

## **DISCLAIMER**

1. THE HOSE REEL SYSTEM ILLUSTRATED IN THIS SET OF SAMPLE DRAWINGS IS BASED ON A TARGET COMPOSITE BUILDING OF SIX STOREYS OR BELOW OR LESS THAN 20m IN HEIGHT WITH ONE OF THE MAJOR FACADES ACCESSIBLE BY FIRE APPLIANCES VIA THE EMERGENCY VEHICULAR ACCESS IN CONNECTION WITH THE ANNOUNCEMENT OF FSD CIRCULAR LETTER NO. 5/2016.
2. THE SAMPLE DRAWINGS ARE AIMED AT PROVIDING GENERAL REFERENCE ON THE DRAWING FORMAT OF FSI/314C SUBMISSION UNDER THE FIRE SAFETY (BUILDINGS) ORDINANCE (CAP. 572), AND ARE NOT INTENDED FOR STIPULATING THE REQUIRED PROVISIONS/ DESIGN OF FIRE SAFETY IMPROVEMENT WORKS WHICH VARY WITH EACH INDIVIDUAL CASE.
3. GIVEN THE NATURE OF THE SAMPLE DRAWINGS MENTIONED-ABOVE, THERE IS NO GUARANTEE THAT THE APPROVAL OF FSI/314C SUBMISSION ADOPTING THE SAMPLE DRAWINGS WILL BE OBTAINED.

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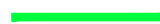

**F.S. NOTES:**

- ALL FIRE SAFETY IMPROVEMENT WORKS SHALL BE PROVIDED IN ACCORDANCE WITH THE CODE OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT 1994 VERSION.
- A NEW HOSE REEL SYSTEM WITH 500L EFFECTIVE STORAGE CAPACITY FIBRE GLASS F.S. WATER TANK SHALL BE PROVIDED IN ACCORDANCE WITH PARAGRAPH 5.14 OF THE CODE OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT 1994 VERSION.
- THE FIXED FIRE PUMPS SHOULD DELIVER A FLOW OF NOT MORE THAN THE REQUIRED FLOW RATE AS INDICATED IN THE FIXED FIRE PUMP SCHEDULE.
- A MANUAL FIRE ALARM SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH PARAGRAPH 5.11 & 5.14(i)(b) OF THE CODE OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT 1994 VERSION.
- ALL FIRE SERVICE EQUIPMENT SHALL BE ENERGIZED BY PRIMARY AND SECONDARY POWER SUPPLY AND MANAGED BY AUTOMATIC CHANGOVER SWITCH WITH BOTH ELECTRICAL AND MECHANICAL INTERLOCK.
- POWER SUPPLY CABLE FOR FIXED FIRE PUMPS, FIRE ALARM BELLS AND F.S. CONTROL PANEL SHALL BE OF FIRE RESISTING TYPE IN ACCORDANCE WITH THE LATEST FSD CIRCULAR LETTER FOR MINIMUM FIRE RESISTING CABLE REQUIREMENTS FOR FIRE SERVICE INSTALLATIONS.
- ALL F.S. INSTALLATIONS SHALL BE INSTALLED WITHIN THE LOT BOUNDARY.
- THE SIZE AND LOCATION OF WATER CHECK METER FOR F.S. WATER SUPPLY SHALL BE DETERMINED BY WSD.
- THE PLUMBING SYSTEM OF FIRE SERVICE INSTALLATIONS IS SUBJECT TO THE REQUIREMENTS OF WATER AUTHORITY.
- THE ELECTRICAL INSTALLATION WORKS SHALL COMPLY WITH THE ELECTRICITY ORDINANCE AND THE POWER COMPANY'S SUPPLY RULES.
- ALL ASSOCIATED BUILDING WORKS OF FIRE SAFETY IMPROVEMENT WORKS ARE SUBJECT TO THE CONTROL UNDER BUILDINGS ORDINANCE. APPROVAL AND CONSENT FROM BUILDING AUTHORITY FOR SUCH WORKS (IF ANY) SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF THE BUILDING WORKS, EXCEPT FOR THOSE BUILDING WORKS WHICH ARE UNDER THE CONTROL OF THE MINOR WORKS CONTROL SYSTEM.































**Guidance Notes:**

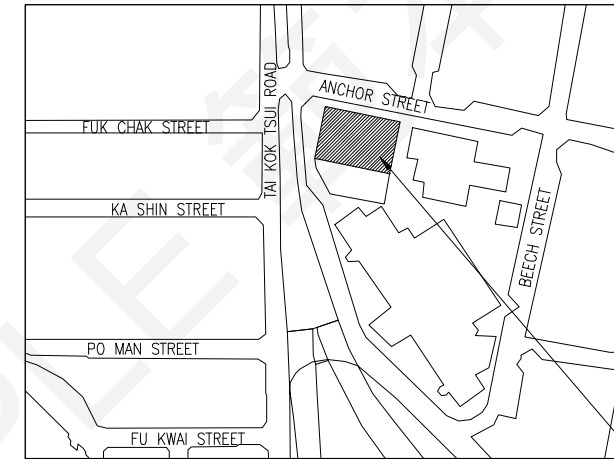
- Colour code shall be aligned with section 3.6.1(d) of FSD Circular Letter No. 4/96.

**COLOUR CODE FOR PIPE SIZES**

PIPE SIZE	COLOUR CODE	SAMPLE
φ25mm	GREEN	
φ40mm	PURPLE	

**LEGEND**

SYMBOL	DESCRIPTION
	DRAIN VALVE C/W PLUG (N/C)
	GATE VALVE (N/O)
	GATE VALVE (N/C)
	NON-RETURN VALVE
	FLEXIBLE PIPE CONNECTOR
	AUTOMATIC AIR VENT
	CHECK METER POSITION
	HOSE REEL
	FIRE ALARM BELL
	MFA CALL POINT (BREAK GLASS TYPE)
	FIXED FIRE PUMP
	PRESSURE GAUGE
	PRESSURE SWITCH
	PRESSURE SWITCH ASSEMBLY
	F.S. / MFA CONTROL PANEL
	FIXED FIRE PUMP CONTROL PANEL
	PIPE RISER
	FUSED SPUR UNIT
	NEW PIPE / CABLE / EQUIPMENT
	EXISTING PIPE / CABLE / EQUIPMENT
	BALL FLOAT VALVE
	3mm ORIFICE PLATE
	AUTOMATIC CHANGOVER SWITCH C/W ELECTRICAL & MECHANICAL INTERLOCK
	kWh METER
	MCCB / MCB UNIT
	FUSED SWITCH
	ISOLATING SWITCH
	MOTOR STARTER
	FIXED FIRE PUMP MOTOR
	STRAINER



**BLOCK PLAN** (N.T.S.)

NO. 42 TAI KOK TSUI ROAD

**ABBREVIATIONS**

RFSIC	REGISTERED FIRE SERVICE INSTALLATIONS CONTRACTOR
FSI	FIRE SERVICE INSTALLATIONS
HR	HOSE REEL
MFA	MANUAL FIRE ALARM
AFFL	ABOVE FINISHED FLOOR LEVEL
H/L	HIGH LEVEL
M/L	MIDDLE LEVEL
T/A	TO ABOVE
T/B	TO BELOW
F/A	FROM ABOVE
F/B	FROM BELOW
N/O	NORMALLY OPEN
N/C	NORMALLY CLOSED
GRP	GLASS REINFORCED POLYESTER
SP	SINGLE POLE
TPN	TRIPLE POLE & NEUTRAL
MCB	MINIATURE CIRCUIT BREAKER
MCCB	MOULDED CASE CIRCUIT BREAKER
C/W	COMPLETED WITH
S.W.	SWITCH
W.L.	WATER LEVEL
M.H.	MANHOLE
O.F.	OVERFLOW
EX.	EXISTING
B.L.	BOUNDARY LINE

SPACE RESERVED FOR FSD APPROVAL CHOP  
Min. (60mm x 45mm)

REV.	DESCRIPTION	DATE
0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

FSI CONTRACTOR / -CONSULTANT

ABC FIRE ENGINEERING COMPANY LIMITED

ADDRESS: UNIT 01, 10/F.,  
XXX YYY COMMERCIAL BUILDING,  
TAI KOK TSUI, KOWLOON  
TEL.: XXXX XXXX

PROJECT TITLE:

FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

DRAWING TITLE:  
F.S. NOTES, LEGEND, ABBREVIATIONS, COLOUR CODE FOR PIPE SIZES & BLOCK PLAN

DRAWING NO.:	SCALE:
FS-01	N.T.S.

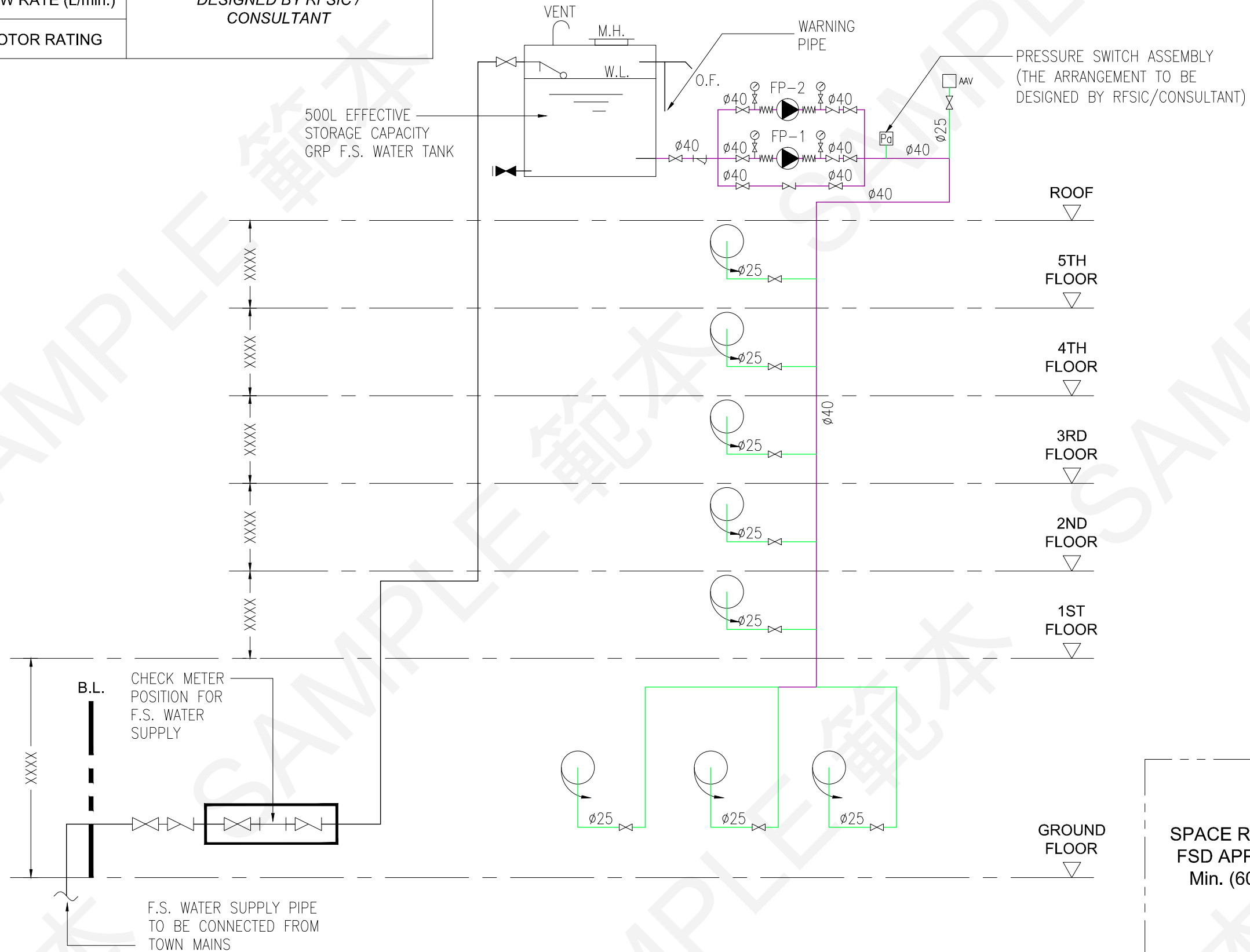
DATE:	REVISION:
29.10.2021	A

### FIXED FIRE PUMP SCHEDULE

PUMP DESIGNATION	DUTY PUMP (FP-1)	STANDBY PUMP (FP-2)
PUMP HEAD (BAR)	<i>TECHNICAL DATA TO BE DESIGNED BY RFSIC / CONSULTANT</i>	
FLOW RATE (L/min.)		
MOTOR RATING		

**Guidance Notes:**

1. Size of F.S. water supply pipe connected from Town Mains and check meter position to be determined by WSD.
2. Size of F.S. water supply pipe, F.S. water tank components to be designed by RFSIC / Consultant.
3. Floor to floor height should be specified according to approved general building plan.
4. Technical data for fixed fire pumps to be designed by RFSIC / Consultant.



SPACE RESERVED FOR  
FSD APPROVAL CHOP  
Min. (60mm x 45mm)

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0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

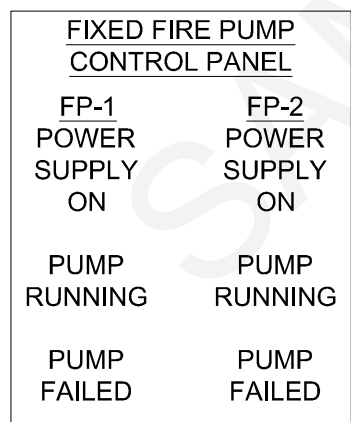
FSI CONTRACTOR / -CONSULTANT  
ABC FIRE ENGINEERING COMPANY LIMITED  
ADDRESS: UNIT 01, 10/F., XXX YYY COMMERCIAL BUILDING, TAI KOK TSUI, KOWLOON  
TEL.: XXXX XXXX

PROJECT TITLE:  
FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

DRAWING TITLE:  
SCHEMATIC PIPING DIAGRAM FOR HOSE REEL SYSTEM

DRAWING NO.: FS-02	SCALE: N.T.S.
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DATE: 29.10.2021	REVISION: A
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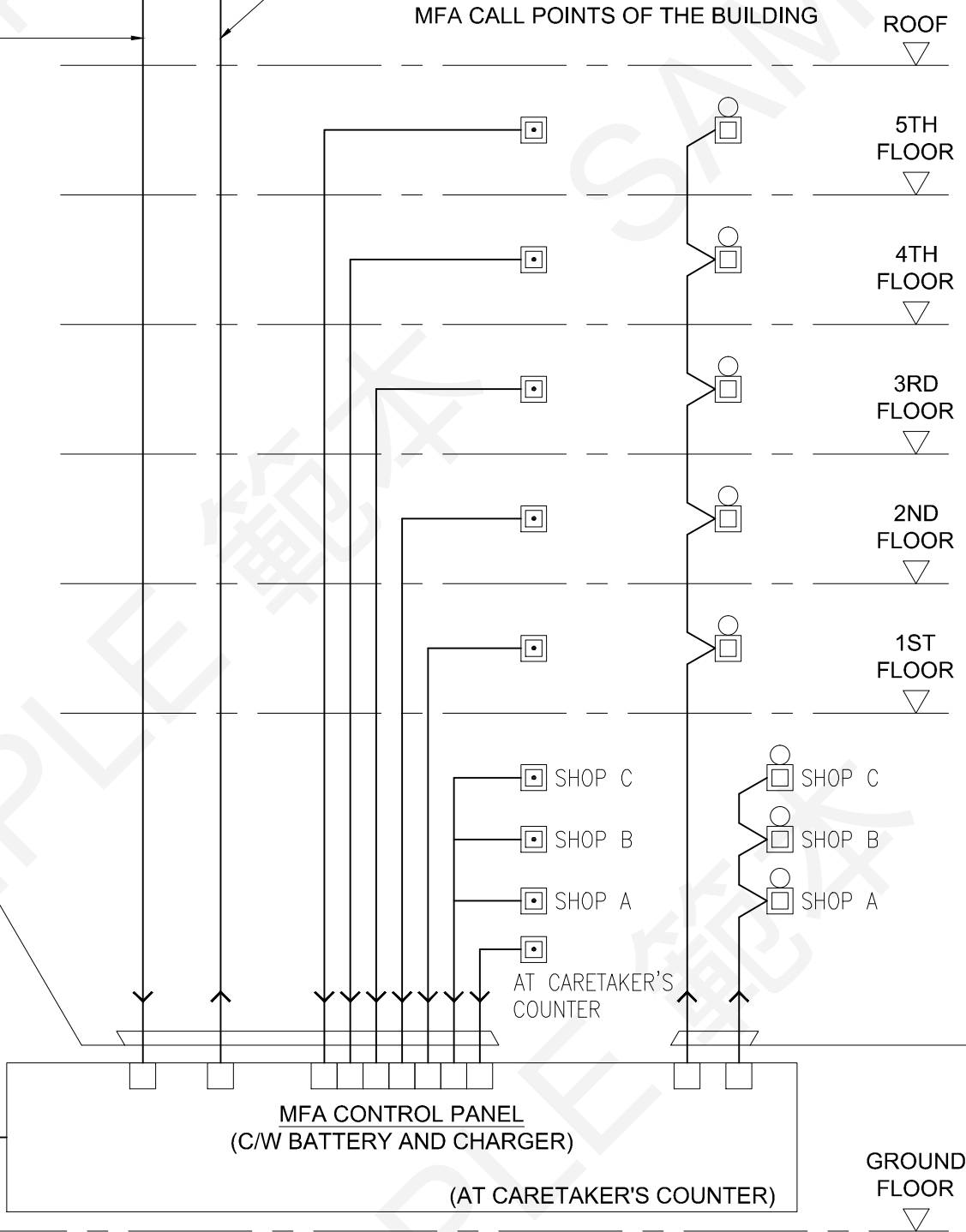


**Guidance Notes:**

- All power cables / control cables should be specified with a) number of cable; b) cable size; c) number of core; d) types of insulation & e) standard (if applicable)
- The minimum fire resisting cable requirements for fire service installations (FSI) shall refer to the latest FSD Circular Letter.

STATUS OF DUTY AND STANDBY FIXED FIRE PUMPS COMPRISING "POWER SUPPLY ON", "PUMP RUNNING" AND "PUMP FAILED" SHOULD BE REPEATED TO MFA CONTROL PANEL

FIXED FIRE PUMPS SHALL COME INTO OPERATION UPON ACTUATION OF ANY MFA CALL POINTS OF THE BUILDING



FIRE RESISTING CABLE (NOTE 1 & NOTE 2)

FIRE RESISTING CABLE (NOTE 1 & NOTE 2)

REV.	DESCRIPTION	DATE
0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

FSI CONTRACTOR / -CONSULTANT  
 ABC FIRE ENGINEERING COMPANY LIMITED  
 ADDRESS: UNIT 01, 10/F., XXX YYY COMMERCIAL BUILDING, TAI KOK TSUI, KOWLOON  
 TEL.: XXXX XXXX

PROJECT TITLE:  
 FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

DRAWING TITLE:  
 SCHEMATIC CONTROL WIRING DIAGRAM FOR MFA SYSTEM

DRAWING NO.: FS-03  
 SCALE: N.T.S.

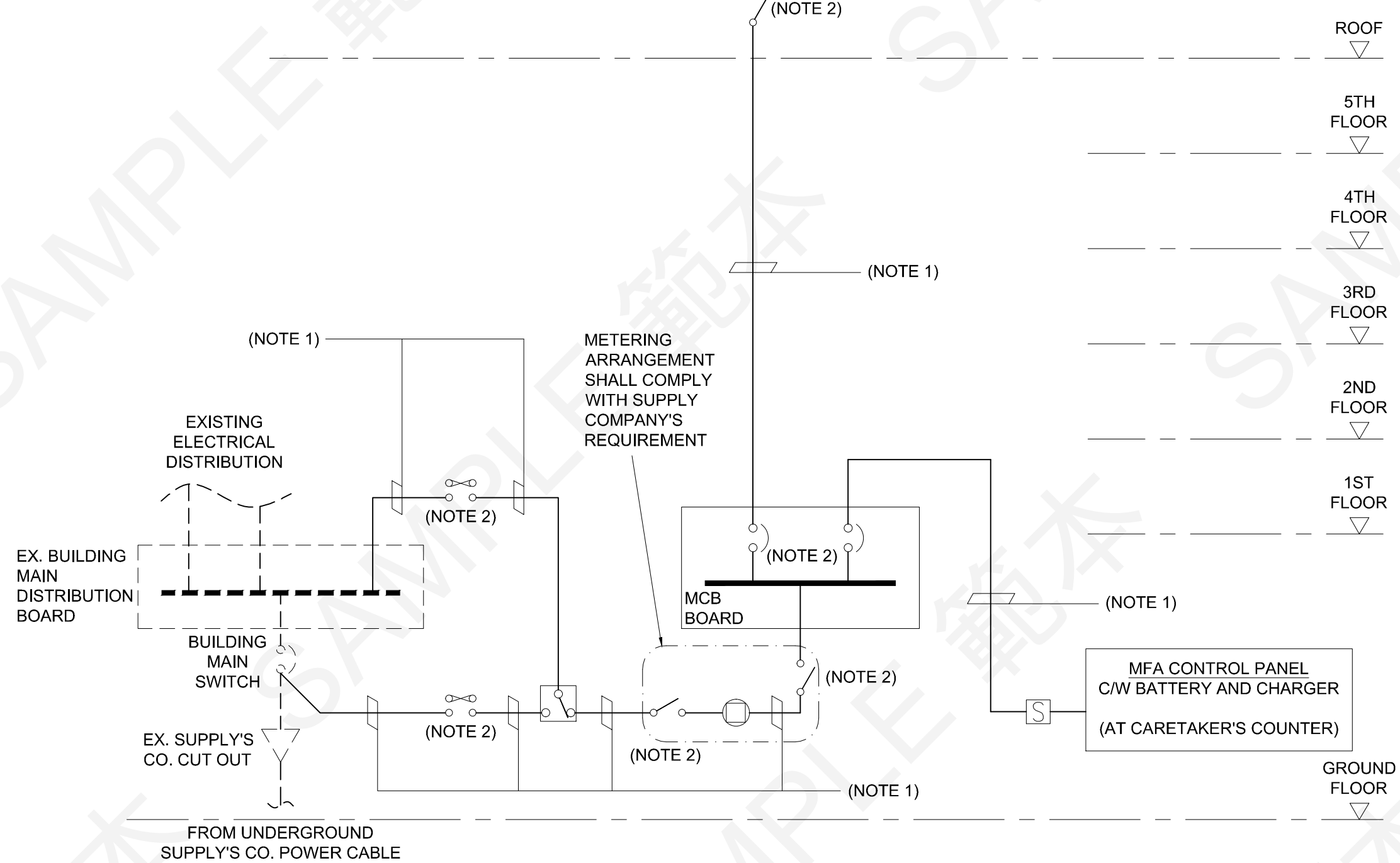
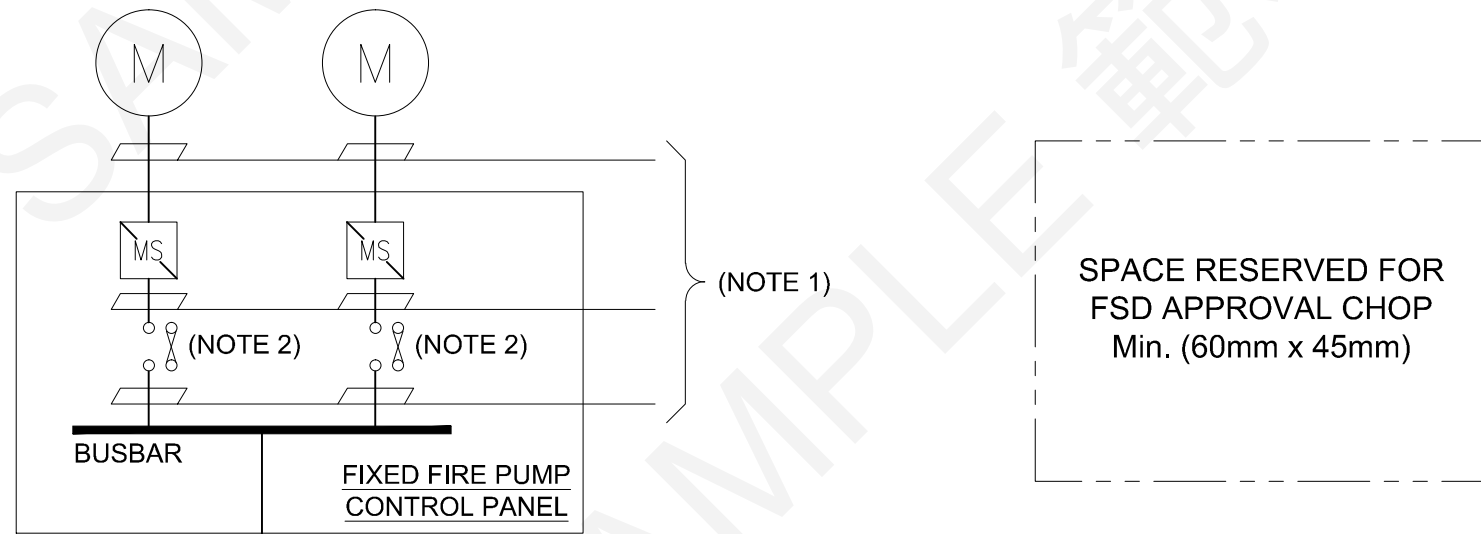
DATE: 29.10.2021  
 REVISION: A

**Guidance Notes:**

1. All power supply cables should be of fire resisting type. It should be specified with a) number of cable; b) cable size; c) number of core; d) types of insulation & e) standard of fire resisting cable (if applicable)

2. All electrical gears should be specified with a) current rating; b) single pole / triple pole / triple pole & neutral

DUTY FIXED FIRE PUMP "FP-1" (XX kW)      STANDBY FIXED FIRE PUMP "FP-2" (XX kW)



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0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

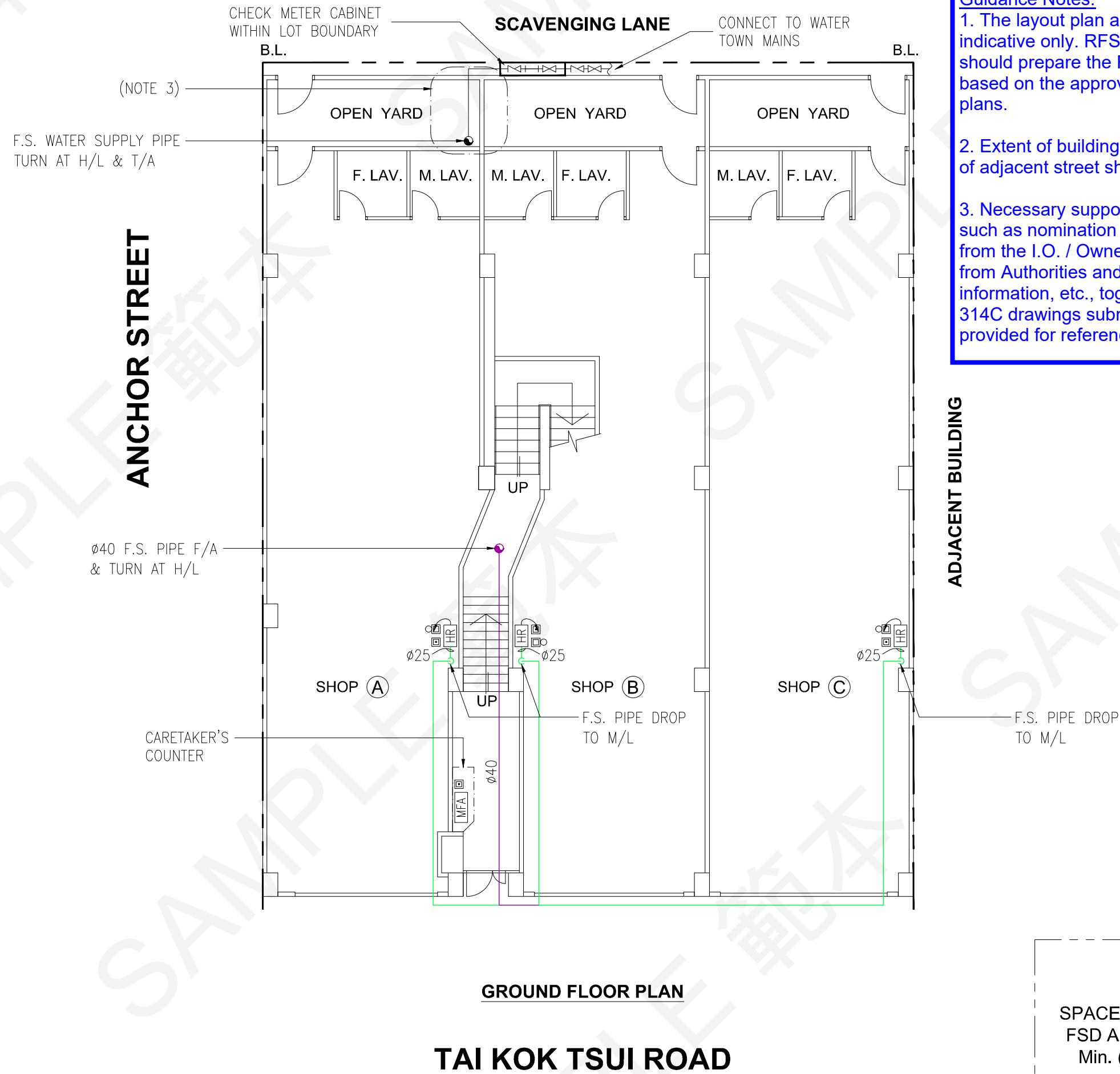
FSI CONTRACTOR / -CONSULTANT  
 ABC FIRE ENGINEERING COMPANY LIMITED  
 ADDRESS: UNIT 01, 10/F., XXX YYY COMMERCIAL BUILDING, TAI KOK TSUI, KOWLOON  
 TEL.: XXXX XXXX

PROJECT TITLE:  
 FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

DRAWING TITLE:  
 SCHEMATIC POWER SUPPLY WIRING DIAGRAM

DRAWING NO.: FS-04      SCALE: N.T.S.

DATE: 29.10.2021      REVISION: A



**Guidance Notes:**

1. The layout plan as shown are indicative only. RFSIC / Consultant should prepare the F.S. layout plan based on the approved general building plans.
2. Extent of building boundary and name of adjacent street should be indicated.
3. Necessary supporting documents, such as nomination / consent letter(s) from the I.O. / Owner(s), approved letters from Authorities and any supplementary information, etc., together with the FSI/ 314C drawings submission should be provided for reference.

REV.	DESCRIPTION	DATE
0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

FSI CONTRACTOR / -CONSULTANT  
 ABC FIRE ENGINEERING COMPANY LIMITED  
 ADDRESS: UNIT 01, 10/F., XXX YYY COMMERCIAL BUILDING, TAI KOK TSUI, KOWLOON  
 TEL.: XXXX XXXX

PROJECT TITLE:  
 FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

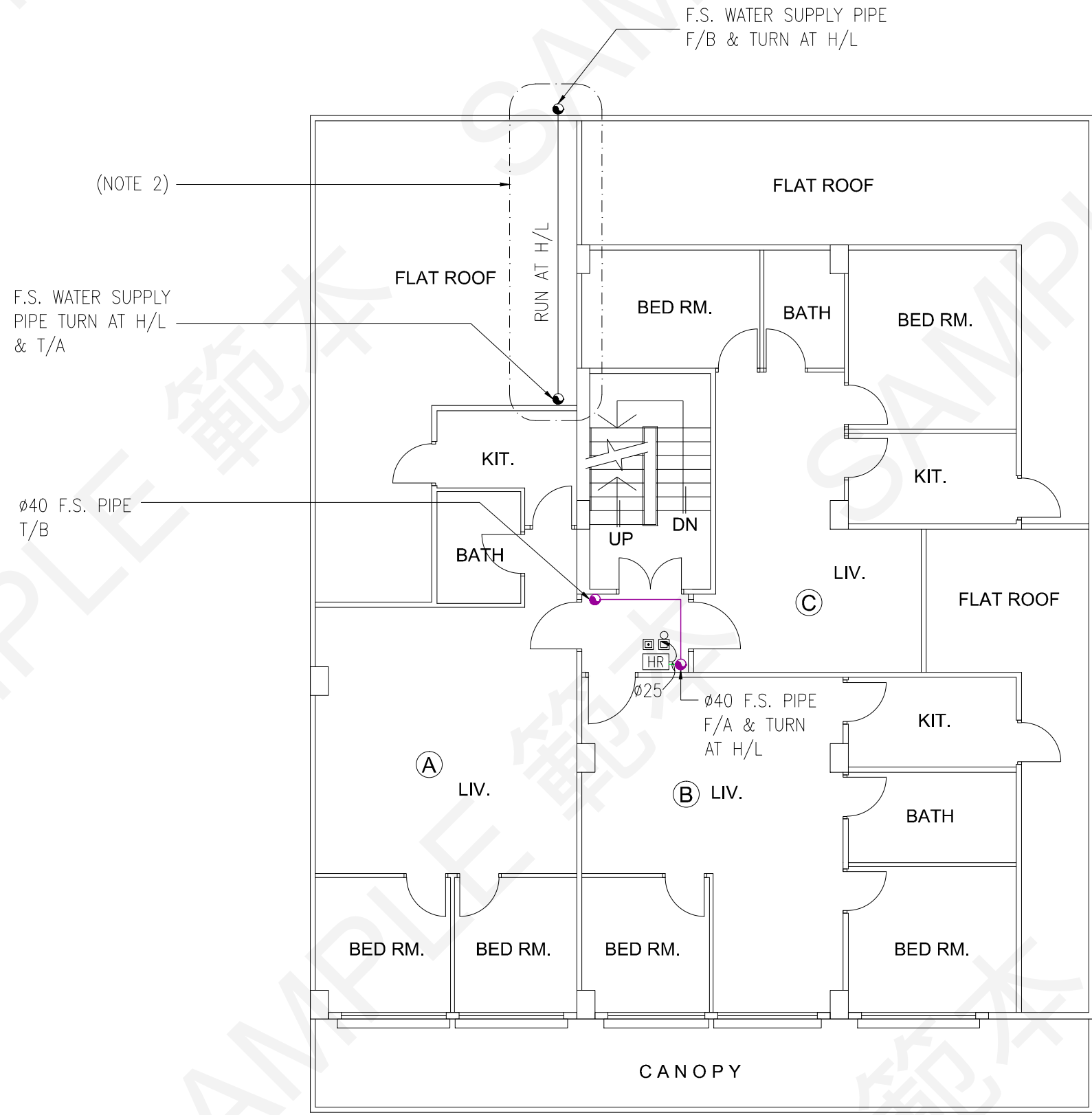
DRAWING TITLE:  
 F.S. LAYOUT PLAN OF GROUND FLOOR

DRAWING NO.: FS-05	SCALE: 1:100
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DATE: 29.10.2021	REVISION: A
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SPACE RESERVED FOR  
 FSD APPROVAL CHOP  
 Min. (60mm x 45mm)





**1ST FLOOR PLAN**

**Guidance Notes:**  
 1. The layout plan as shown are indicative only. RFSIC / Consultant should prepare the F.S. layout plan based on the approved general building plans.  
 2. Necessary supporting documents, such as nomination / consent letter(s) from the I.O. / Owner(s), approved letters from Authorities and any supplementary information, etc., together with the FSI/314C drawings submission should be provided for reference.

REV.	DESCRIPTION	DATE
0	1ST SUBMISSION	30.6.2021
A	2ND SUBMISSION	29.10.2021

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 ABC FIRE ENGINEERING COMPANY LIMITED  
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 TEL.: XXXX XXXX

PROJECT TITLE:  
 FIRE SAFETY IMPROVEMENT WORKS FOR NO. 42 TAI KOK TSUI ROAD, KOWLOON

DRAWING TITLE:  
 F.S. LAYOUT PLAN OF 1ST FLOOR

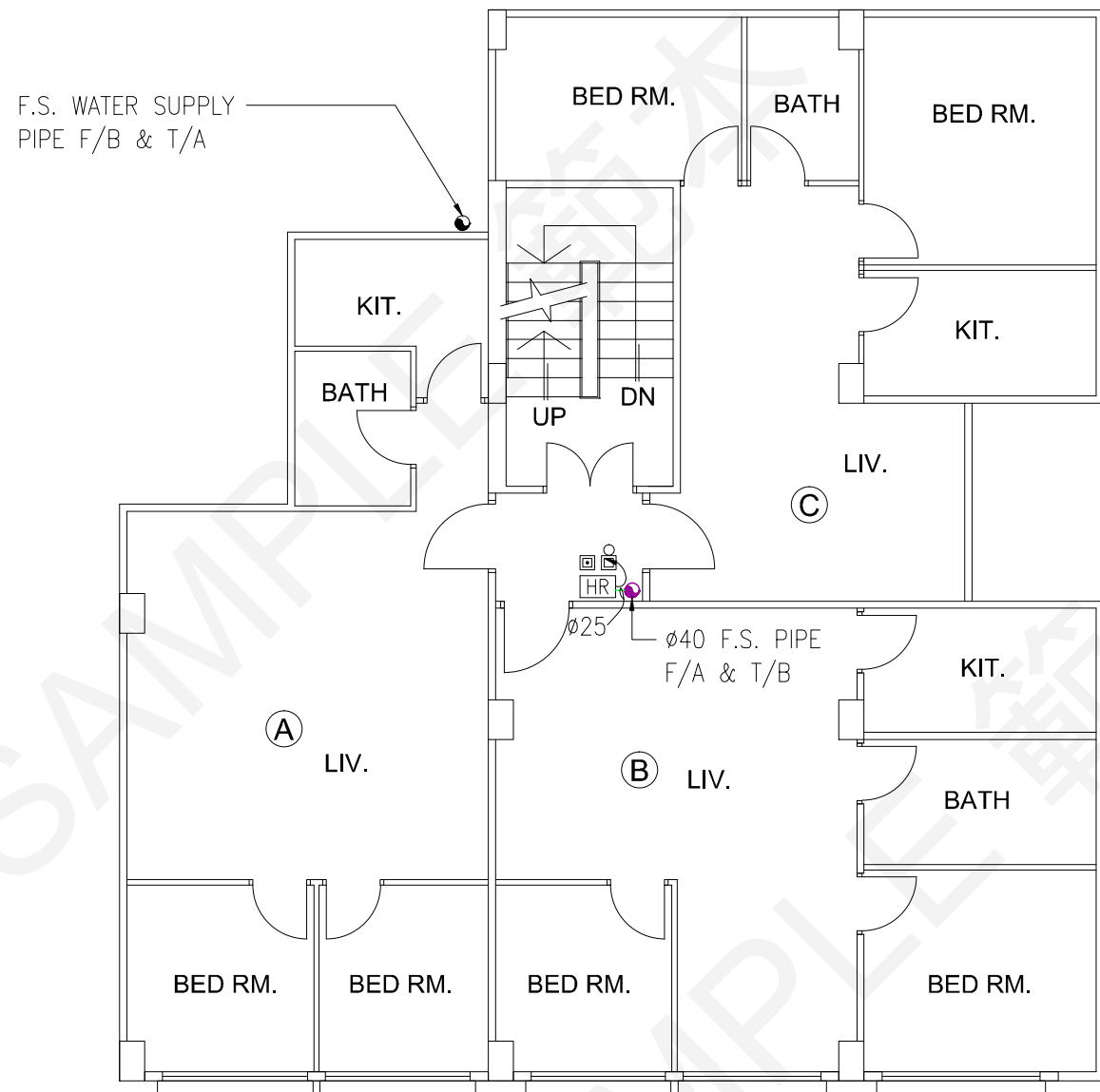
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 SCALE: 1:100

DATE: 29.10.2021  
 REVISION: A

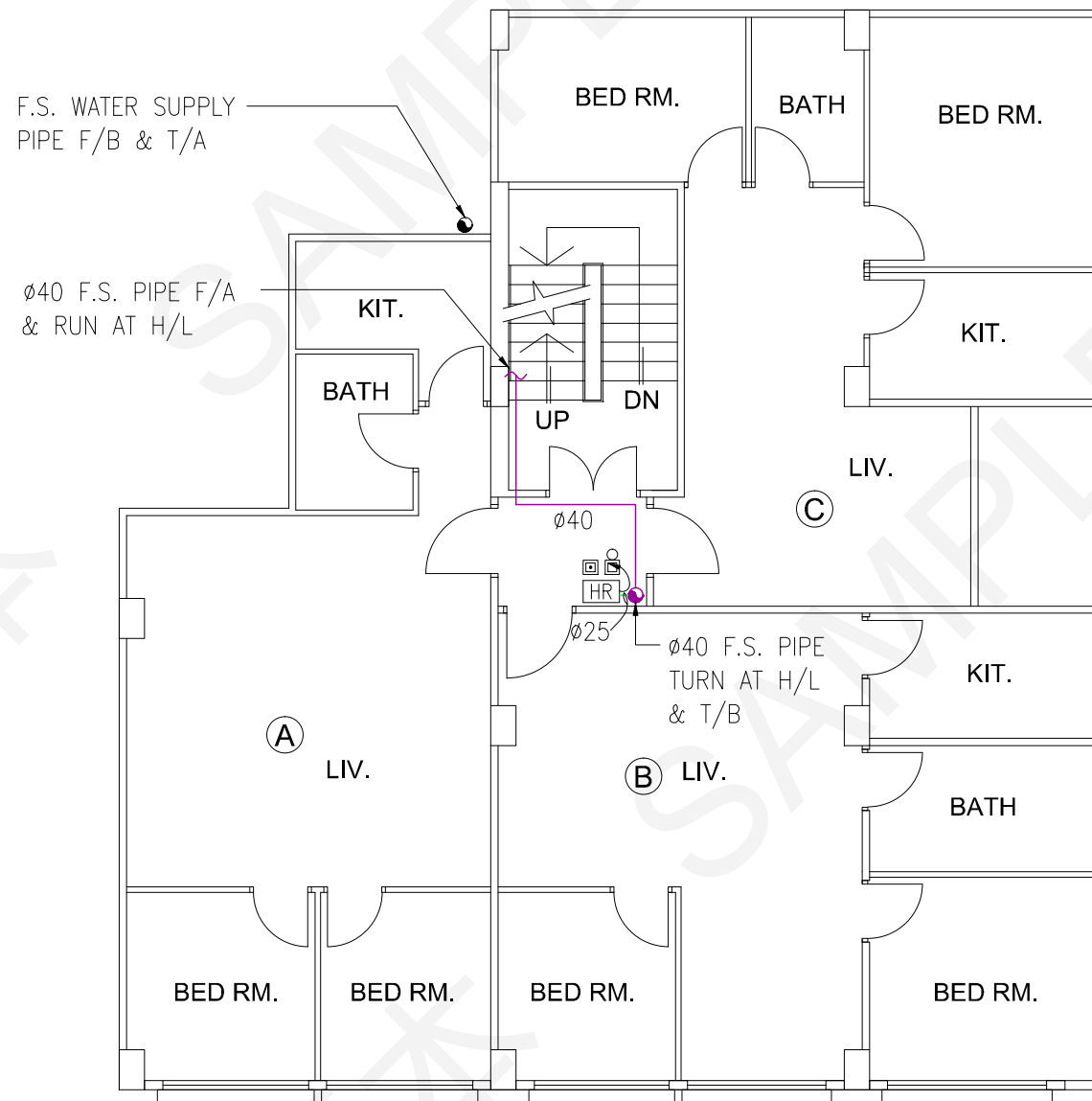
SPACE RESERVED FOR FSD APPROVAL CHOP  
 Min. (60mm x 45mm)

**Guidance Notes:**

1. The layout plan as shown are indicative only. RFSIC / Consultant should prepare the F.S. layout plan based on the approved general building plans.



**2ND FLOOR TO 4TH FLOOR PLAN**  
(TOTAL: 3 NOS. OF FLOOR)



**5TH FLOOR PLAN**

SPACE RESERVED FOR  
FSD APPROVAL CHOP  
Min. (60mm x 45mm)

REV.	DESCRIPTION	DATE
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A	2ND SUBMISSION	29.10.2021

FSI CONTRACTOR / -CONSULTANT

ABC FIRE ENGINEERING  
COMPANY LIMITED

ADDRESS: UNIT 01, 10/F.,  
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TAI KOK TSUI, KOWLOON  
TEL.: XXXX XXXX

PROJECT TITLE:

FIRE SAFETY IMPROVEMENT  
WORKS FOR  
NO. 42 TAI KOK TSUI ROAD,  
KOWLOON

DRAWING TITLE:

F.S. LAYOUT PLAN OF  
2ND FLOOR TO 4TH FLOOR  
AND 5TH FLOOR

DRAWING NO.:	SCALE:
FS-07	1:100

DATE:	REVISION:
29.10.2021	A



500L EFFECTIVE STORAGE  
CAPACITY GRP F.S.  
WATER TANK

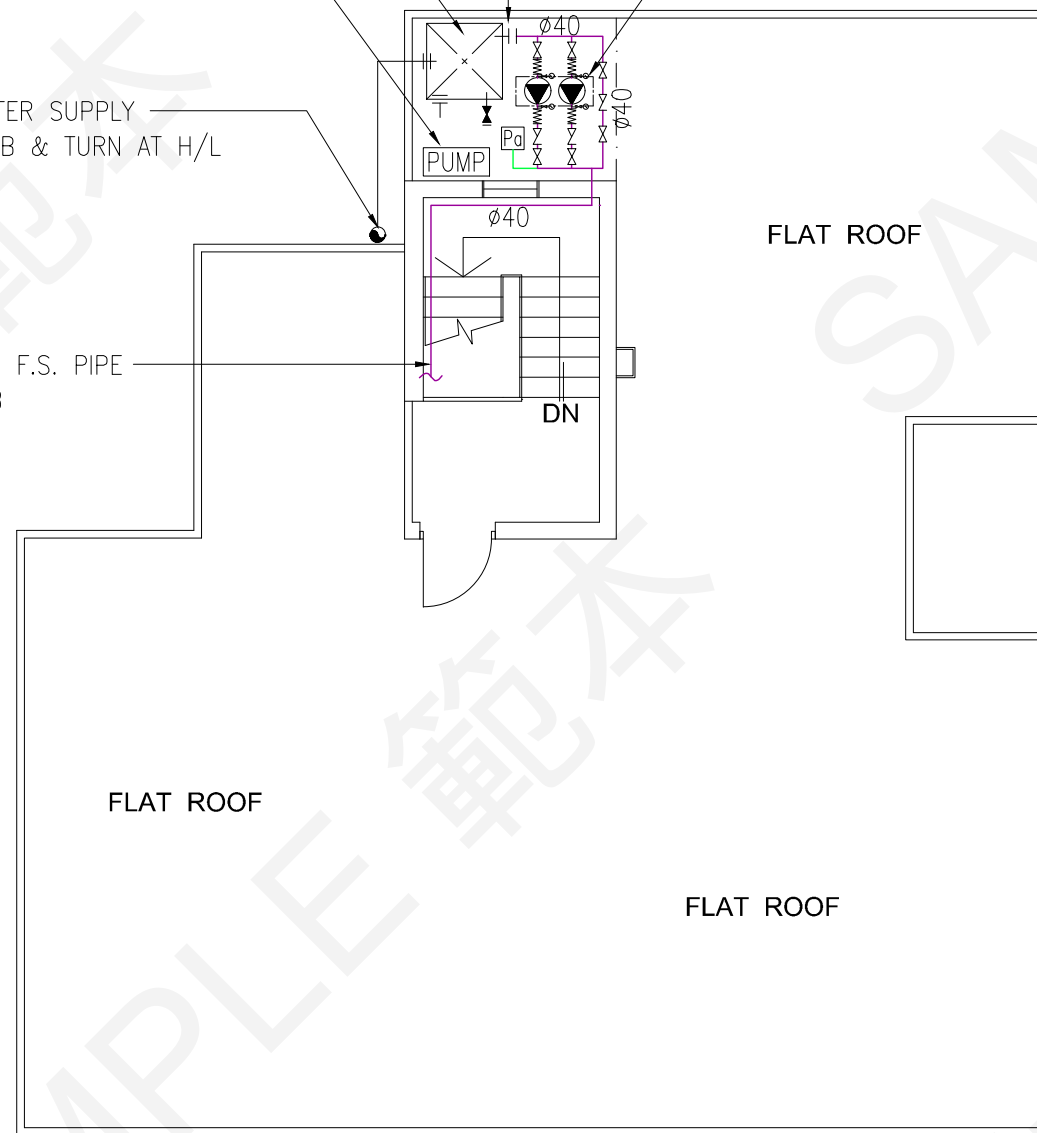
FIXED FIRE PUMP CONTROL  
PANEL HOUSED IN  
WEATHERPROOF ENCLOSURE

F.S. WATER SUPPLY  
PIPE F/B & TURN AT H/L

Ø40 F.S. PIPE  
T/B

(NOTE 2 &  
NOTE 3)

FIXED FIRE PUMP  
FP-1 (DUTY)  
FP-2 (STANDBY)  
SHOULD BE HOUSED IN  
SUITABLE ENCLOSURE



**ROOF PLAN**

**Guidance Notes:**

1. The layout plan as shown are indicative only. RFSIC / Consultant should prepare the F.S. layout plan based on the approved general building plans.

2. The ownership of the area occupied by the new F.S. water tank and fixed fire pumps should be clarified.

3. Necessary supporting documents, such as nomination / consent letter(s) from the I.O. / Owner(s), approved letters from Authorities and any supplementary information, etc., together with the FSI/314C drawings submission should be provided for reference.

SPACE RESERVED FOR  
FSD APPROVAL CHOP  
Min. (60mm x 45mm)

REV.	DESCRIPTION	DATE
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A	2ND SUBMISSION	29.10.2021

FSI CONTRACTOR / -CONSULTANT

ABC FIRE ENGINEERING  
COMPANY LIMITED

ADDRESS: UNIT 01, 10/F.,  
XXX YYY COMMERCIAL BUILDING,  
TAI KOK TSUI, KOWLOON  
TEL.: XXXX XXXX

PROJECT TITLE:

FIRE SAFETY IMPROVEMENT  
WORKS FOR  
NO. 42 TAI KOK TSUI ROAD,  
KOWLOON

DRAWING TITLE:

F.S. LAYOUT PLAN OF ROOF

DRAWING NO.:	SCALE:
FS-08	1:100

DATE:	REVISION:
29.10.2021	A