



# Supplementary Guidance Note on General Building Plan Submissions



香港消防處

HONG KONG FIRE SERVICES DEPARTMENT

# Preface

The Fire Services Department (FSD) has been committed to maintaining fire safety in buildings, founded on the assurance of their fire safety designs meeting requisite standards and requirements. While the FSD facilitates trade practitioners throughout the processing of GBP submissions, the cooperation from the building professionals and Authorized Person (AP) in maintaining submission quality is crucial to achieving this goal. Liaison meetings have been regularly organized as a communication platform between the FSD and AP for the exchange of experiences and discussions on GBP submissions.

The purpose of this guidance note is to consolidate the common errors / irregularities that were previously discussed during the liaison meetings between the FSD and AP. It should be read in conjunction with “A Practical Guide for Design, Installation, Acceptance and Maintenance of Fire Service Installations and Equipment” <sup>[1]</sup> to assist the readers in identifying and eliminating these common errors / irregularities in their plan submissions, thereby achieving better efficiency in plan processing.

The target readers of this guidance note are trade practitioners and stakeholders, such as architects, registered professional engineers, surveyors and consultants.

This guidance note is for general reference and informational purposes only. Readers should not only rely on the information given in this publication and should consult the FSD whenever there are doubts about the contents of this publication.

Fire Services Department  
2<sup>nd</sup> revision : September 2024

[1] “A Practical Guide for Design, Installation, Acceptance and Maintenance of Fire Service Installations and Equipment”

can be downloaded from the following URL or QR Code:

[https://www.hkfsd.gov.hk/eng/source/licensing/Practical\\_Guide.pdf](https://www.hkfsd.gov.hk/eng/source/licensing/Practical_Guide.pdf)



# Abbreviations

A&A	Alterations and Additions
AP	Authorized Person
BD	Buildings Department
EVA	Emergency Vehicular Access
FS Code 2011	Code of Practice for Fire Safety in Buildings 2011 promulgated by Buildings Department
FS Notes	Fire Services Notes
FSD	Fire Services Department
FSI	Fire Service Installations and Equipment
CoP <sup>[2]</sup>	Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment
GBP	General Building Plans
PNAP	Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers

<sup>[2]</sup> “Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment” is available at the following URL or QR Code:

[https://www.hkfsd.gov.hk/eng/fire\\_protection/notices/code.html](https://www.hkfsd.gov.hk/eng/fire_protection/notices/code.html)



# Contents

<b>Preface</b>		1
<b>Abbreviations</b>		2
<b>Contents</b>		3
<b>Part 1</b>	Processing of GBP Submissions	4
<b>Part 2</b>	Common Errors / Irregularities in GBP Submissions	5
	2.1 FS Notes	5
	2.2 Layout	5
	2.3 EVA	6
	2.4 Miscellaneous	6
<b>Part 3</b>	Enquiry	6
<b>Appendix I</b>	Checklist for GBP Submissions	7
<b>Appendix II</b>	Common Errors / Irregularities Illustrations	8
<b>Appendix III</b>	Terminology	15
<b>Appendix IV</b>	Point(s) to Note for Proper Installation of FSI	17
	1. Open Kitchen Sprinkler Head Positions against Cabinet in Residential Unit	17

## Part 1 – Processing of GBP Submissions

1.1 The FSD strives to expedite the processing of GBP submissions, taking into consideration the demanding schedules associated with the building development. The early approval of GBP submissions can significantly contribute to the timely completion of building projects / works. Therefore, the overall accuracy / quality of GBP submissions by AP plays a determining role in ensuring the efficiency of plan processing.

1.2 AP shall observe the table of DOs and DON'Ts below prior to submission of GBP:

### DOs (✓)

- ✓ Cross-check FS Notes for typos before submission
- ✓ Ensure previous amendments are incorporated in the latest submission
- ✓ Submit non-code-compliant items in the form of written enquiry at early stage
- ✓ Be conversant with the promulgation of the latest FSD Circular Letter, brief notes of liaison meeting between the FSD and AP and brief notes on Fire Safety Standards Advisory Group Meeting

### DON'Ts (✗)

- ✗ Submit piecemeal alterations which unnecessarily increase the number of amended GBP submissions
- ✗ Submit FS Notes which are not tallied with layout plans
- ✗ Omit to incorporate amendments made in previous submissions in the latest submission
- ✗ Include FSI not mentioned in FS Notes
- ✗ Include items not related to FSI provision in FS Notes

1.3 A checklist to facilitate the submission of GBP by AP is appended in *Appendix I* for reference.

1.4 We adopt a more open policy for plan amendment aiming at reducing abortive work and repeated submissions. In general, the Processing Officer will study and examine the submitted GBP and relevant information in every single case. Other than discrepancies involving structural aspects or major FSI, AP **may be** invited to make amendments to the submission where minor errors / irregularities are noted. The types of such minor errors / irregularities are summarized as follows:

- (a) Inaccuracy of descriptive notes;
- (b) Misprint / drawing irregularities;
- (c) Minor alteration to FSI design, such as pipework, routing and layouts; and
- (d) Other minor amendments excluding the addition of completely new system design, relaxation of requirements and major FSI systems design.

1.5 Notwithstanding the contents in paragraph 1.4, the FSD reserves the right to make a final decision on whether the discrepancies in GBP submissions are eligible for amendment.

## Part 2 – Common Errors / Irregularities in GBP Submissions

Some common errors / irregularities noted in the GBP submissions are highlighted in the ensuing paragraphs, with corresponding illustrations in *Appendix II*:

### 2.1 FS Notes

- 2.1.1 FS Notes not tallied with layout plans
- 2.1.2 FS Notes amendments not highlighted / underlined
- 2.1.3 Inclusion of items not under the FSD's jurisdiction
- 2.1.4 FS Notes not tallied with existing building FSI in A&A works submission
- 2.1.5 Missing of FS Notes
- 2.1.6 Missing / incorrect of standards of FSI
- 2.1.7 CoP adopted for new submission plans<sup>[3]</sup> not tallied with the prevailing revision
- 2.1.8 Amendments made in previous submissions not incorporated in the latest submission

### 2.2 Layout

- 2.2.1 Submission areas not clearly coloured on plans
- 2.2.2 Abbreviations not defined accurately and clearly
- 2.2.3 Naming of location and floor numbering shown on plans not tallied with FS Notes
- 2.2.4 Location installed with electric vehicle charging facility not indicated
- 2.2.5 Insufficient coverage of hose reel
- 2.2.6 Missing of fire hydrant in approach lobby to required staircase or required staircase enclosure
- 2.2.7 Missing of portable hand-operated approved appliance in mechanical plant room
- 2.2.8 Missing of sprinkler control valve
- 2.2.9 Missing of fireman's emergency switch for electric vehicle charging facility

<sup>[3]</sup> New submission plans refer to: -

- (a) new submission of building plans for new building; or
- (b) existing building of which not less than one half measured by volume is rebuilt or which is altered to such an extent as to necessitate the reconstruction of not less than one half of the superficial area of the main walls, or where an new occupation permit shall be issued.



## **2.3 EVA**

- 2.3.1 EVA plan not provided in new submission plans
- 2.3.2 Discrepancy in calculation of building facade served by EVA
- 2.3.3 Missing of EVA details / specifications

## **2.4 Miscellaneous**

- 2.4.1 Calculation of openable window and top vent of natural venting staircase not clearly indicated
- 2.4.2 Cubical extent of the building not provided for justifying the non-provision of pressurization of staircase
- 2.4.3 Compartment volume not provided for justifying the non-provision of smoke extraction system
- 2.4.4 FSI provisions not extended from the area connecting to the access solely for lift pit
- 2.4.5 Type of transformer not indicated

## **Part 3 – Enquiry**

For enquiry on GBP submissions / processing, please contact:

New Projects Division,  
Fire Safety Command,  
Fire Services Department,  
2/F, Centre Parc, 11 Sheung Yuet Road,  
Kowloon Bay, Kowloon, Hong Kong.  
Tel. No. : (852) 3971 4621  
Fax No. : (852) 2722 6234  
Email : [ado\\_np\\_31@hkfsd.gov.hk](mailto:ado_np_31@hkfsd.gov.hk)

# Appendix I – Checklist for GBP Submissions

## New Submission Plans

	Item	Reference	✓ / ✗
1	Two sets of plans submitted to BD for referral to the FSD (Remarks: Three sets of plans for works under Fire Safety (Commercial Premises) Ordinance or the Fire Safety (Buildings) Ordinance)	PNAP ADM-2 <sup>[4]</sup>	
2	Prescriptive FSI provided according to building occupancies	CoP	
3	Scale of plan provided	-	
4	International standards of various FSI incorporated in FS Notes	-	
5	Reference of the FSD Circular Letter incorporated in FS Notes	The FSD Website	
6	FS Notes shall tally with the layout plans (e.g. FS tank location / size)	-	
7	Non-code-compliance items submitted in the form of written enquiry prior to submission of GBP	-	
8	Provision of Fireman's Lift	Part D, Section 4 of FS Code 2011 <sup>[5]</sup>	
9	Provision of EVA	Part D, Section 6 of FS Code 2011 <sup>[5]</sup> and PNAP APP-136 <sup>[6]</sup>	
10	Provision of FSI for open kitchen	Clause C13.4 of FS Code 2011 <sup>[5]</sup>	

## Amended Plans

1	Amendment made in previous submission incorporated in the latest submission	-	
2	Submission area clearly indicated on plans	-	
3	Amendments coloured / underlined on layout plans / FS Notes	-	

## A&A Works

1	Prescriptive FSI provided according to building occupancies	CoP	
2	Submission area clearly indicated on plans	-	
3	FS Notes shall tally with existing building FSI	-	

<sup>[4]</sup> & <sup>[6]</sup> The PNAP are available at the following URL:

[https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index\\_pnap.html](https://www.bd.gov.hk/en/resources/codes-and-references/practice-notes-and-circular-letters/index_pnap.html)

<sup>[5]</sup> The FS Code 2011 can be downloaded from the following URL or QR Code:

[https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/fs\\_code2011.pdf](https://www.bd.gov.hk/doc/en/resources/codes-and-references/code-and-design-manuals/fs_code2011.pdf)





## Appendix II – Common Errors / Irregularities Illustrations

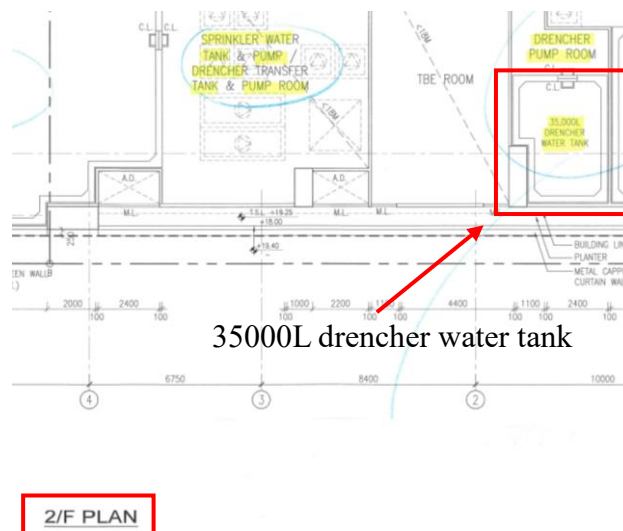
The following illustrations should be read in conjunction with Part 2 of this guidance note:

1. FS Notes not tallied with layout plans (Item 2.1.1 refers)

ib. ONE 35,000 LITRES DRENCHER WATER TANK AND TWO DRENCHER PUMPS ((DUTY/STANDBY) TO BE PROVIDED AT REFUGE FLOOR AS INDICATED ON PLANS.

ic. THE DRENCHER SYSTEM TO BE AUTOMATICALLY/MANUALLY OPERATED:

- ACTUATION OF FLOW SWITCH ALARM SIGNAL OF THE SPRINKLERS INSTALLED AT THE REFUGE FLOOR WILL AUTOMATICALLY OPERATED THE DRENCHER SYSTEM
- MANUAL OPERATING DEVICES WITH OPERATION INSTRUCTION DISPLAYED NEARBY TO BE PROVIDED AT EACH EXIT DOOR ON REFUGE FLOOR AND THE DRENCHER CONTROL VALVE SET FOR EMERGENCY MANUAL OPERATION



The location of drencher water tank was not tallied with FS Notes

2. Inclusion of items not under the FSD's jurisdiction (Item 2.1.3 refers)

**FIRE SERVICES NOTES:**

1. THERE WILL BE NO CHANGE IN THE PROVISION OF MEANS OF ESCAPE.
2. EMERGENCY LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH BS 5266.
3. DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH FSD LETTER 5/2008.
4. NEW VISUAL FIRE ALARM SYSTEM TO BE PROVIDED IN ACCORDANCE WITH BS 5839-1 2002 + A2: 2008 DESIGN MANUAL BARRIER FREE ACCESS 2008 CL4/2001 AND 2/2012.
5. TOTAL FLOOR AREA OF NON-DOMESTIC OF THE BUILDING DOSE NOT EXCEED 230M<sup>2</sup>. SPRINKLERS WILL NOT BE PROVIDED IN G/F AND BASEMENT SHOPS.

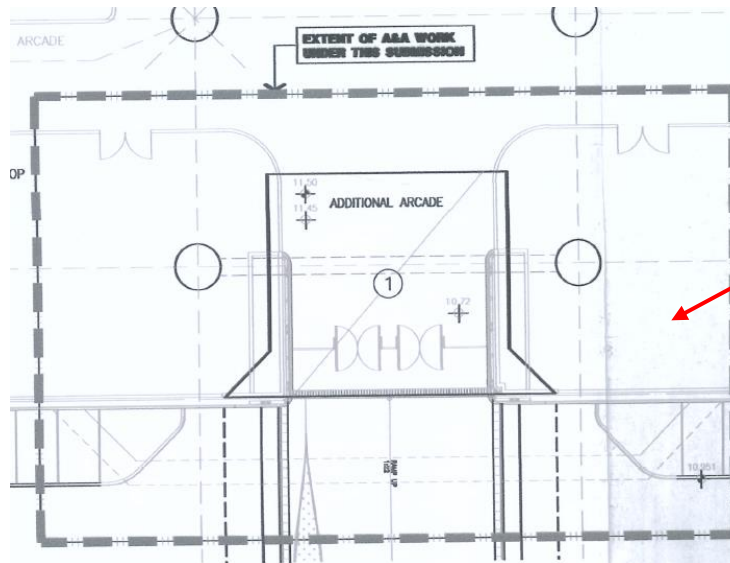
Means of escape shall not be illustrated in FS Notes

3. FS Notes not tallied with existing building FSI in A&A works submission (Item 2.1.4 refers)

**NOTE 3 – ATTENTION TO F.S.D.**

1. NO STORAGE OR DANGEROUS GOODS WITHOUT THE AUTHORITY OF THE DIRECTOR OF THE FIRE SERVICES.
2. EXISTING FIRE SERVICE PROVISION TO BE MAINTAINED IN EFFICIENT ORDER.
3. EXISTING SPRINKLER SYSTEM AND EMERGENCY LIGHTING TO BE ADJUSTED TO SUIT REVISED LAYOUT.
4. FIRE SHUTTERS AUTOMATICALLY OPERATED BY SMOKE DETECTORS PLUS MANUEL CONTROL SHALL BE PROVIDED AS SHOWN ON THE BUILDING PLAN.
5. EXIT SIGNS PROVIDED WITHIN THE RECONFIGURATION AREAS SHALL BE CLEARLY INDICATED BY THE ILLUMINATED EXIT SIGNS IN CHINESE AND ENGLISH.
6. FIRE EXTINGUISHER AND FIRE BLANKET SHALL BE PROVIDED AS SHOWN ON PLAN.

*Handwritten notes: DG, PR/PS, PR/PB*



Fire shutter was not the existing building FSI in the A&A works area

4. Missing of FS Notes (Item 2.1.5 refers)

**LOCATION PLAN** SCALE 1:5000

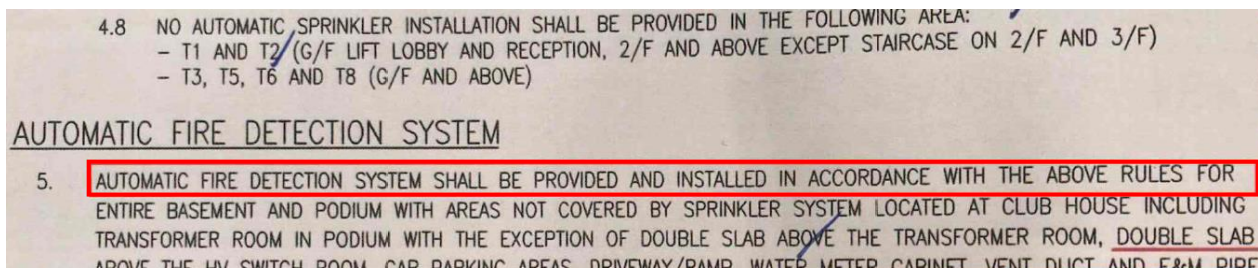
**GENERAL NOTES:**

1. NO WORKS SHALL BE COMMENCED UNTIL THE CONSENT FOR COMMENCEMENT OF WORKS HAS BEEN OBTAINED FROM THE BUILDING AUTHORITY.
2. UNLESS OTHERWISE DENOTED, ALL DIMENSIONS SHOWN ON DRAWINGS ARE STRUCTURAL AND ARE IN MILLIMETERS.
3. THERE IS NO CHANGE IN SITE COVERAGE, PLOT RATIO OR SEWAGE MANHOLE DRAINAGE CONNECTION.
4. THERE IS NO CHANGE IN FIRE SERVICE PROVISION.

*Handwritten note: No FS Notes provided*

FS Notes were found missing on plan

5. Missing / incorrect of standards of FSI (Item 2.1.6 refers)



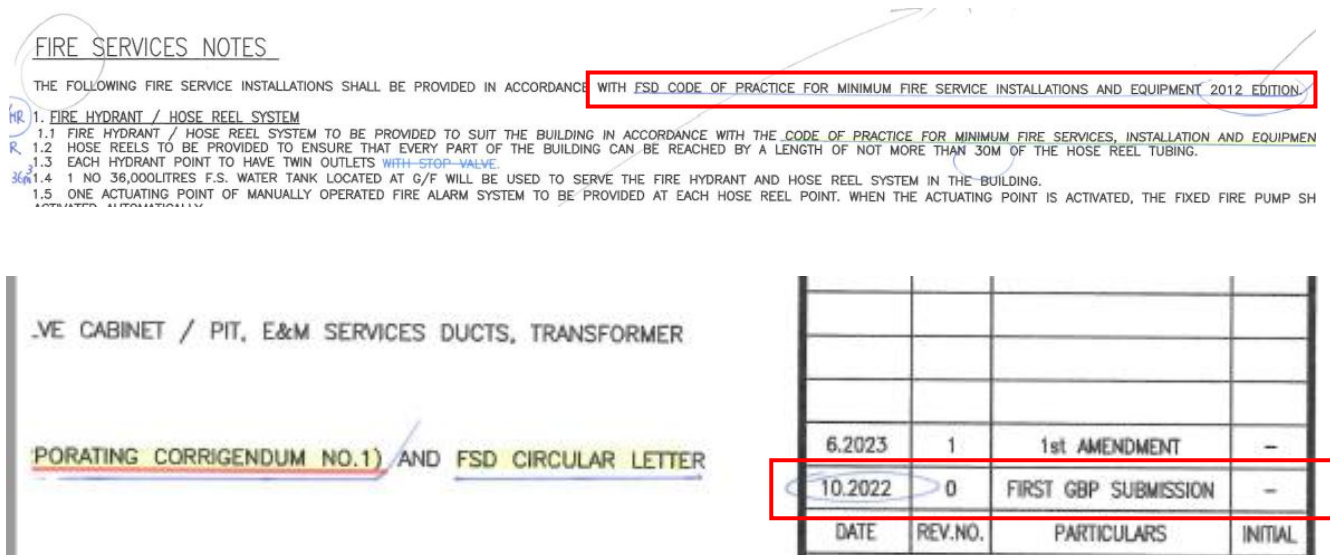
The standards of fire detection system were found missing

6) EMERGENCY LIGHTING

- i) EMERGENCY LIGHTING SHALL COMPLY WITH BS 5266-1:2016, BS EN 1838:2013 AND FSD CIRCULAR LETTER NO. 1/2006.
- ii) EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING AND ALL EXIT ROUTES LEADING TO GROUND LEVEL BUT EXCEPT E&M PIPE DUCTS/CABINETS, DOMESTIC FLATS, PRIVATE ROOFS AND TOP ROOF.

The FSD Circular Letter applied for emergency lighting was not up-to-date

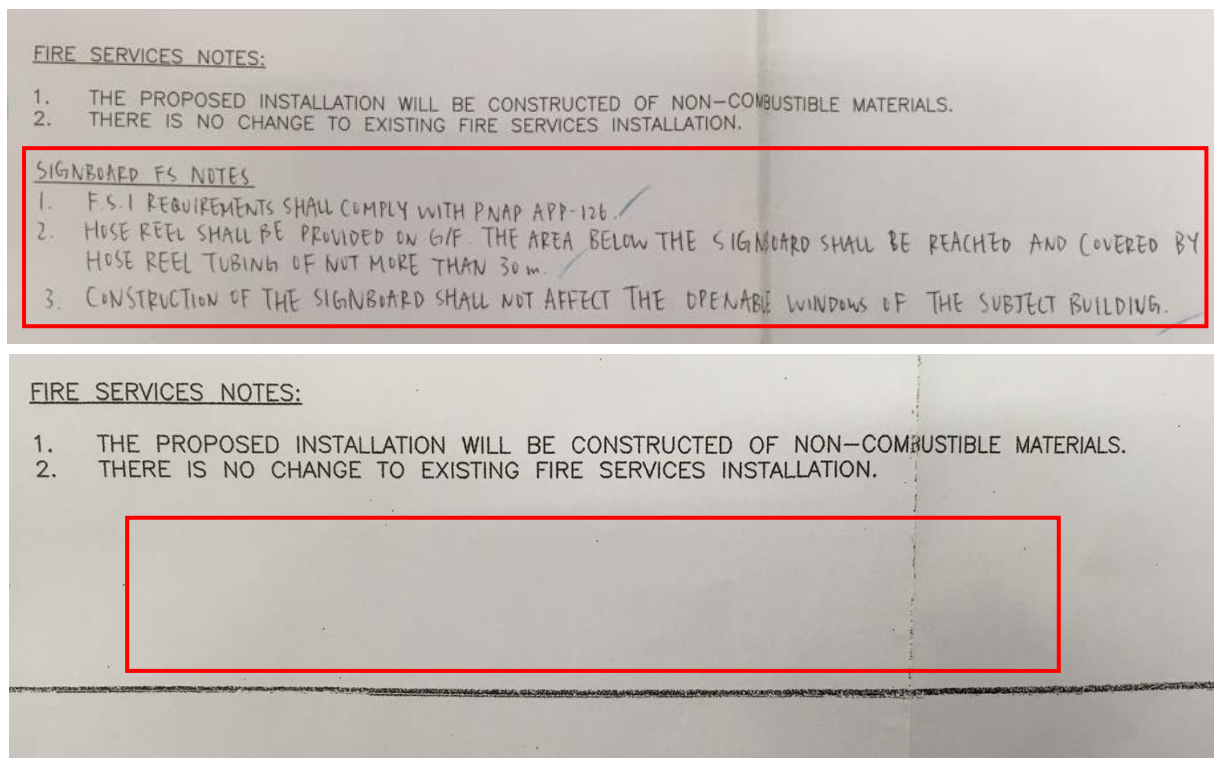
6. CoP adopted for new submission plans not tallied with the prevailing revision (Item 2.1.7 refers)



CoP (September 2022) shall be adopted  
for new submission plans with effect from 1.9.2022

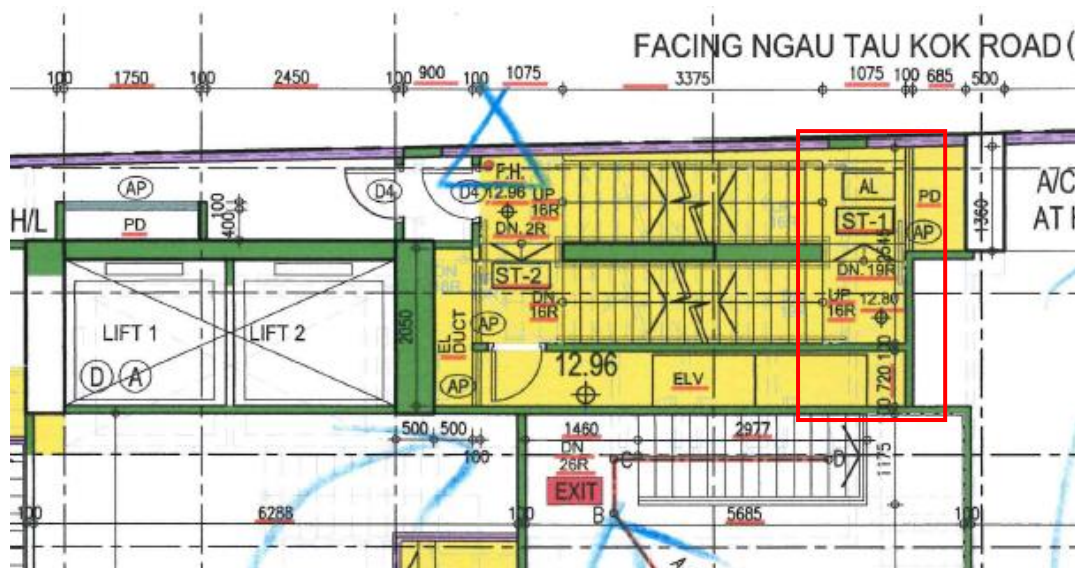


7. Amendments made in previous submissions not incorporated in the latest submission (Item 2.1.8 refers)



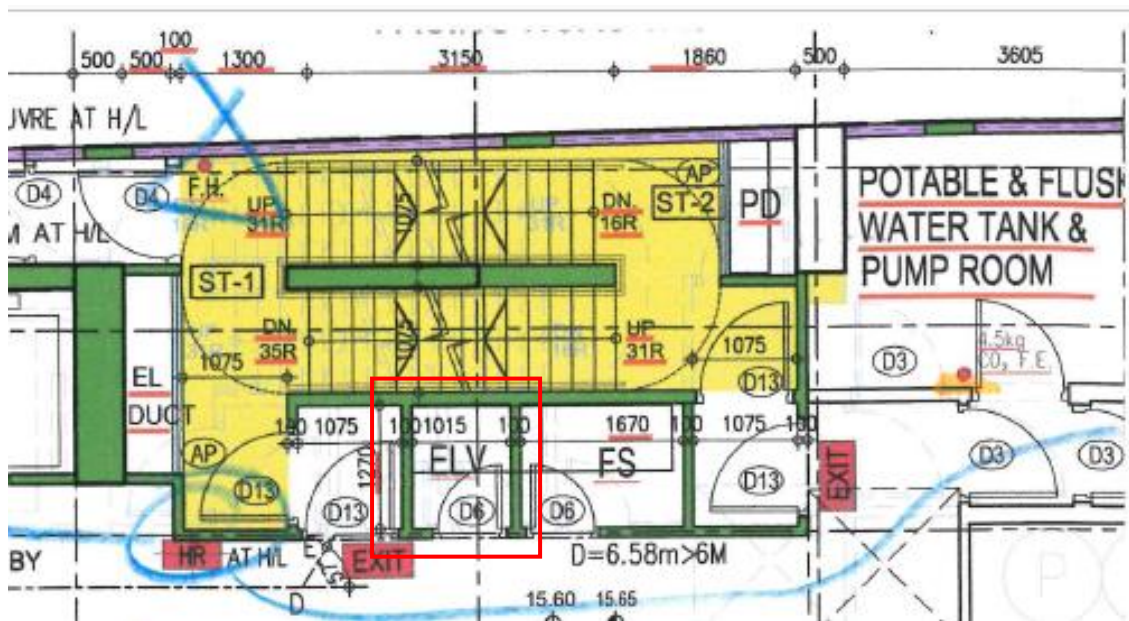
Amendments made in the 1<sup>st</sup> submission (upper diagram)  
were not incorporated in the 2<sup>nd</sup> submission (lower diagram)

8. Missing of fire hydrant in approach lobby to required staircase or required staircase enclosure (Item 2.2.6 refers)



No fire hydrant was found at staircase ST-1

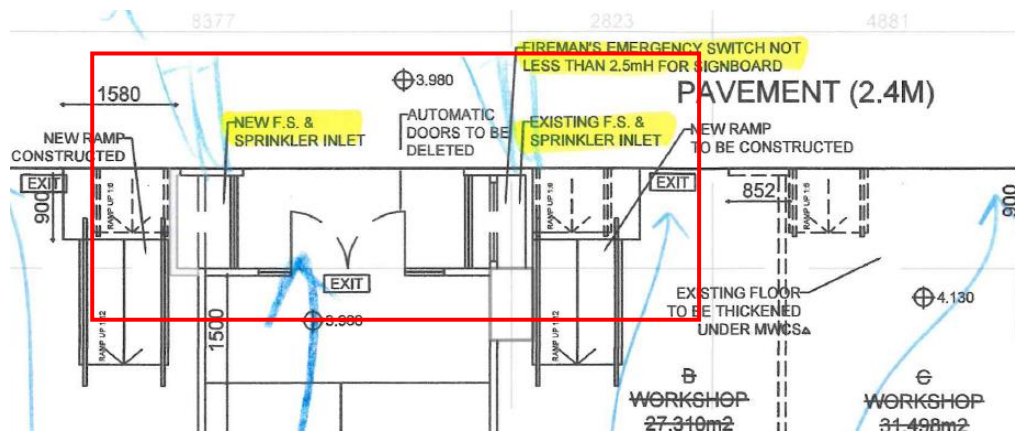
9. Missing of portable hand-operated approved appliance in mechanical plant room (Item 2.2.7 refers)



No fire extinguisher was found in ELV room

10. Missing of sprinkler control valve (Item 2.2.8 refers)

- INFLOW.
- d. A SPRINKLER ALARM CONTROL VALVE WITH SPRINKLER INLET TO BE PROVIDED AT THE POSITION AS INDICATED ON GROUND FLOOR PLAN.
- e. SPRINKLER ANNUNCIATOR PANEL SHALL BE PROVIDED AT G/F FIRE CONTROL CENTRE TO INDICATE THE FLOOR UPON WHICH SPRINKLERS ARE OPERATING.



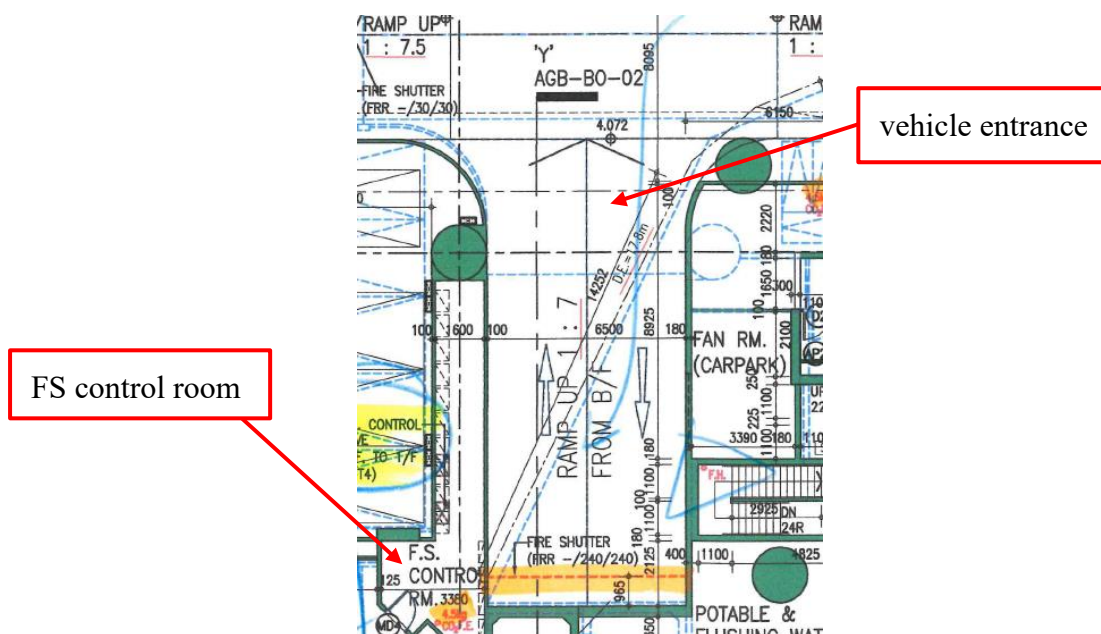
No sprinkler control valve was found on G/F

11. Missing of fireman's emergency switch for electric vehicle charging facility (Item 2.2.9 refers)

16. FINALIZED FSMP FOR OPEN KITCHEN TO BE SUBMITTED AND ENDORSED BY FSD PRIOR TO SUBMISSION OF FSI/501 FOR ARRANGING FSI ACCEPTANCE INSPECTION.

17. EV CHARGING FACILITIES

a. FIRE EXTINGUISHER AND FIREMAN'S EMERGENCY SWITCH SHALL BE PROVIDED ACCORDING TO FSD CIRCULAR LETTER NO. 4/2020.



No fireman's emergency switch was found at FS control room / vehicle entrance

12. Discrepancy in calculation of building facade served by EVA (Item 2.3.2 refers)

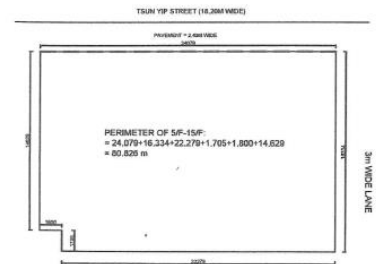
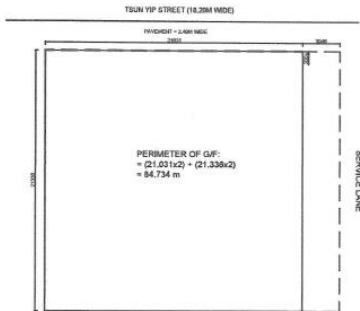
CALCULATION TABLE			
LOCATION	TOTAL LENGTH OF FACADE (I)	LENGTH OF FACADE TO BE SERVED BY EVA (II)	% OF FACADE SERVED BY EVA (II / I x 100%)
ROUND FLOOR	88.102 m (CAL. BY CAD)	122.005 m (CAL. BY CAD)	72.2 > 25
<div> <div style="border-bottom: 2px solid green; width: 50px; display: inline-block;"></div> TOWER FACADE SERVED BY FIRE ENGINE         </div> <div> <div style="border-bottom: 2px solid black; width: 50px; display: inline-block;"></div> TOTAL FACADE         </div>			

Incorrect calculation of building facade served by EVA

13. Missing of EVA details / specifications (Item 2.3.3 refers)

EVA SERVED BUILDING FACADE CALCULATION:

PERIMETER OF G/F	= 84.734 M	PERIMETER OF 1/F-3/F	= 90.830 M	PERIMETER OF 5/F-15/F	= 80.826 M
REQUIRED EVA SERVED TOTAL LENGTH OF BUILDING FACADE		REQUIRED EVA SERVED TOTAL LENGTH OF BUILDING FACADE		REQUIRED EVA SERVED TOTAL LENGTH OF BUILDING FACADE	
84.734 x 25%	= 21.184 M	90.830 x 25%	= 22.708 M	80.826 x 25%	= 20.207 M
PROVIDED EVA SERVED TOTAL LENGTH OF BUILDING FACADE		PROVIDED EVA SERVED TOTAL LENGTH OF BUILDING FACADE		PROVIDED EVA SERVED TOTAL LENGTH OF BUILDING FACADE	
21.231/84.734 x 100%	= 25.06% > 25%	24.079/90.830 x 100%	= 26.51% > 25% (OK)	24.079/80.826 x 100%	= 29.79% > 25% (OK)



No EVA details / specifications were provided on EVA plan



## Appendix III – Terminology

Systems/Installations/Equipment	系統/裝置/設備
Audio/visual advisory system	聲響/視像警報系統
Automatic actuating devices	自動啟動裝置
Automatic fixed installation other than water	不含水的滅火劑自動固定裝置
Automatic fixed installation using water	用水作滅火劑的自動固定裝置
Closed circuit television system	閉路電視系統
Deluge system	集水花灑系統
Drencher system	水簾系統
Dust detection system	塵埃偵測系統
Dynamic smoke extraction system	機械式排煙系統
Emergency generator	應急發電機
Emergency lighting	應急照明系統
Emergency power points	應急電插座
Exit sign	出口指示牌
Fire alarm system	火警警報系統
Fire control centre	消防控制中心
Fire detection system	火警偵測系統
Fire hydrant/hose reel system	消防栓/喉轆系統
Fireman's communication system	消防員通訊系統
Fireman's emergency switch	消防員緊急開關掣
Fireman's lift	消防員升降機
Firefighting and rescue stairway	消防和救援樓梯間
Fixed automatically operated approved appliance	認可的自動操作固定器具
Fixed foam system	固定泡沫系統
Gas detection system	氣體偵測系統
Gas extraction system	氣體排放系統
Pedestrian cross over facilities	行人跨管設施

Portable hand-operated approved appliance	認可的人手操作手提器具
Pressurization of staircase	樓梯增壓
Ring main system with fixed pump(s)	裝有固定水泵的環形水管系統
Sprinkler system	花灑系統
Static smoke extraction system	靜態式排煙系統
Street fire hydrant system	街道消防栓系統
Supply tank	消防水缸
Ventilation/air conditioning control system	通風/空調控制系統
Water mist system	水霧系統
Water spray system	噴水系統
Water supply	供水

## Appendix IV – Point(s) to Note for Proper Installation of FSI

### 1. Open Kitchen Sprinkler Head Positions against Cabinet in Residential Unit

According to Clause 12.4 of Loss Prevention Council Rules for Automatic Sprinkler Installations Incorporating BS EN 12845 (“LPC Rules”), there is no minimum installation clearance specified between the nearest sprinkler and the wall but only the spacing requirements for separation from building construction elements, such as beams, columns, trusses and platforms/ducts, are specified.

It is quite common to note that cabinet or other furniture would be installed in open kitchen. As the cabinet is a non-structural member and is not entirely constructed of non-combustible material, thus it is protected by the sprinkler head in the event of a fire and is not classified as an obstruction under the LPC Rules. Thus, the spacing requirement of sprinkler head in relation to obstruction in the LPC Rules **is not applicable**, and **it is not recommended** to introduce the minimum distance of sprinkler head from cabinet in residential unit with open kitchen. In other words, an additional layer of sprinkler head is not necessary to be installed underneath the cabinet. Nevertheless, the designer should pay particular attention on the siting of sprinkler heads such that the notional open kitchen area should be covered by sprinkler head(s) as far as practicable.