Checklist For Items To Be Included In the Submission Plans

Presented by

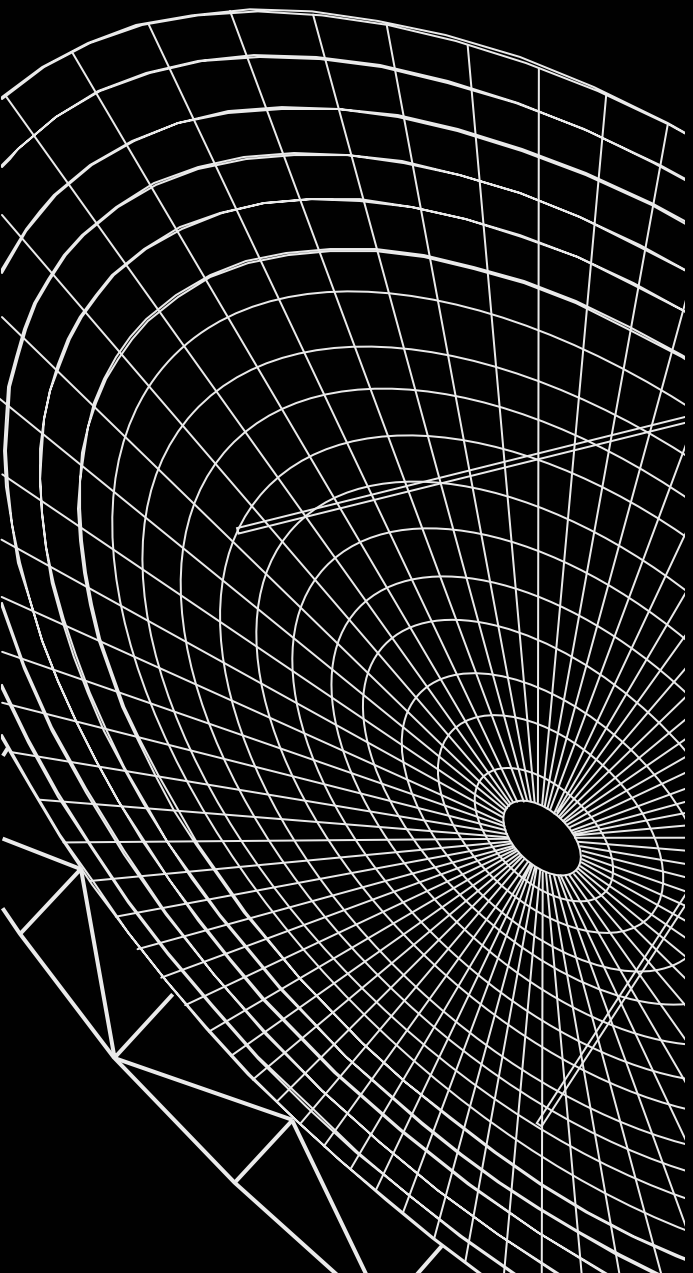
Mdm Eng Yew Hoon

BJ ARCHITECTS INTERNATIONAL

Problems face by QPs



QP with different roles & concerns

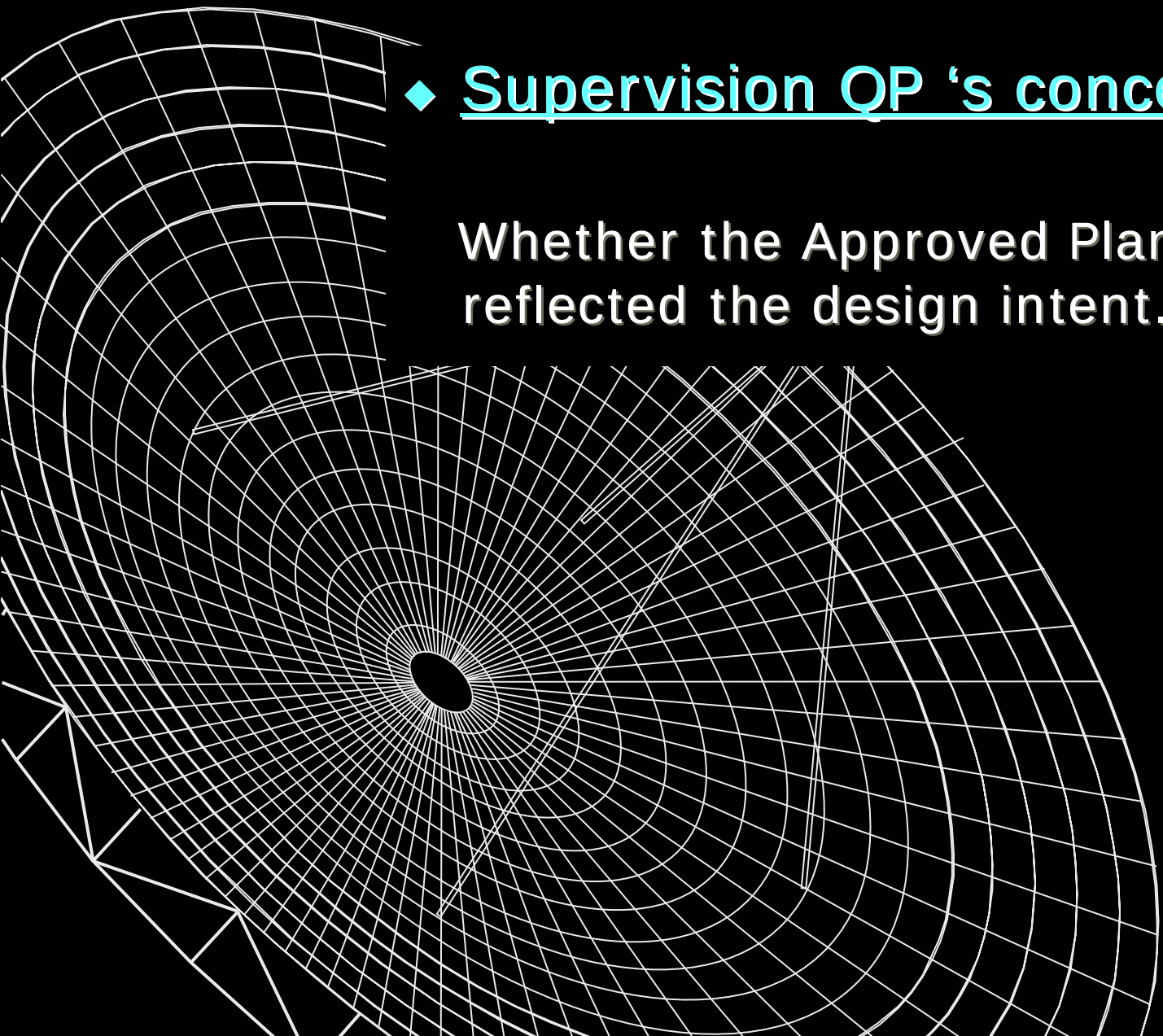


- Submission QP 's concern –

Whether the information shown on the submission plans are sufficient to reflect the self declared statement ---

I __ hereby certify that the works shown on plan have been design in accordance with the Fire Code and comply with the provisions of Fire Safety Act and any regulations made there under

QP with different roles & concerns



- Supervision QP 's concern –

  Whether the Approved Plans have reflected the design intent.

QP with different roles & concerns



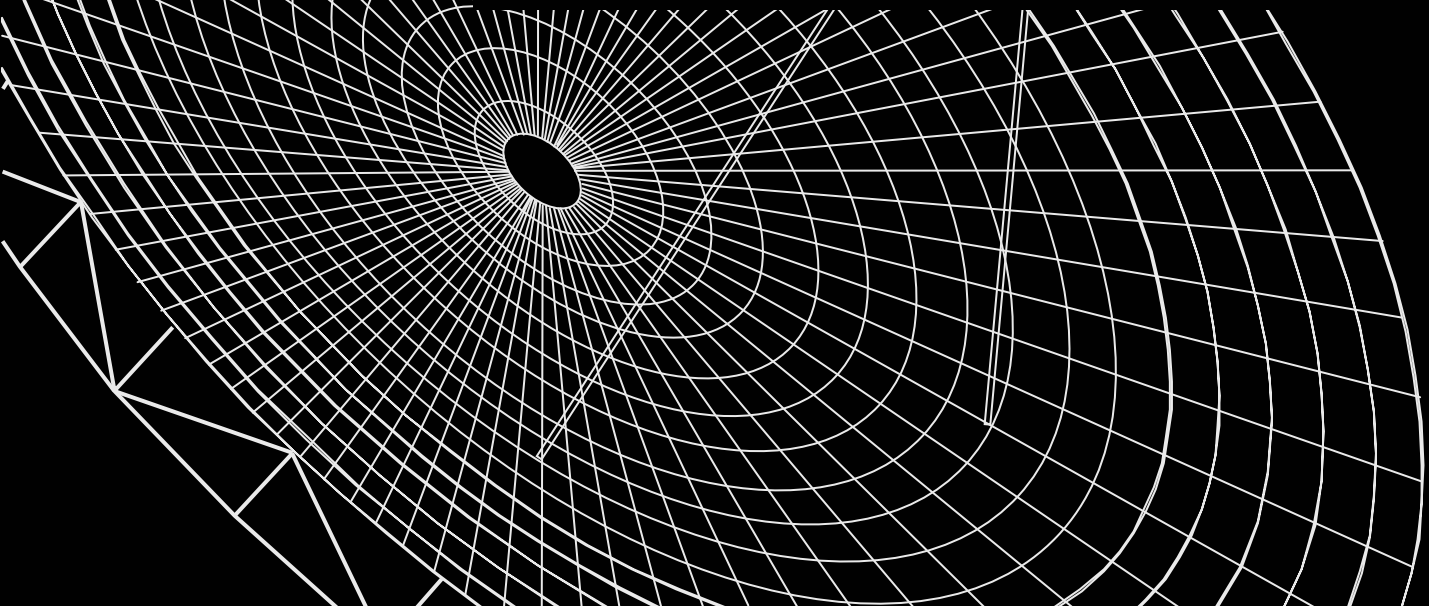
- Registered Inspector's concern –

  Whether the information shown on the Approved Plans are comprehensive , without ambiguity

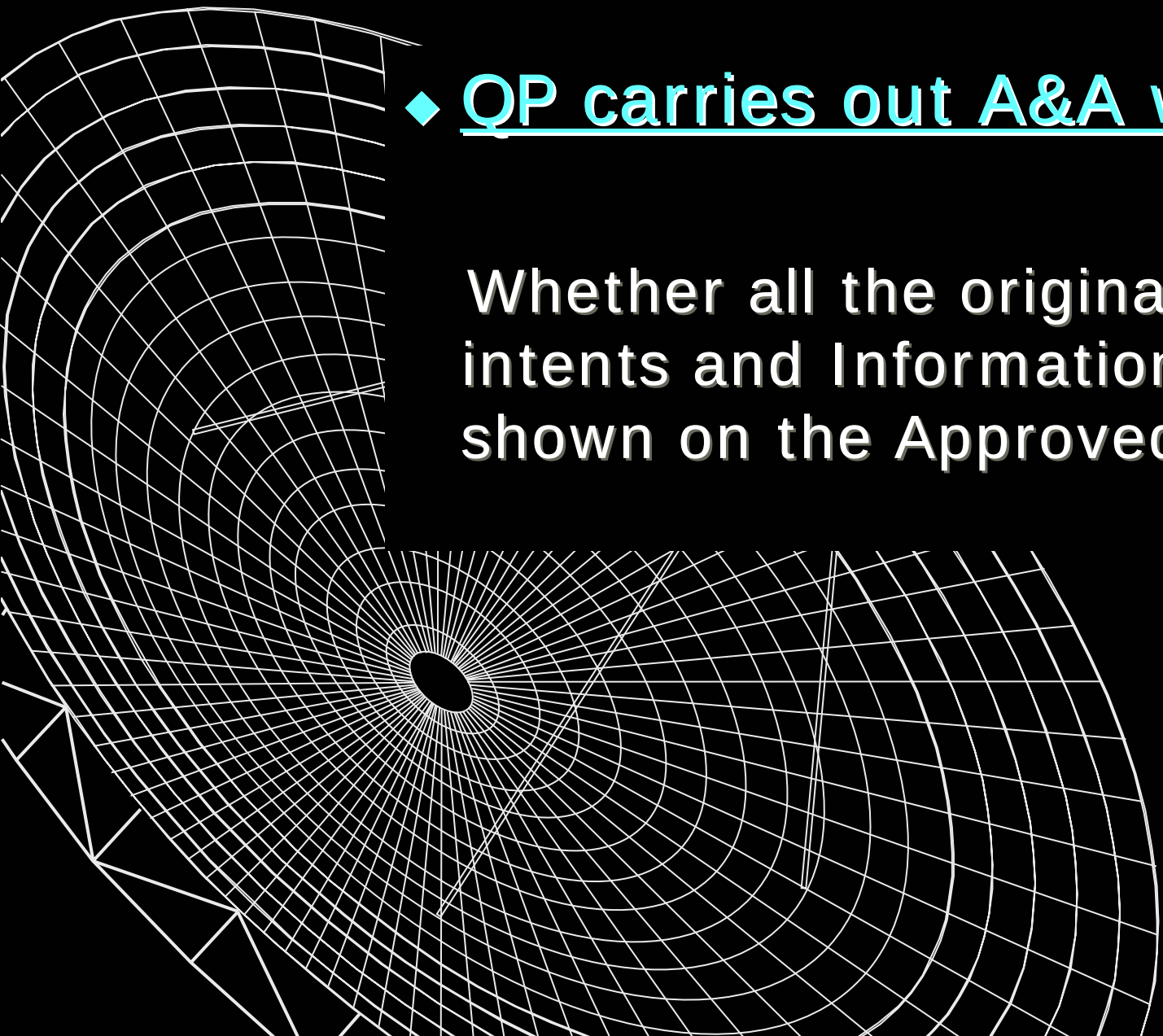
QP with different roles & concerns

- QP take over from previous QP –

Whether all the original design intents and Information are shown on the Approved Plans



QP with different roles & concerns



- QP carries out A&A works–

  Whether all the original design intents and Information are shown on the Approved Plans

The forms

FIRE SAFETY PLANS CHECKLIST

SUBMISSION OF NEW ERECTION/EXTENSION

S/N		ITEMS	COMPLIANCE Yes	No	NA
		LOCATION PLANS			
1		The following items shall be clearly identified and shown in distinct colours :-			
*	a.	The coloured location of the lot relative to neighboring lots			
*	b.	The various roads constituting the access layout to the lot			
		SITE PLANS			
2		The following items shall be clearly identified and shown in distinct colours :-			
*	a.	The means of access to the site and to the perimeter of each building for fire fighting vehicles and equipment			
*	b.	Distances between each building or fire safety works and the relevant lot boundaries, other proposed or existing buildings or installations on the site			
*	c.	The location of existing and proposed internal fire-hydrants on the site			
*	d.	Any other feature on or in the vicinity of the site which is likely to be a fire hazard or is likely to cause obstruction to fire fighting vehicles and equipment and rescue operations			
		FLOOR/ROOF PLANS			
3		The following shall be indicated clearly on floor/roof plans: -			
	a.	Indicate clearly waiver approved location and quote the waiver reference number			
*	b.	Indicate the locations of all existing and proposed fire lifts, fire lift lobbies, the Fire Command Centre, fire pumps, water tank rooms and generator rooms			
*	c.	Indicate the proposed or existing use of every part			
	d.	Indicate the floor area of each room			
*	e.	Indicate the design occupant load and exit capacity for each storey and roof			
*	f.	Show details of all means of escape such as exit doors, corridors, passageways, aisles, gangways, balconies, lobbies, ramps, exit passageways, escape and fire fighting staircases and areas of refuge			
	g.	Highlight the remotest points in relation to the exits and the travel distances			
	h.	Indicate all dead end corridors			
*	i.	Show the details of all openings and voids penetrating floors including their usages, dimensions and the nature and arrangement of enclosing walls and barricades			

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FIRE SAFETY PLANS CHECKLIST

SUBMISSION OF ADDITION/ALTERATION WORKS

S/N		ITEMS	COMPLIANCE Yes	No	NA
		LOCATION PLANS			
1		The following items shall be clearly identified and shown in distinct colours:-			
*	a.	The coloured location of the lot relative to neighboring lots			
		FLOOR/ROOF PLANS			
2		The following shall be indicated clearly on floor/roof plans: -			
	a.	Indicate clearly waiver approved location and quote the waiver reference number			
*	b.	Indicate the locations of all existing and proposed fire lifts, fire lift lobbies and exit provisions.			
*	c.	Indicate the proposed or existing use of every part			
	d.	Indicate the floor area of each room			
*	e.	Indicate the design occupant load and exit capacity for each affected storey.			
*	f.	Show details of all means of escape such as exit doors, corridors, passageways, aisles, gangways, balconies, lobbies, ramps, exit passageways, escape and fire fighting staircases and areas of refuge;			
	g.	Highlight the remotest points in relation to the exits and the travel distances			
	h.	Indicate all dead end corridors			
*	i.	Show the details of all new openings and voids penetrating floors including their usage, dimensions and the nature and arrangement of enclosing walls and barricades			
*	j.	Highlight all new compartment walls and state the fire resistance ratings of all elements of structure, fire doors, shutters, dampers and other fire safety measures			
	k.	Indicate all exit sign location			
*	l.	Indicate the locations of all areas designated for the storage of flammable liquids or gases, boiler rooms, transformer rooms and any other area of special risk			
*	m.	Indicate the types and extent of provision of fire detection and alarm systems and voice communications systems			
	n.	Indicate positions of wet/dry riser outlets & hydraulic hose reels			
*	o.	Indicate the new areas protected by various types of fire protection systems, e.g. sprinkler system, gaseous fire suppression system, auto/manual fire alarm system etc			

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Objectives

- To document the original design intent.
- To act as a reminder/checklist for QPs
- To facilitate plan checking and easy referencing for RI
- To provide information for future addition & alteration works

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

A. SITE PLANS :

a) The means of access to the site and to the perimeter of each building for fire fighting vehicles and equipment ;

b) Distances between each building or fire safety works and the relevant lot boundaries, other proposed or existing buildings or installations on the site

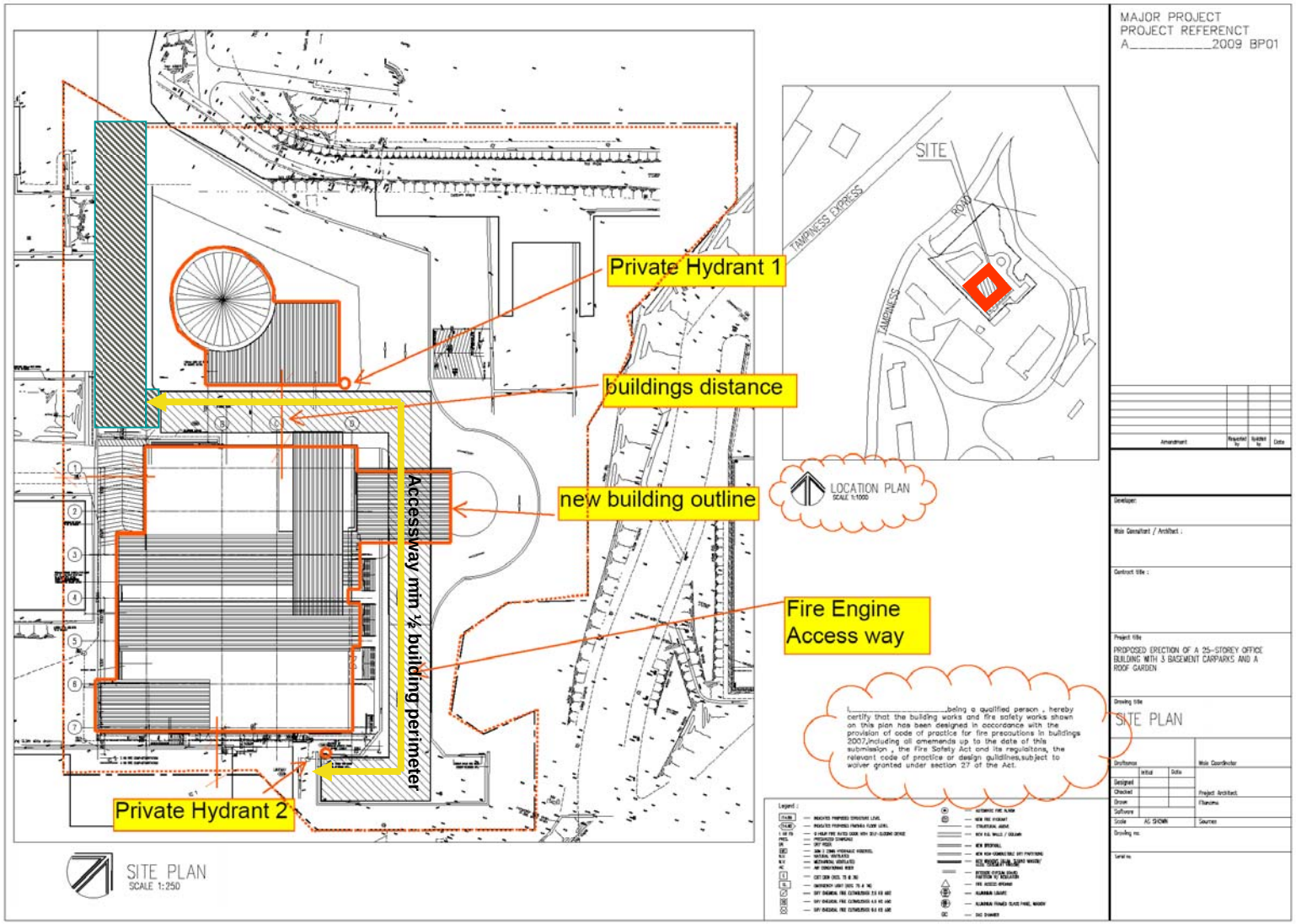
c) The location of existing and proposed internal fire-hydrants on the site ;

d) Any other feature on or in the vicinity of the site which is likely to be a fire hazard or is likely to cause obstruction to fire fighting vehicles and equipment and rescue operations Position of external hydrant/s along public roads in the vicinity of the subject site & additional provision of internal hydrant/s

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/ extension)

SITE PLAN :



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection / extension)

B. FLOOR PLANS :

a. Activities / usages of all rooms/areas/compartments are to be indicated on floor plan.
b. Highlight all compartment walls and state the fire resistance ratings of all elements of structure, fire doors, shutters, dampers and other fire safety measures
c. Wall types / finishes / thickness /critical width/dimension (min or max) of all means of escape &all openings and voids penetrating floors are to be clearly indicated.
e. Indicate the design occupant load and exit capacity for each storey and roof below the plan .
f. Type and extend of fire protection systems to be provided shall be indicated below each floor plan .
g. Shade conceal space (ceiling/raised floor) and indicate mode of fire protection for the space

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection / extension)

B. FLOOR PLANS :

h.) Position of breeching inlet/s, wet/dry riser outlets & hydraulic hose reels, extinguishers types shall be indicated.

i.) Indicate clearly waiver approved location and quote approval reference number, if any.

j.) Indicate the type and extent of provision of smoke control and ventilation systems and their related air or smoke shafts

k.) Indicate the locations of all fire lifts, fire lift lobbies the Fire Command Centre, fire pumps, water tank rooms and generator rooms

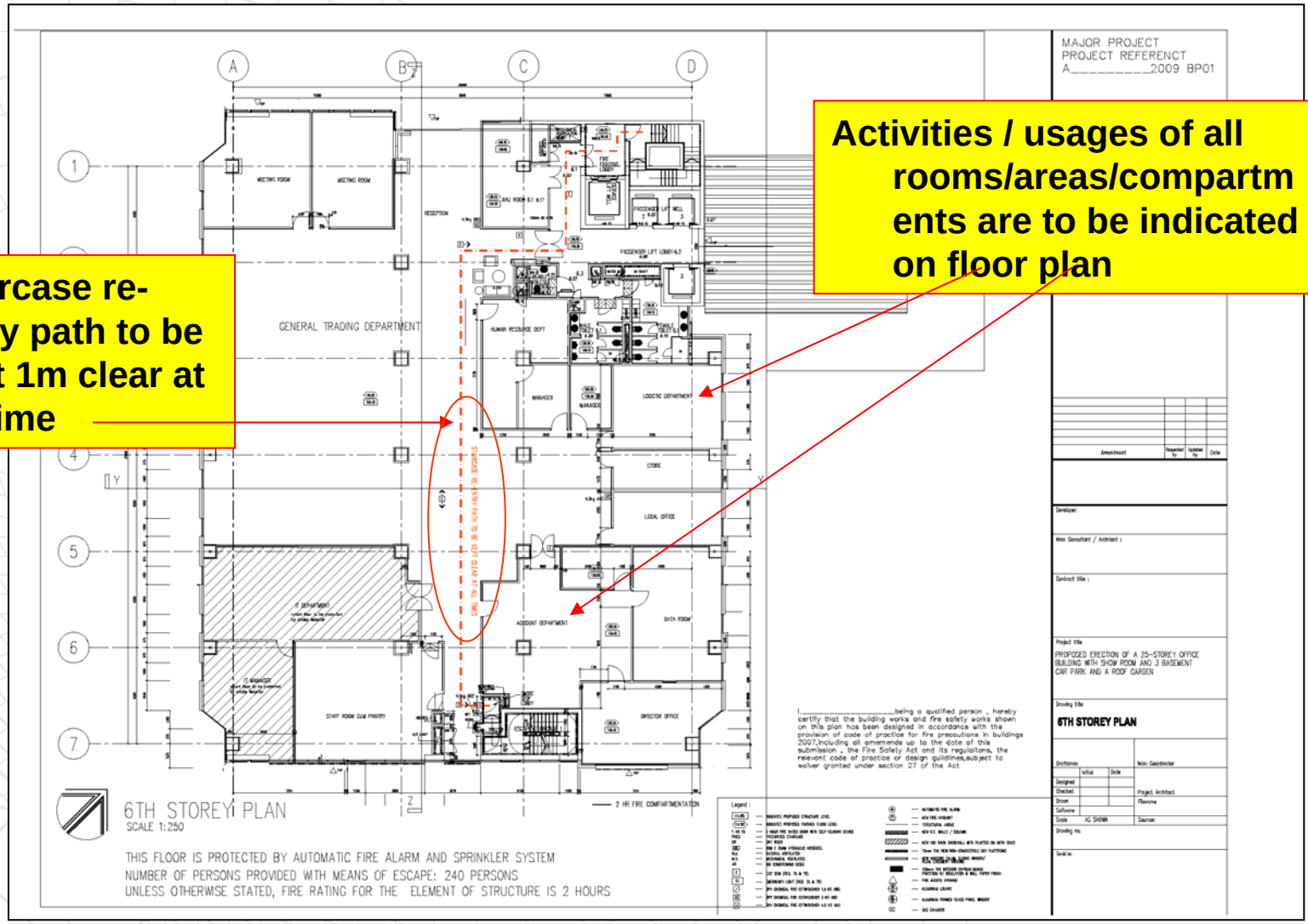
l.) Indicate the types and extent of provision of fire detection and alarm systems and voice communications systems

m.) Indicate the locations of all areas designated for the storage of flammable liquids or gases, boiler rooms, transformer rooms and any other area of special risk

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection /extension)

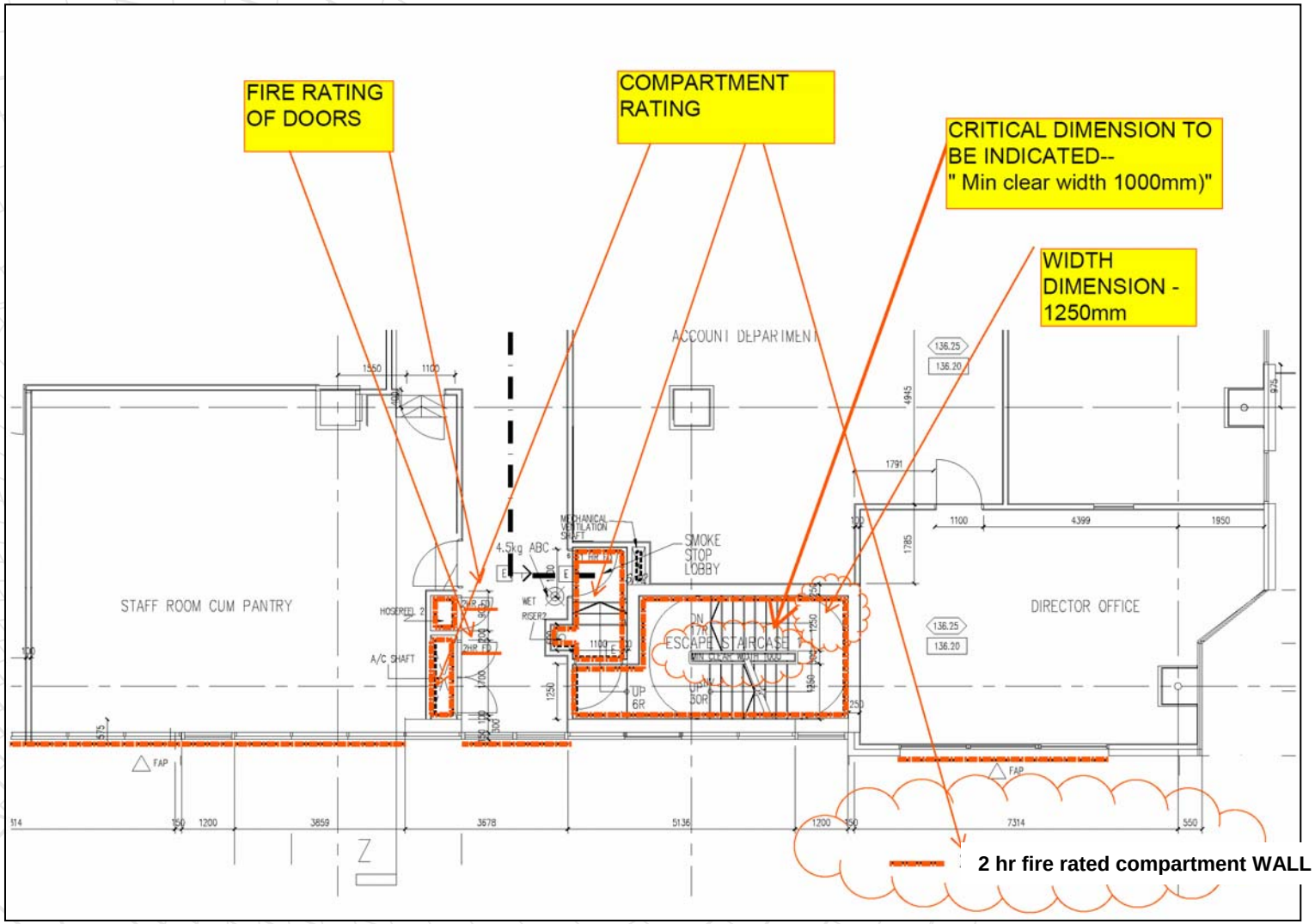
FLOOR PLAN :



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :



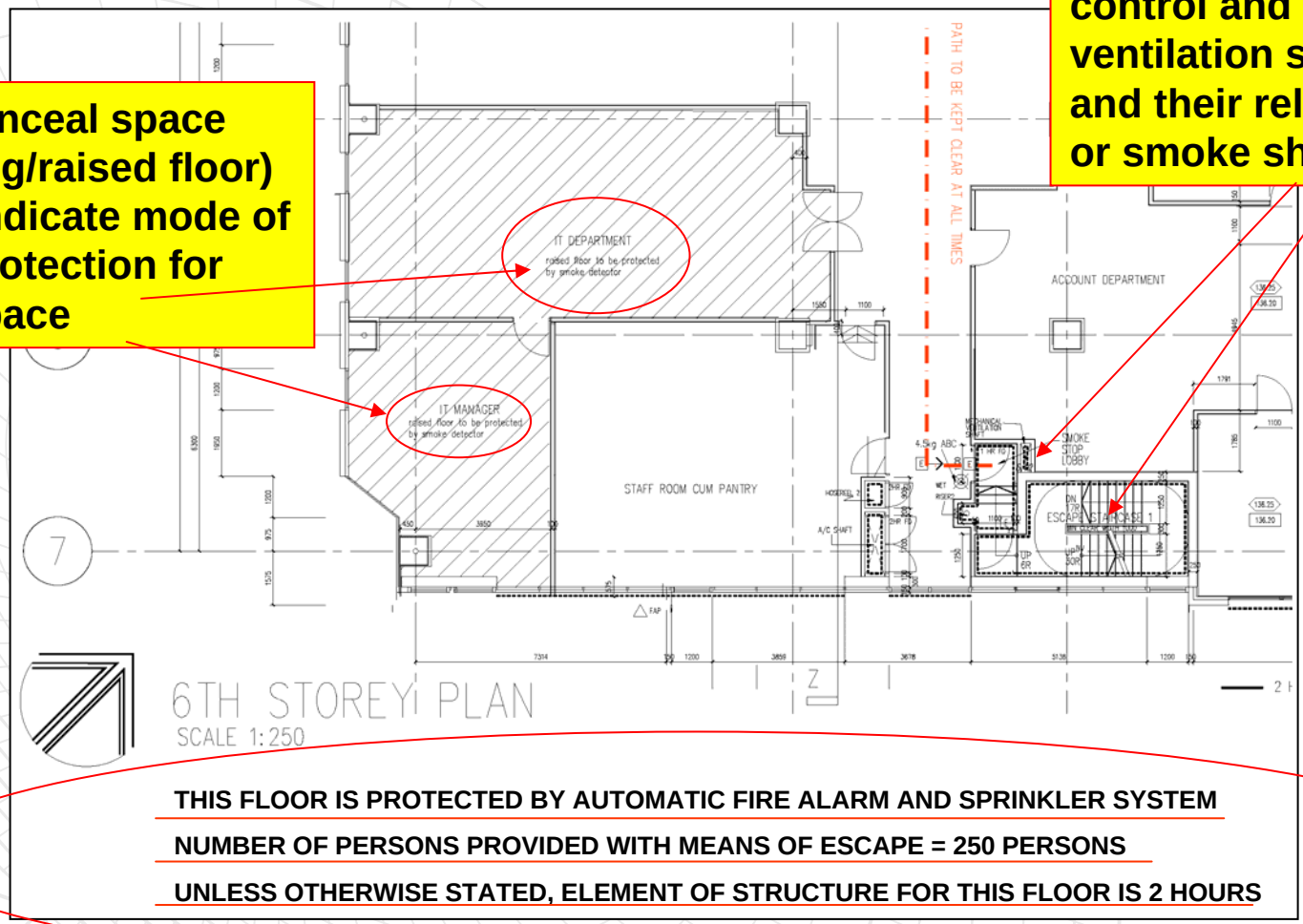
FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :

Shade conceal space (ceiling/raised floor) and indicate mode of fire protection for the space

Indicate the type and extent of provision of smoke control and ventilation systems and their related air or smoke shafts



THIS FLOOR IS PROTECTED BY AUTOMATIC FIRE ALARM AND SPRINKLER SYSTEM

NUMBER OF PERSONS PROVIDED WITH MEANS OF ESCAPE = 250 PERSONS

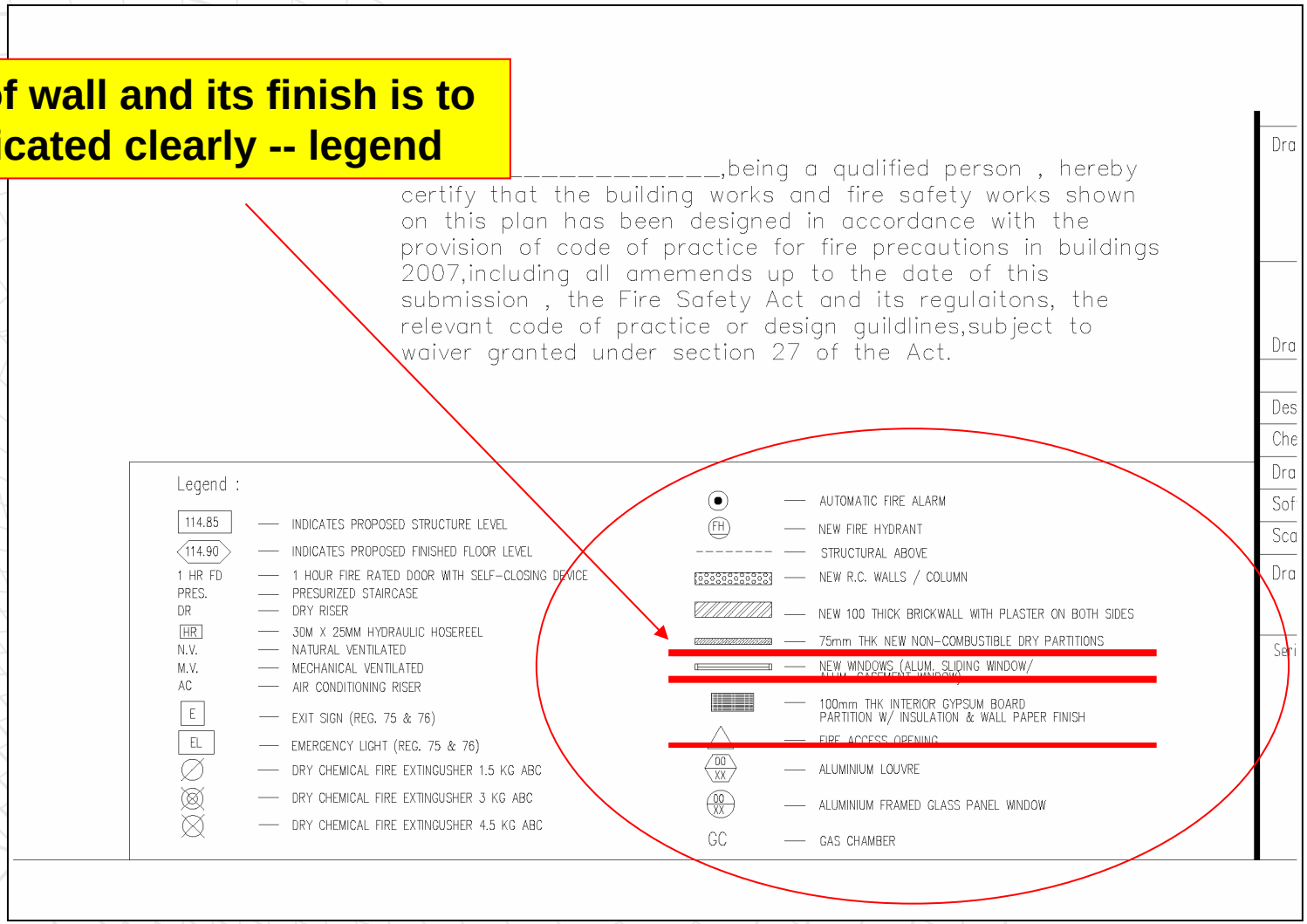
UNLESS OTHERWISE STATED, ELEMENT OF STRUCTURE FOR THIS FLOOR IS 2 HOURS

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :

Type of wall and its finish is to be indicated clearly -- legend



_____,being a qualified person , hereby certify that the building works and fire safety works shown on this plan has been designed in accordance with the provision of code of practice for fire precautions in buildings 2007,including all amemends up to the date of this submission , the Fire Safety Act and its regulaitons, the relevant code of practice or design guildlines,subject to waiver granted under section 27 of the Act.

Legend :

- 114.85 — INDICATES PROPOSED STRUCTURE LEVEL
- 114.90 — INDICATES PROPOSED FINISHED FLOOR LEVEL
- 1 HR FD — 1 HOUR FIRE RATED DOOR WITH SELF-CLOSING DEVICE
- PRES. — PRESURIZED STAIRCASE
- DR — DRY RISER
- HR — 30M X 25MM HYDRAULIC HOSEREEL
- N.V. — NATURAL VENTILATED
- M.V. — MECHANICAL VENTILATED
- AC — AIR CONDITIONING RISER
- E — EXIT SIGN (REG. 75 & 76)
- EL — EMERGENCY LIGHT (REG. 75 & 76)
- — DRY CHEMICAL FIRE EXTINGUSHER 1.5 KG ABC
- — DRY CHEMICAL FIRE EXTINGUSHER 3 KG ABC
- — DRY CHEMICAL FIRE EXTINGUSHER 4.5 KG ABC

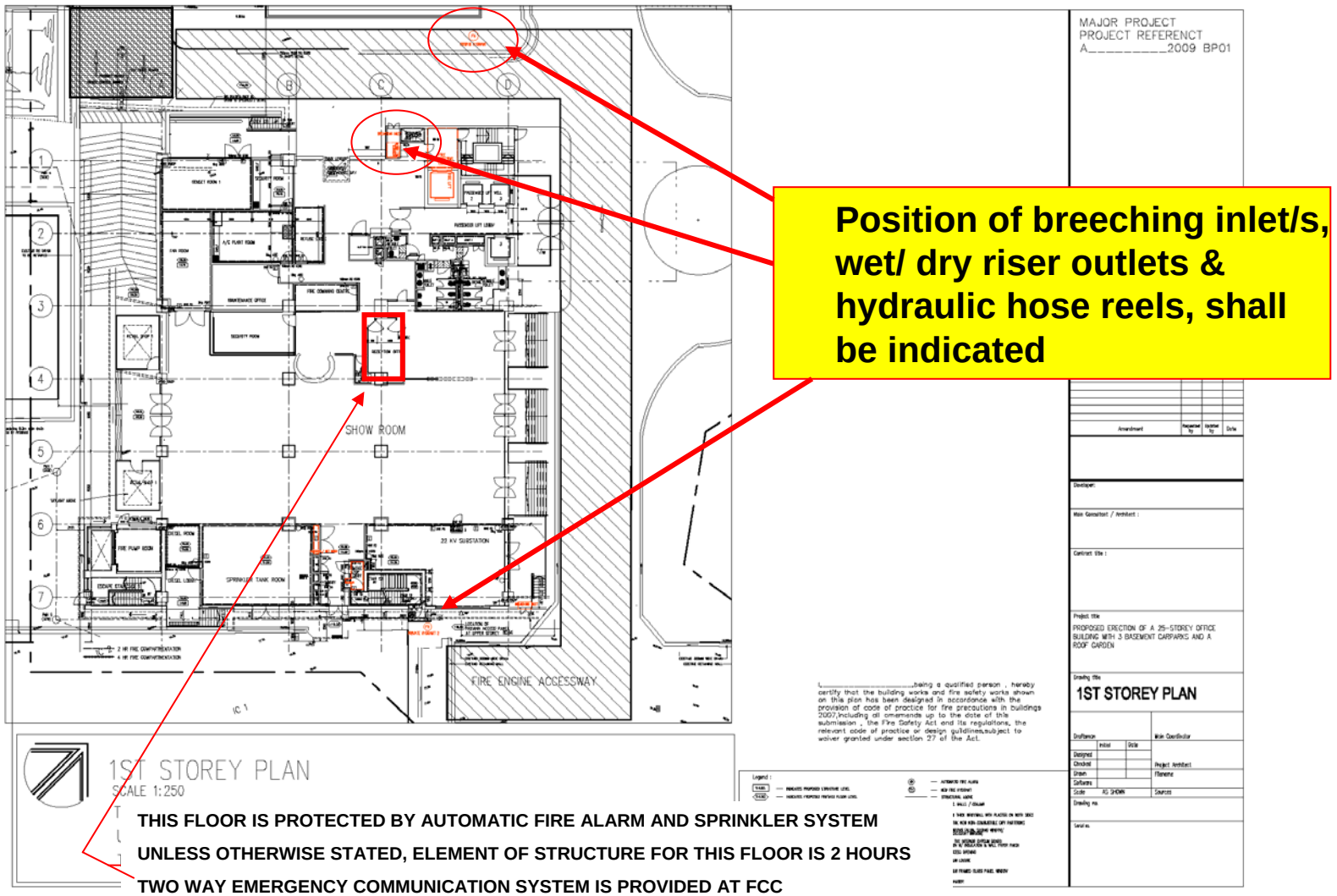
- — AUTOMATIC FIRE ALARM
- FH — NEW FIRE HYDRANT
- — STRUCTURAL ABOVE
- — NEW R.C. WALLS / COLUMN
- — NEW 100 THICK BRICKWALL WITH PLASTER ON BOTH SIDES
- — 75mm THK NEW NON-COMBUSTIBLE DRY PARTITIONS
- — NEW WINDOWS (ALUM. SLIDING WINDOW/
- — 100mm THK INTERIOR GYPSUM BOARD PARTITION W/ INSULATION & WALL PAPER FINISH
- — FIRE ACCESS OPENING
- 00 XX — ALUMINIUM LOUVRE
- 00 XX — ALUMINIUM FRAMED GLASS PANEL WINDOW
- GC — GAS CHAMBER

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FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :

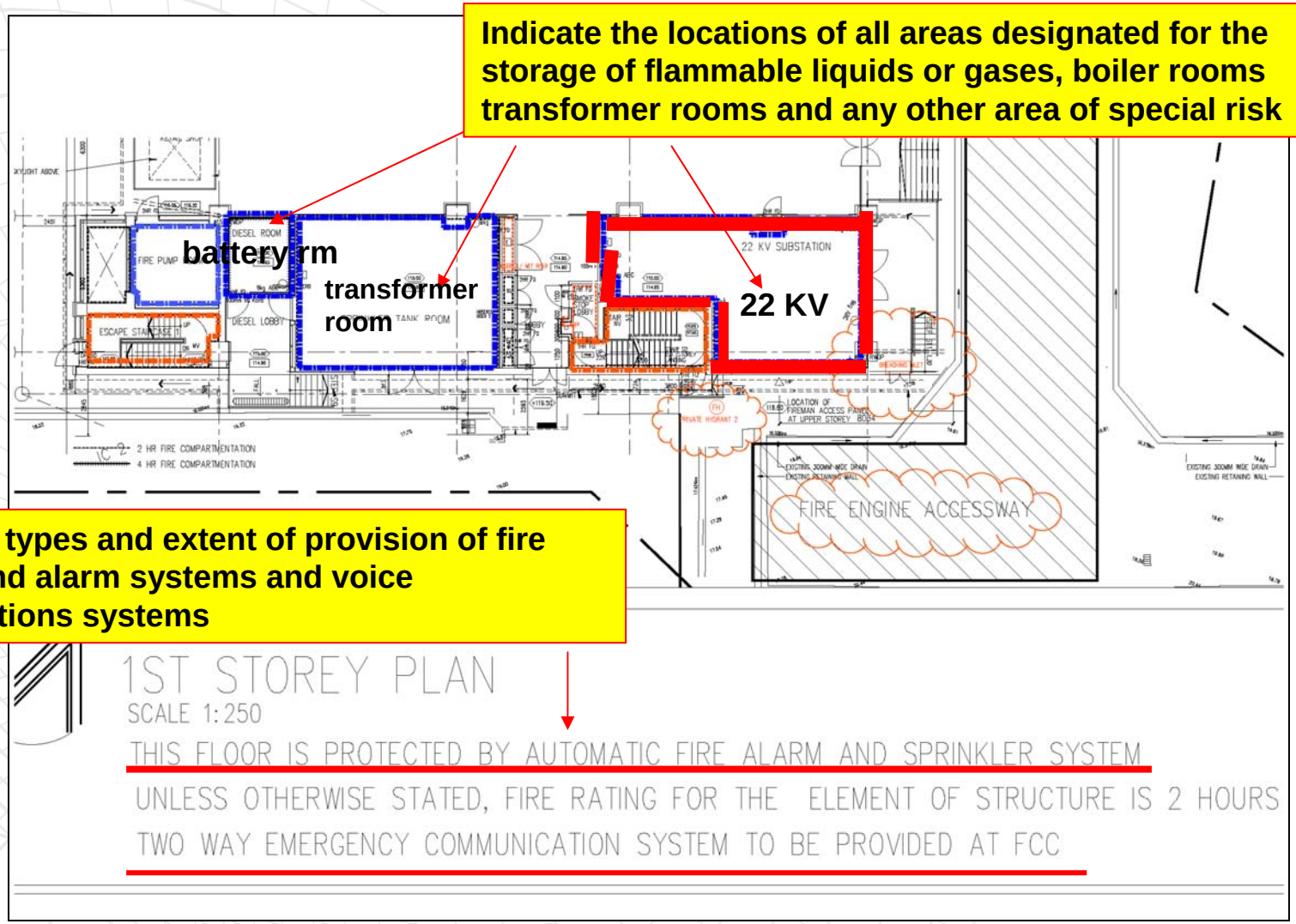


FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :

Indicate the locations of all areas designated for the storage of flammable liquids or gases, boiler rooms transformer rooms and any other area of special risk

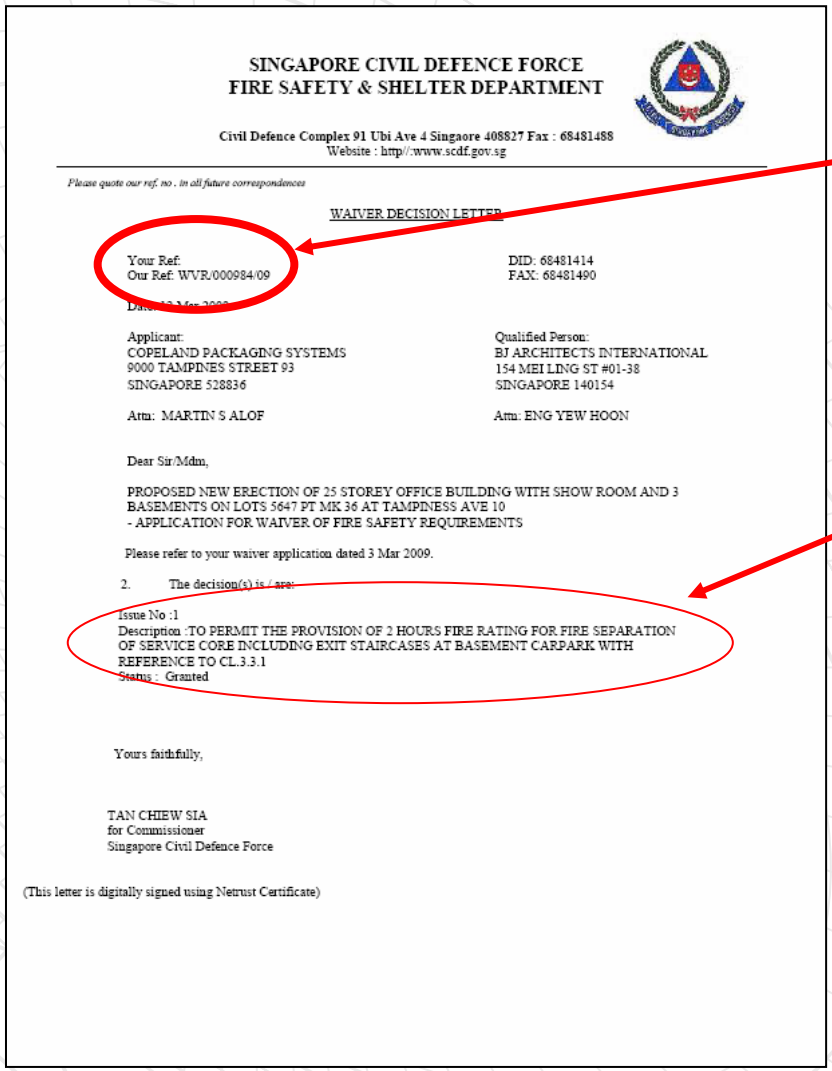


Indicate the types and extent of provision of fire detection and alarm systems and voice communications systems

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :



SINGAPORE CIVIL DEFENCE FORCE
FIRE SAFETY & SHELTER DEPARTMENT

Civil Defence Complex 91 Ubi Ave 4 Singaore 408827 Fax : 68481488
Website : http//:www.scdf.gov.sg

Please quote our ref. no . in all future correspondences

WAIVER DECISION LETTER

Your Ref:
Our Ref: WVR/000984/09

DID: 68481414
FAX: 68481490

Applicant:
COPELAND PACKAGING SYSTEMS
9000 TAMPINES STREET 93
SINGAPORE 528836

Attn: MARTIN S ALOF

Qualified Person:
BJ ARCHITECTS INTERNATIONAL
154 MEI LING ST #01-38
SINGAPORE 140154

Attn: ENG YEW HOON

Dear Sir/Mdm,

PROPOSED NEW ERECTION OF 25 STOREY OFFICE BUILDING WITH SHOW ROOM AND 3 BASEMENTS ON LOTS 5647 PT MK 36 AT TAMPINESS AVE 10
- APPLICATION FOR WAIVER OF FIRE SAFETY REQUIREMENTS

Please refer to your waiver application dated 3 Mar 2009.

2. The decision(s) is / are:

Issue No :1
Description :TO PERMIT THE PROVISION OF 2 HOURS FIRE RATING FOR FIRE SEPARATION OF SERVICE CORE INCLUDING EXIT STAIRCASES AT BASEMENT CARPARK WITH REFERENCE TO CL.3.3.1
Status : Granted

Yours faithfully,

TAN CHIEW SIA
for Commissioner
Singapore Civil Defence Force

(This letter is digitally signed using Netrust Certificate)

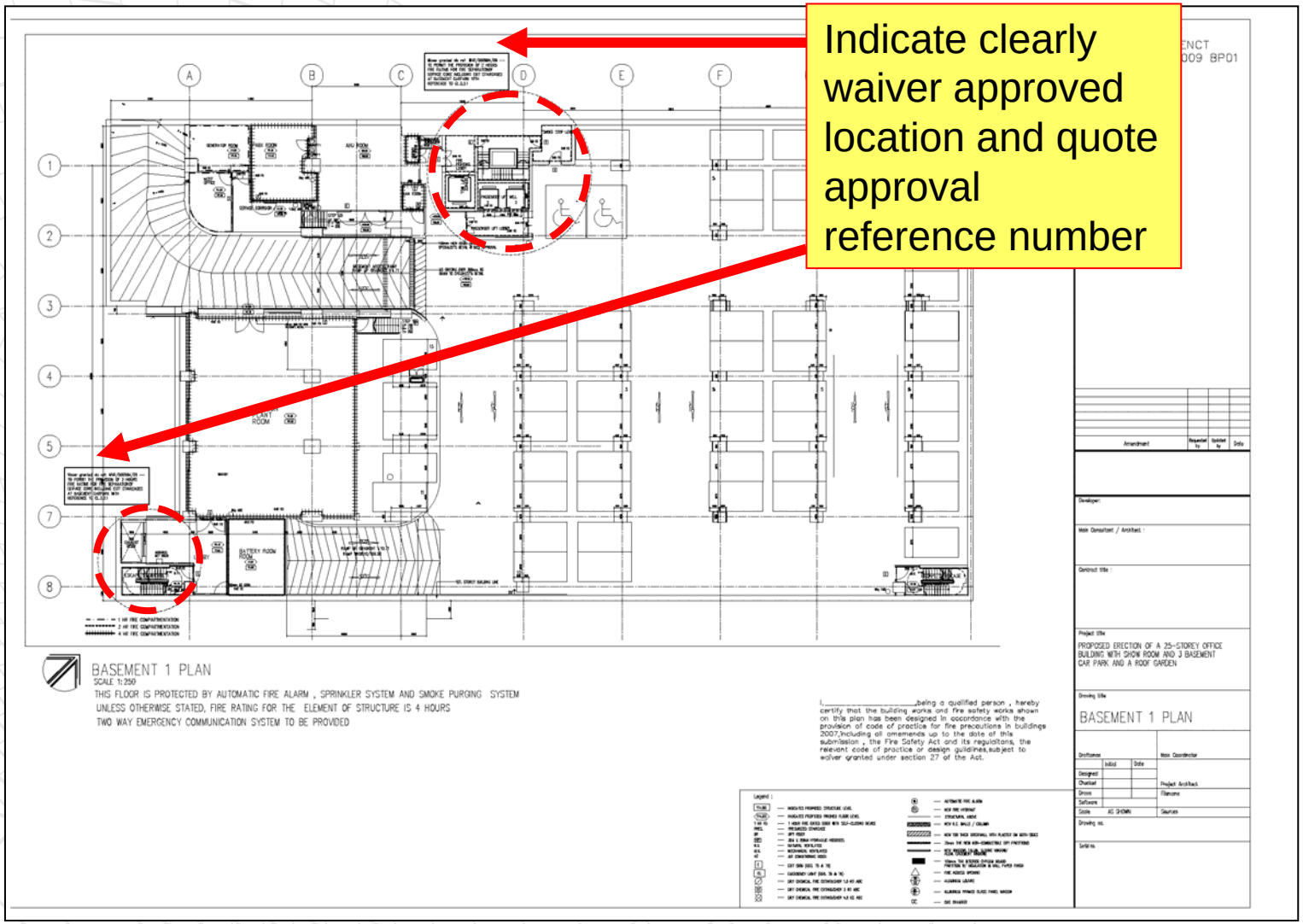
Quote the approved waiver reference

Quote the approved waiver decision / description

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

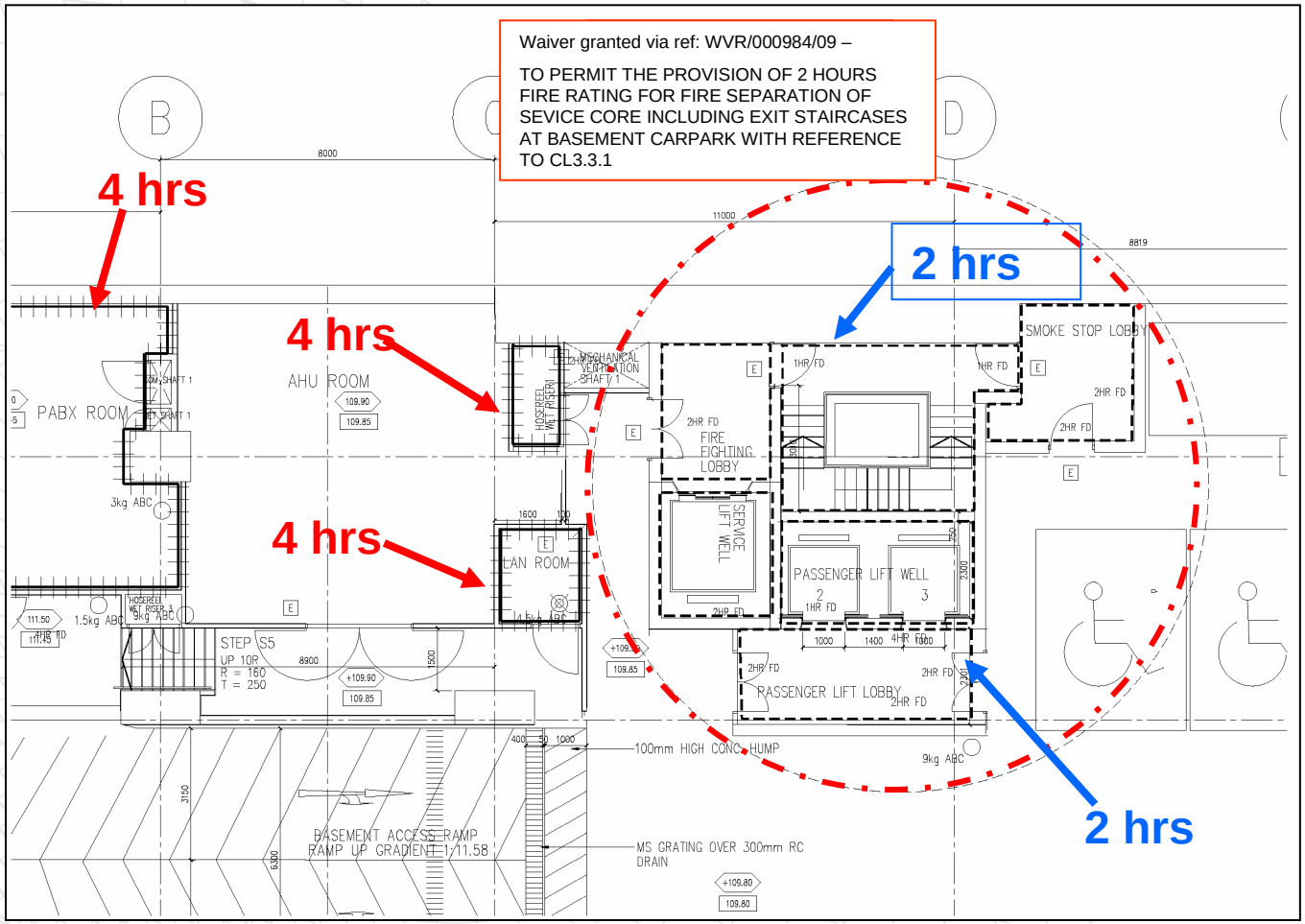
FLOOR PLAN :



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :



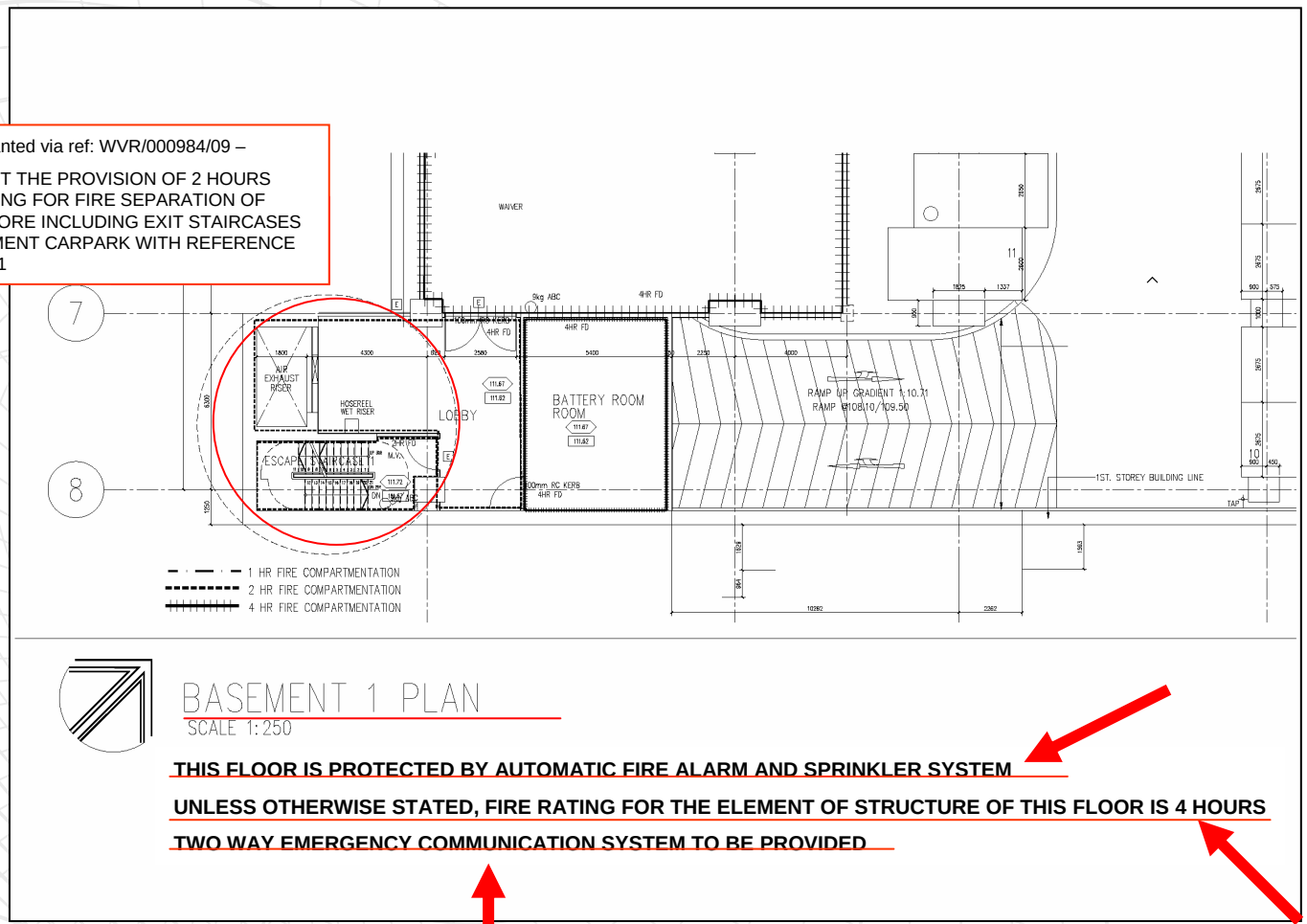
FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

FLOOR PLAN :

Waiver granted via ref: WVR/000984/09 –

TO PERMIT THE PROVISION OF 2 HOURS FIRE RATING FOR FIRE SEPARATION OF SEVICE CORE INCLUDING EXIT STAIRCASES AT BASEMENT CARPARK WITH REFERENCE TO CL3.3.1



BASEMENT 1 PLAN

SCALE 1:250

THIS FLOOR IS PROTECTED BY AUTOMATIC FIRE ALARM AND SPRINKLER SYSTEM

UNLESS OTHERWISE STATED, FIRE RATING FOR THE ELEMENT OF STRUCTURE OF THIS FLOOR IS 4 HOURS

TWO WAY EMERGENCY COMMUNICATION SYSTEM TO BE PROVIDED

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection / extension)

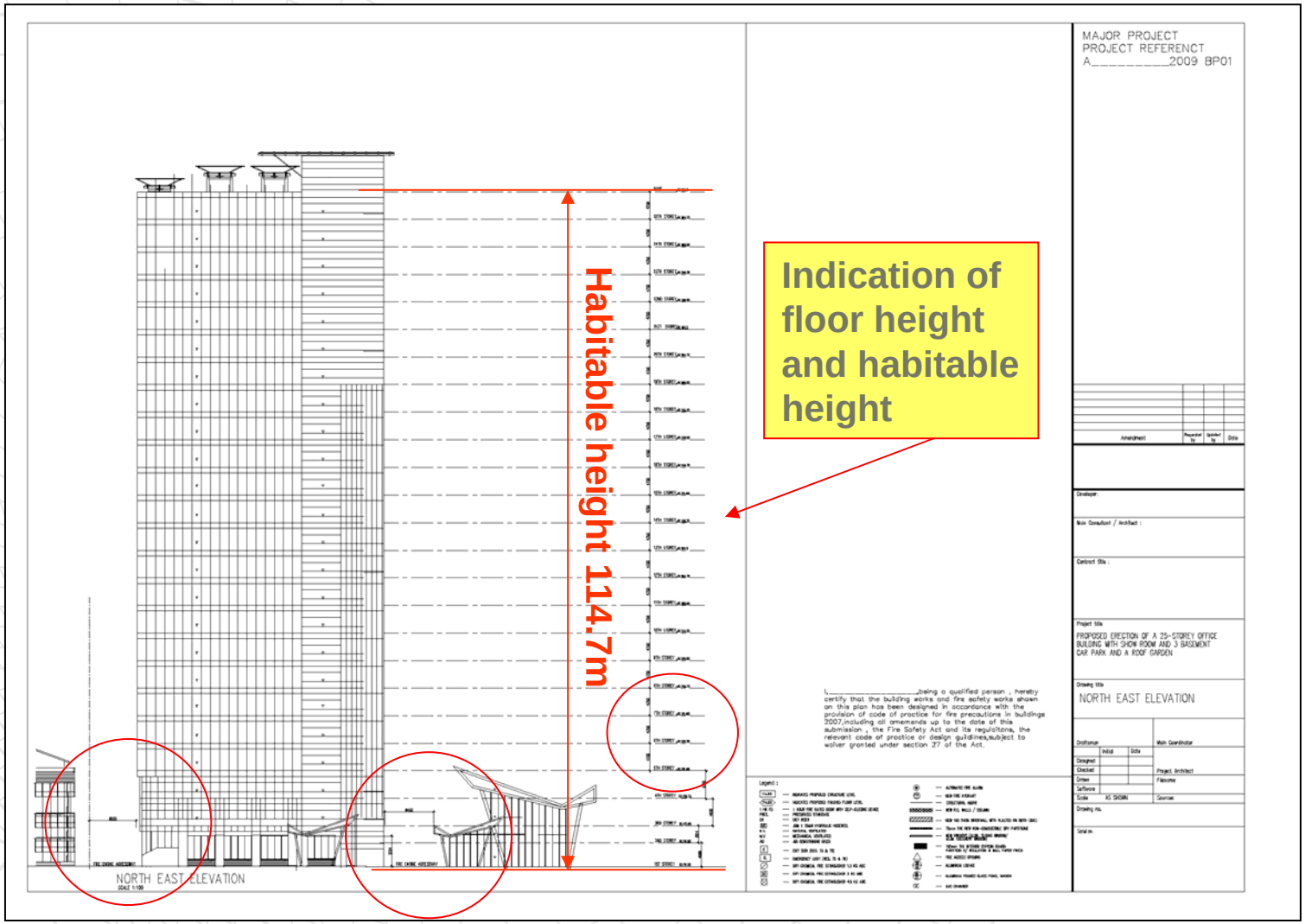
C. ELEVATINS :

a.) Indication of floor height and habitable height.
b.) Indicate level of fire engine access road/ way.
c.) Opening size and material used.
d.) Location of FAP.
e.) The distance between the new buildings to be erected or the building works to be carried out and the lot boundary
f.) Indicate the clear height of all structures or projections directly above the access for fire fighting vehicles and equipment

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

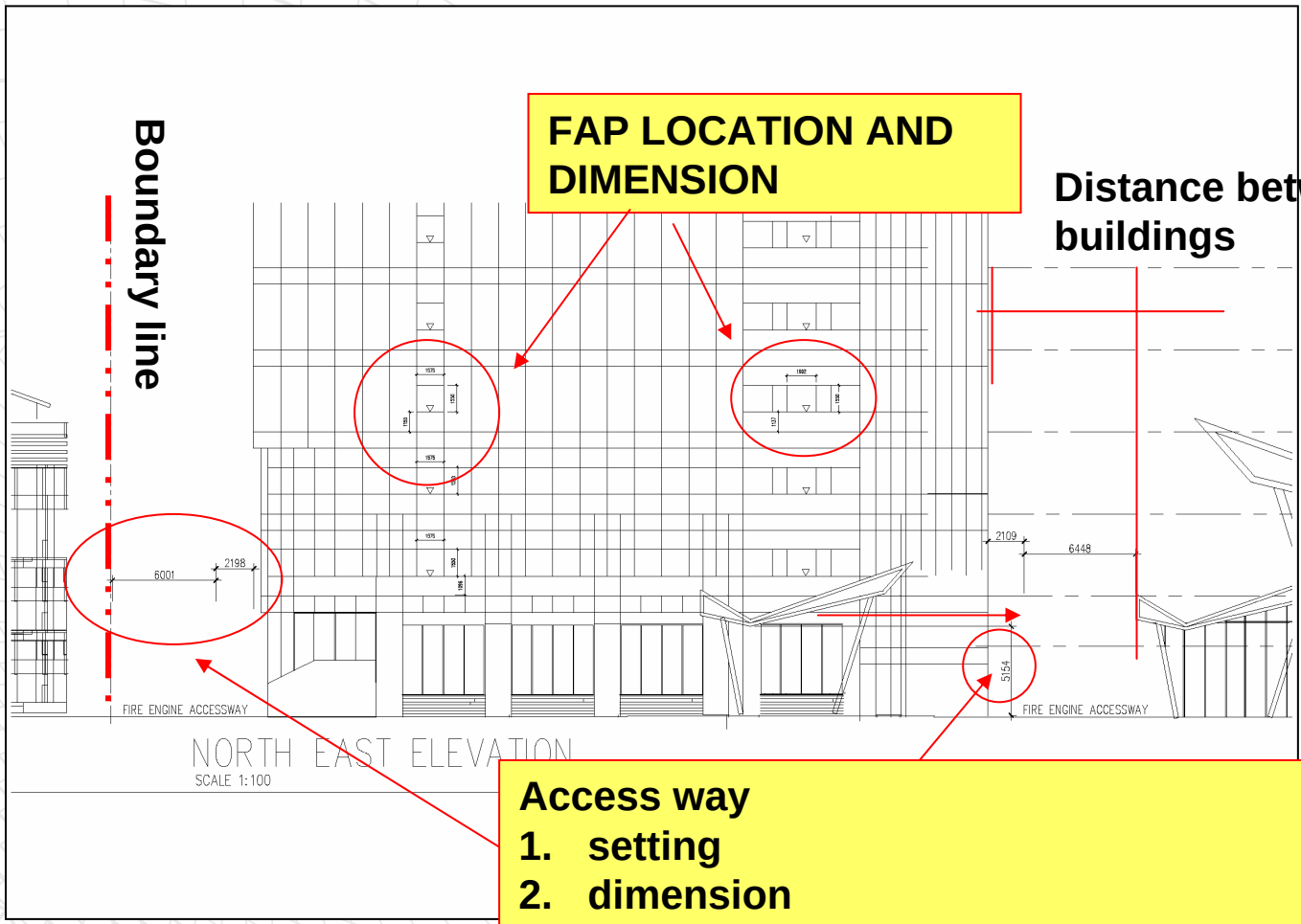
ELEVATION :



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

ELEVATION :



Access way

1. setting
2. dimension
3. Clear height of all structures or projections directly above the access way.

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extensin)

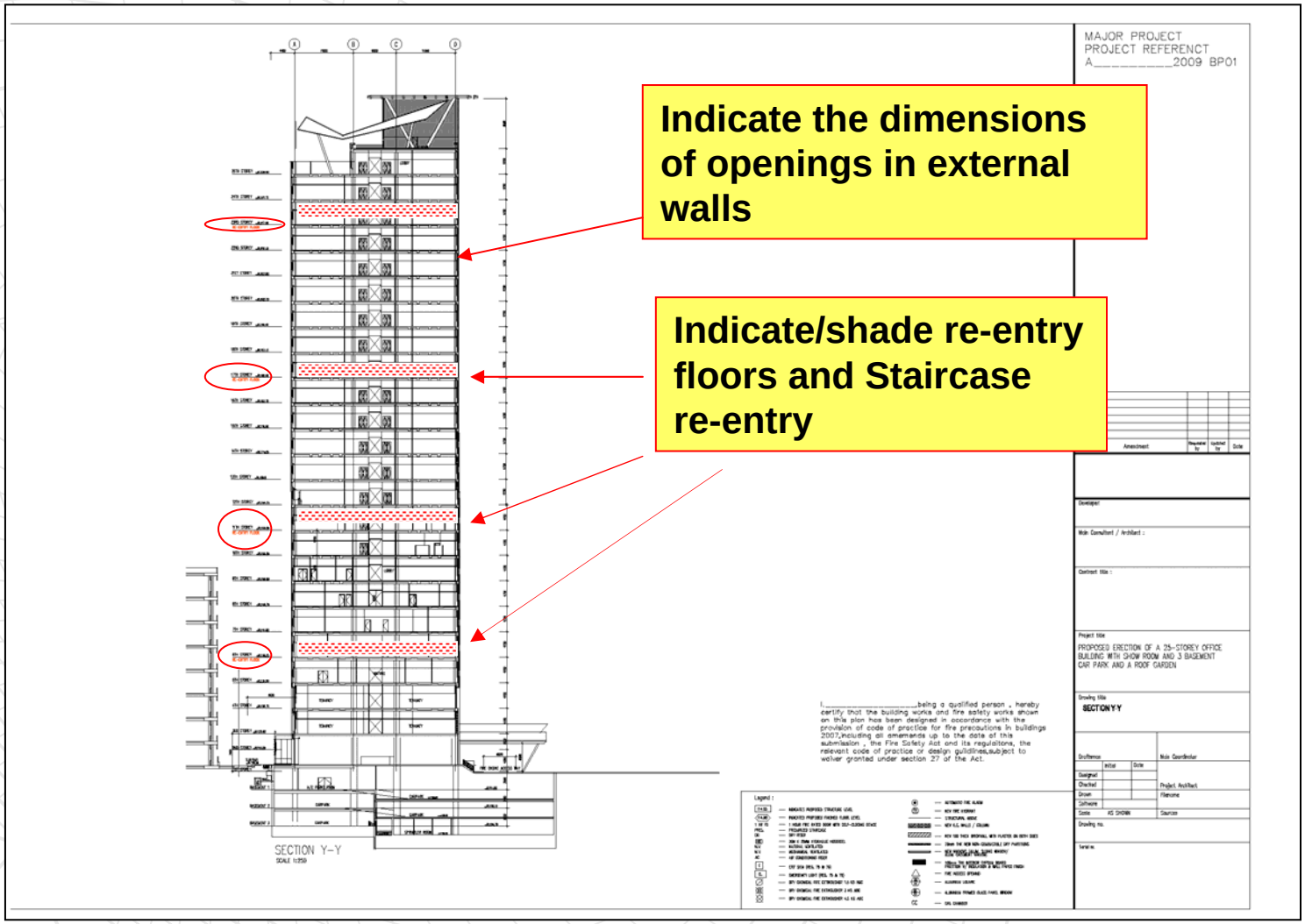
D. SECTION :

a.) Show the full height of each storey and the depth of ceiling space, including their dimensions
b.) Show details of the junction between the roof and any compartment walls
c.) Indicate the dimensions of openings in external walls
d.) Indicate the types of materials used in and the thickness of all walls, floors, roofs, ceilings, beams and other related parts of the building;
e.) Highlight all separating walls
f.) Show enlarged details of curtain walling at the junction with the typical floor slab to show the provision of fire stopping or fire cavity barriers
g.) Indicate/shade re-entry floors and Staircase re-entry

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

SECTION :

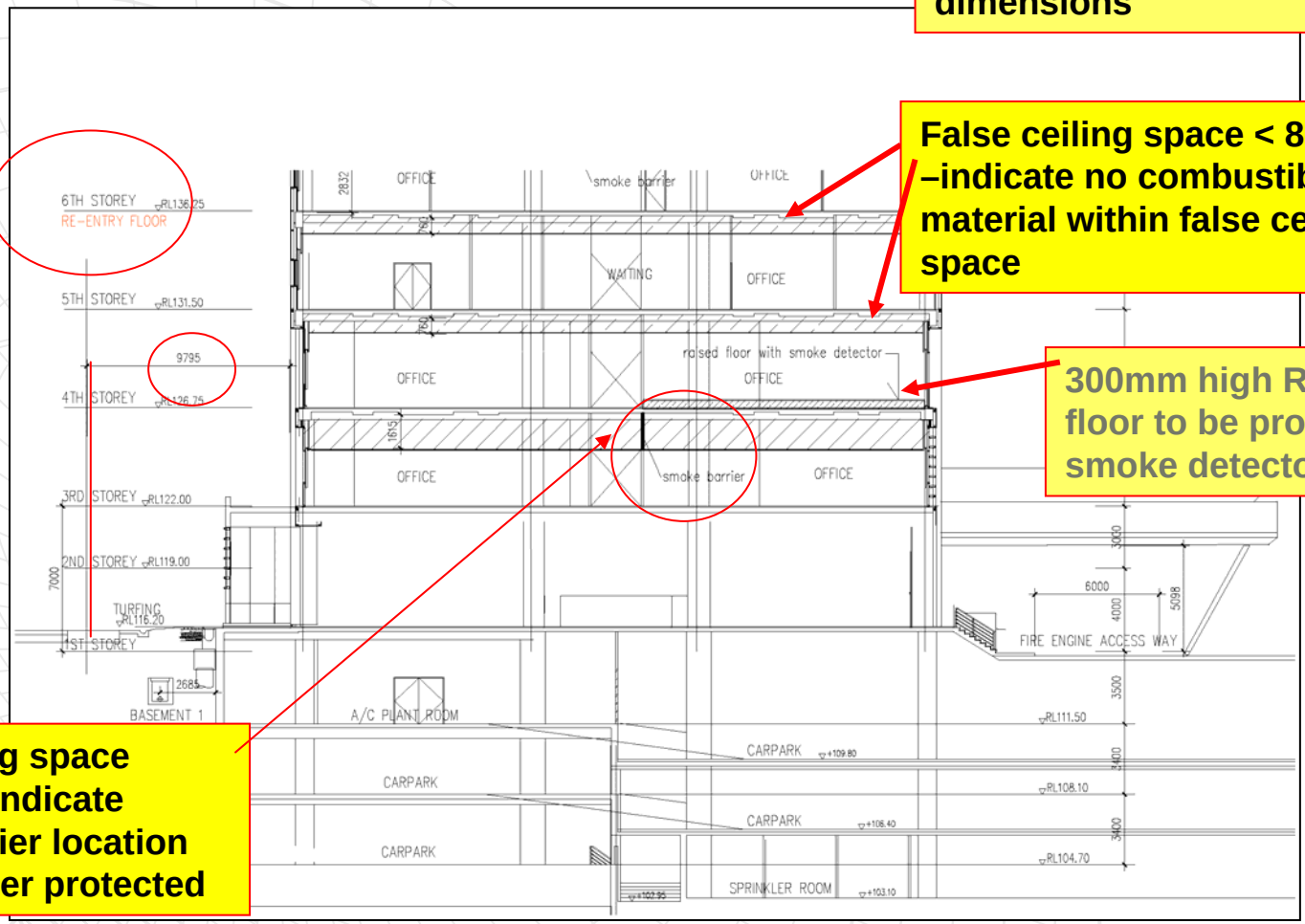


FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

SECTION :

Show the full height of each storey and the depth of ceiling space, including their dimensions



False ceiling space < 800mm –indicate no combustible material within false ceiling space

300mm high Raised floor to be protected by smoke detector

False ceiling space >800mm – indicate smoke barrier location or if sprinkler protected

FIRE SAFETY PLANS CHECKLIST

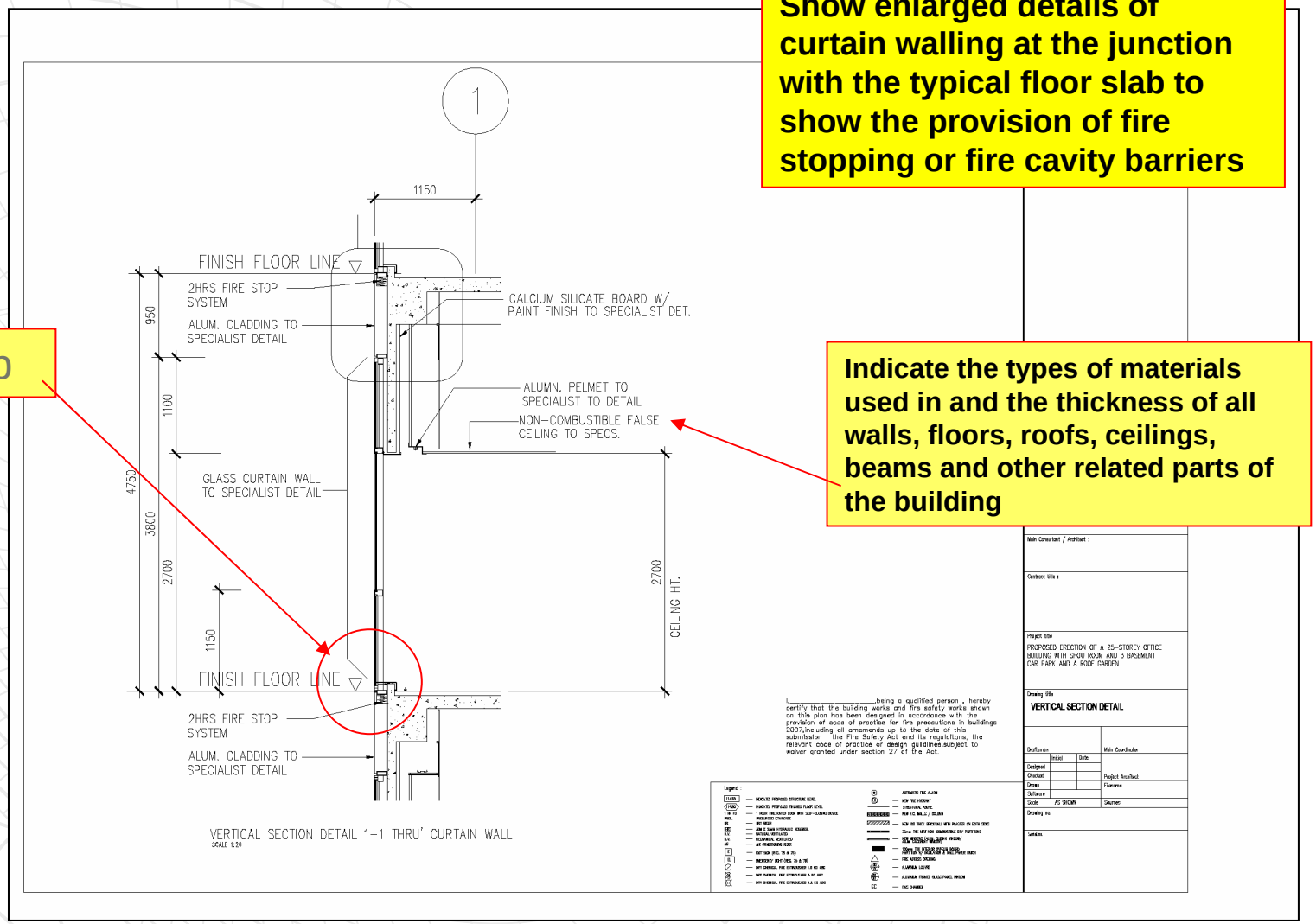
NEW SUBMISSION (new erection/extension)

SECTION :

Show enlarged details of curtain walling at the junction with the typical floor slab to show the provision of fire stopping or fire cavity barriers

Fire stop

Indicate the types of materials used in and the thickness of all walls, floors, roofs, ceilings, beams and other related parts of the building



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection / extension)

E. UN-PROTECTED OPENING CALCULATION PLANS :

Show all elevations including the respective detail calculation in accordance with form FSSB-BP 4.

F. COMPARTMENTATION PLANS :

All the fire compartment walls shall be clearly edged out on the floor plans including the fire rating of the respective compartments

G. ESCAPE ROUTE PLANS :

a.) Highlight escape staircases
b.) Highlight travel distance of most remote points
c.) Indicate all dead end corridors
d.) Indicate exit lights locations
e.) Highlight extinguishers / hose reel locations

FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection/extension)

COMPARTMENTATION & ESCAPE ROUTE PLAN:

Highlight extinguishers

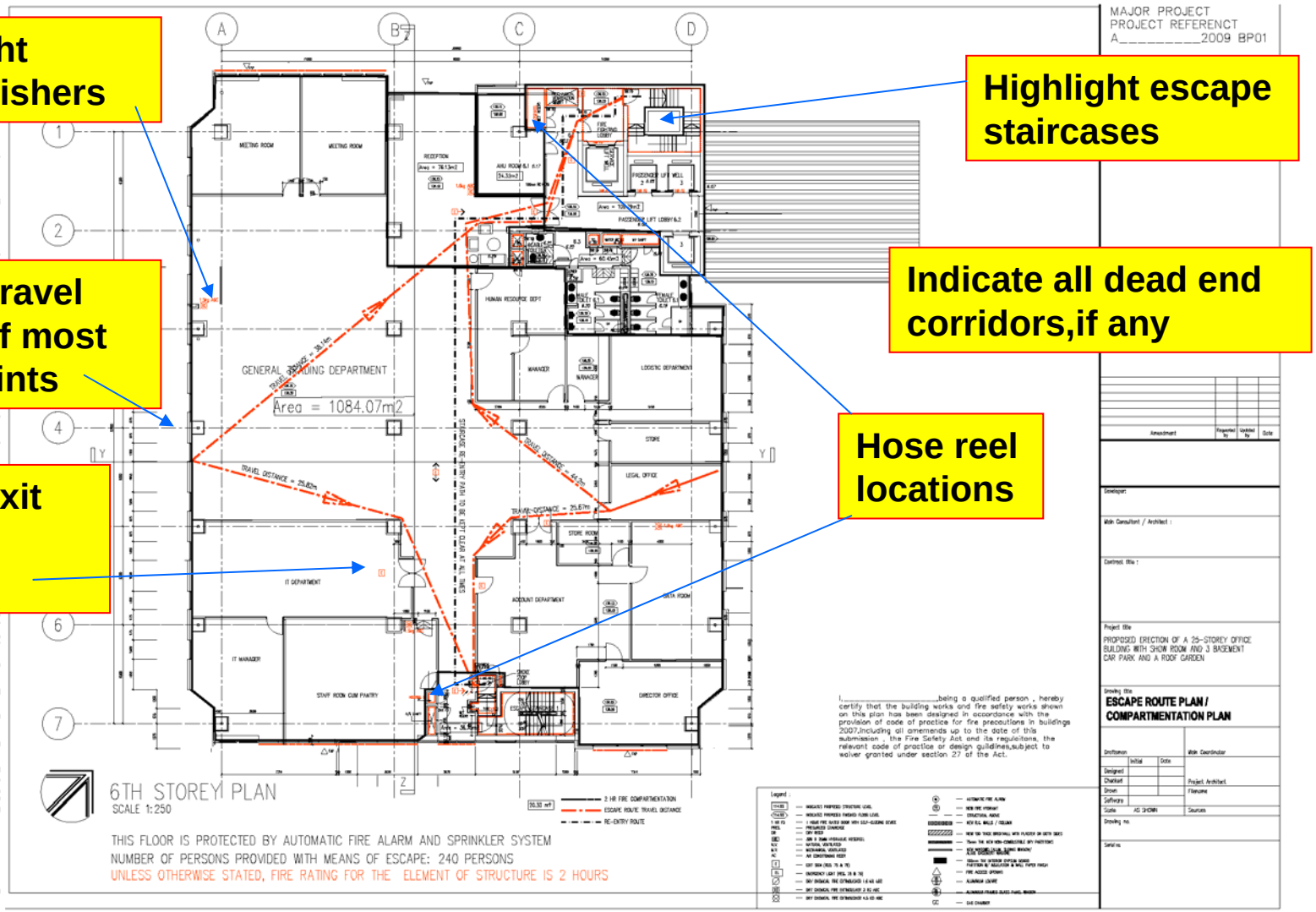
Highlight travel distance of most remote points

Indicate exit lights locations

Highlight escape staircases

Indicate all dead end corridors,if any

Hose reel locations



FIRE SAFETY PLANS CHECKLIST

NEW SUBMISSION (new erection / extension)

H. OCCUPANT LOAD CALCULATION PLANS :

a.) Calculations of the designed occupancy load and exit requirement *per storey* corresponding to forms FSSB-BP 2 & FSSB-BP 3

b.) Area and usage of each rooms are to be shown on plans

FIRE SAFETY PLANS CHECKLIST

A&A SUBMISSION





FIRE SAFETY PLANS CHECKLIST

A&A SUBMISSION

Checklist for A&A is similar to New erection except for the followings:

a.) All new erection and new fire protection items shall be differentiated from the existing provision .

b.) If change of used is involved, occupant load calculation plan is to be submitted.

Thank You

