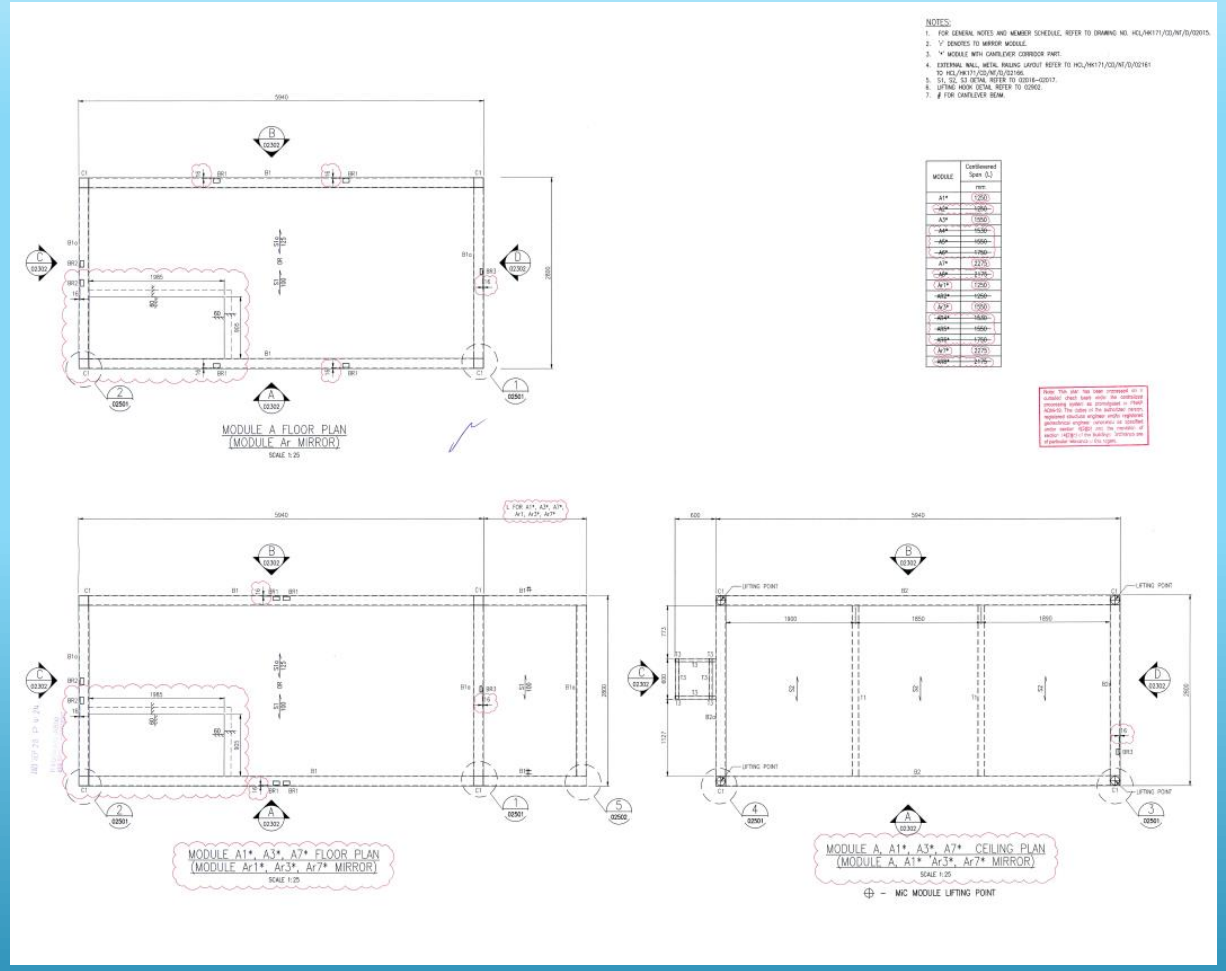
Steel Structure

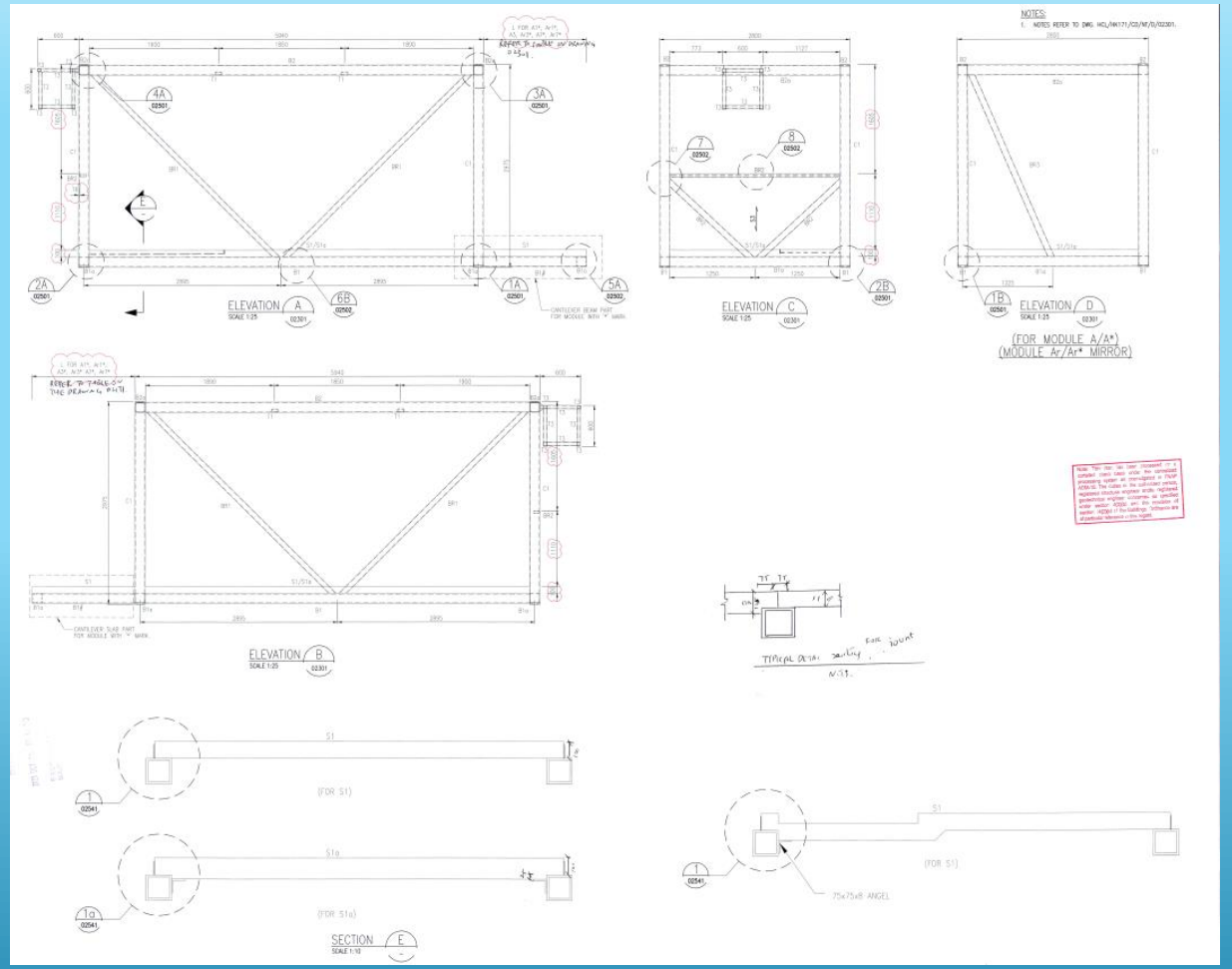
Transitional Housing Project at Ngau Tam Mei North:



Transitional Housing Projects

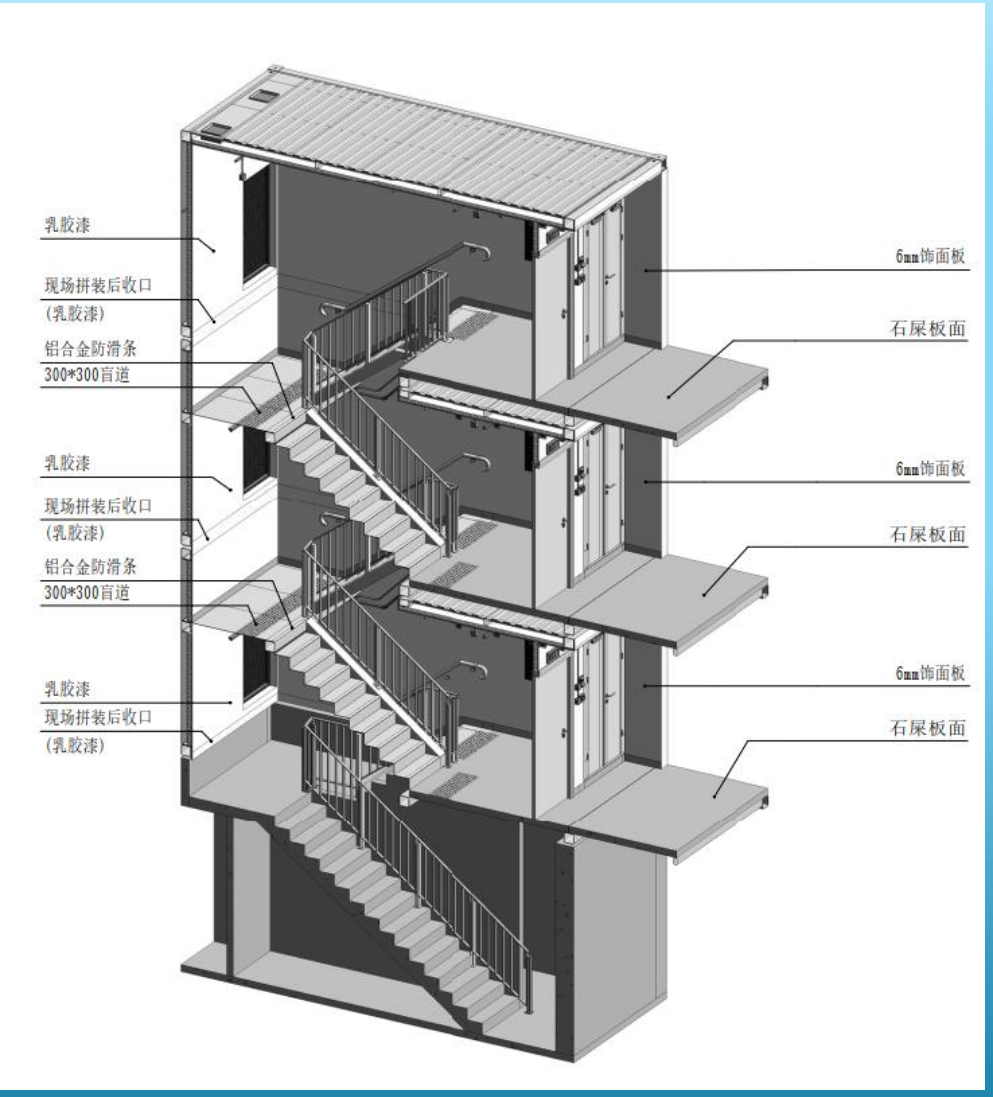
Steel Structure

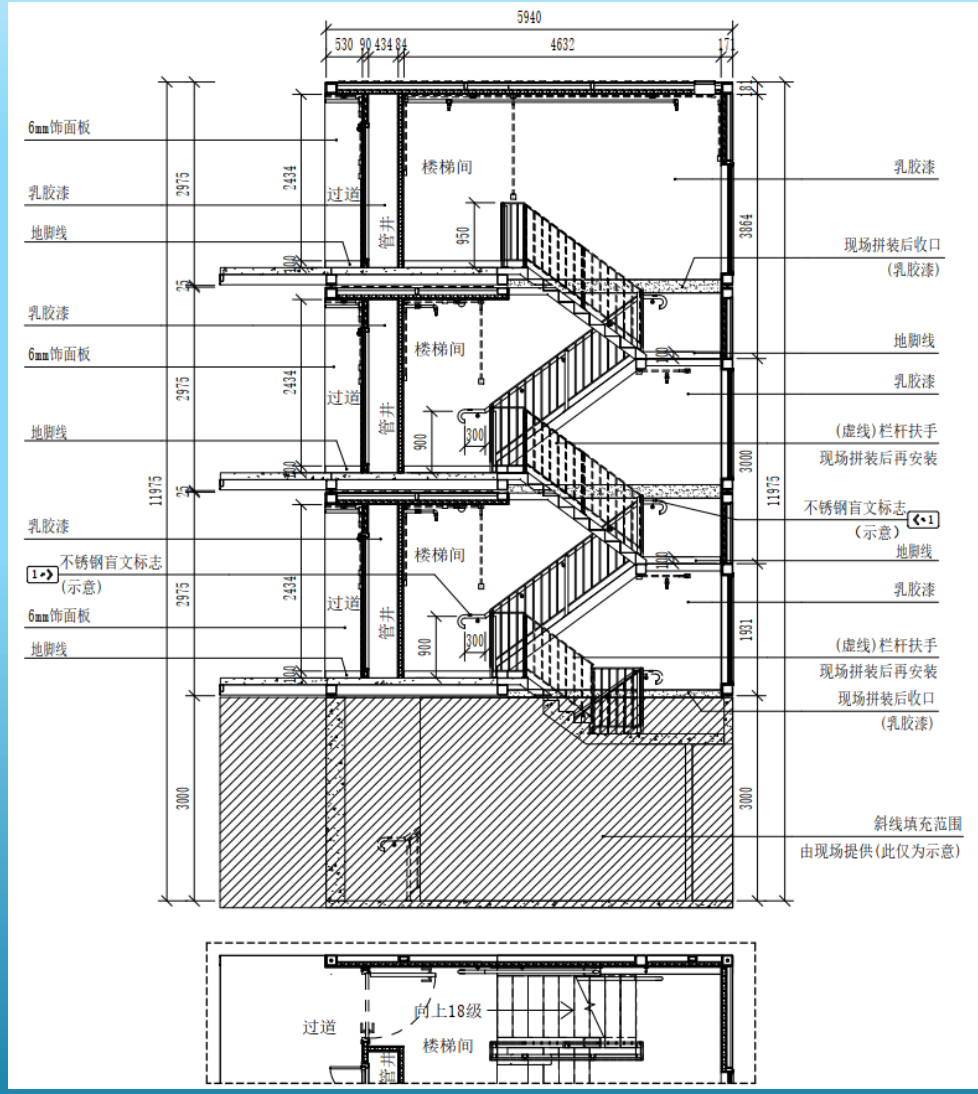


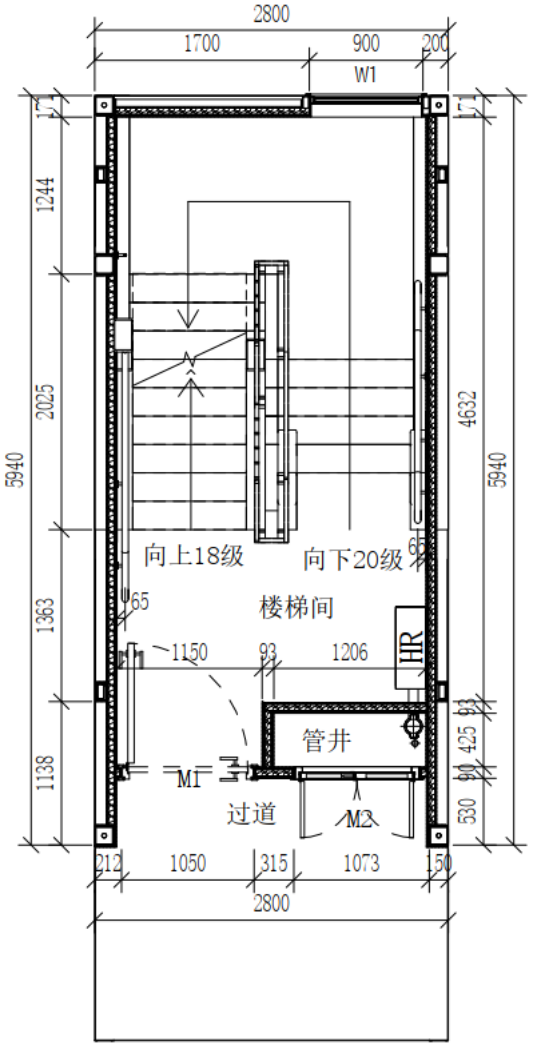


Transitional Housing Projects

Staircase Detail







Transitional Housing Projects

Staircase Detail

Transitional Housing Projects

Concrete Structure

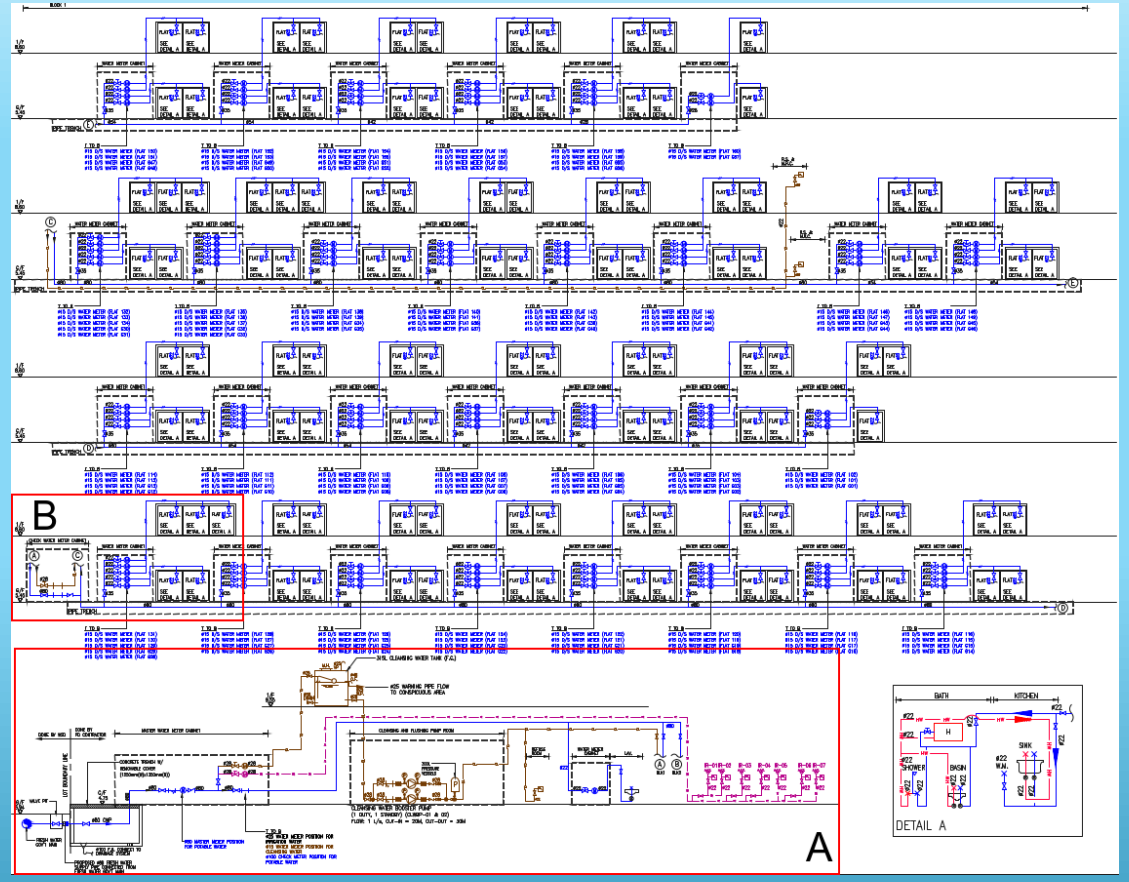
Yen Chow Street Modular Social Housing Project - James' Concourse

Water Services Provisions for Each Project

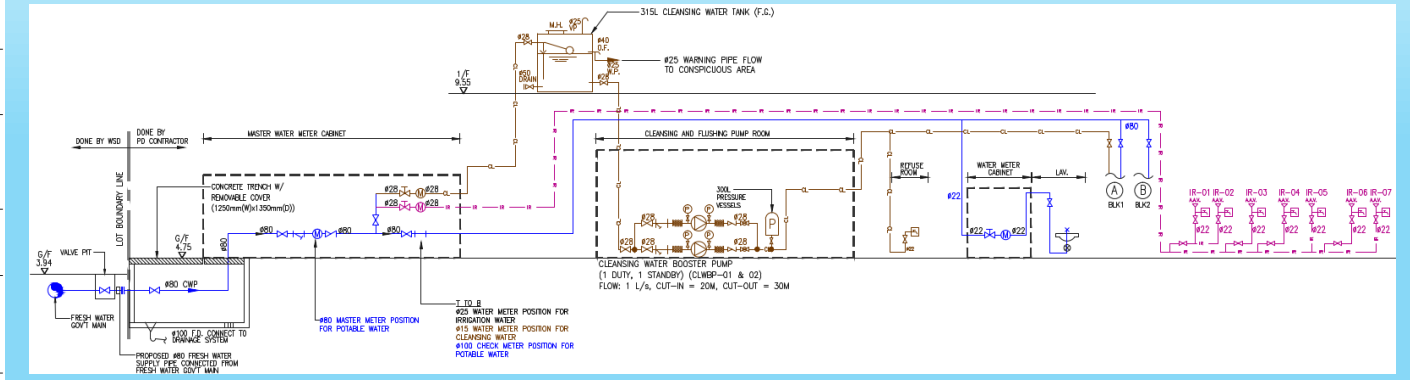
Water Services Provisions for Each Project

Potable Water

Schematic



Bold Up A:



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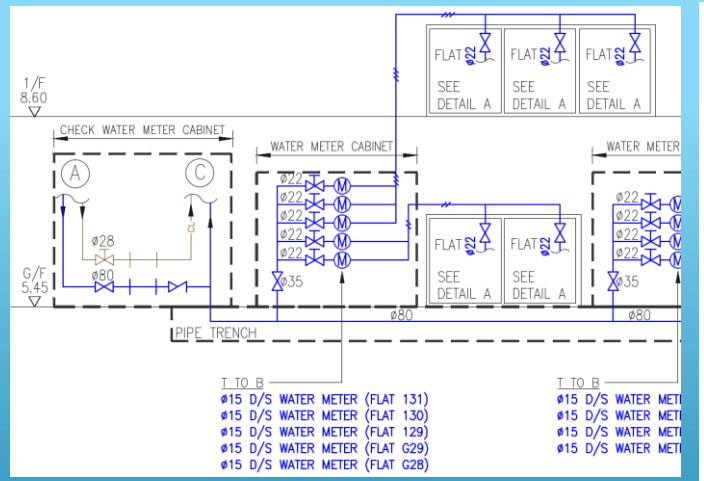
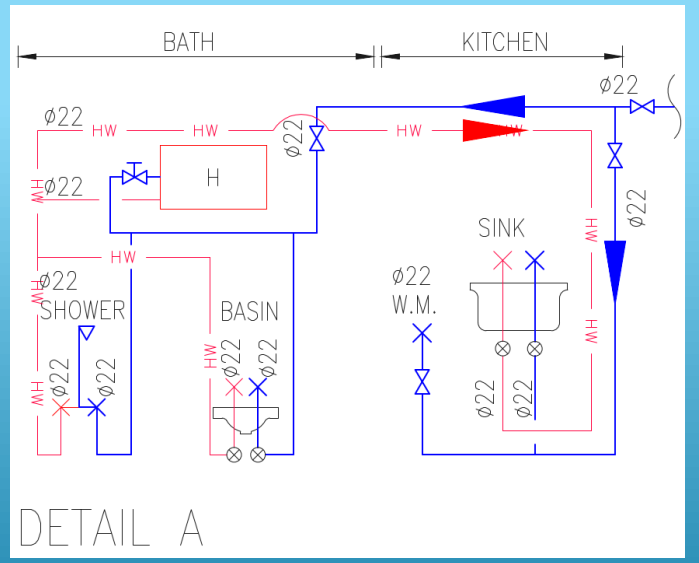
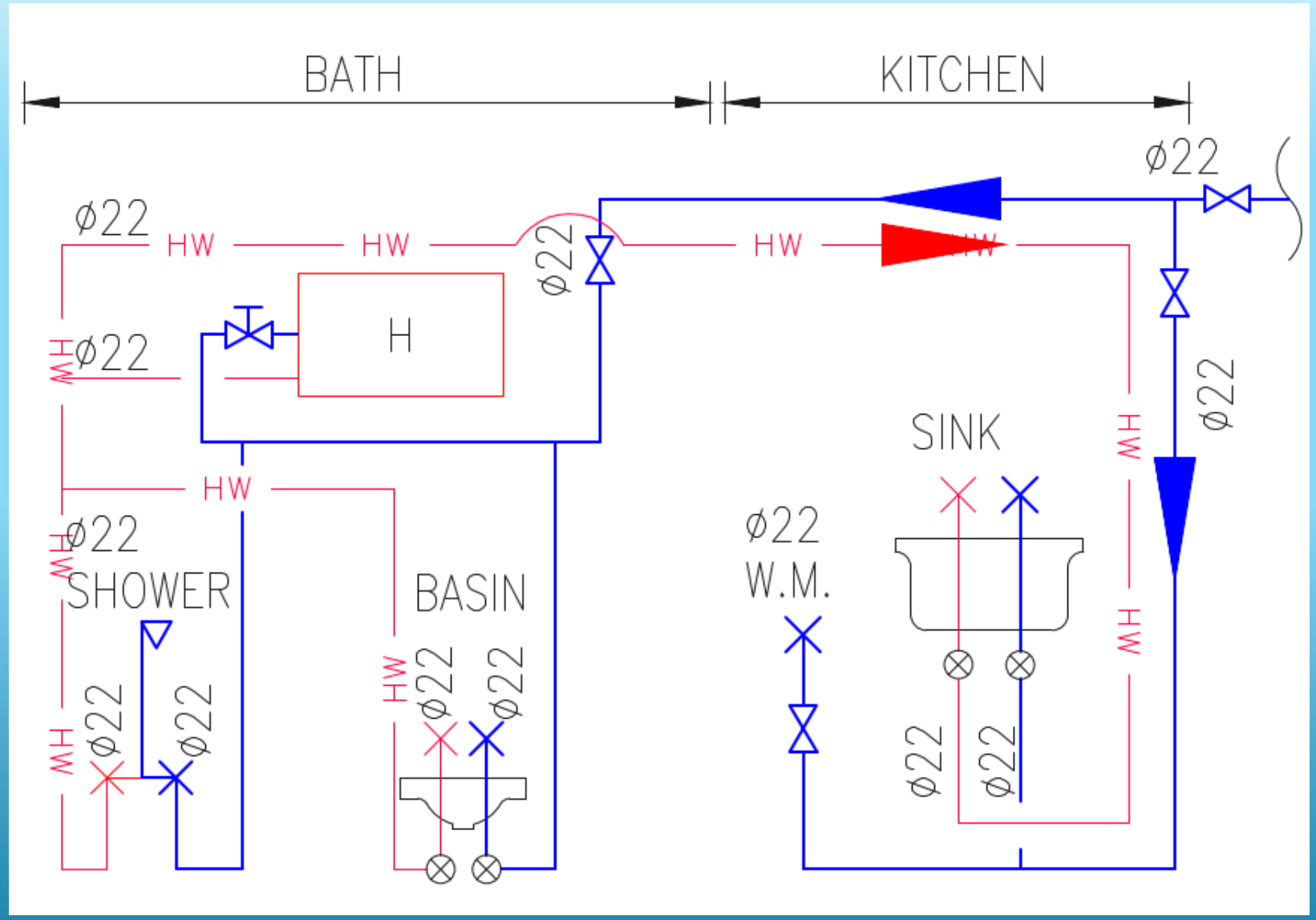


Detail A:



Water Services Provisions for Each Project

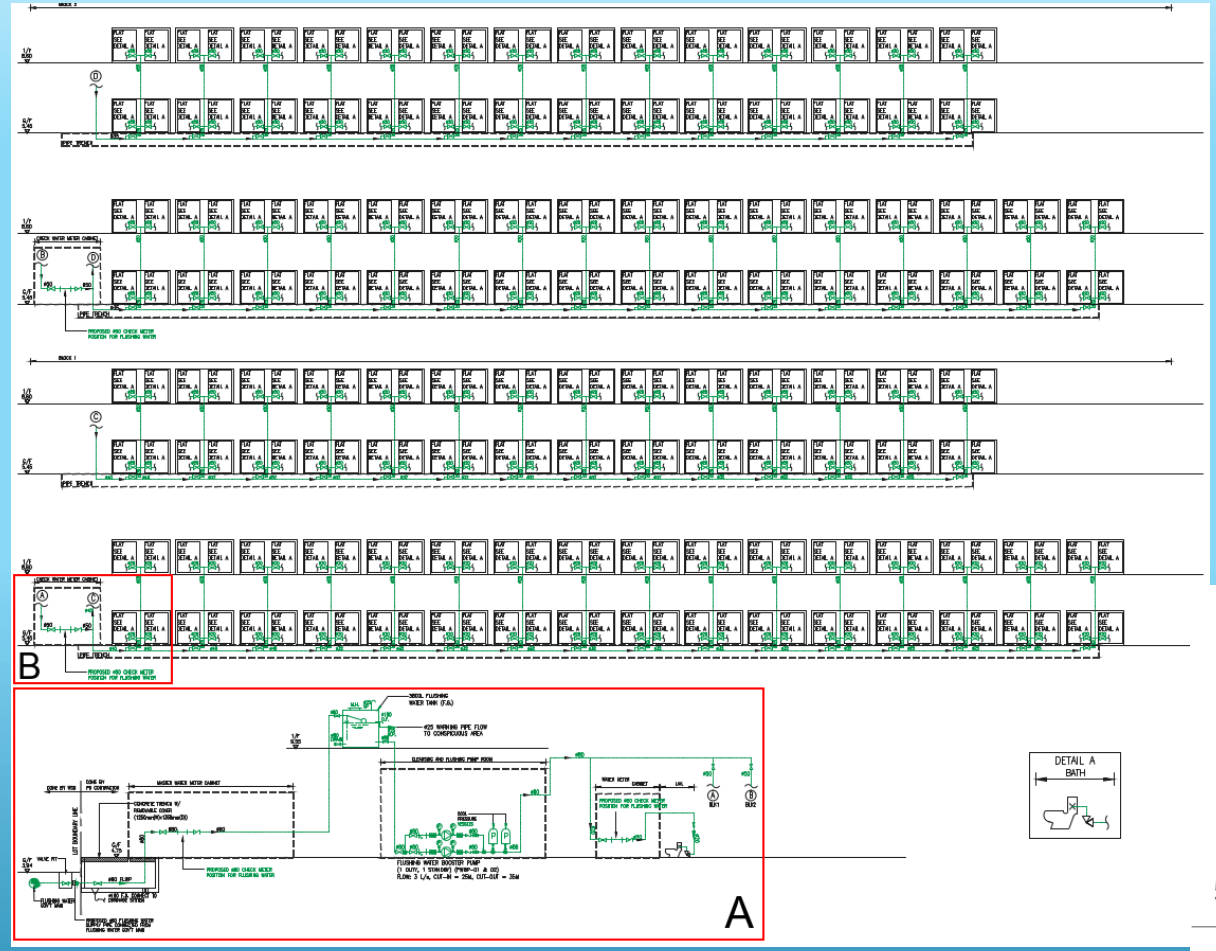
Hot Water



Water Services Provisions for Each Project

Flushing Water

Schematic



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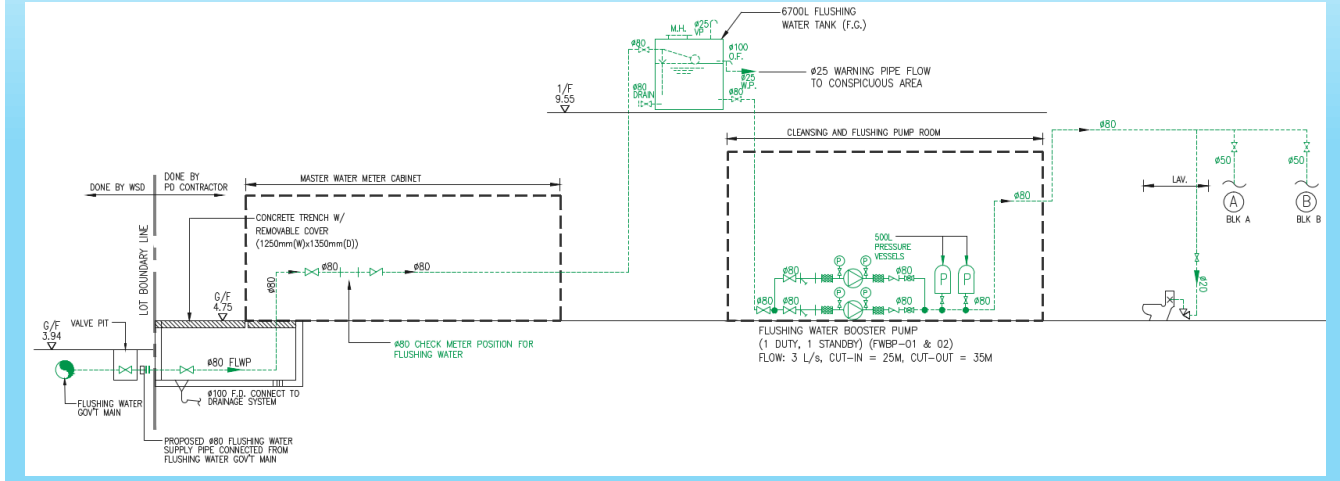

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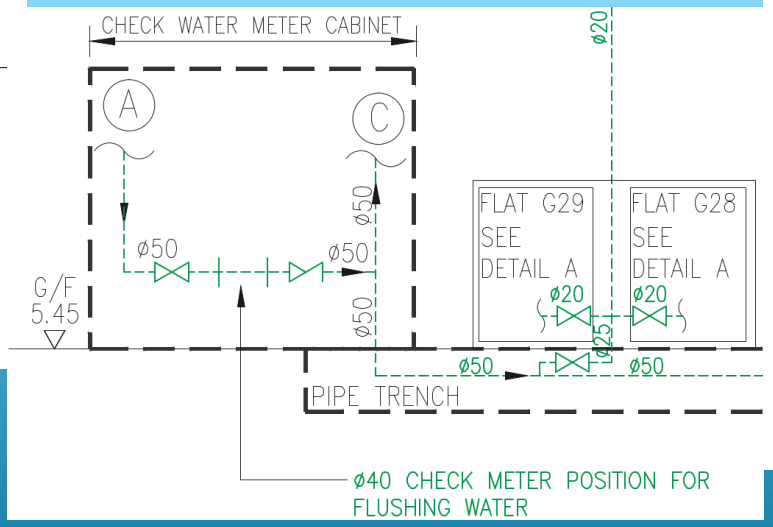
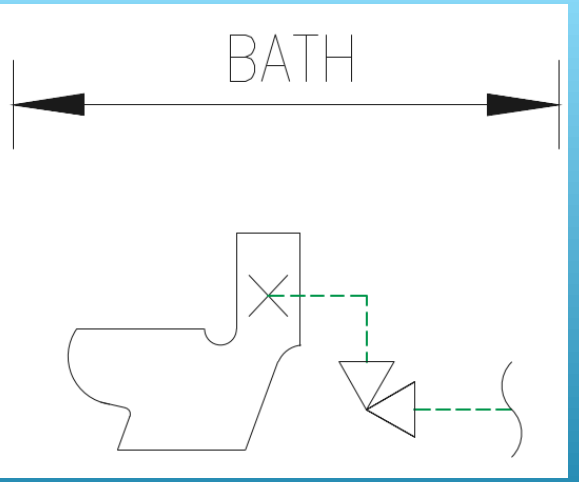


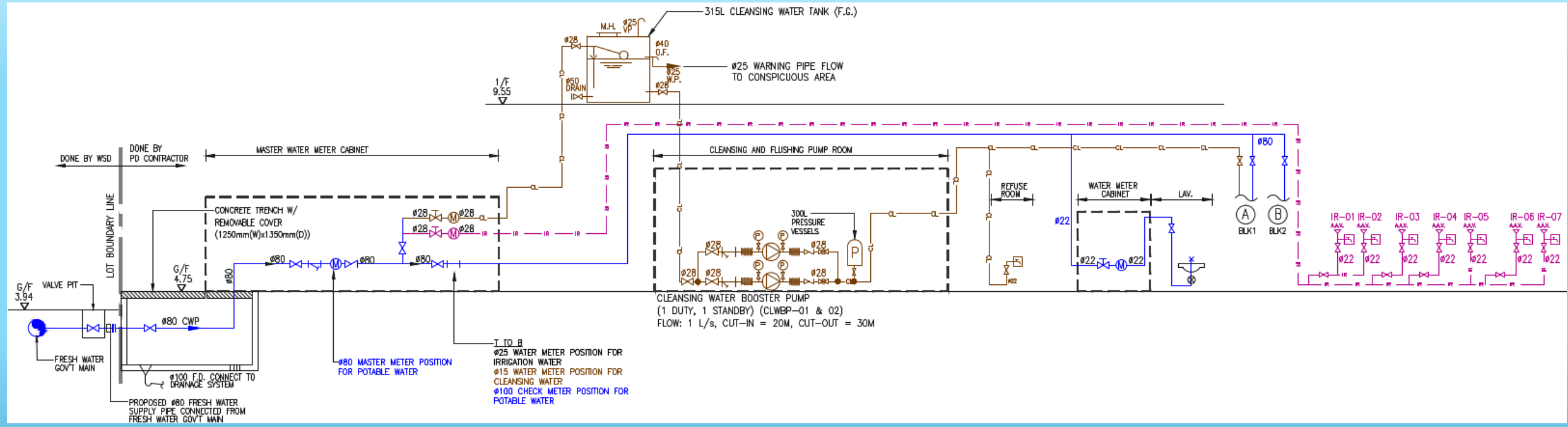
Detail A:



Water Services Provisions for Each Project

Cleansing Water

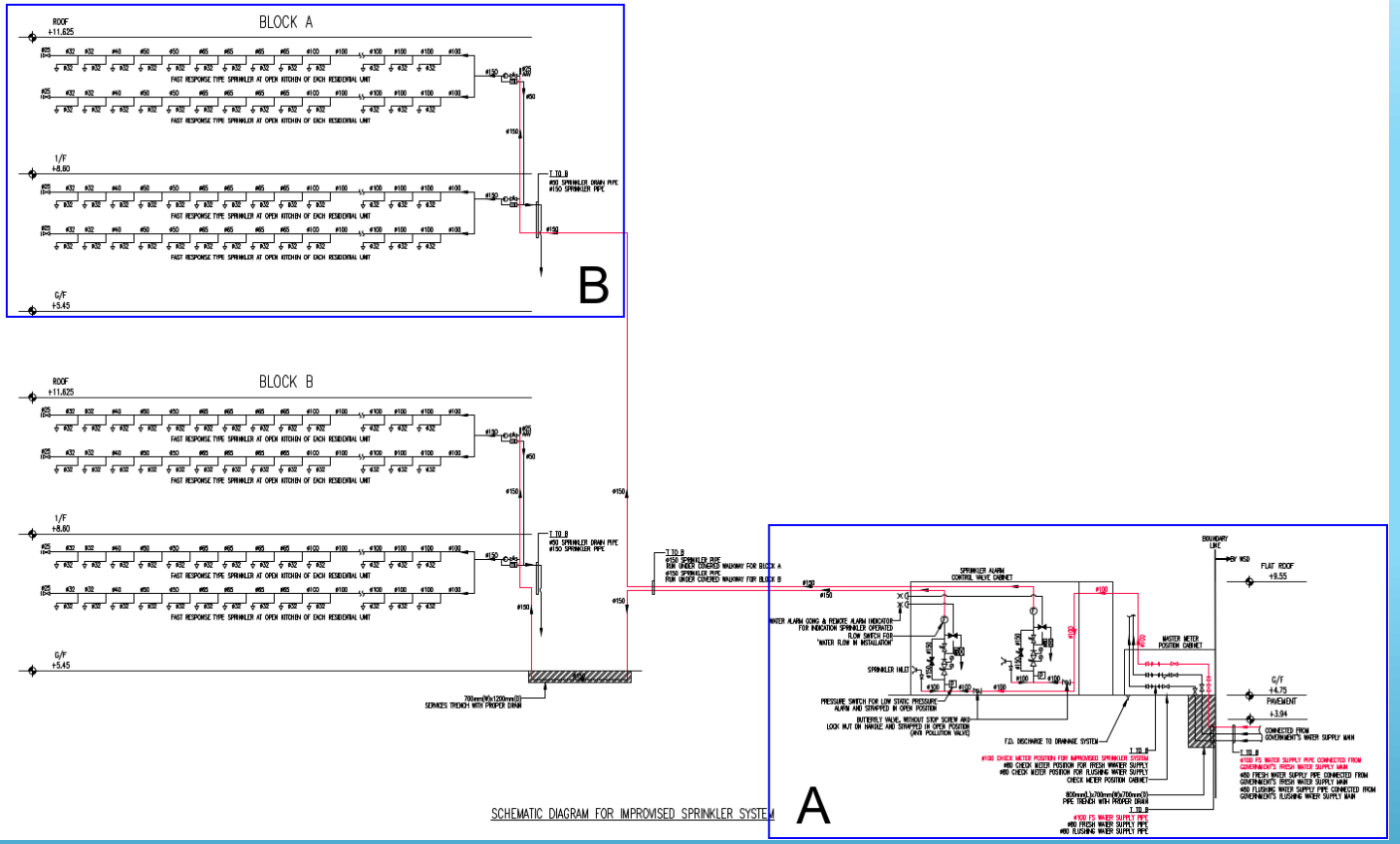
Schematic



Water Services Provisions for Each Project

Water Supply for Fire Services

Schematic



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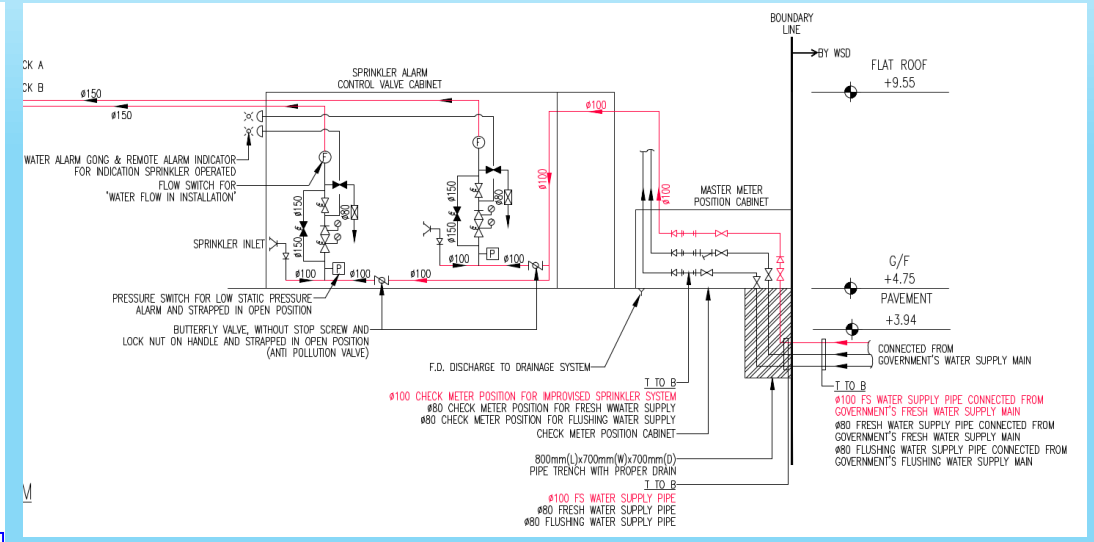

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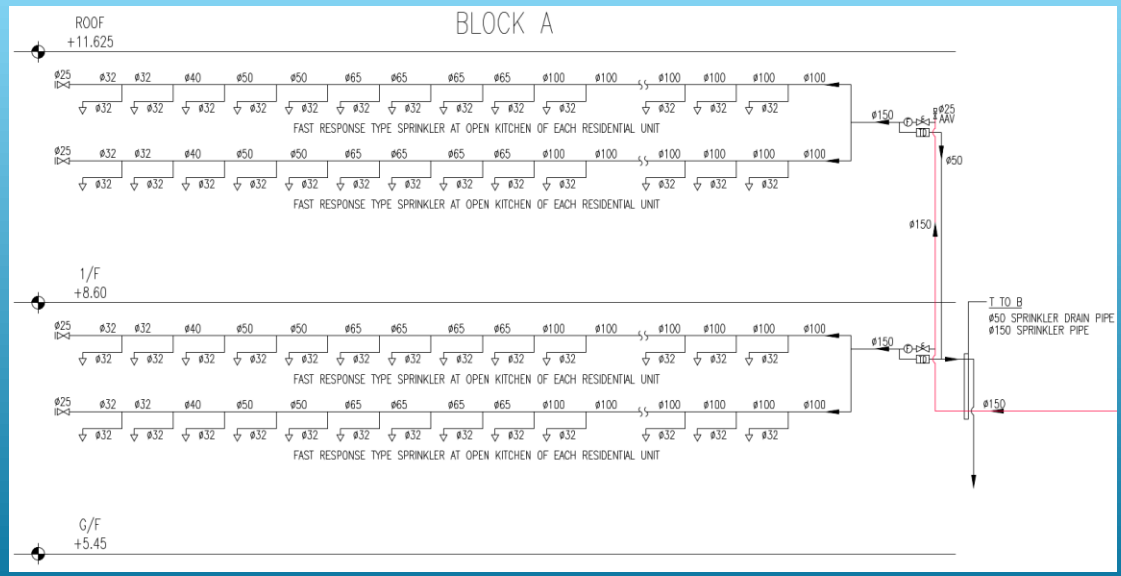


Schematic of Water Systems for Buildings

Schematic of Water System for Buildings

Water Meter Room on Each Floor

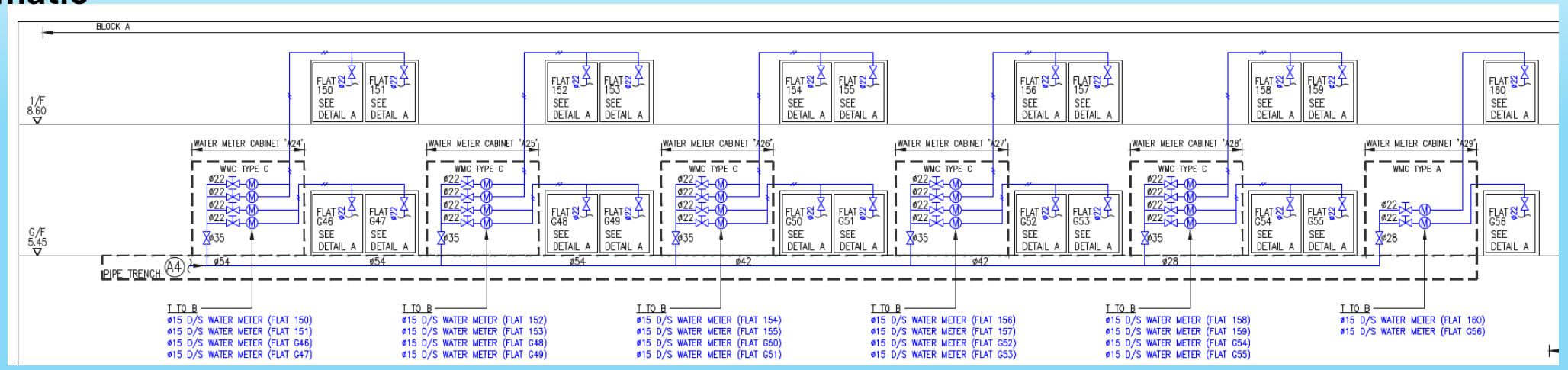
Schematic

Water Meter Room

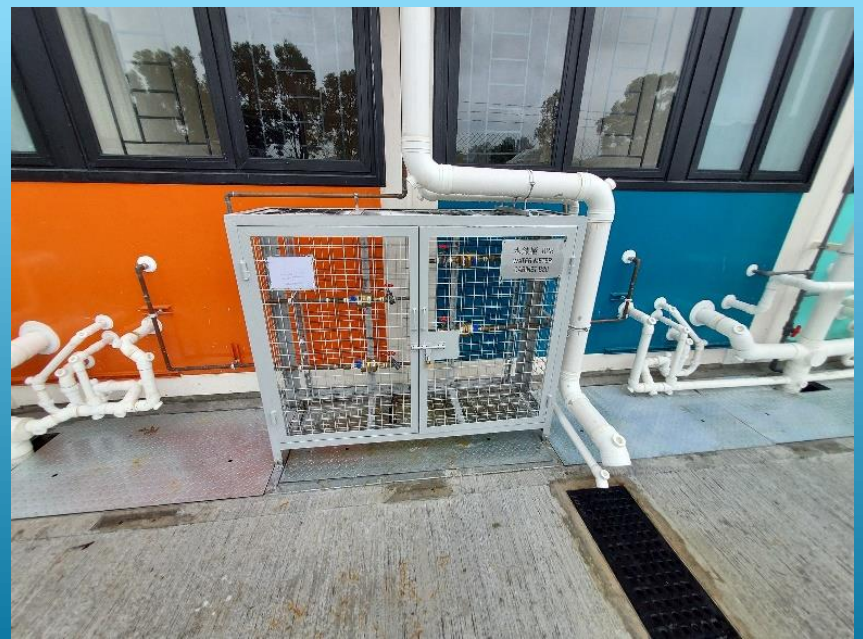
Schematic of Water System for Buildings

Water Meter Cabinets on Ground Level

Schematic



Water Meter Cabinet



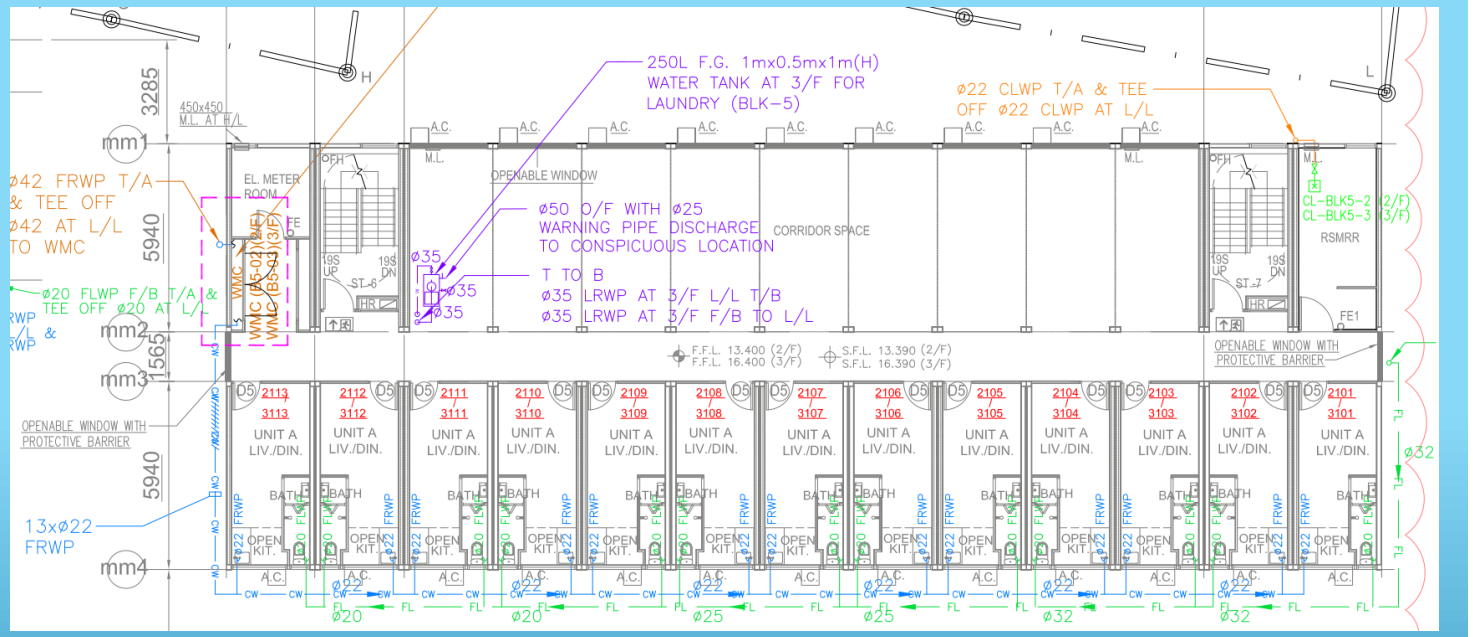
- Coffee Break

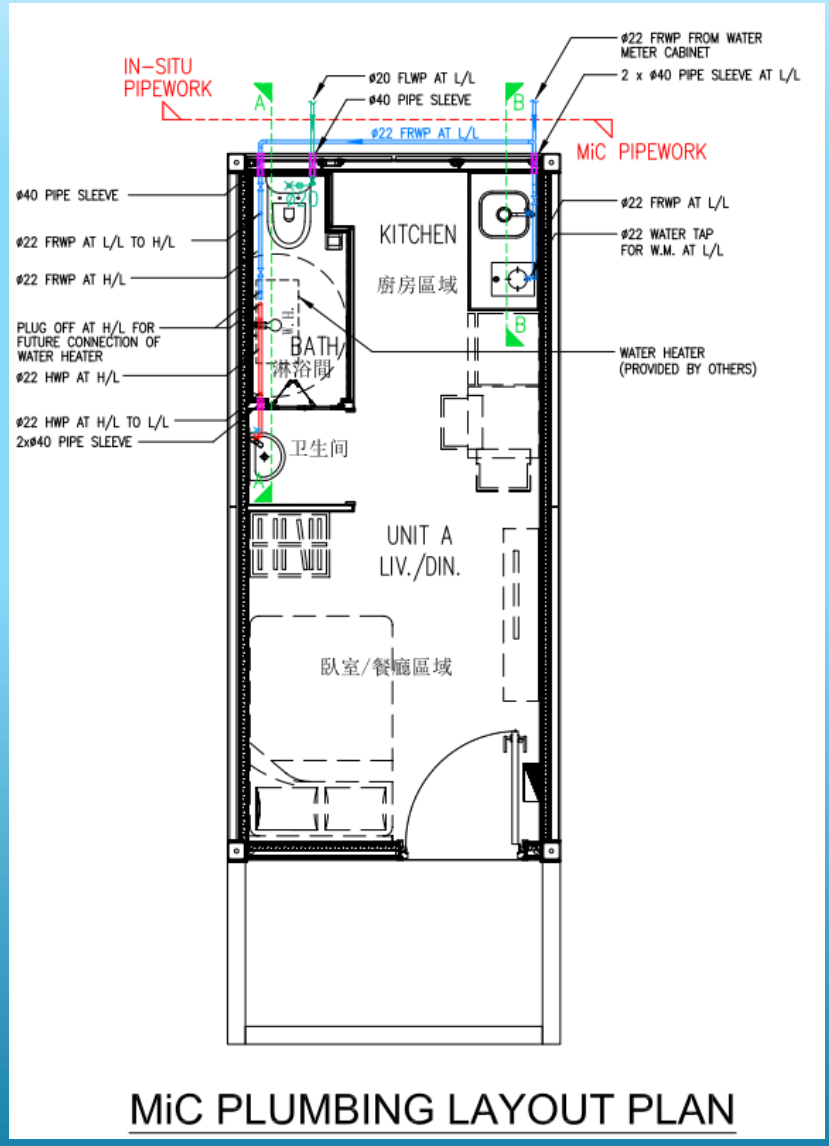
Water Supply Pipes to Each Domestic Units

Water Supply Pipes to Each Domestic Unit

Pipes Mounting Externally and into The Unit from Bathroom

Layout Plan

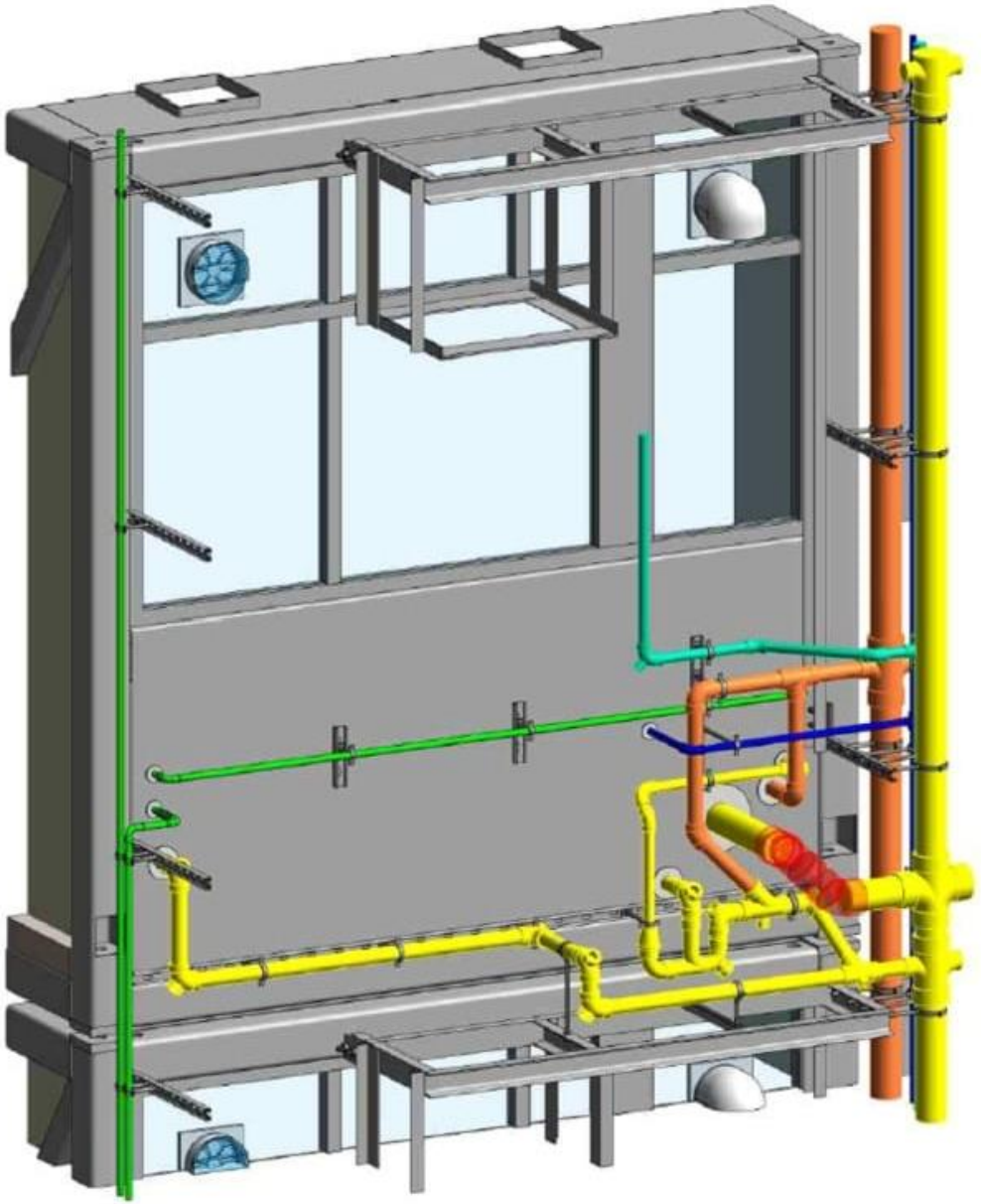




MiC PLUMBING LAYOUT PLAN

Water Supply Pipes to Each Domestic Unit

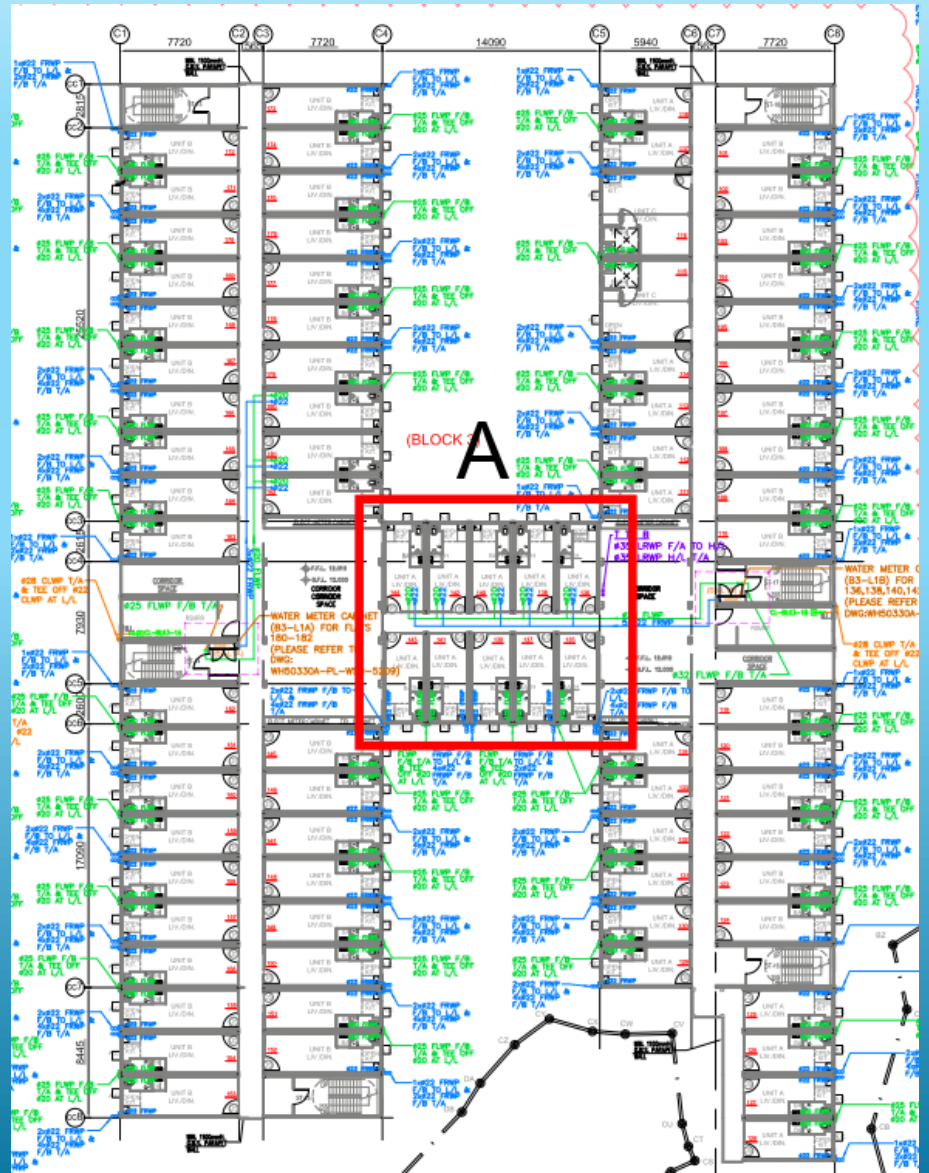
Pipes Mounting Externally and into The Unit from Bathroom



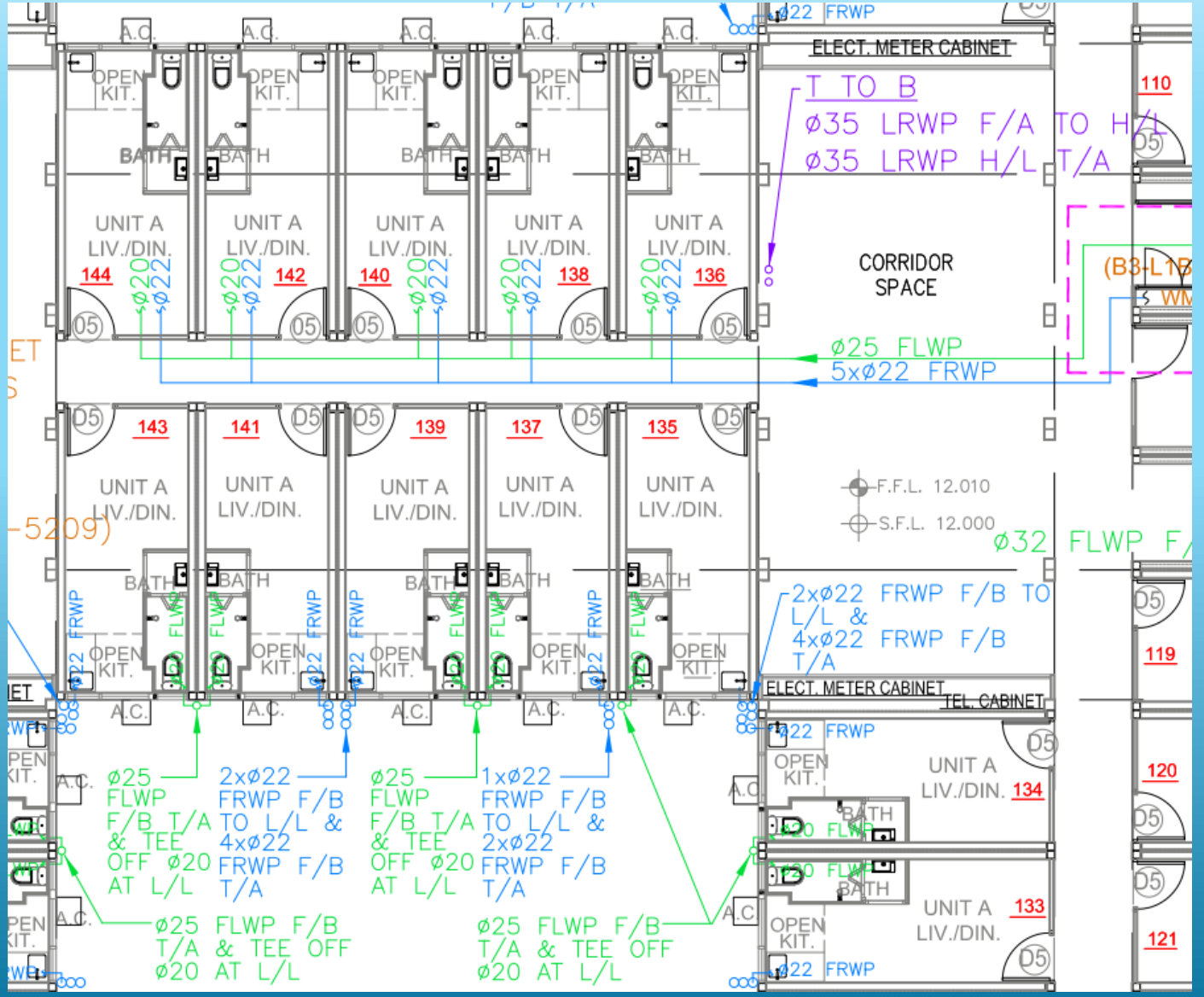
Water Supply Pipes to Each Domestic Unit

Pipes Run through Corridor into Unit

Layout Plan



Bold Up A:



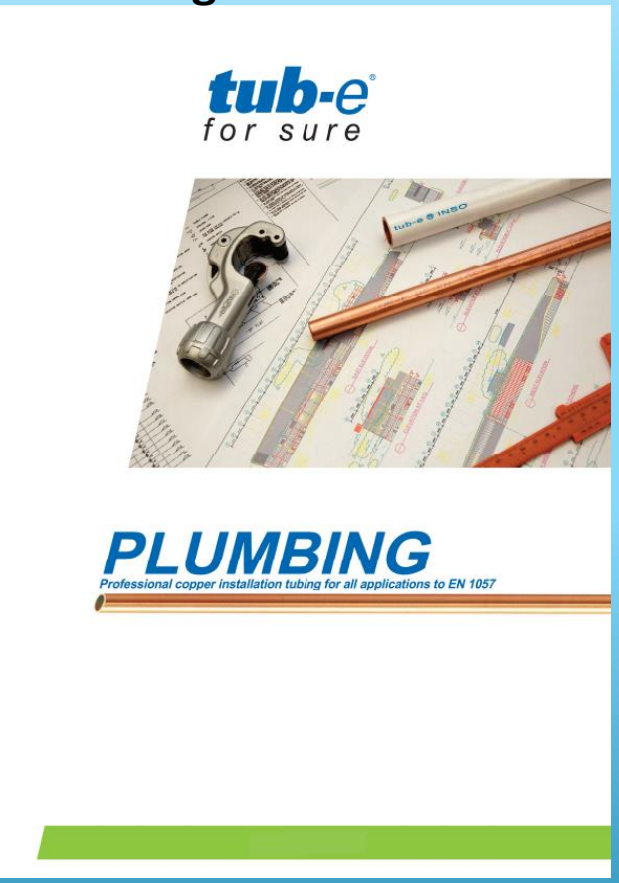
Water Pipe and Fitting Materials

Water Pipe and Fitting Materials

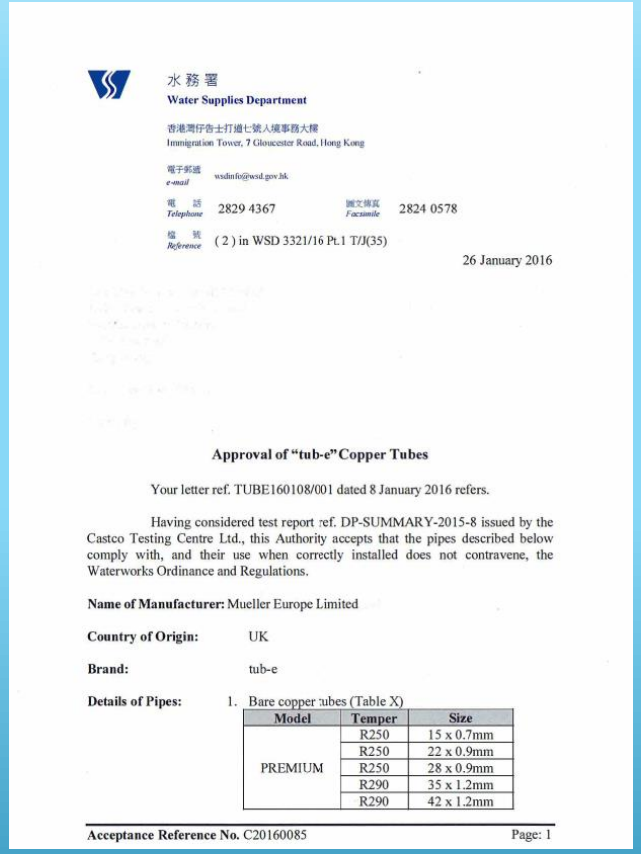
Copper (Potable Water)

Pipe

Catalogue



WSD Letter



水務署
Water Supplies Department

香港灣仔告士打道七號入境事務大樓
Immigration Tower, 7 Gloucester Road, Hong Kong

電子郵遞 e-mail: wsdinfo@wsd.gov.hk
電話 Telephone: 2829 4367 圖文傳真 Facsimile: 2824 0578
檔號 Reference: (2) in WSD 3321/16 Pt.1 T/J(35)

26 January 2016

Approval of "tub-e" Copper Tubes

Your letter ref. TUBE160108/001 dated 8 January 2016 refers.

Having considered test report ref. DP-SUMMARY-2015-8 issued by the Castco Testing Centre Ltd., this Authority accepts that the pipes described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Mueller Europe Limited

Country of Origin: UK

Brand: tub-e

Details of Pipes: 1. Bare copper tubes (Table X)

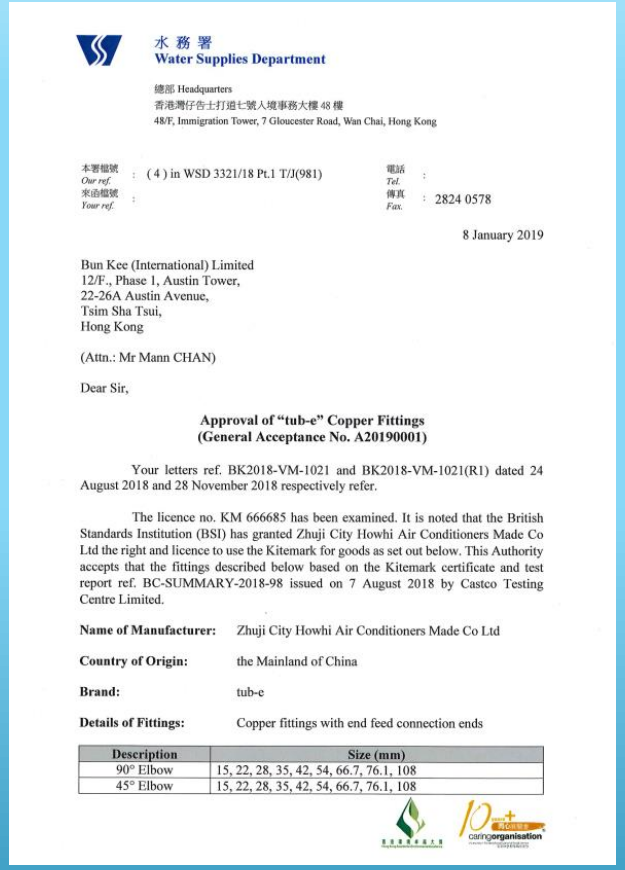
Model	Temper	Size
PREMIUM	R250	15 x 0.7mm
	R250	22 x 0.9mm
	R250	28 x 0.9mm
	R290	35 x 1.2mm
	R290	42 x 1.2mm

Acceptance Reference No. C20160085 Page: 1

Fitting

Catalogue

WSD Letter



水務署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref.: (4) in WSD 3321/18 Pt.1 T/J(981)
來函檔號 Your ref.:
電話 Tel.:
傳真 Fax.: 2824 0578

8 January 2019

Bun Kee (International) Limited
12/F., Phase 1, Austin Tower,
22-26A Austin Avenue,
Tsim Sha Tsui,
Hong Kong

(Attn.: Mr Mann CHAN)

Dear Sir,

Approval of "tub-e" Copper Fittings
(General Acceptance No. A20190001)

Your letters ref. BK2018-VM-1021 and BK2018-VM-1021(R1) dated 24 August 2018 and 28 November 2018 respectively refer.

The licence no. KM 666685 has been examined. It is noted that the British Standards Institution (BSI) has granted Zhuji City Howhi Air Conditioners Made Co Ltd the right and licence to use the Kitemark for goods as set out below. This Authority accepts that the fittings described below based on the Kitemark certificate and test report ref. BC-SUMMARY-2018-98 issued on 7 August 2018 by Castco Testing Centre Limited.

Name of Manufacturer: Zhuji City Howhi Air Conditioners Made Co Ltd

Country of Origin: the Mainland of China

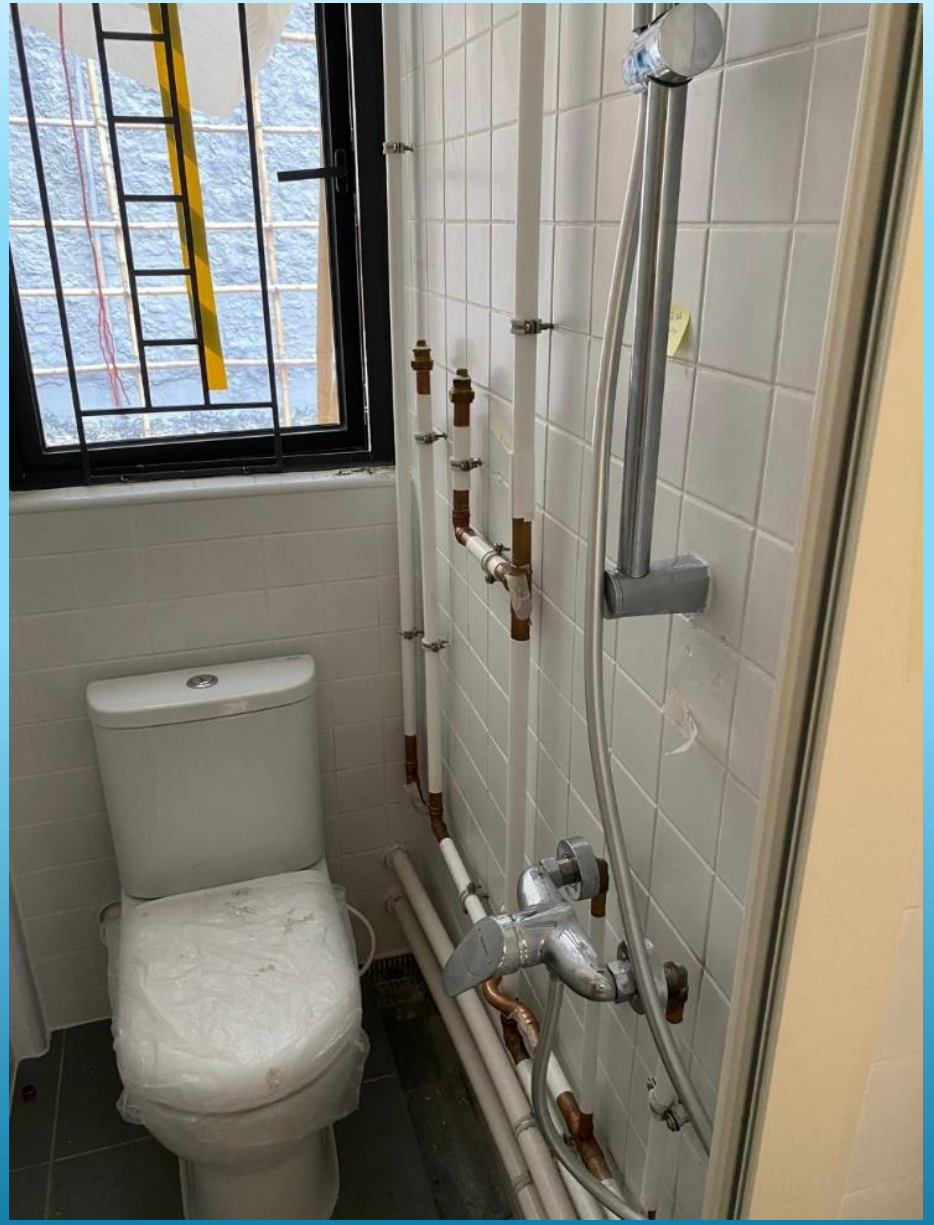
Brand: tub-e

Details of Fittings: Copper fittings with end feed connection ends

Description	Size (mm)
90° Elbow	15, 22, 28, 35, 42, 54, 66.7, 76.1, 108
45° Elbow	15, 22, 28, 35, 42, 54, 66.7, 76.1, 108

Water Pipe and Fitting Materials

Copper (Potable Water)



Water Pipe and Fitting Materials

Stainless Steel (Potable Water)

Pipe and Fitting

Catalogue

DUCKY 駿寶管業
DUCKY PIPE FITTING

JUNBAOGUANYE DUCKY PIPE FITTINGS

环套卡凸式 / 卡压式 / 沟槽 / 对接焊
不锈钢管材管件

WSD Letter

水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (6) in WSD 3321/2022 T/J(863/2022)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

31 October 2022

HK Ducky Win Pipe Fittings Limited
Unit A & B, 8/F, Elex Industrial Building,
131 Tung Chau Street, Tai Kok Tsui,
Kowloon, Hong Kong

(Attn.: Mr WONG Kin)

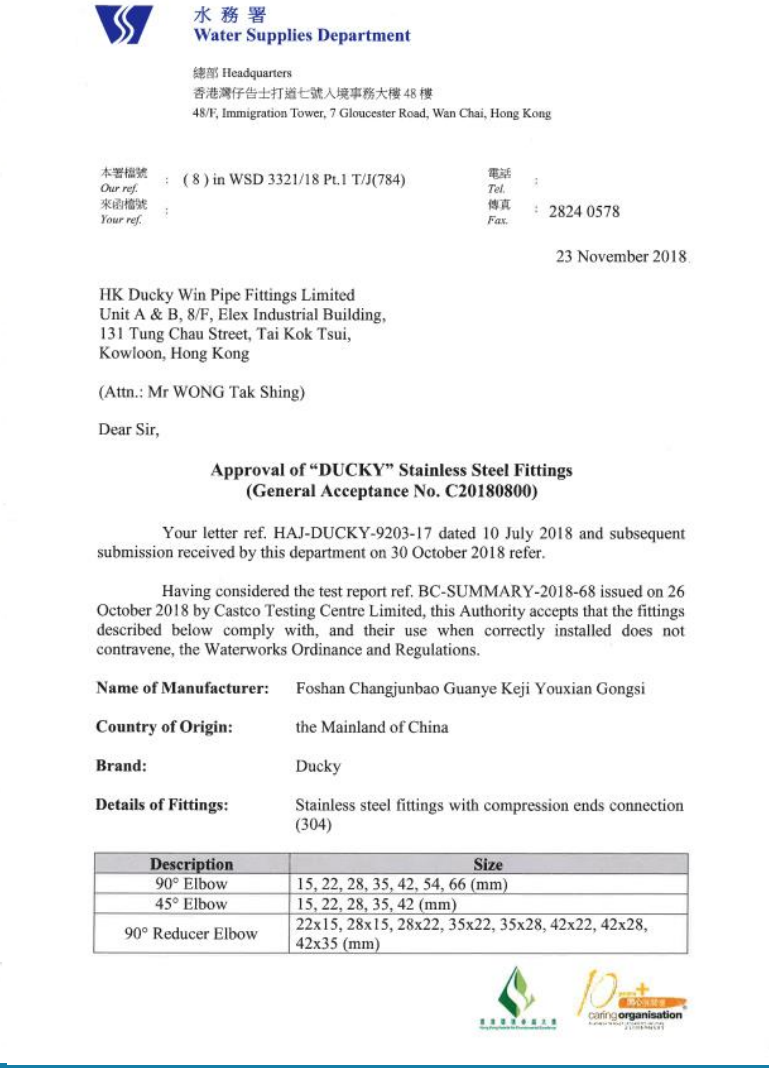
Dear Sir,

Approval of "DUCKY" Stainless Steel Pipes
(General Acceptance No. C20221015)

Your letters dated 18 July 2022, 26 September 2022 and 7 October 2022 refer.

Having considered the test report ref. BC-SUMMARY-2022-072 issued on 28 June 2022 by Castco Testing Centre Limited, this Authority accepts that the pipes described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer:	廣東榮駿寶管業科技有限公司
Country of Origin:	the Mainland of China
Brand:	Ducky
Details of Pipes:	Stainless steel pipes - Series 1 (304)
Size:	15mm, 22mm, 28mm, 35mm, 42mm, 54mm, 66.7mm, 76.1mm, 108mm
Body Markings:	DUCKY SS304 BS EN 10312 SERIES 1 (DN) x (Length) PIPE
Expiry Date:	23 June 2027



水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (8) in WSD 3321/18 Pt.1 T/J(784)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

23 November 2018

HK Ducky Win Pipe Fittings Limited
Unit A & B, 8/F, Elex Industrial Building,
131 Tung Chau Street, Tai Kok Tsui,
Kowloon, Hong Kong

(Attn.: Mr WONG Tak Shing)

Dear Sir,

Approval of "DUCKY" Stainless Steel Fittings
(General Acceptance No. C20180800)

Your letter ref. HAJ-DUCKY-9203-17 dated 10 July 2018 and subsequent submission received by this department on 30 October 2018 refer.

Having considered the test report ref. BC-SUMMARY-2018-68 issued on 26 October 2018 by Castco Testing Centre Limited, this Authority accepts that the fittings described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer:	Foshan Changjunbao Guanye Keji Youxian Gongsi
Country of Origin:	the Mainland of China
Brand:	Ducky
Details of Fittings:	Stainless steel fittings with compression ends connection (304)

Description	Size
90° Elbow	15, 22, 28, 35, 42, 54, 66 (mm)
45° Elbow	15, 22, 28, 35, 42 (mm)
90° Reducer Elbow	22x15, 28x15, 28x22, 35x22, 35x28, 42x22, 42x28, 42x35 (mm)

Water Pipe and Fitting Materials

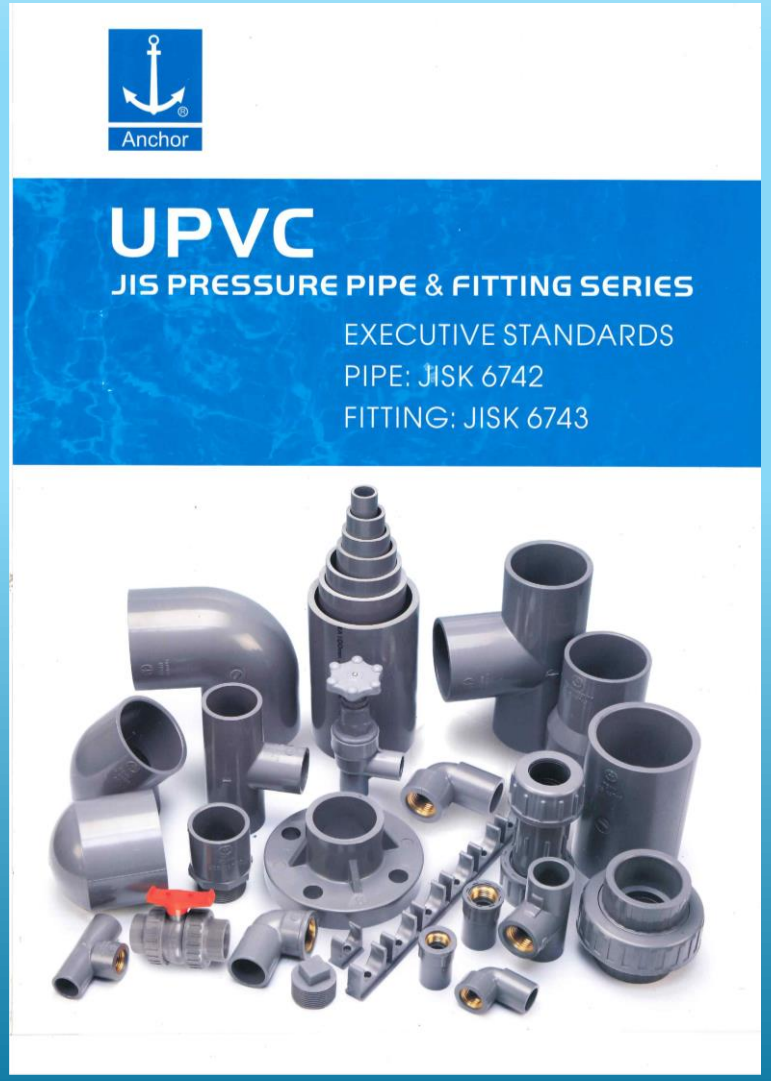
Stainless Steel (Potable Water)

Water Pipe and Fitting Materials

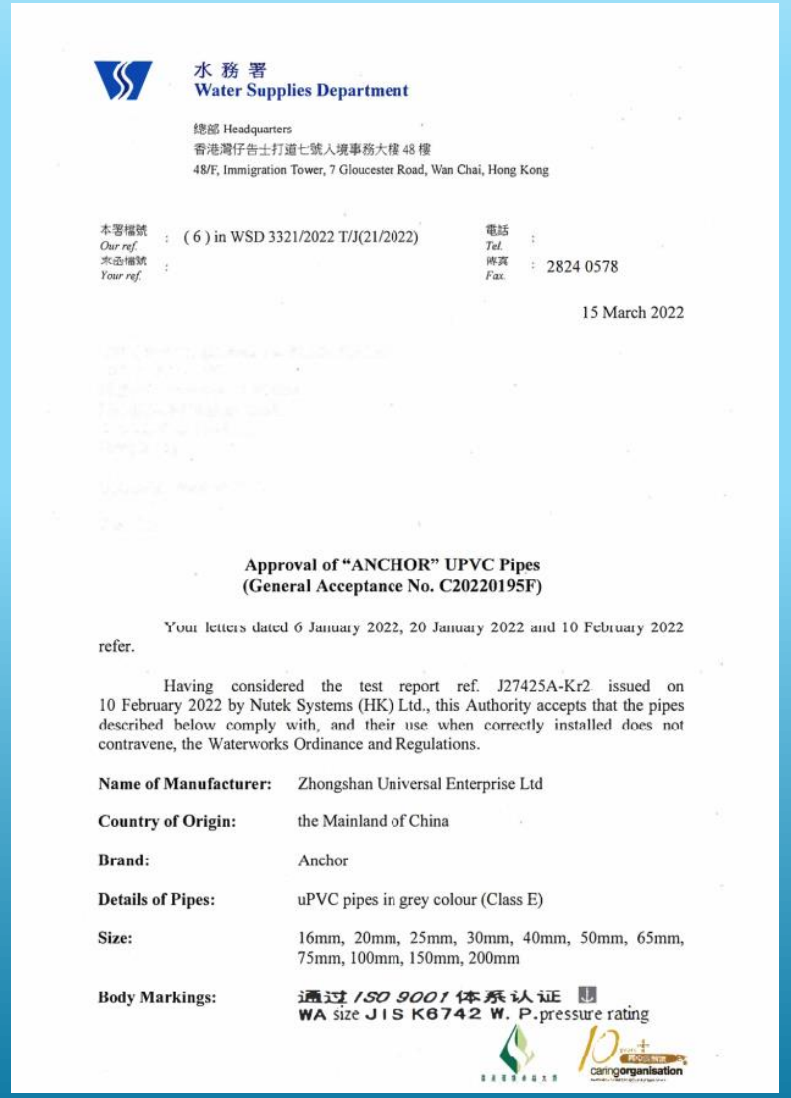
uPVC (Flushing Water)

Pipe and Fitting

Catalogue



WSD Letter



水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (6) in WSD 3321/2022 T/J(21/2022)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

15 March 2022

Approval of "ANCHOR" UPVC Pipes
(General Acceptance No. C20220195F)

Your letters dated 6 January 2022, 20 January 2022 and 10 February 2022 refer.

Having considered the test report ref. J27425A-Kr2 issued on 10 February 2022 by Nutek Systems (HK) Ltd., this Authority accepts that the pipes described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Zhongshan Universal Enterprise Ltd

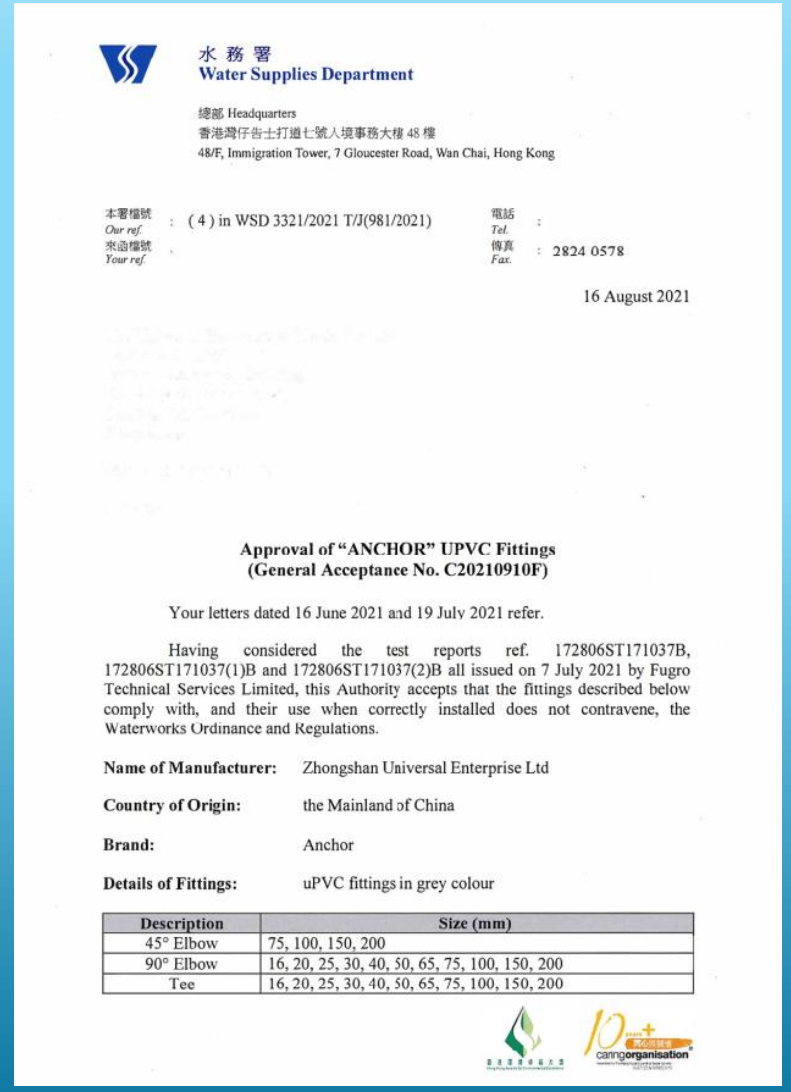
Country of Origin: the Mainland of China

Brand: Anchor

Details of Pipes: uPVC pipes in grey colour (Class E)

Size: 16mm, 20mm, 25mm, 30mm, 40mm, 50mm, 65mm, 75mm, 100mm, 150mm, 200mm

Body Markings: 通过 ISO 9001 体系认证
WA size JIS K6742 W. P.pressure rating



水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (4) in WSD 3321/2021 T/J(981/2021)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

16 August 2021

Approval of "ANCHOR" UPVC Fittings
(General Acceptance No. C20210910F)

Your letters dated 16 June 2021 and 19 July 2021 refer.

Having considered the test reports ref. 172806ST171037B, 172806ST171037(1)B and 172806ST171037(2)B all issued on 7 July 2021 by Fugro Technical Services Limited, this Authority accepts that the fittings described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: Zhongshan Universal Enterprise Ltd

Country of Origin: the Mainland of China

Brand: Anchor

Details of Fittings: uPVC fittings in grey colour

Description	Size (mm)
45° Elbow	75, 100, 150, 200
90° Elbow	16, 20, 25, 30, 40, 50, 65, 75, 100, 150, 200
Tee	16, 20, 25, 30, 40, 50, 65, 75, 100, 150, 200

Water Pipe and Fitting Materials

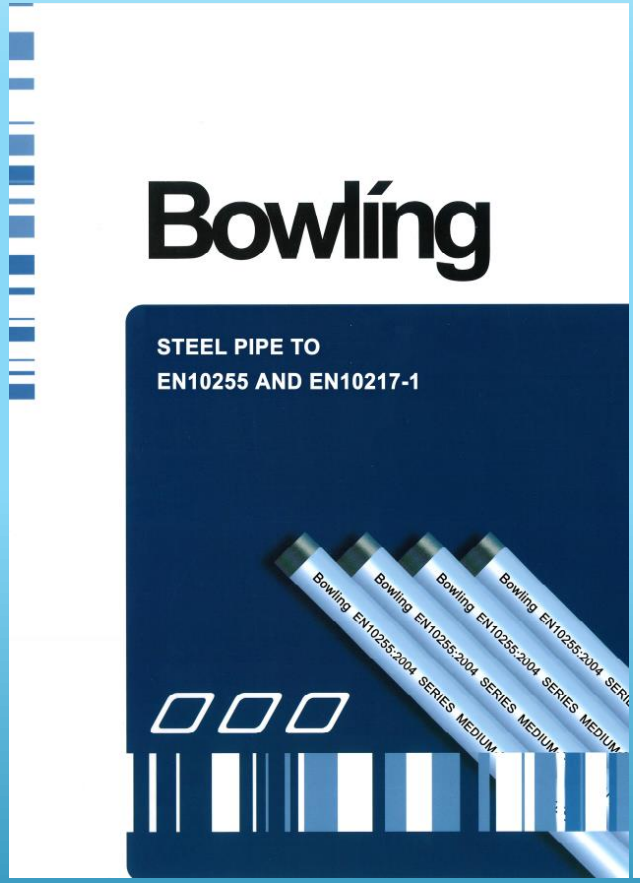
uPVC (Flushing Water)

Water Pipe and Fitting Materials

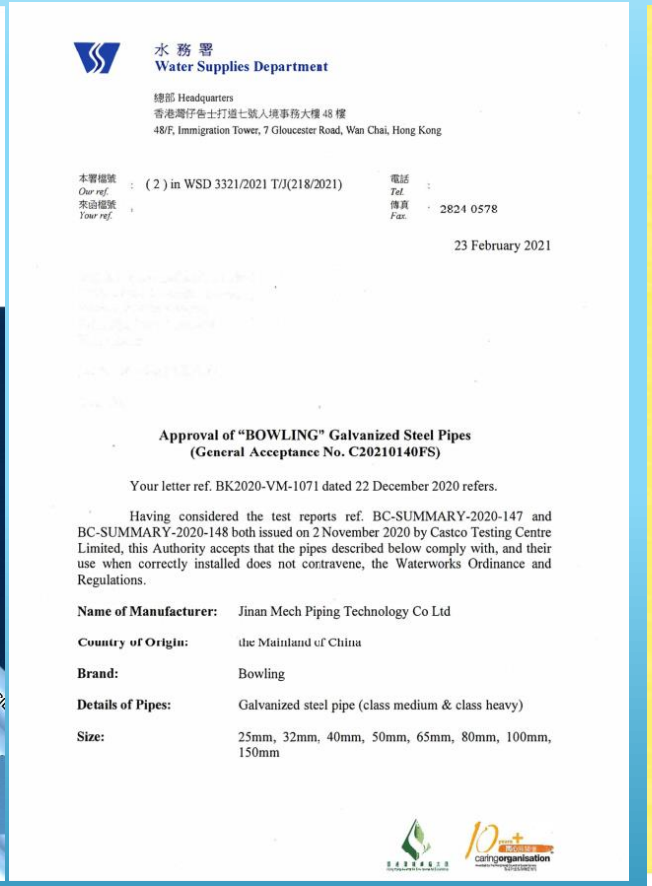
Galvanized Iron (Water Supply for Fire Services)

Pipe

Catalogue



WSD Letter



水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (2) in WSD 3321/2021 T/J(218/2021)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

23 February 2021

Approval of "BOWLING" Galvanized Steel Pipes
(General Acceptance No. C20210140FS)

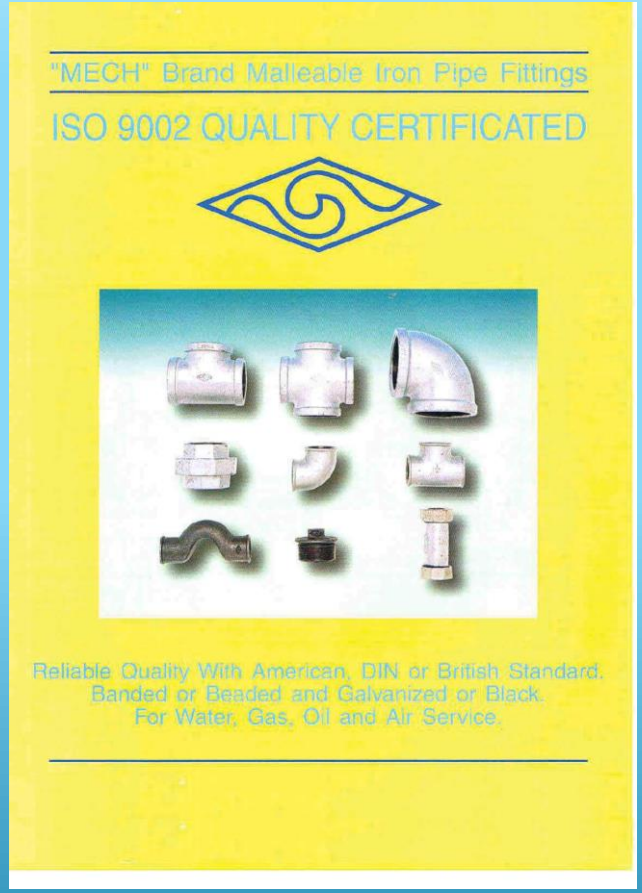
Your letter ref. BK2020-VM-1071 dated 22 December 2020 refers.

Having considered the test reports ref. BC-SUMMARY-2020-147 and BC-SUMMARY-2020-148 both issued on 2 November 2020 by Castco Testing Centre Limited, this Authority accepts that the pipes described below comply with, and their use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

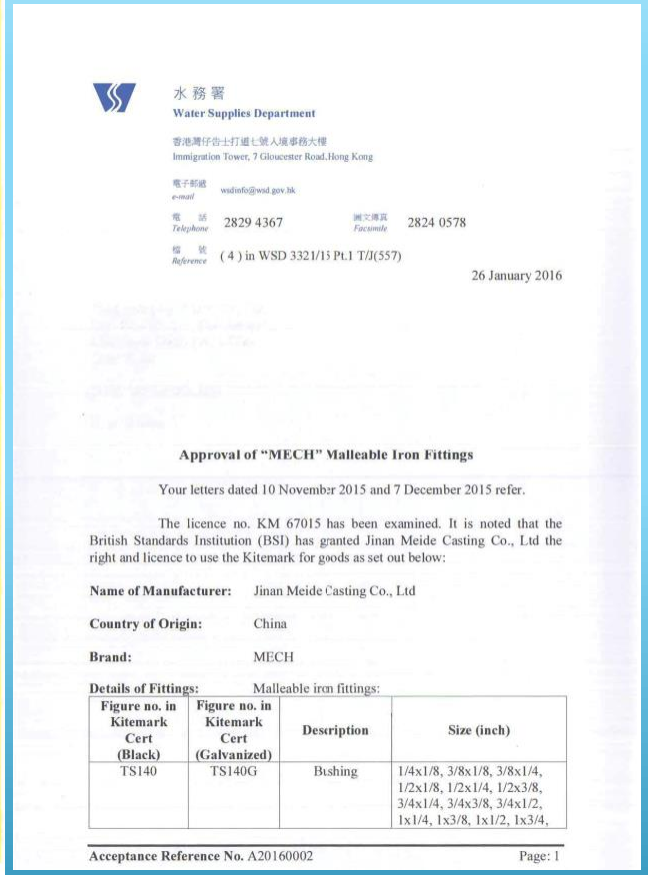
Name of Manufacturer:	Jinan Mech Piping Technology Co Ltd
Country of Origin:	the Mainland of China
Brand:	Bowling
Details of Pipes:	Galvanized steel pipe (class medium & class heavy)
Size:	25mm, 32mm, 40mm, 50mm, 65mm, 80mm, 100mm, 150mm

Fitting

Catalogue



WSD Letter



水 務 署
Water Supplies Department

香港灣仔告士打道七號入境事務大樓
Immigration Tower, 7 Gloucester Road, Hong Kong

電子郵遞 e-mail : wsdinfo@wsd.gov.hk
電話 Telephone : 2829 4367
圖文傳真 Facsimile : 2824 0578
檔號 Reference : (4) in WSD 3321/13 Pt.1 T/J(557)

26 January 2016

Approval of "MECH" Malleable Iron Fittings

Your letters dated 10 November 2015 and 7 December 2015 refer.

The licence no. KM 67015 has been examined. It is noted that the British Standards Institution (BSI) has granted Jinan Meide Casting Co., Ltd the right and licence to use the Kitemark for goods as set out below:

Name of Manufacturer: Jinan Meide Casting Co., Ltd

Country of Origin: China

Brand: MECH

Details of Fittings: Malleable iron fittings:

Figure no. in Kitemark Cert (Black)	Figure no. in Kitemark Cert (Galvanized)	Description	Size (inch)
TS140	TS140G	Bushing	1/4x1/8, 3/8x1/8, 3/8x1/4, 1/2x1/8, 1/2x1/4, 1/2x3/8, 3/4x1/4, 3/4x3/8, 3/4x1/2, 1x1/4, 1x3/8, 1x1/2, 1x3/4,

Acceptance Reference No. A20160002 Page: 1

Water Pipe and Fitting Materials

Sanitary Fittings

Water Closet

Catalogue

BBM BRILLIANT Building Materials Limited
Flat F1, 1/F., Hang Fung Ind. Bldg., Phase 1, No.2G Hok Yuen Street, Hung Hom, Kowloon, Hong Kong

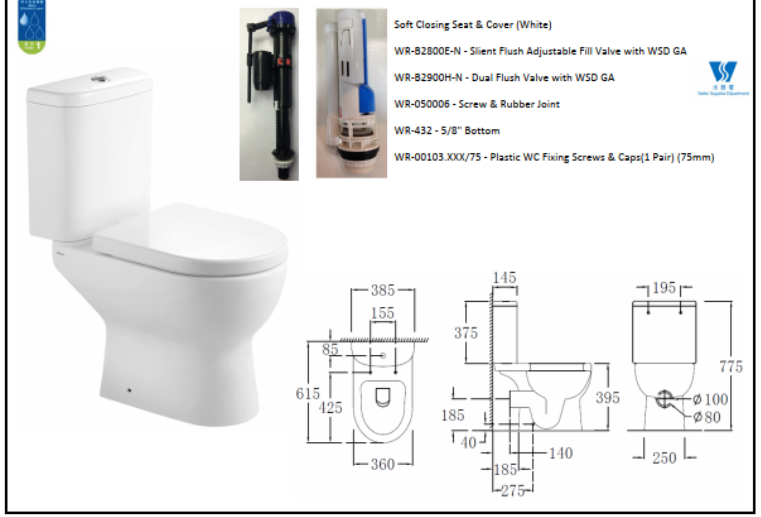
WALRUS

Project Name		Item Code	Page
Project No.	Location		

SANITARY WARE SPECIFICATION

Product Details		Details Specification	
Brand:	WALRUS	Materials:	Vitreous China
Origin:	Italy Brand (China Made)	Color:	White
Model:	WR-120012.2 Full Set (WR-120012.2B/FS WC Pan & WR-120012.TBF Cistern)	Installation:	Floor Mounted Type
Description:	Closed Coupled Toilet WELS Grade 1: WC 20-0062, 3 or 4.7 L/flush	Dimension:	615 x 385 x 775 mm (P-Trap: 185 mm)

Product Image



Soft Closing Seat & Cover (White)
WR-B2800E-N - Slient Flush Adjustable Fill Valve with WSD GA
WR-B2900H-N - Dual Flush Valve with WSD GA
WR-050006 - Screw & Rubber Joint
WR-432 - 5/8" Bottom
WR-00103.XXX/75 - Plastic WC Fixing Screws & Caps(1 Pair) (75mm)

Notes	Contact Us	
(1) All the above mentioned dimensions are just for reference only which are subject to the standard tolerances.	Company:	Brilliant Building Materials Ltd.
(2) The product specification including parts, screws, nuts etc are based on our factory standard.	Person:	Kenneth Leung
(3) We reserve the rights to change the specifications and details in case of any manufacturing decision or processing changed.	Email:	kennethleung@bbmchina.com
	Telephone:	(852) 2513 3515 / (852) 9752 3136/ (852) 6339 8220
	Fax:	(852) 2904 4204

WSD Letter

水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (6) in WSD 3321/2020 T/J(357/2020)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

11 September 2020

Luen Hing Hong Bldg. Materials Ltd
Flat F1, Hang Fung Ind. Bldg.,
Phase 1, No. 2G, Hok Yuen Street,
Hung Hom, Kowloon,
Hong Kong

(Attn.: Mr Danny CHEUNG)

Dear Sir,

Approval of "WALRUS" Float Operated Valve
(General Acceptance No. C20200789F)

Your letters ref. BL200010, BL200010-R1 and BL200010-R2 dated 8 April 2020, 18 June 2020 and 4 August 2020 respectively refer.

Having considered the test report ref. 200600ST200061B issued on 24 July 2020 by Fugro Technical Services Limited, this Authority accepts that the fitting described below complies with, and its use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: WDI (Xiamen) Technology Inc
Country of Origin: the Mainland of China
Brand: Walrus
Details of Fitting: 1/2" Plastic bottom inlet float operated valve
Model: WR-B2800E-N
Body Markings: Nil
Expiry Date: 16 March 2025

水 務 署
Water Supplies Department

總部 Headquarters
香港灣仔告士打道七號入境事務大樓 48 樓
48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 Our ref. : (2) in WSD 3321/2021 T/J(182/2021)
來函檔號 Your ref. :
電話 Tel. :
傳真 Fax. : 2824 0578

19 March 2021

Luen Hing Hong Building Materials Ltd.
Unit F1, 1/F, Hang Fung Ind. Bldg., Phase 1,
No. 2G, Hok Yuen Street, Hunghom,
Kowloon, Hong Kong

(Attn.: Mr Danny CHEUNG)

Dear Sir,

Approval of "WALRUS" Flush Valve
(General Acceptance No. C20210289F)

Your letter ref. BL-200063 dated 12 January 2021 refers.

Having considered the test report ref. J25933 issued on 8 January 2021 by Nutek Systems (HK) Limited, this Authority accepts that the fitting described below complies with, and its use when correctly installed does not contravene, the Waterworks Ordinance and Regulations.

Name of Manufacturer: WDI (Xiamen) Technology Inc
Country of Origin: the Mainland of China
Brand: Walrus
Details of Fitting: 2" Plastic dual flush valve
Model: WR-B2900H-N
Body Markings: WALRUS
Expiry Date: 29 November 2025

Installation

Installation

Supervision by Licensed Plumber (LP)

- Ensure adequate supervision is provided for the plumbing works in the MiC factory in accordance with the supervision plan agreed by WSD.

- Proper supervision records shall be kept, including the date and time of inspection and supervision of the plumbing works conducted by LP and RPW.

- The supervision records shall be submitted to WSD for inspection when required.

- WSD will assign agent to carry out audit checks of the supervision records at the MiC factory if considered necessary.

- Declare that the plumbing works carried out in the MiC factory have been supervised according to the supervision plan.

- Provision of robust digital supervision records, including photographs, videos and details of the supervision personnel who have undertaken the inspection, will facilitate the acceptance by WSD.

Installation

Interim Inspections

- WSD will arrange an Inspection Agent to carry out interim inspections in the MiC factory before the concealed parts of the plumbing installations are covered up to ensure that they comply in all respects with the provisions of the Waterworks Ordinance (WWO)/Waterworks Regulations (WWR) and all the prevailing requirements of WSD25.

- The Inspection Agent will conduct inspections and carry out non-destructive tests to determine the lead content in the solder joints for the plumbing installations.

- The responsible LP or his/her representative shall be present in all interim inspections such that any non-compliance identified during the inspections could be immediately communicated to the LP or his/her representative for rectification.

- If the plumbing installations to be covered up are in order, the Inspection Agent will also advise the LP or his/her representative on the spot.

- The Inspection Agent will also carry out audit checks of the LP's supervision records.

- The responsible LP shall coordinate and liaise with the WSD's Inspection Agent regarding the exact inspection dates of the plumbing works to be covered up at the MiC factory.

- The responsible LP is not required to submit Form WWO 46 Part IV to WSD for arranging interim inspection.

- If the inspection frequency so warrants, the responsible LP may be required to arrange a working place in the MiC factory for the Inspection Agent to field its resident staff for conducting interim inspection, and/or adopt digital technologies for joint witnessing of the inspection checks and tests required and the preparation of supervision records.

Installation

Workflow

Project Stage	Submission and Approval of Plans	Additional Requirements for MiC
Submission and Approval of Plans before Commencement of Module Production	Applicant/Consultant Submit application (Form WWO 542) together with a plumbing proposal to WSD for approval.	AP/Consultant Submit the following: (i) a section clearly specifying the part of the plumbing installations to be constructed in the MiC factory; and a Vertical Plumbing Line Diagram and/or other documents as appropriate showing the extent of the plumbing installations; and (ii) a supervision plan of the construction of the plumbing installations at the MiC factory for agreement by WSD.
	WSD Issue approval letter for Form WWO 542 and demand note.	
	AP, LP and Applicant Submit Form WWO46 Parts I & II to WSD to seek permission for commencement of plumbing works at building site.	AP/Consultant Submit the following if there are parts of plumbing installations to be covered up in the MiC factory, in such a manner that they cannot be exposed for inspection ana non-destructive tests at the building site: (i) shop drawings showing details of the plumbing installations in the modules that will be covered up in the MiC factory; and (ii) production schedule of the modules, in particular the production schedule of the plumbing works and the corresponding inspection schedule for the plumbing works to be covered up in the modules in the MiC factory.

Installation

Workflow

Project Stage	Submission and Approval of Plans	Additional Requirements for MiC
Module Production at MiC Factory	WSD Issue Form WWO46 Part III to grant permission for commencement of plumbing works at building site.	LP, RPW, MiC Supplier (a) Implement the supervision plan as agreed by WSD. (b) Keep Supervision records and produce to WSD for inspection when required. (c) Declare (by AP) on the supervision records any supervision carried out in the MiC factory. (d) Coordinate and liaise (by LP) with the WSD's inspection Agent regarding the exact inspection dates of the plumbing installations to the covered up at the MiC factory. WSD's inspection Agent Carry out interim inspection of the concealed parts of the plumbing installations at the MiC factory before they are covered up, to ensure compliance with WWO/WWR. LP or His/Her Representative Be present at all interim inspections carried out by the WSD's Inspection Agent.

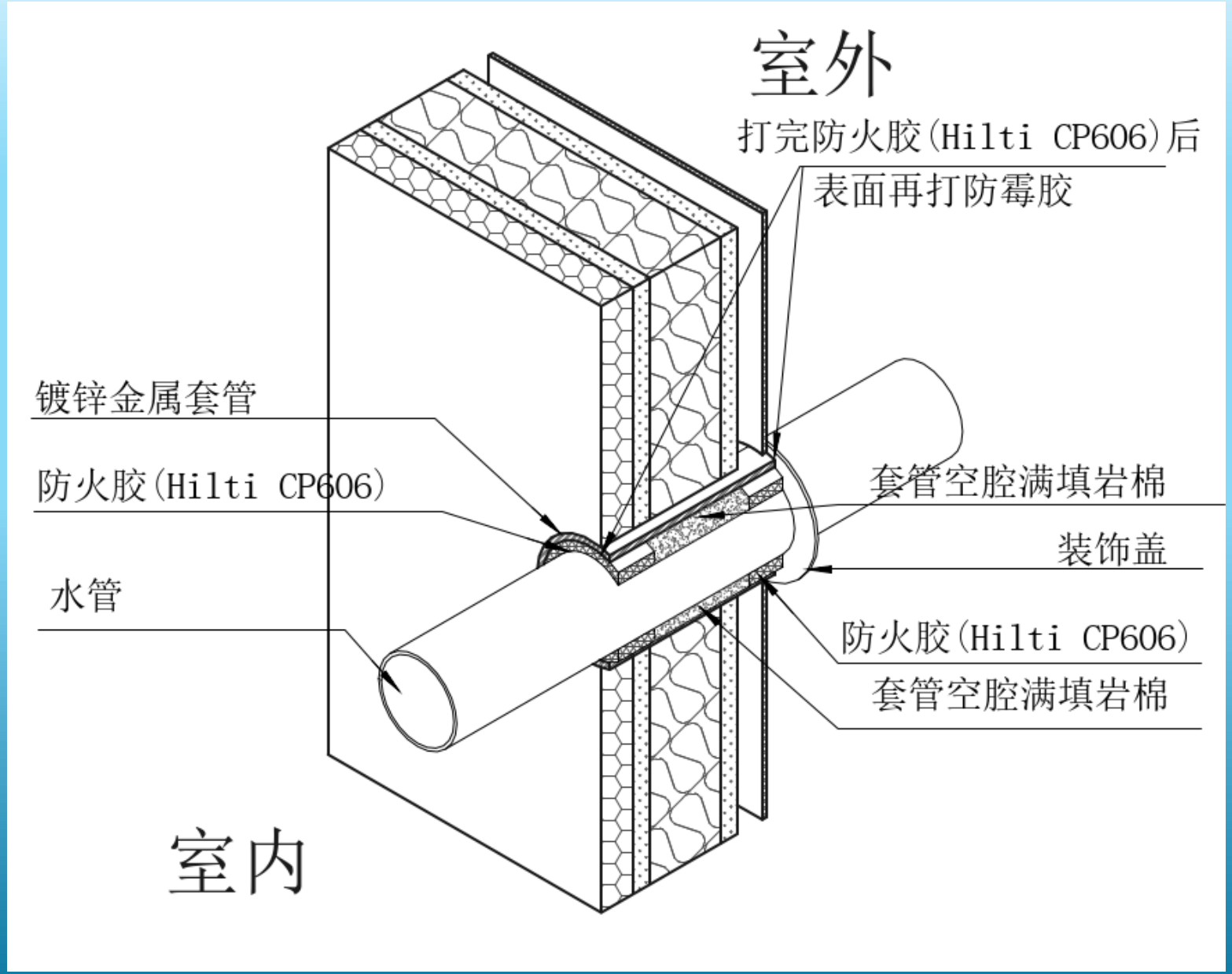
Installation

Workflow

Project Stage	Submission and Approval of Plans	Additional Requirements for MiC
Construction at Building Site	LP Submit Form WWO 46 Part IV upon completion of whole plumbing works of the MiC project for final inspection. WSD Carry out final inspection for completed plumbing works.	
Compliance Certification	WSD Inform LP to provide water supply on site and issue Form WWO 46 Part V to LP and applicant	WSD Grant approval of the completed works (issuance of Form WWO 46 Part V(a)) subject to: (i) satisfactory results of the final inspection by WSD at the building site; (ii) satisfactory results of the interim inspections by the WSD's Inspection Agent of the concealed parts of the plumbing works before they are covered up in the MiC factory; and (iii) compliance with the commissioning requirements specified by WSD.

Installation

Details of Pipes Installation through Wall



Inspection

Inspection

Regular Inspection by Other Qualified Personnel If Necessary

	Plumbing Works
Qualification of personnel required to be employed from HK to visit factory	**LP, RPW, WSD's II**
Frequency of visit to factory to ensure the quality of MiC unit fabrication	According to agreed Supervision Plan

Inspection

Supervisory Duties

Piping Installation, Plumbing and Drainage	LP (Licensed Plumber), RPW (Registered Plumbing Worker), MiC Supplier	i. Implement the supervision plan as agreed by WSD ii. Keep supervision records and produce to WSD for inspection when required. Pressure / leakage testing shall be carried out as per approved method statement iii. Declare (by LP) on the supervision records any supervision carried out in the MiC factory iv. Coordinate and liaise (by LP) with the WSD's inspection Agent regarding the exact inspection dates of the plumbing installations to the covered up at the MiC factory.

Testing

Testing

Copper Pipes and Fittings

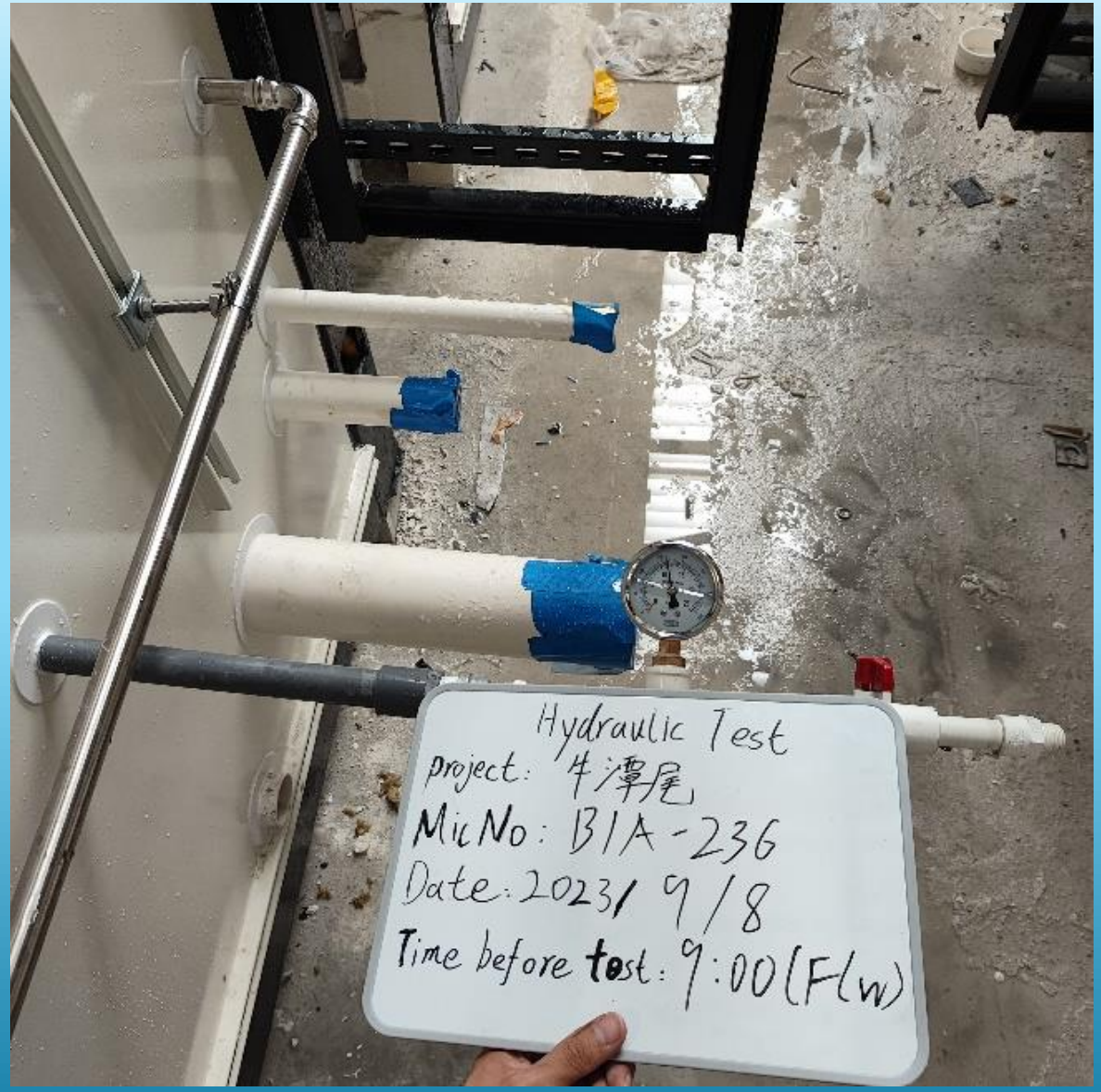
- Verification check of materials by selecting random samples of soldering and brazing materials

- Lead free test

- Hydraulic test

Stainless Steel and uPVC Pipes and Fittings

- Hydraulic test



Testing

Test Report

A2）水喉測試紀錄表

水喉位置及編號：B1A-258

測試儀器证书编号：GZL823046457-042，060，098

水喉編號	第一次检查			第二次检查（4小时后）			第三次检查（24小时后）最终			备注
	日期	时间	压力（psi）	日期	时间	压力（psi）	日期	时间	压力（psi）	
给水管	2023.9.14	10:00	150	2023.9.14	16:30	150	2023.9.15	10:30	150	
咸水管	2023.9.14	10:00	150	2023.9.14	16:30	150	2023.9.15	10:30	150	
消防管	2023.9.14	10:00	163	2023.9.14	16:30	163				
测试者	伍景南									
日期	2023.9.15									

聲明：就本人所知及相信，上列資料全部屬實。

标准：①打压压力均为150psi. ②试压时间：食水管、咸水管为24小时；消防管为6小时；保压4小时内不能掉压超过2%（即不能超过3psi）③：检验前确保水阀均已开阀，水管及连接处无渗漏、水滴等情况。

Testing

Test Method from Quality Assurance Scheme (QAS)

Leakage Test of Water Piping

Equipment same as specified above for "leakage test of gas piping and gas appliances" except source of water at 100 PSI may be substituted for the compressed air. The pressure gauge must be one that is capable of being read directly to 1.0 PSI, if the test is run to less than 100 PSI.

Leakage Test of Water System

All water piping in distribution system shall be subjected to an air or water pressure of 100 PSI for not less than 30 minutes without leakage or loss of pressure, applicable to plastic pipe if permitted by individual states.

Test Procedure

A. Close all faucets and secure ball float in stool tank in the raised position.

B. Attach air or water line to water inlet.

C. Apply 100 PSI for not less than 30 minutes.

D. A drop in pressure indicates a leak. After the leak is located, the piping, fitting, etc., shall be replaced or repaired.

E. After leak is repaired, repeat steps A through C.

Extend of Work in Factory

Extend of Work in Factory

Supervision Plan

Item	Description		Description of Works for MiC	Checking Frequency	
				Registered Plumbing Worker (RPW)	Licensed Plumber (LP)
1	Material On Site	1.1	Make sure the material are same of WWO1149	Continuous	Weekly
		1.2	Lead Check for Soldering Materials in Pipe-fittings with Integrated Solder Ring (minimum 1% of the total number of fittings) (if applicable)	Continuous	Weekly
2	Pipes Work Installation	2.1	Ensure all material, size of pipes & fittings as well as their installation and jointing method are complied with WSD requirement	Continuous	Weekly
		2.2	All plumbing installations need to recording the worker's name	Continuous	Weekly
		2.3	The photo record to be taken after completion of every MiC	Continuous	Weekly
		2.4	The quality of pipe work conform WSD standard	Continuous	Weekly
3	T&C	3.1	Supervision for plumbing installation in the MiC factory	Continuous	Weekly
		3.2	Supervision records shall be kept including the date and time of inspection and supervision of the plumbing works conducted by LP and RPW	Continuous	Weekly
		3.3	All water supply pipe shall complete pressure test	Continuous	Weekly
		3.4	All MiC at least 10% do the non-destructive test for solder joints	Continuous	Weekly
		3.5	Digital supervision record including photographs, video and details of the supervision personnel who undertook the inspection checks and tests will keep and facilitate the acceptance by WSD	Continuous	Weekly
4	Others	4.1	Interim inspection of plumbing works in projects adopting MiC method by WSD	Every time	Weekly
		4.2	Contact with WSD of the MiC project	Every time	Weekly

MiMEP

WHAT IS MiMEP? MiMEP = Multi-trade Integrated Mechanical, Electrical & Plumbing

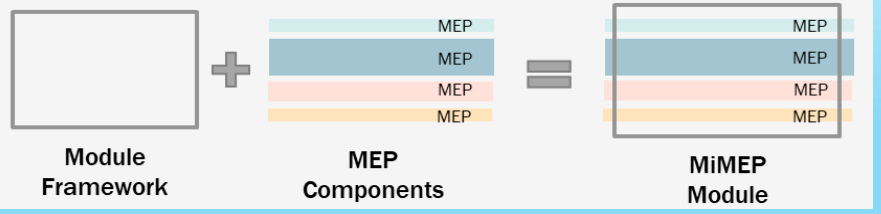
Merits of MiMEP

Shorten installation programme	• On-site builder's works and off-site pre-fabrication can carry out **concurrently**
Free up spaces on site	• **Minimize coordination work** of different trades on site
Improve safety	• Labour-intensive work can be conducted at factory
Enhance quality control	• **Minimize working at height**
Increase productivity	• Less dependent to weather conditions
Cost saving	• **Multi-trade labours** work in a controlled environment at factory

MiMEP

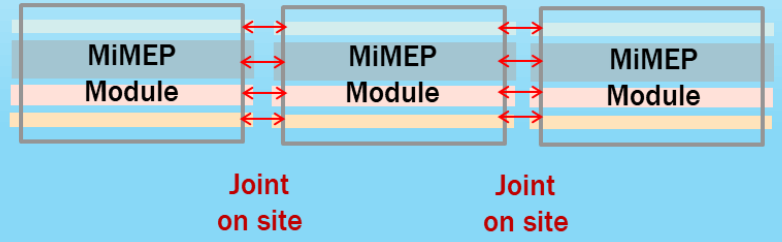
1. Design of Module

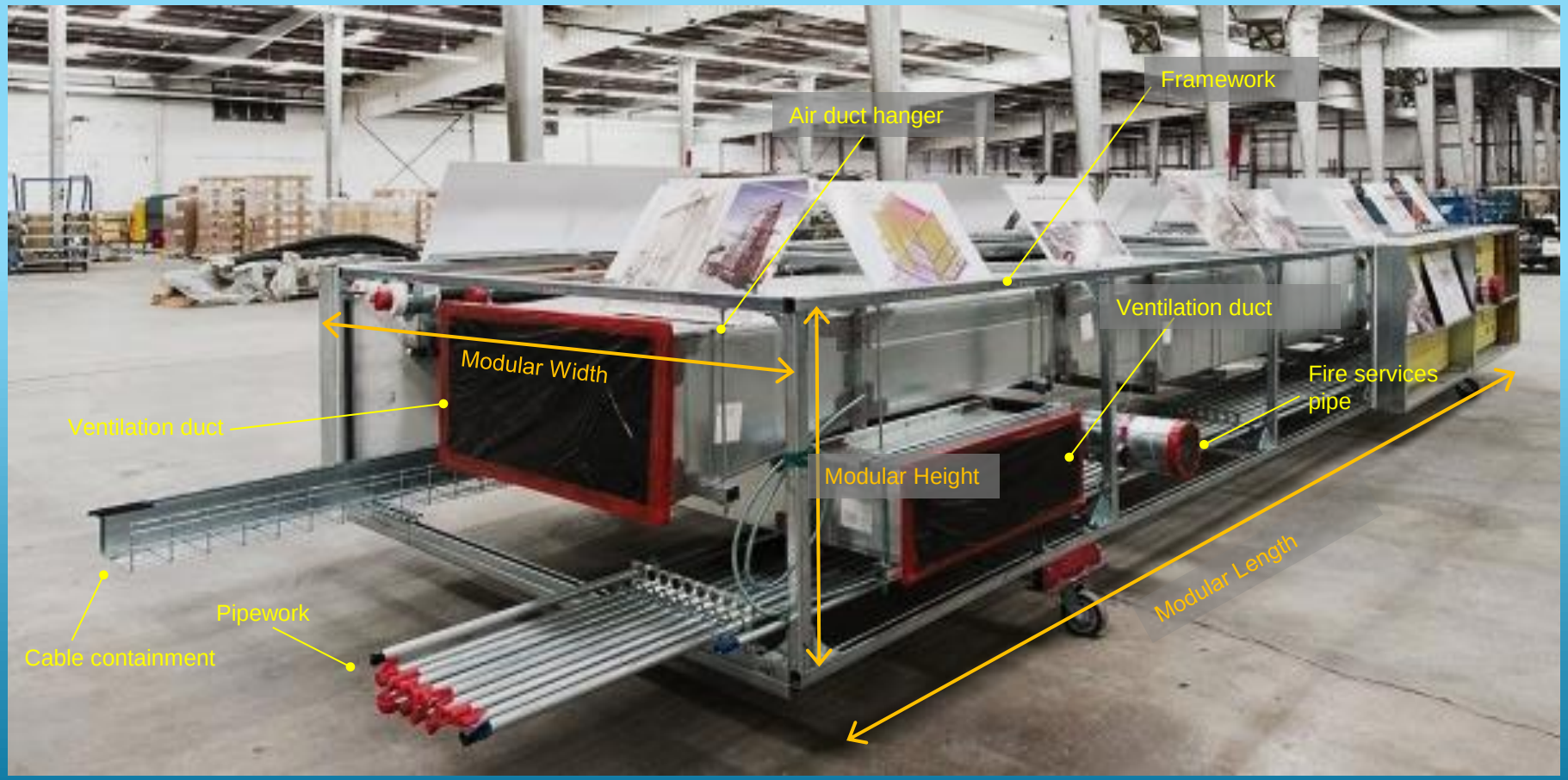
2. Off Site Prefabrication



3. Delivery to Site

4. Installation on Site





Typical MiMEP

1. Ceiling Modules

- Sprinkler heads and pipings
- Chilled water supply and return pipe
- Condensate drain pipe
- Sanitary drain
- Plumbing
- Town gas
- ELV cabling system with trunking, tray or cable ladders
- Air-conditioning / mechanical ventilation ductwork
- Light fixtures
- Fire-rated boards with insulation

2. Vertical Modules

- Vertical ductwork, pipes, conduits and cable trunking and tray

3. Plant Modules

- Sprinkler control valve set
- Subsidiary stop valve set
- Hose reel cabinet
- Pressure reducing valve set
- Water meters cabinet
- Electrical meters cabinet
- Low voltage cubicle switchboard
- Electrical services in Electrical and/or ELV Switch Rooms
- Modular electrical wiring system
- Chilled water plant pipework system
- Cooling tower and condensing water pipework system
- AHU / PAU plant
- Water pump set module

Design Consideration and Strategy for MiC Plant Room

- Equipment dimensions
- System capacity
- Overall weight
- Repetitiveness of components
- Cost effectiveness
- Construction time efficiency

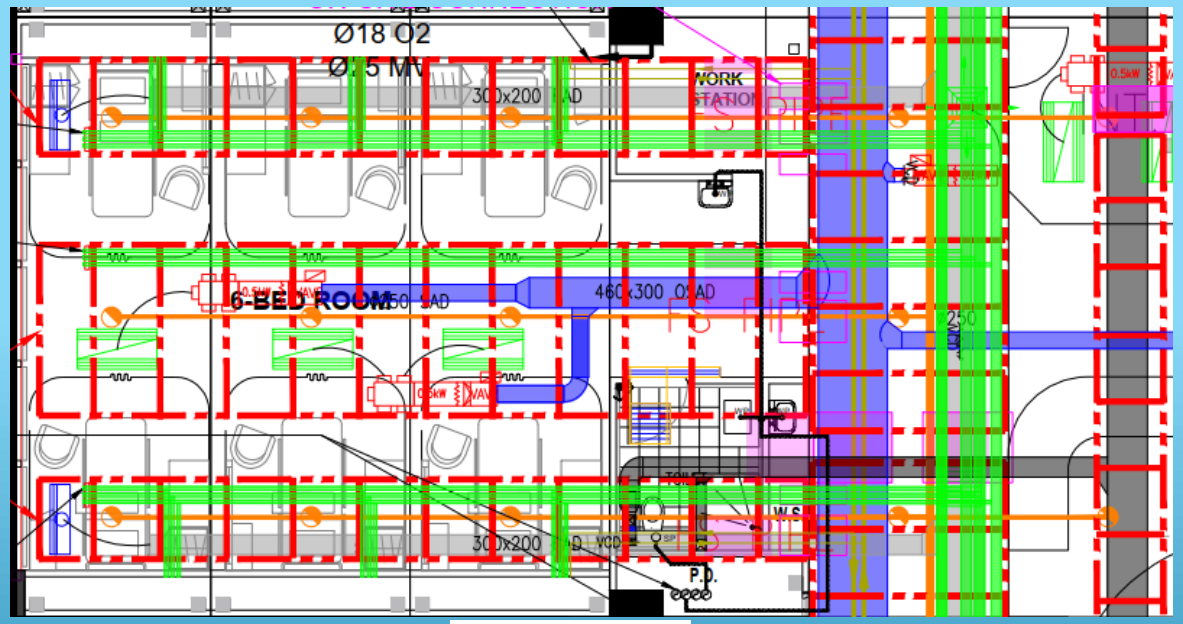
Remarks:
- Equipment dimension shall not exceed the MiC module size
- Gross weight of each MiC Plant Room module <=20 tons

- Dimension shall not exceed 3m(W) x 12m(L) x 3.6m(H)

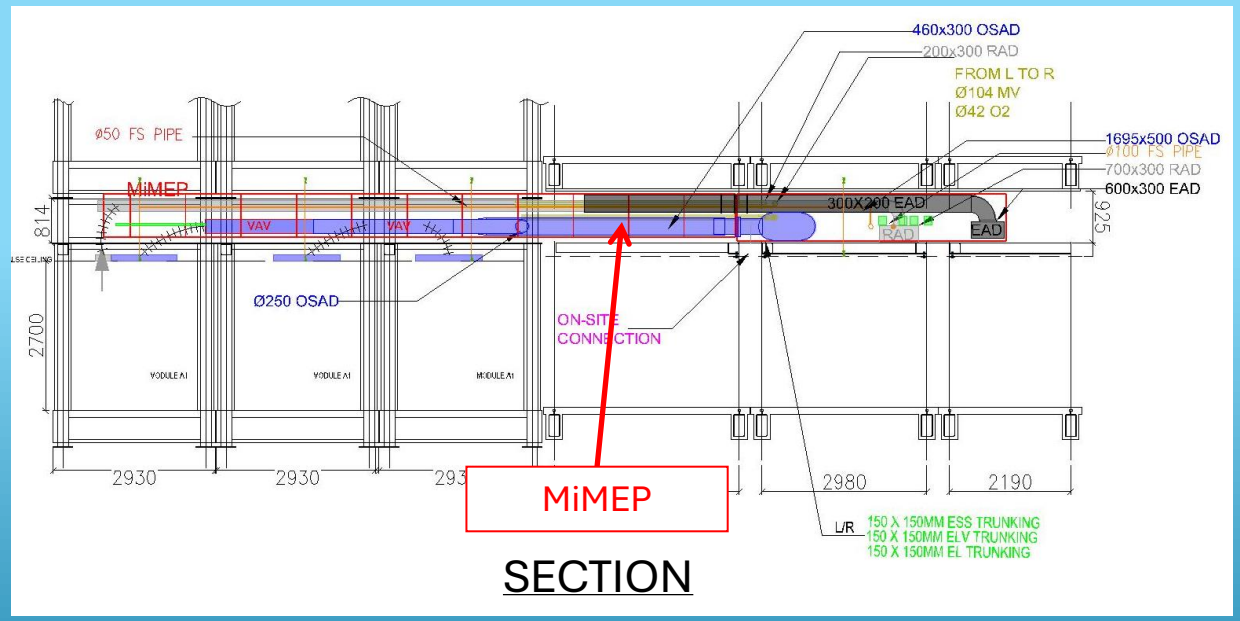
MiMEP

Example of Ceiling Module

i) Equipment rack for fixing of building services components
ii) All bolts and nuts for fixing equipment rack on steel truss should be ease of access
iii) MiMEP dimension shall not exceed 3m(W) x 12m(L) x 3.6m(H)
iv) Gross weight of each MiMEP module <=20 tons



PLAN

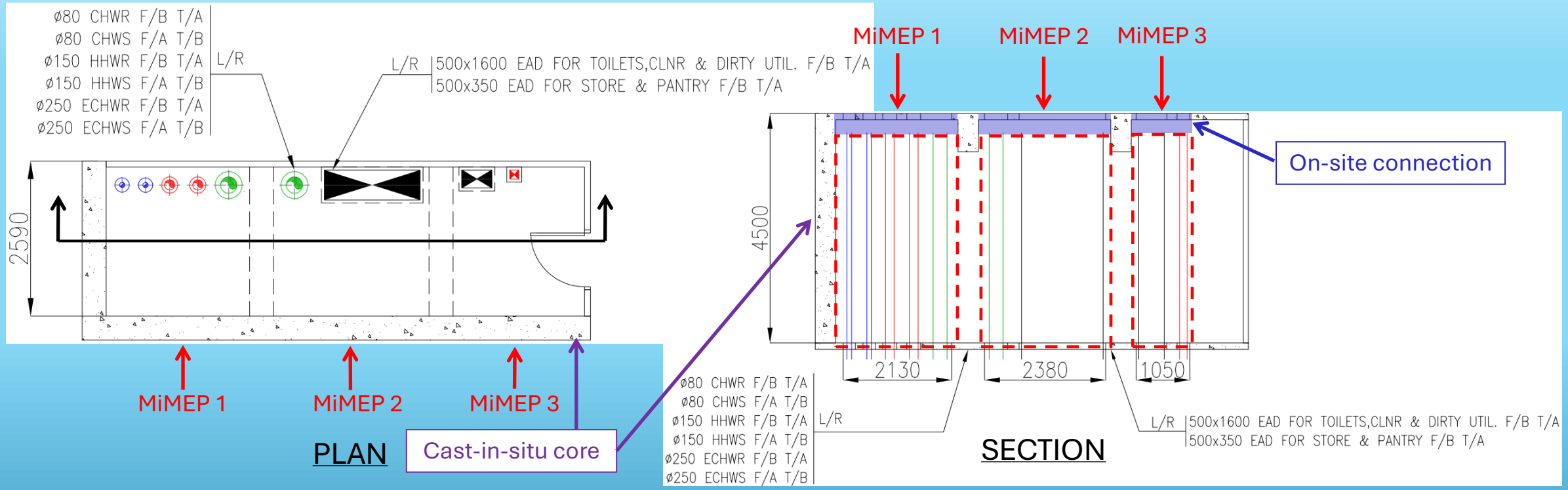


SECTION

MiMEP

Example of Vertical Module

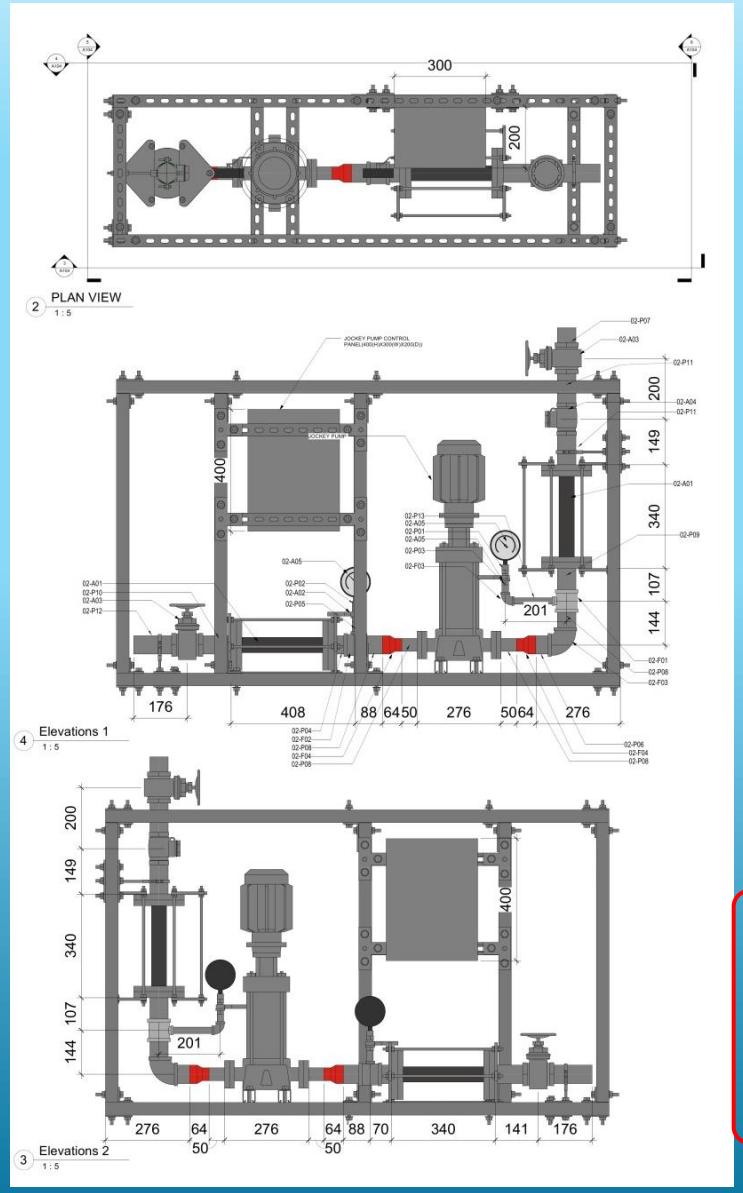
Vertical Pipe / Duct Shaft

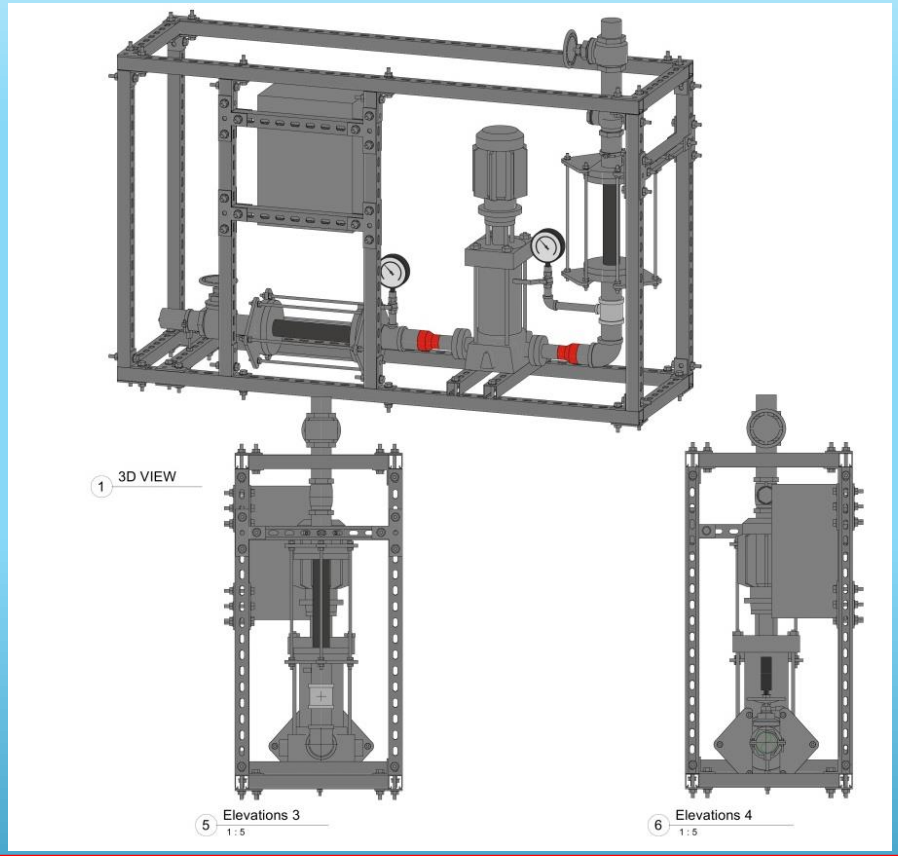


MiMEP

Example of Plant Module

FS Jockey Pump Set and Control Panel





Remarks:

- MiMEP dimension shall not exceed 3m(W) x 12m(L) x 3.6m(H);
- Gross weight of each MiMEP module <=20 tons

As this project involves the construction of plumbing works adopting modular integrated construction (MiC) method, you are required to submit a supervision plan for the construction of plumbing installations at the MiC factory together with Form WwO 46 Part I& II for the consideration by the Water Authority (WA) for granting permission to commence the plumbing works. In addition, the shop drawings showing the details of the plumbing installations in the MiC modules that will be covered up in the MiC factory (if any), the production schedule and inspection schedule for the plumbing works to be covered up in the MiC modules at the factory (if any) shall also be submitted together with the Form wwo 46 Part I & II for WA's information.

Q&A

Please Scan Me