



sun  **track**
Building with passion

Content

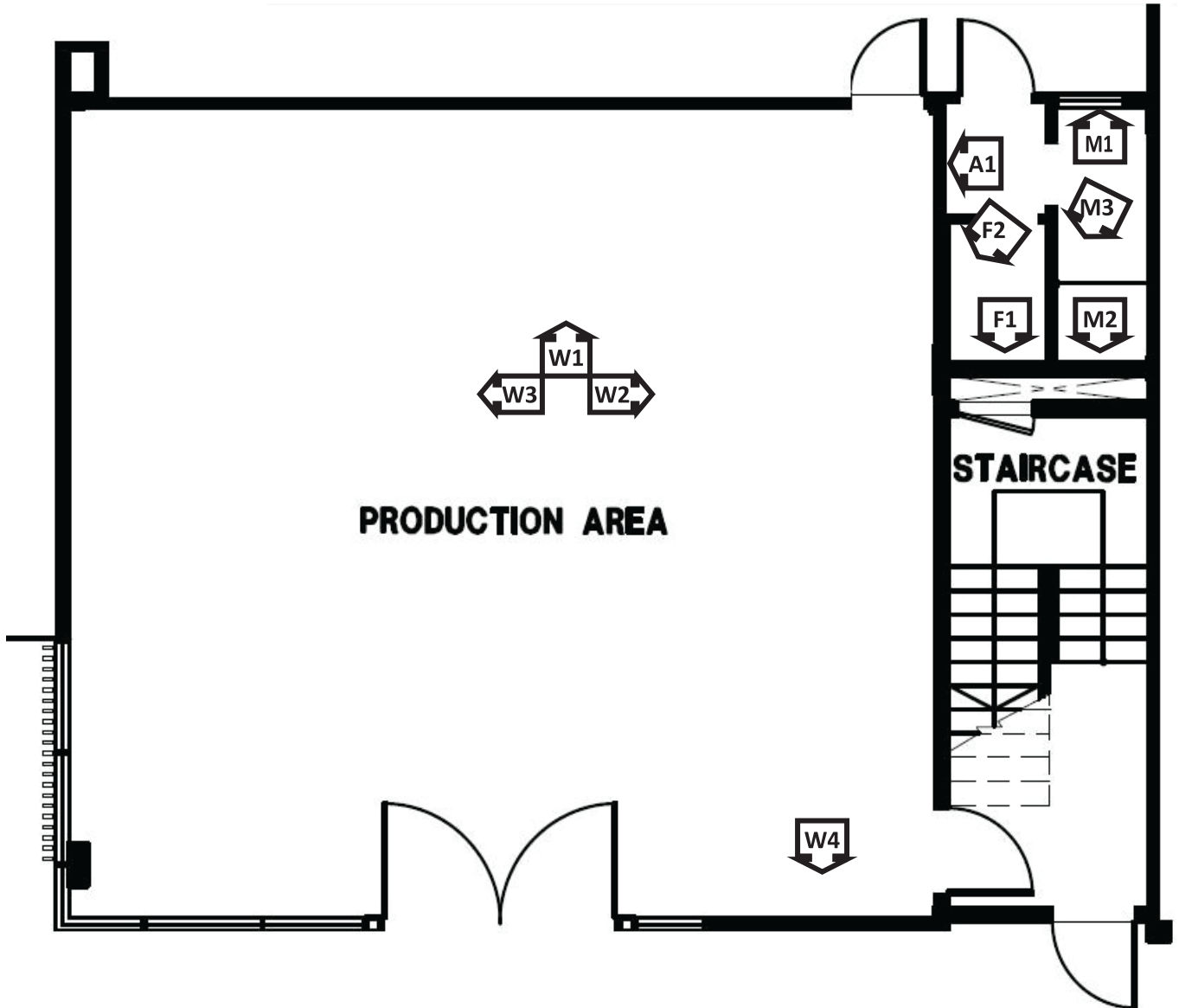
- 1) Pictures of Suntrack_HUB@Bangi
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- **Disclaimer: whilst every reasonable care has been taken in preparing this manual, Suntrack Development Sdn Bhd and their consultant/staff/contractor cannot be responsible for any inaccuracy.**







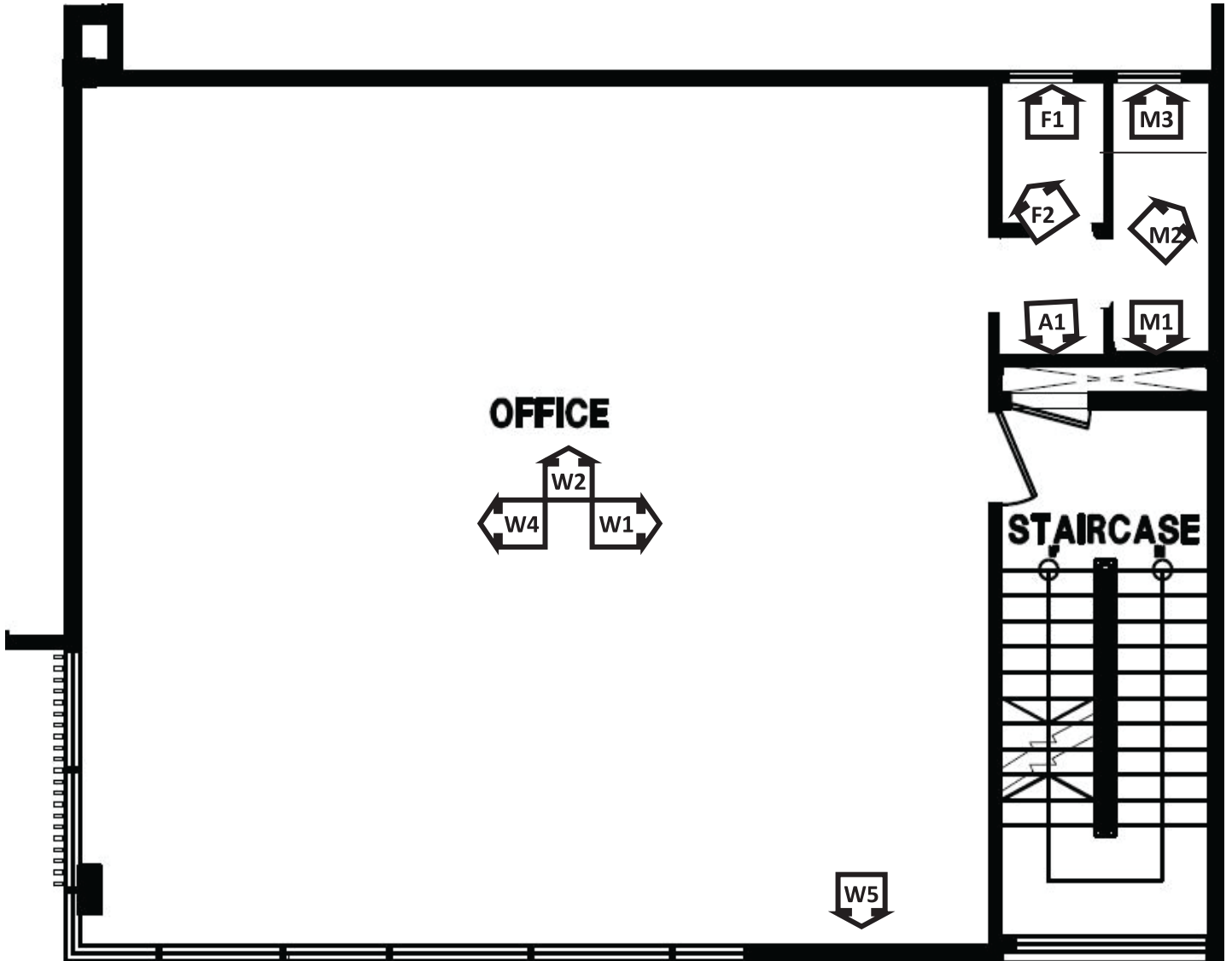
FACTORY LAYOUT PLAN



Remarks : Male and Female toilet at Ground Floor same for Type A, B and C.

GROUND FLOOR PLAN – TYPE A

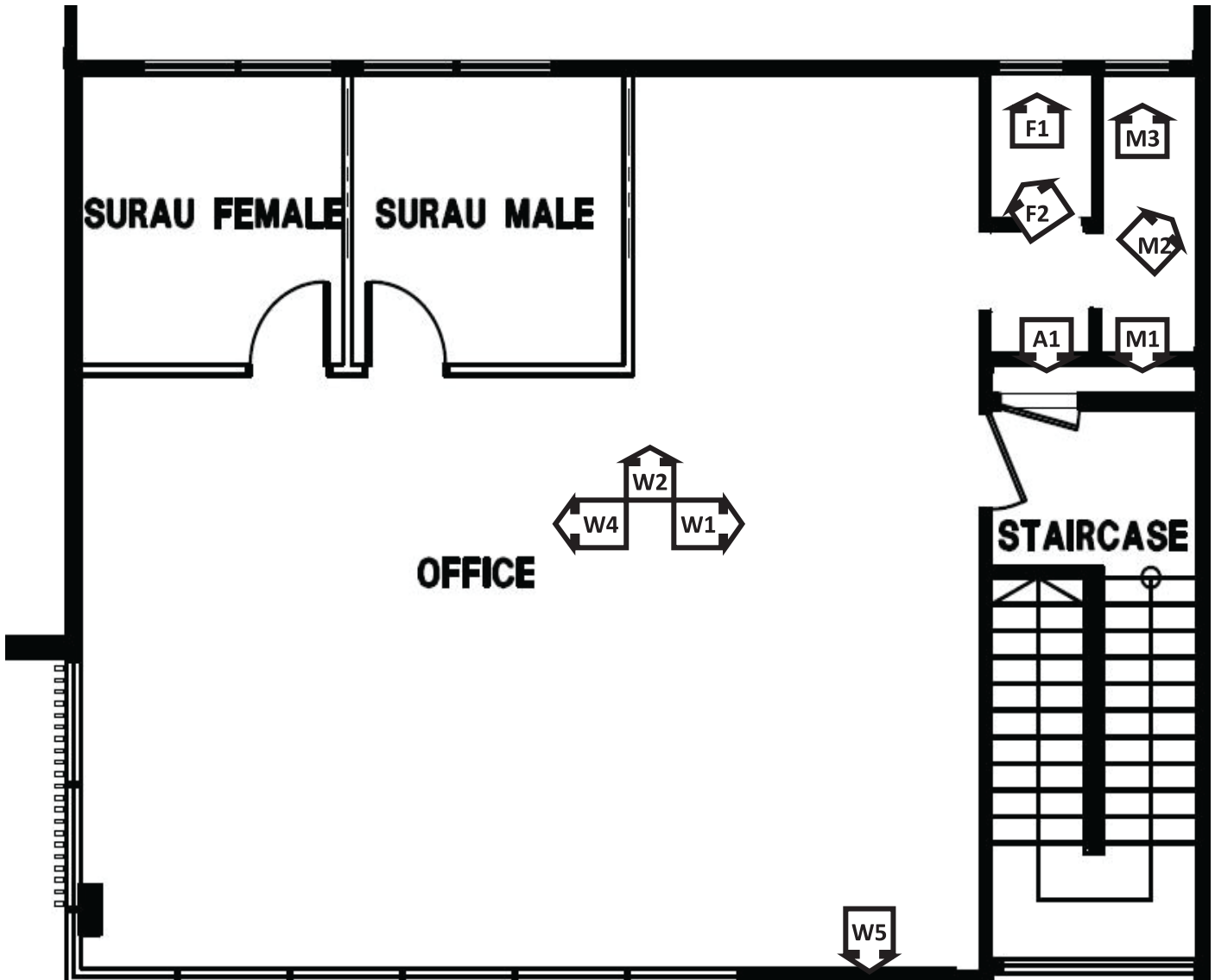
FACTORY LAYOUT PLAN



Remarks : Male and Female toilet at First Floor same for Type A, B and C .

FIRST FLOOR PLAN – TYPE A

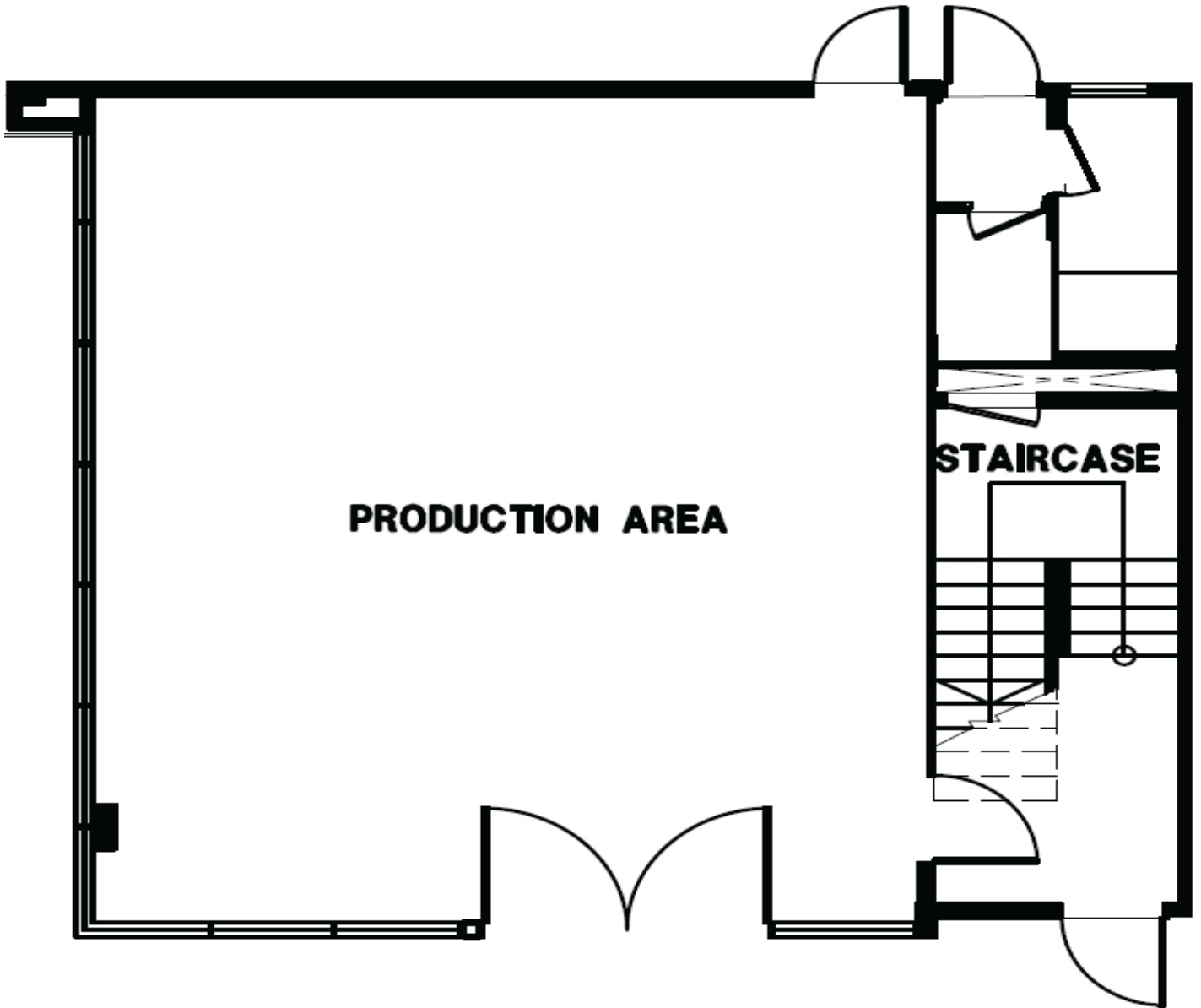
FACTORY LAYOUT PLAN



Remarks : Male and Female toilet at Second Floor same for Type A, B and C .

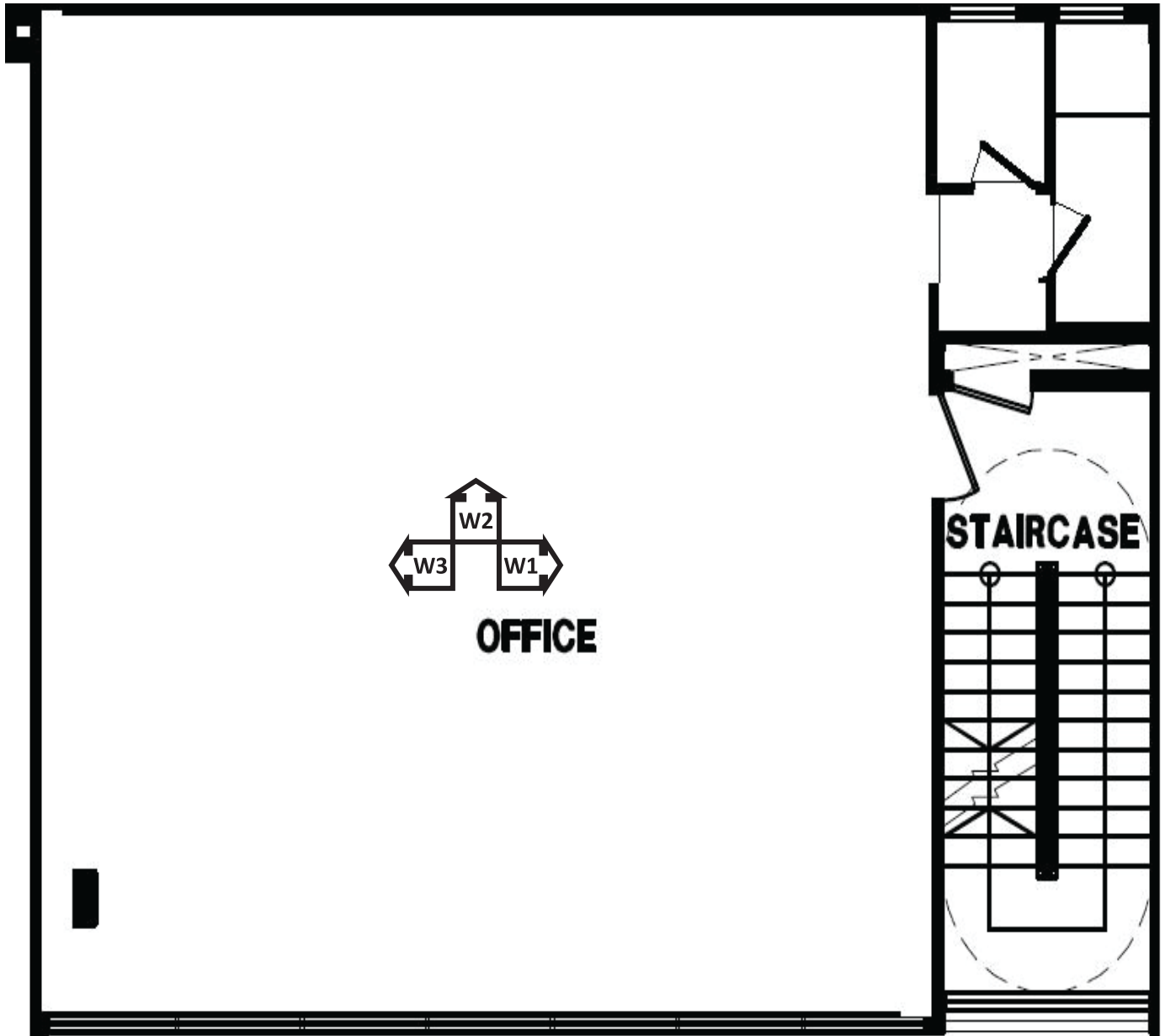
SECOND FLOOR PLAN – TYPE A

FACTORY LAYOUT PLAN



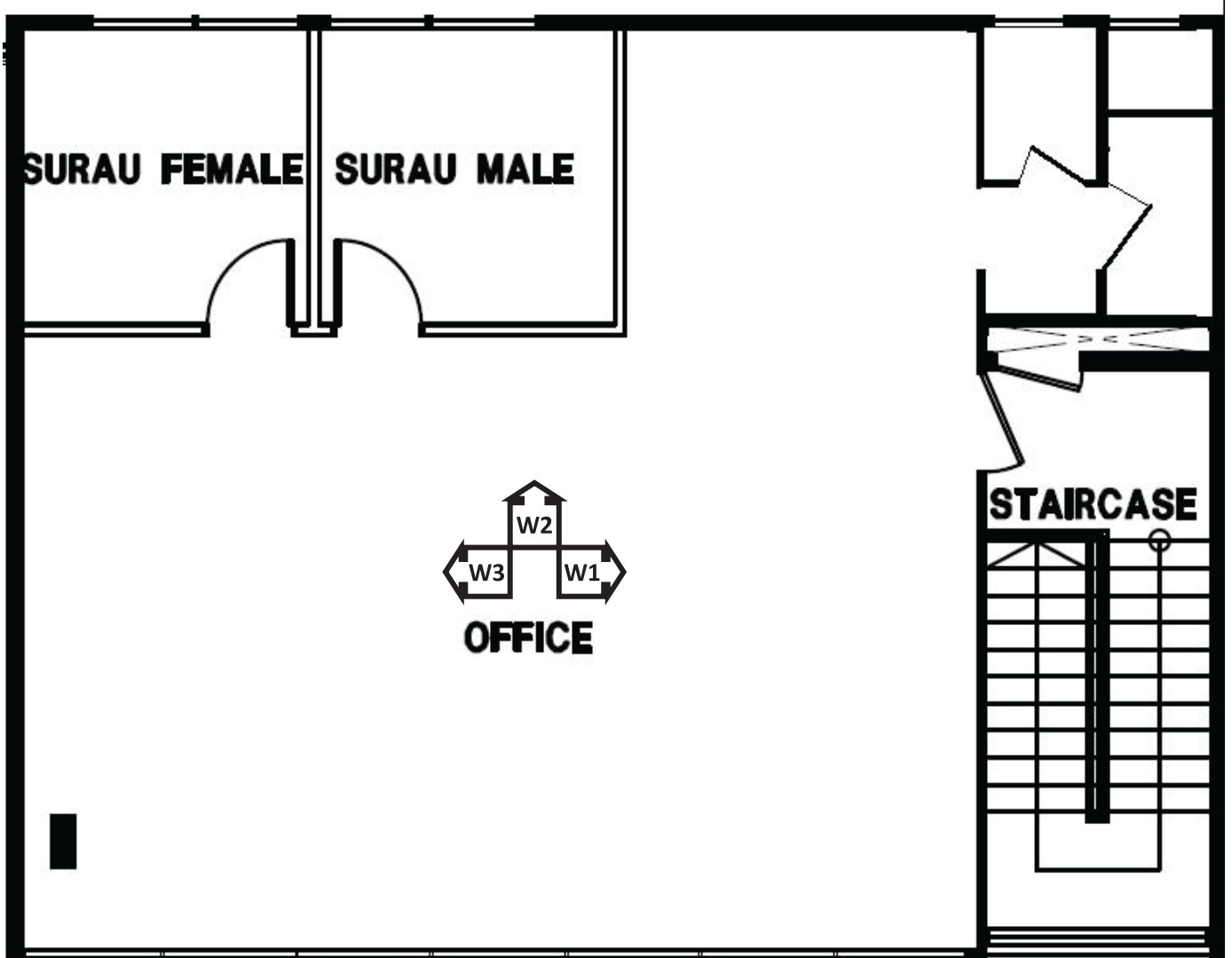
GROUND FLOOR PLAN – TYPE B and C

FACTORY LAYOUT PLAN

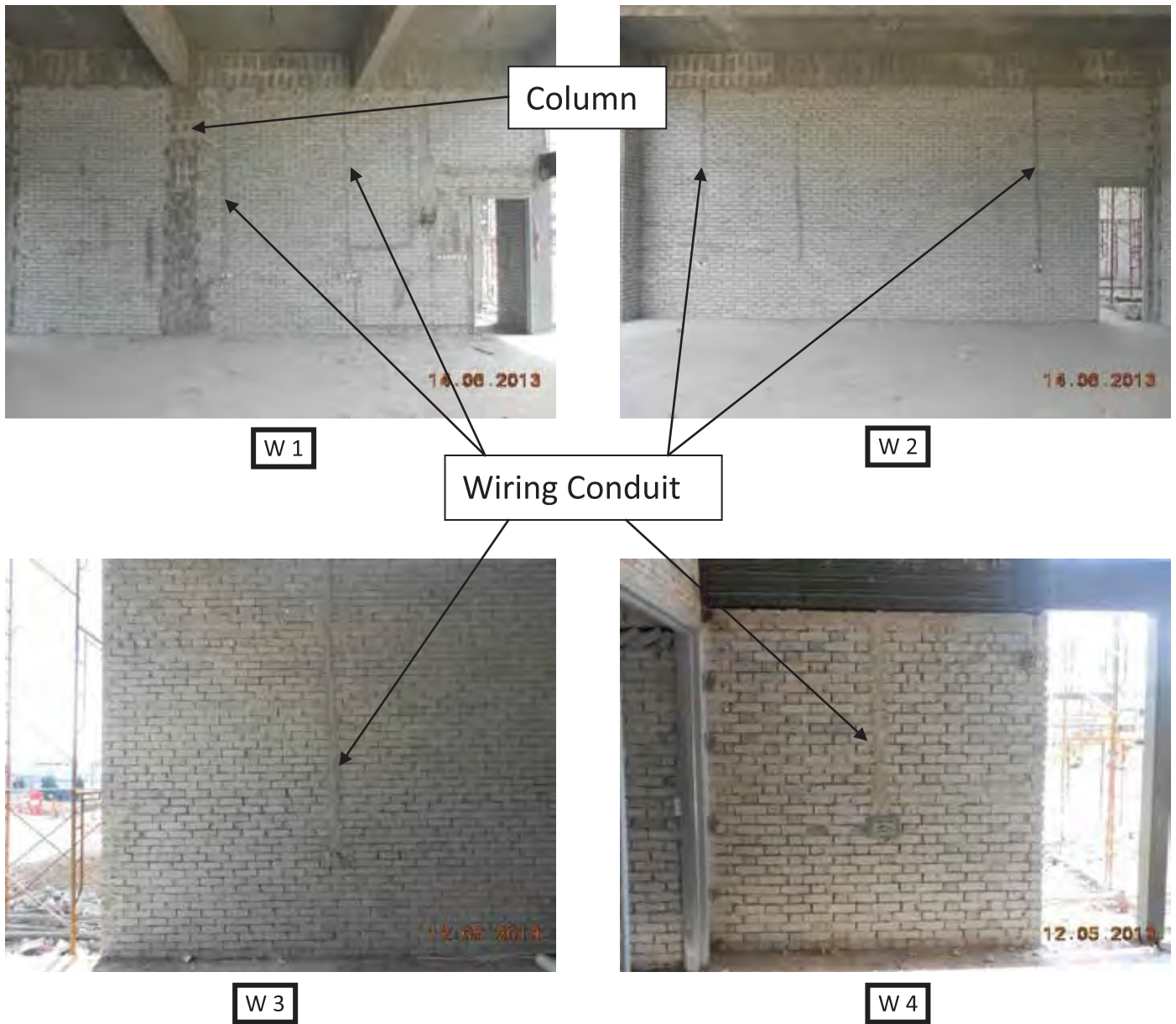


FIRST FLOOR PLAN – TYPE B AND C

FACTORY LAYOUT PLAN

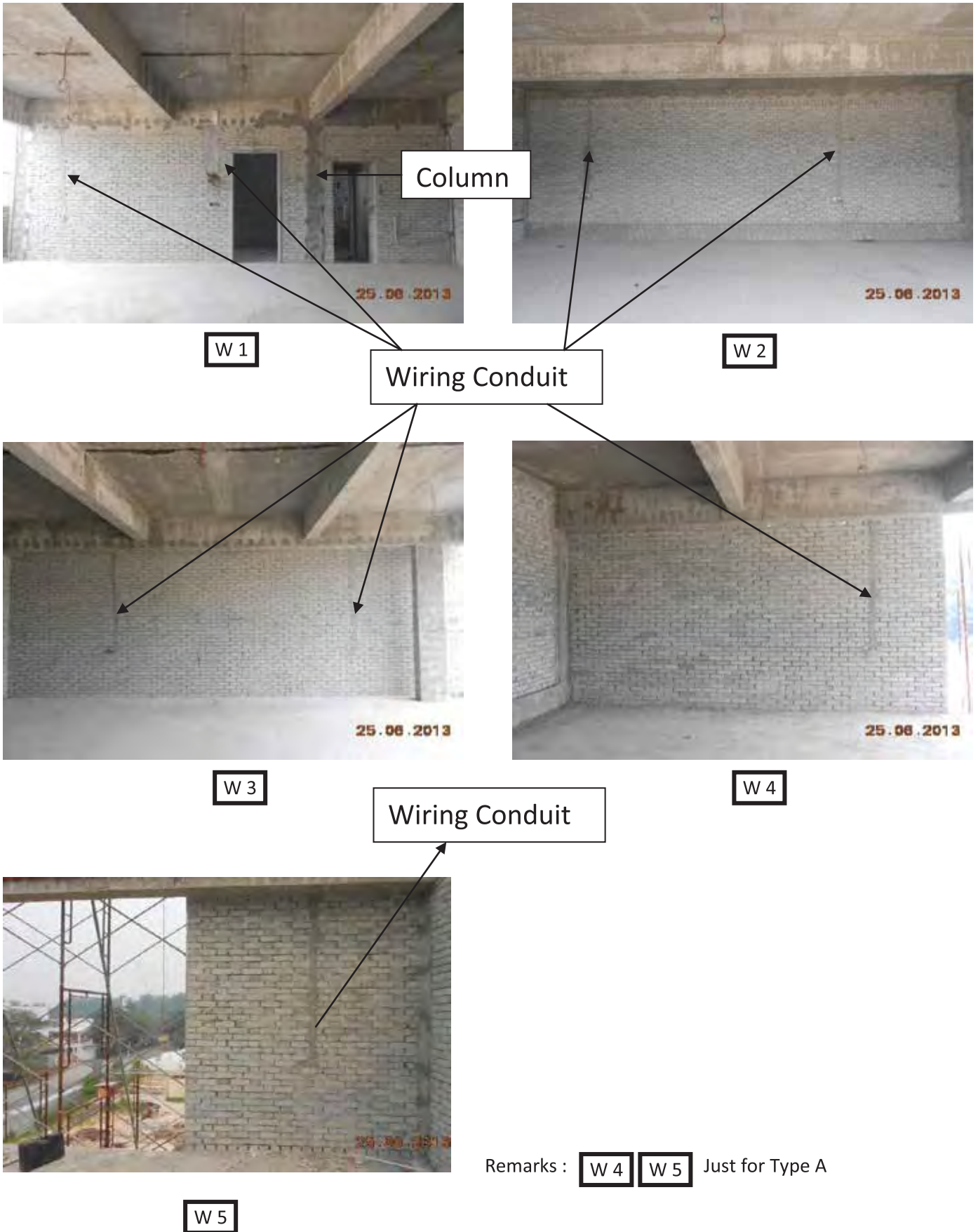


SECOND FLOOR PLAN – TYPE B AND C



Remarks : **W 3** **W 4** Available For Type A

GROUND FLOOR – TYPE A, B AND C



FIRST FLOOR – TYPE A, B AND C



W 1



W 2

Wiring conduit



W 3



W 4



W 5

Wiring conduit

Remarks : W 4 W 5 Only Available For Type A

SECOND FLOOR – TYPE A, B AND C



A1



F1

Cold Water Piping



F2

GROUND FLOOR – FEMALE TOILET
FOR ALL TYPE



M 1



M 2

Cold Water Piping



M 3

GROUND FLOOR – MALE TOILET
FOR ALL TYPE

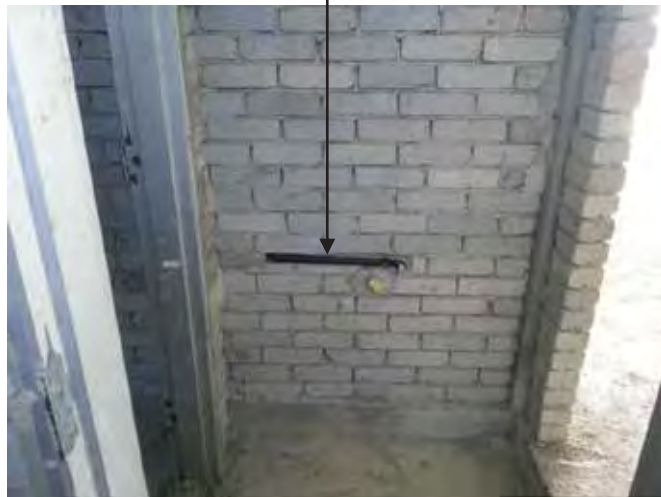


F 1



F 2

Cold Water Piping



A 1

FIRST FLOOR AND SECOND FLOOR – FEMALE TOILET
FOR ALL TYPE



M 1



M 2

Cold Water Piping

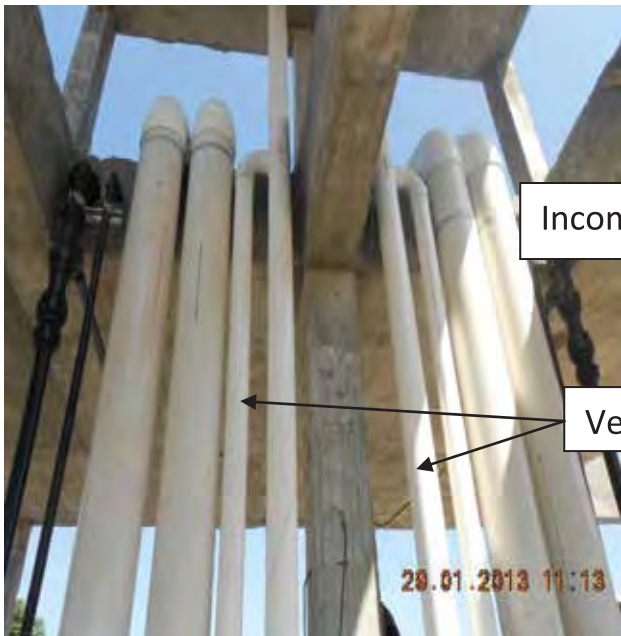


M 3

FIRST FLOOR AND SECOND FLOOR – MALE TOILET
FOR ALL TYPE



Exhaust Vent. Pipe



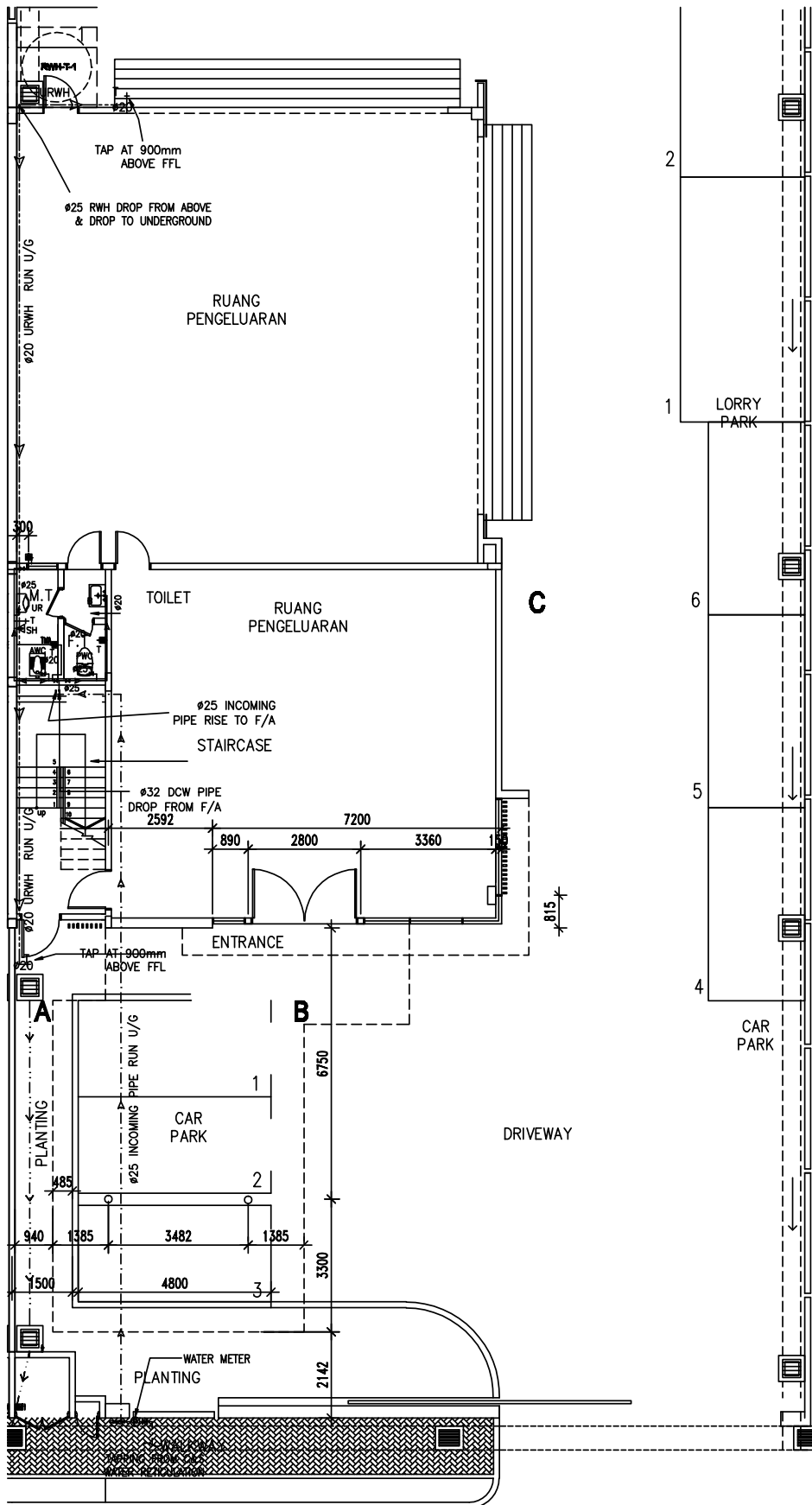
Incoming pipe from SYABAS

Ventilation Pipe

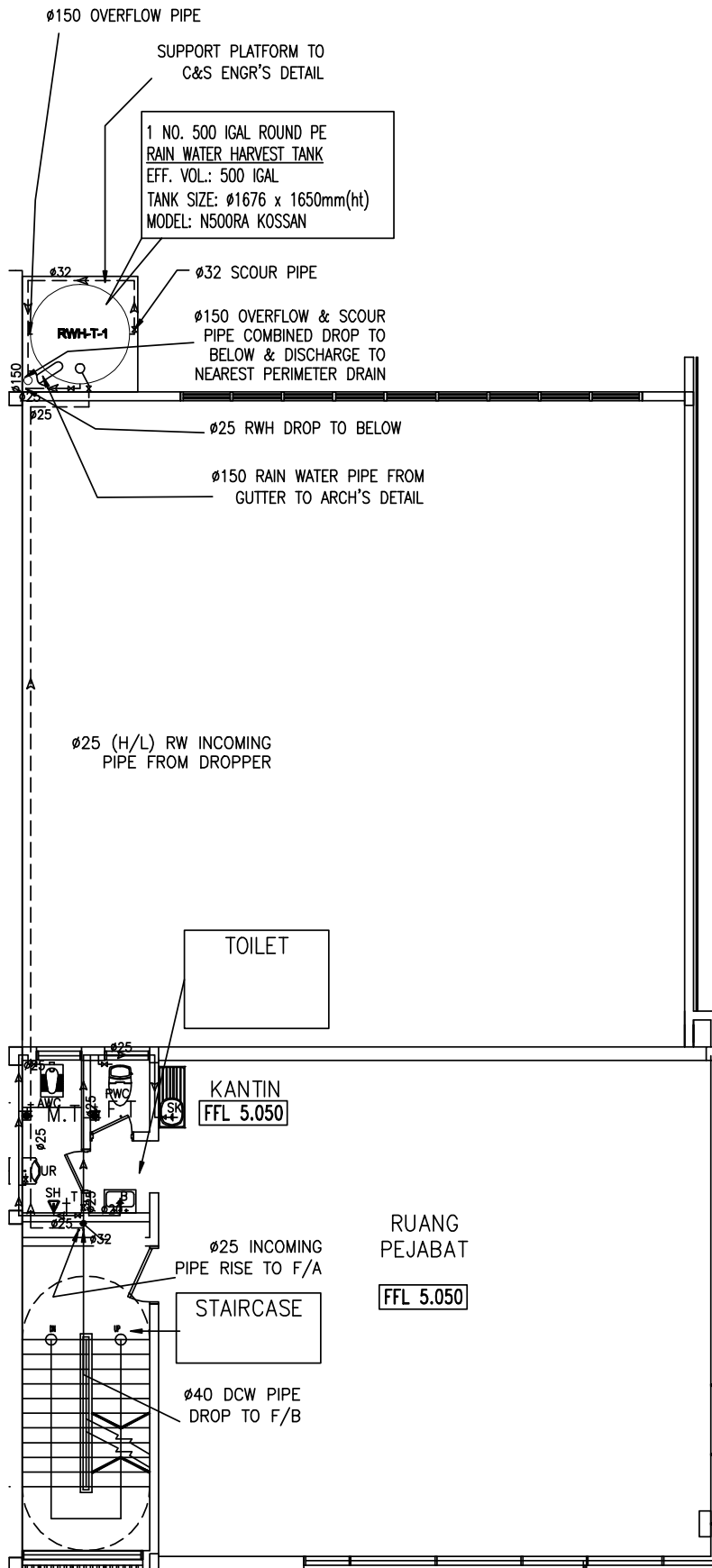


Distribution Pipe from Roof Tank

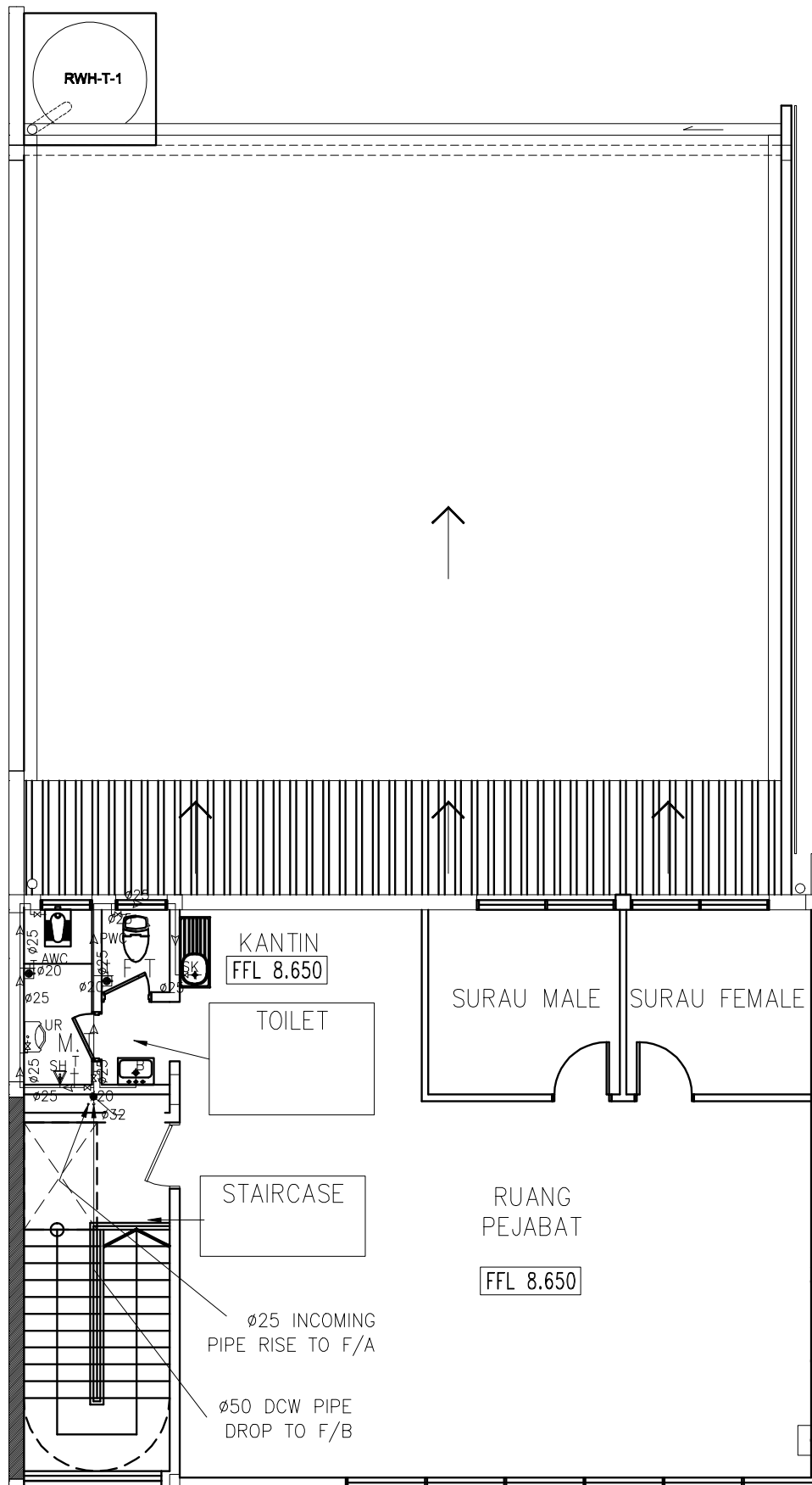
RISER – FOR ALL TYPE



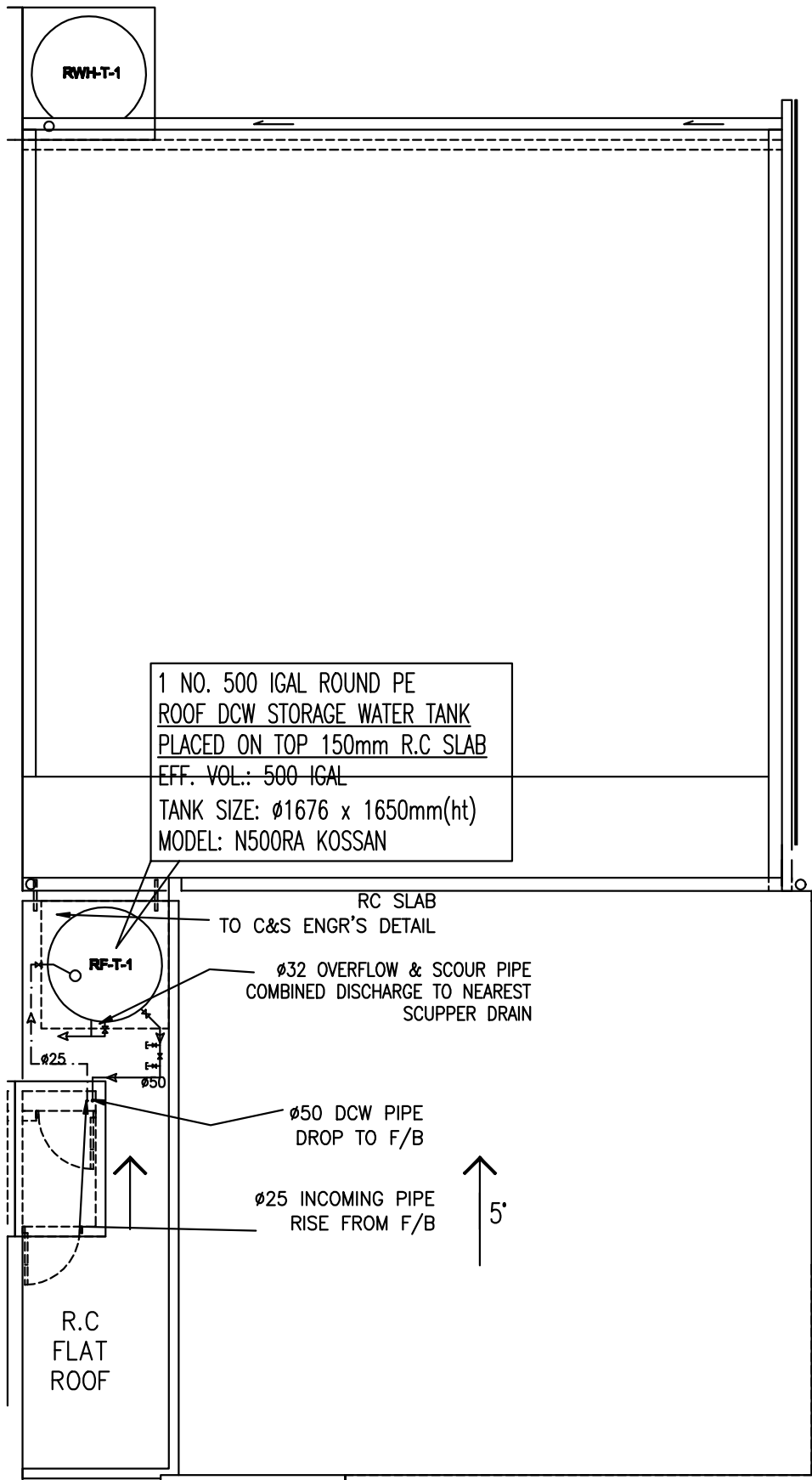
**COLD WATER PIPING - GROUND FLOOR
FOR ALL TYPE**



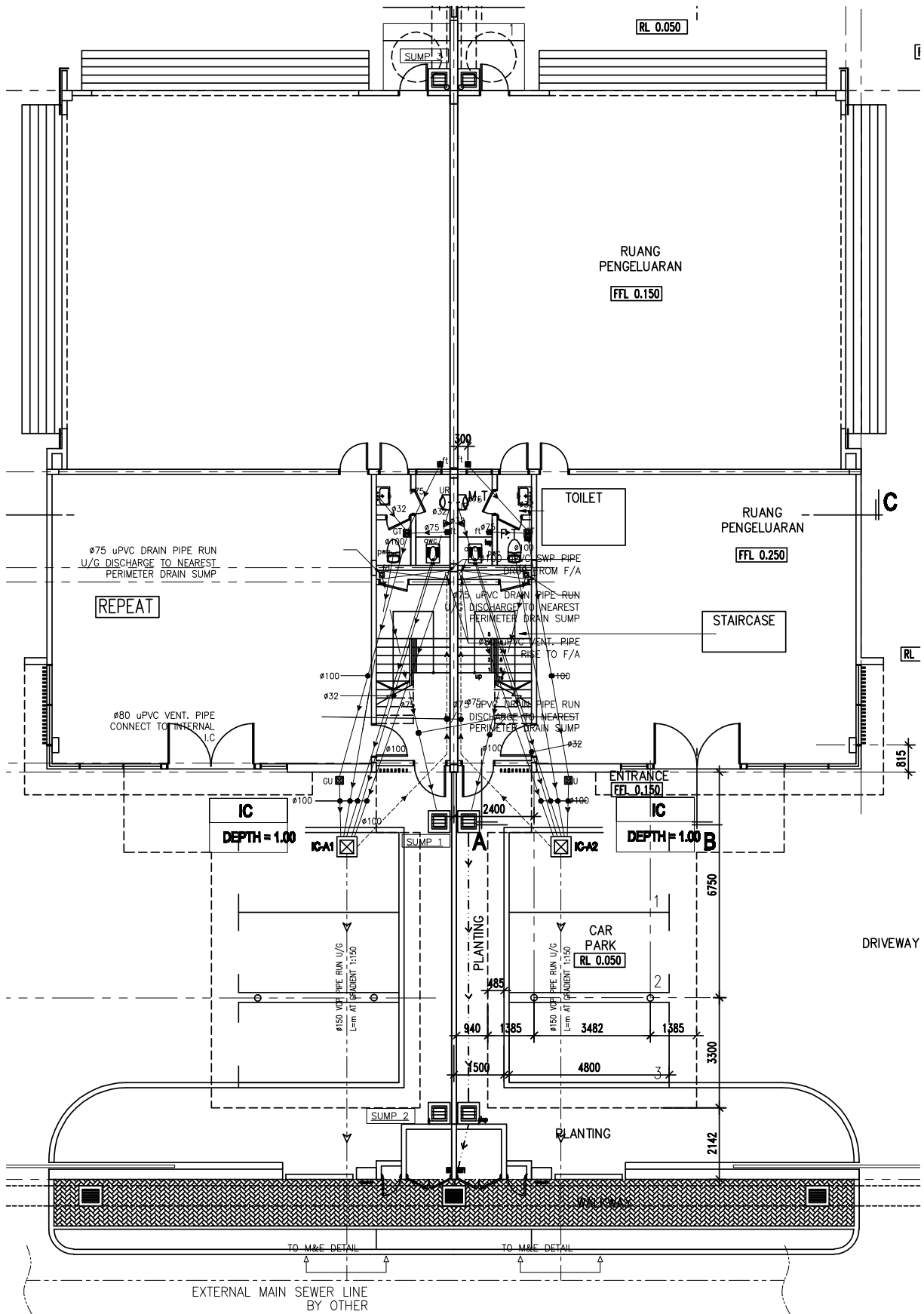
**COLD WATER PIPING - FIRST FLOOR
FOR ALL TYPE**



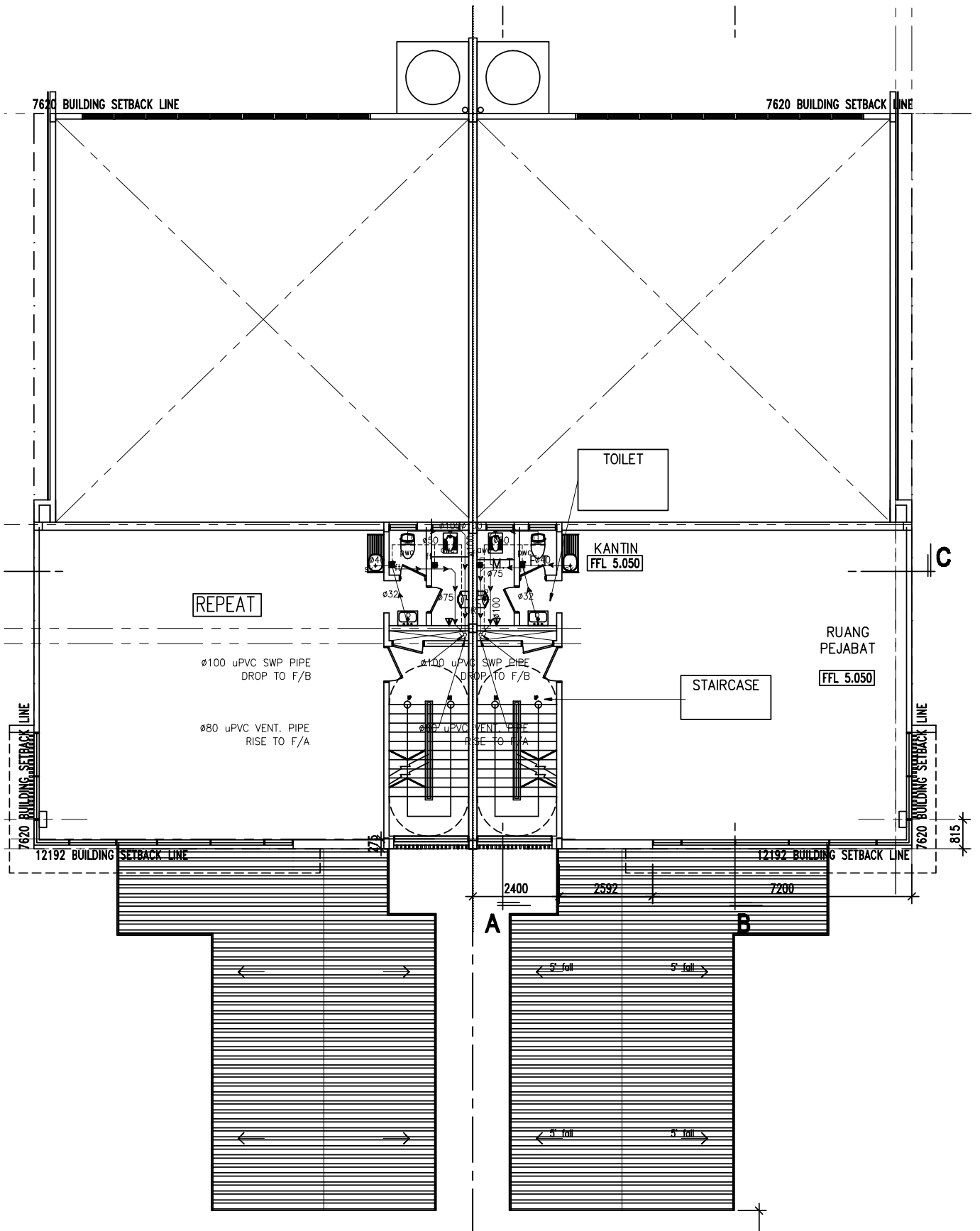
**COLD WATER PIPING - SECOND FLOOR
FOR ALL TYPE**



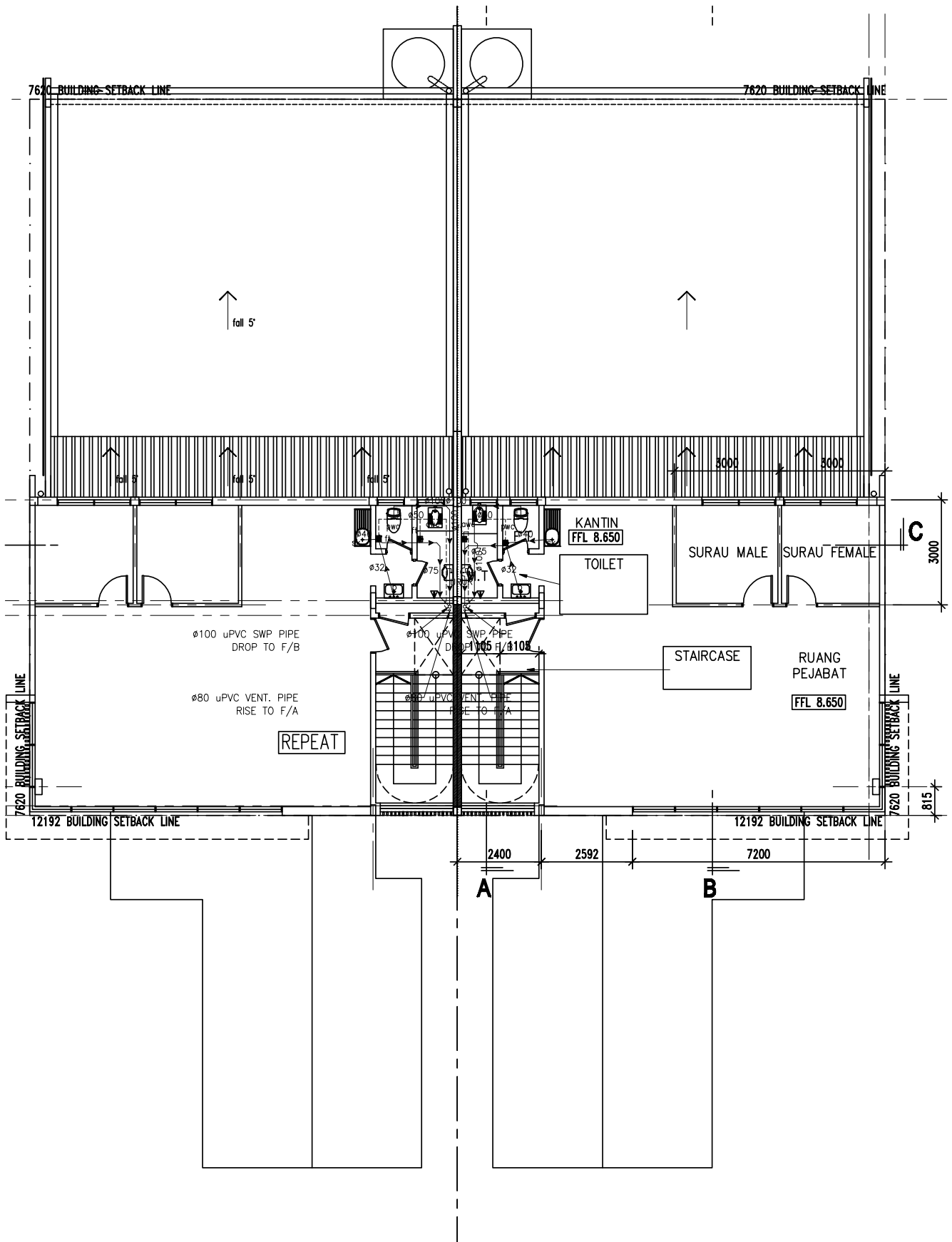
**COLD WATER PIPING - ROOF
FOR ALL TYPE**



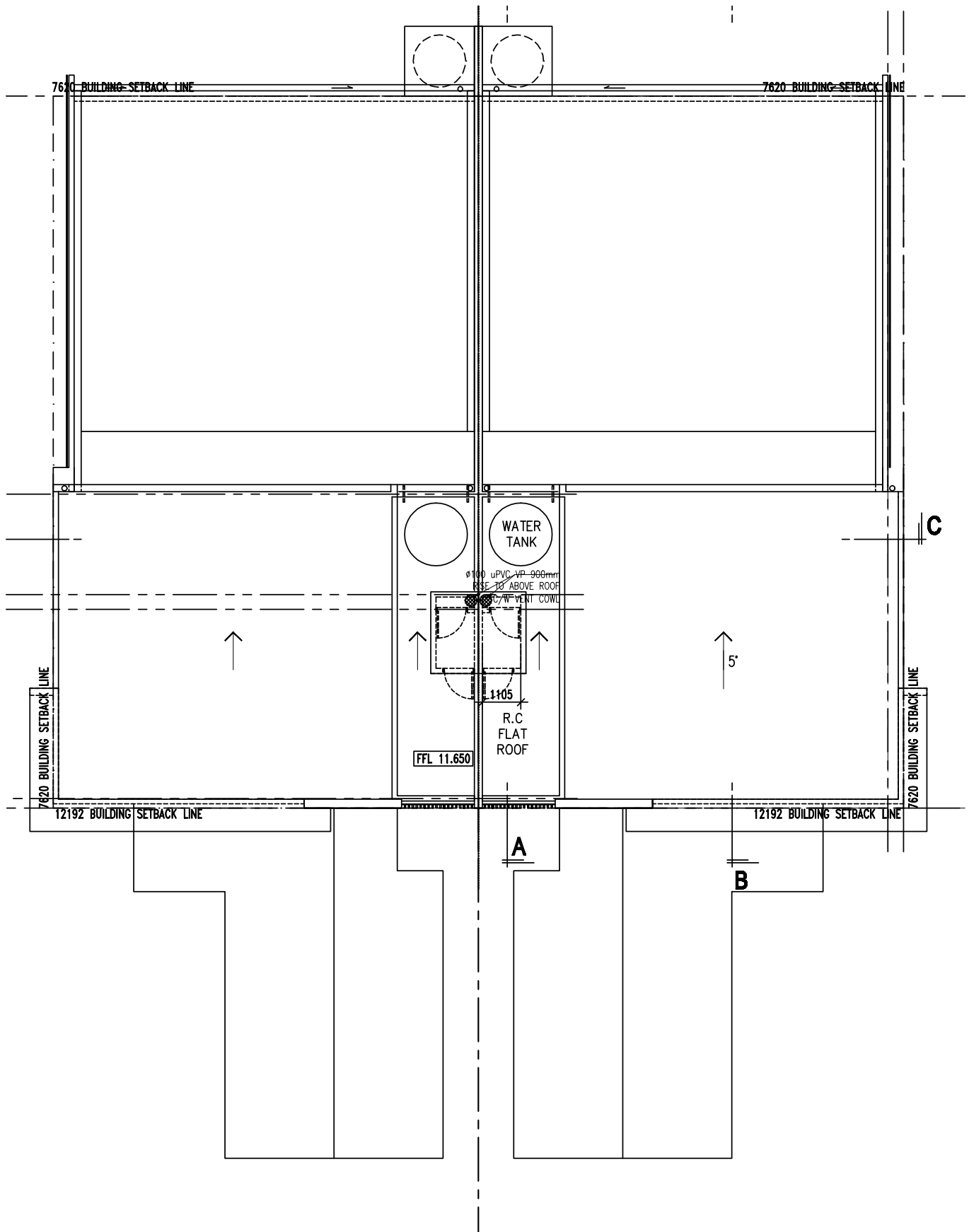
**SANITARY PLUMBING LAYOUT PLAN - GROUND FLOOR
FOR ALL TYPE**



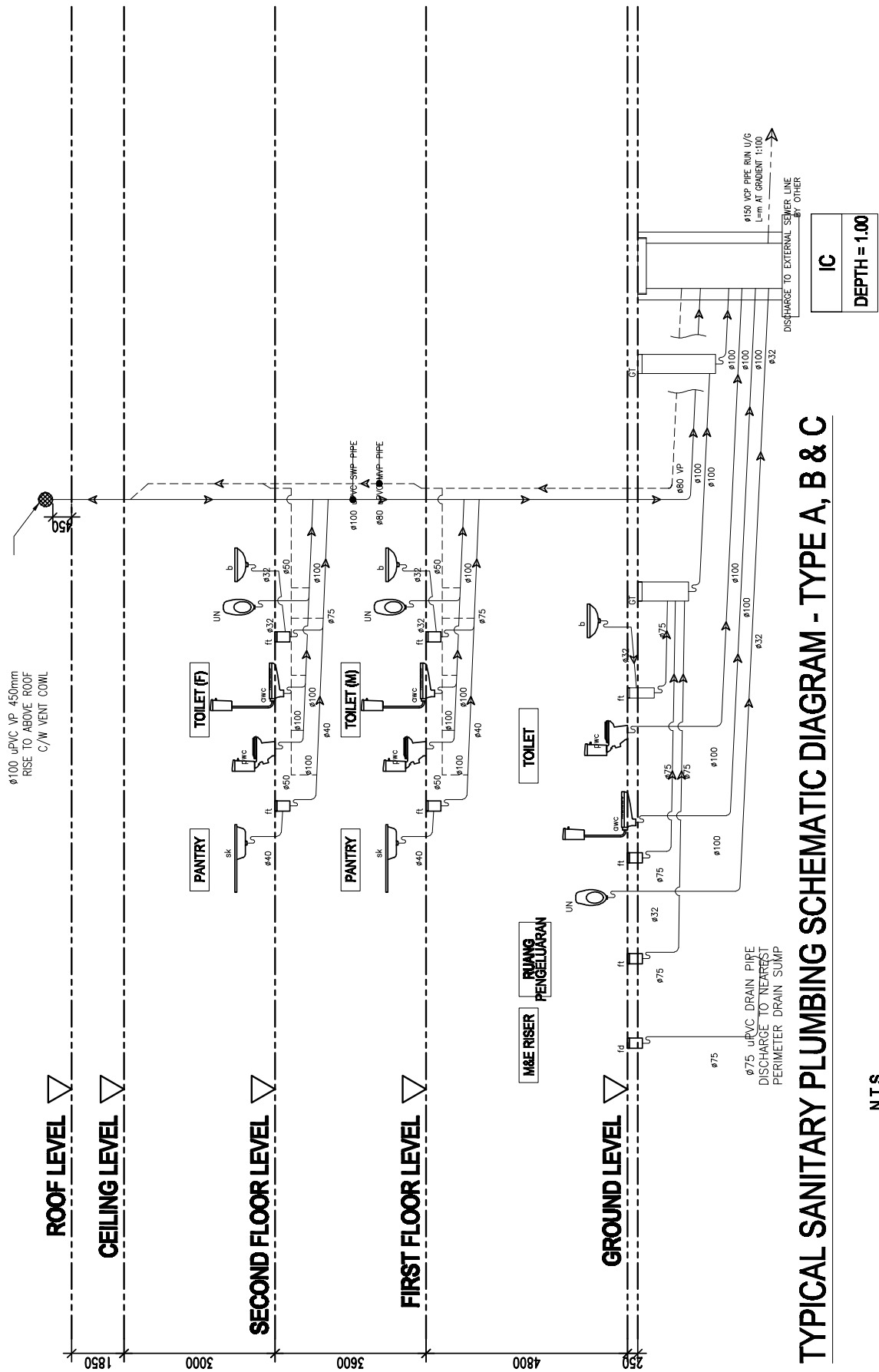
**SANITARY PLUMBING LAYOUT PLAN - FIRST FLOOR
FOR ALL TYPE**



SANITARY PLUMBING LAYOUT PLAN - SECOND FLOOR
FOR ALL TYPE



**SANITARY PLUMBING LAYOUT PLAN - ROOF PLAN
FOR ALL TYPE**



TYPICAL SANITARY PLUMBING SCHEMATIC DIAGRAM - TYPE A, B & C

N.T.S

NOTE:

1. ALL SOIL & WASTE PIPE SHALL BE uPVC (WHITE) PIPE (BS 4514) EXCEPT FOR THOSE UNDERGROUND PIPE CONNECT FROM TOILET APPLIANCES TO I.C. SHALL REMAIN AS uPVC BROWN PIPE (BS 4660)
2. ALL VENT PIPE SHALL BE REMAIN AS uPVC (WHITE) PIPE(BS 4514)




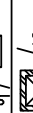




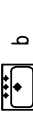




SCHEDULE OF SANITARY PIPES SIZE

UNDERGROUND PIPES

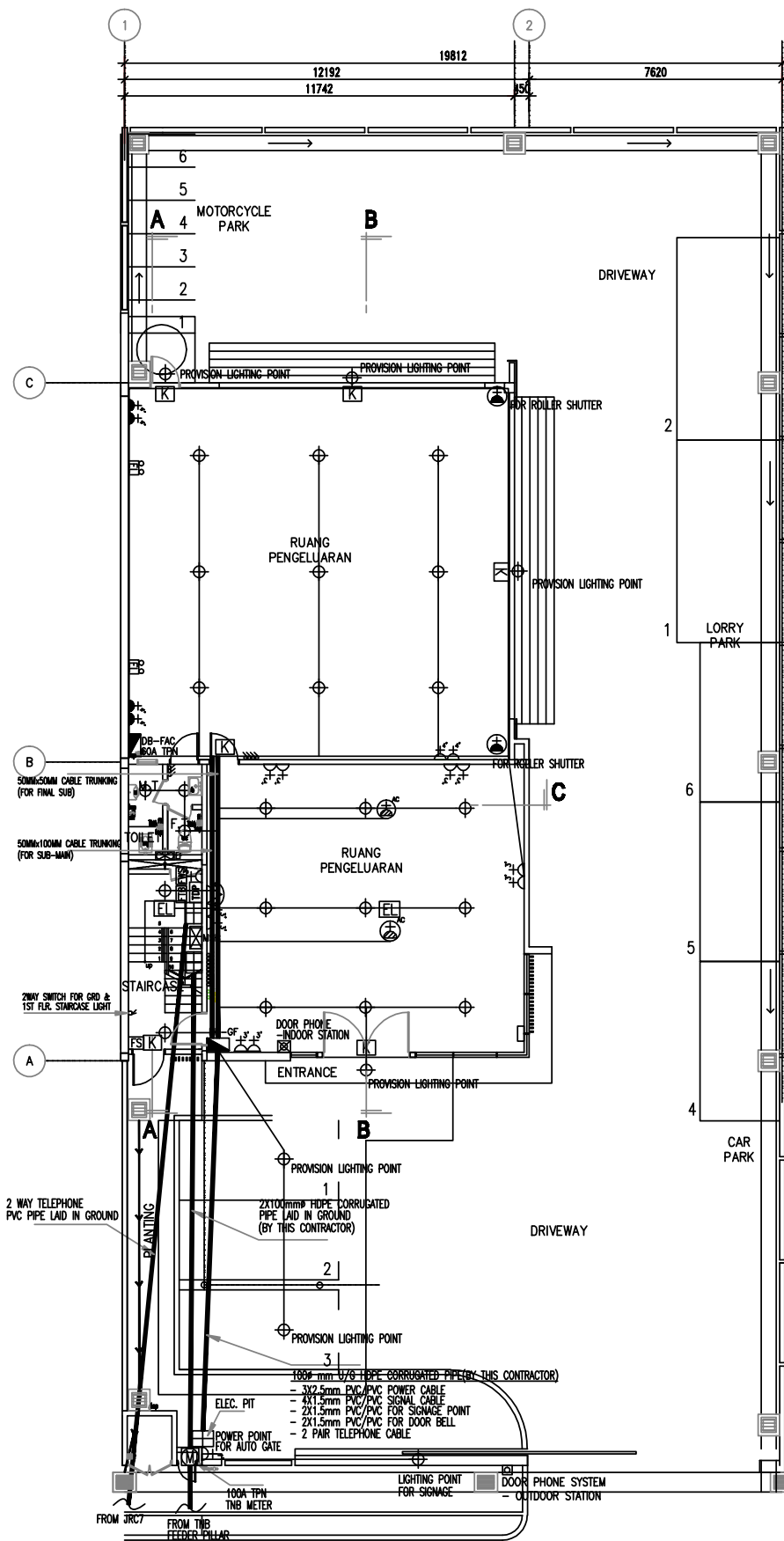
1. BASIN (B) TO FLOOR TRAP (FT) = ϕ 32mm uPVC
2. FLOOR TRAP (FT) TO GULLY TRAP (GT) = ϕ 75mm uPVC
3. SINK (SK) TO FLOOR TRAP (FT) = ϕ 40mm uPVC
4. GULLY TRAP (GT) TO INSPECTION CHAMBER (IC) = ϕ 100mm uPVC
5. WATER CLOSET (WC) TO INSPECTION CHAMBER (IC) = ϕ 100mm uPVC
6. INSPECTION CHAMBER (IC) TO MANHOLE (MH) = ϕ 150mm VCP
7. MAIN SOIL & WASTE PIPE TO INSPECTION CHAMBER(IC)= ϕ 100mm uPVC

ABOVE GROUND PIPES

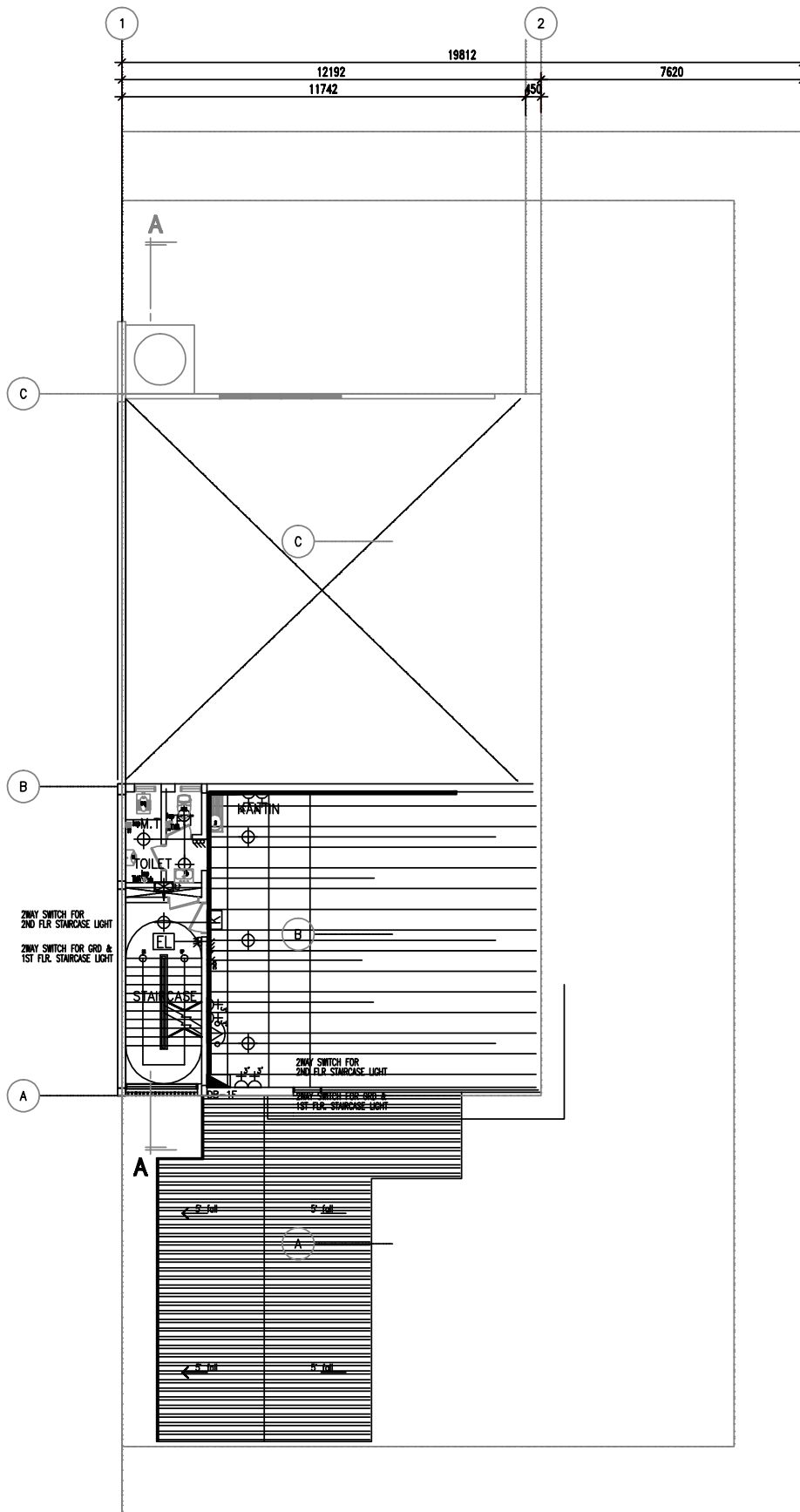
1. BASIN (B) TO FLOOR TRAP (FT) = ϕ 32mm uPVC
2. SINK (SK) TO FLOOR TRAP (FT) = ϕ 40mm uPVC
3. FLOOR TRAP (FT) TO MAIN SOIL & WASTE PIPE = ϕ 75mm uPVC
4. WATER CLOSET (WC) TO MAIN SOIL & WASTE PIPE = ϕ 100mm uPVC
5. FLOOR TRAP (FT) TO MAIN VENT PIPE = ϕ 50mm uPVC
6. WATER CLOSET (WC) TO MAIN VENT PIPE = ϕ 50mm uPVC

LEGEND	
SYMBOL	DESCRIPTION
	FLOOR TRAP
	FLOOR DRAIN
	GULLY TRAP
	INSPECTION CHAMBER
	VENT COWL
	PEDESTAL WATER CLOSET
	ASIAN WATER CLOSET
	BASIN
	SINK
	URINAL
F/B	FLOOR BELOW
F/A	FLOOR ABOVE
	SOIL & WASTE PIPE (SWP) uPVC
	VENT PIPE (VP) uPVC PIPE
	MAIN SOIL & WASTE PIPE (MSWP) VCP PIPE
GL	GROUND LEVEL
IL	INVERT LEVEL
D.	DEPTH
H/L	HIGH LEVEL
U/G	UNDERGROUND

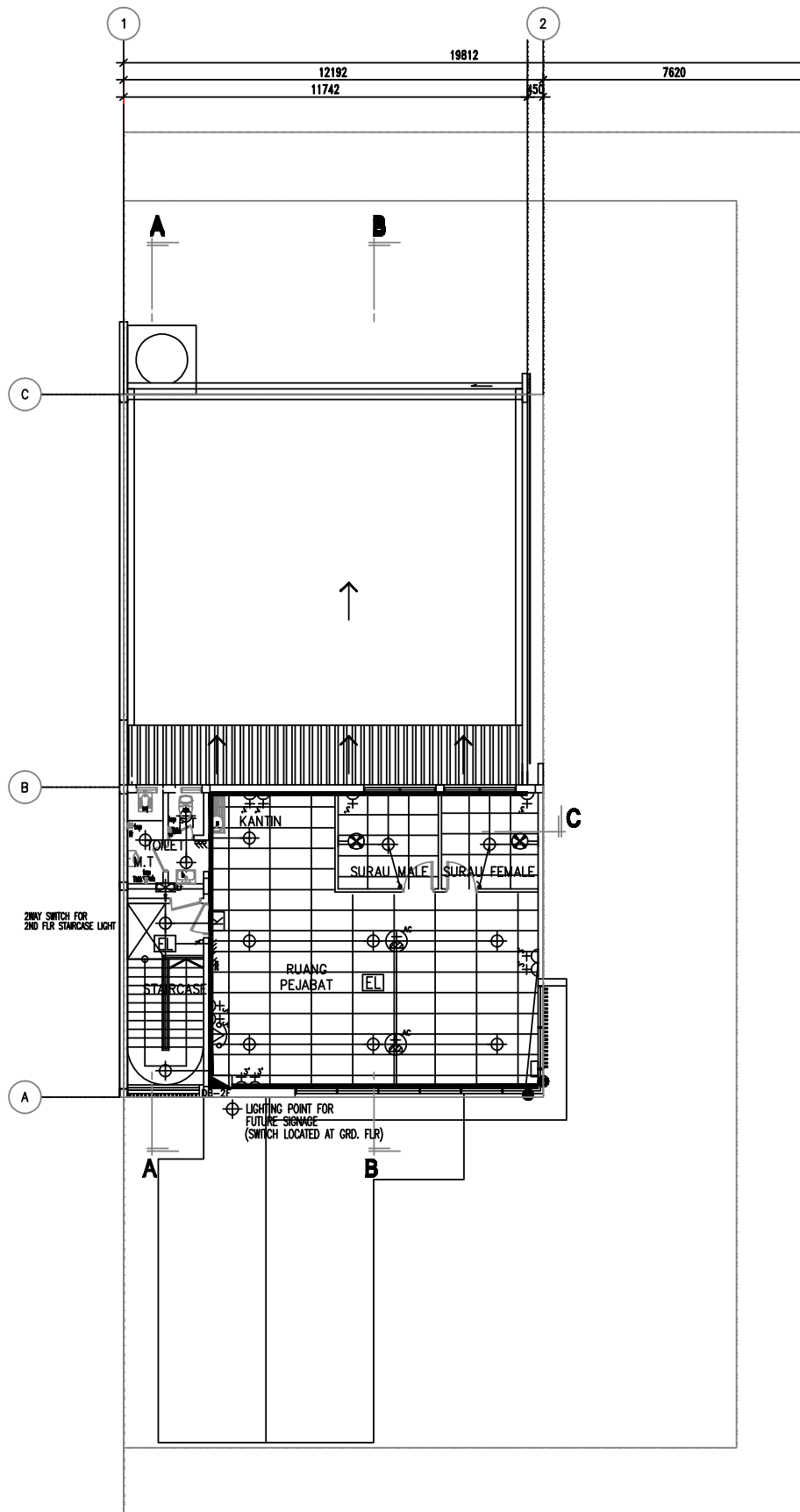
**SANITARY PLUMBING LEGEND
FOR ALL TYPE**



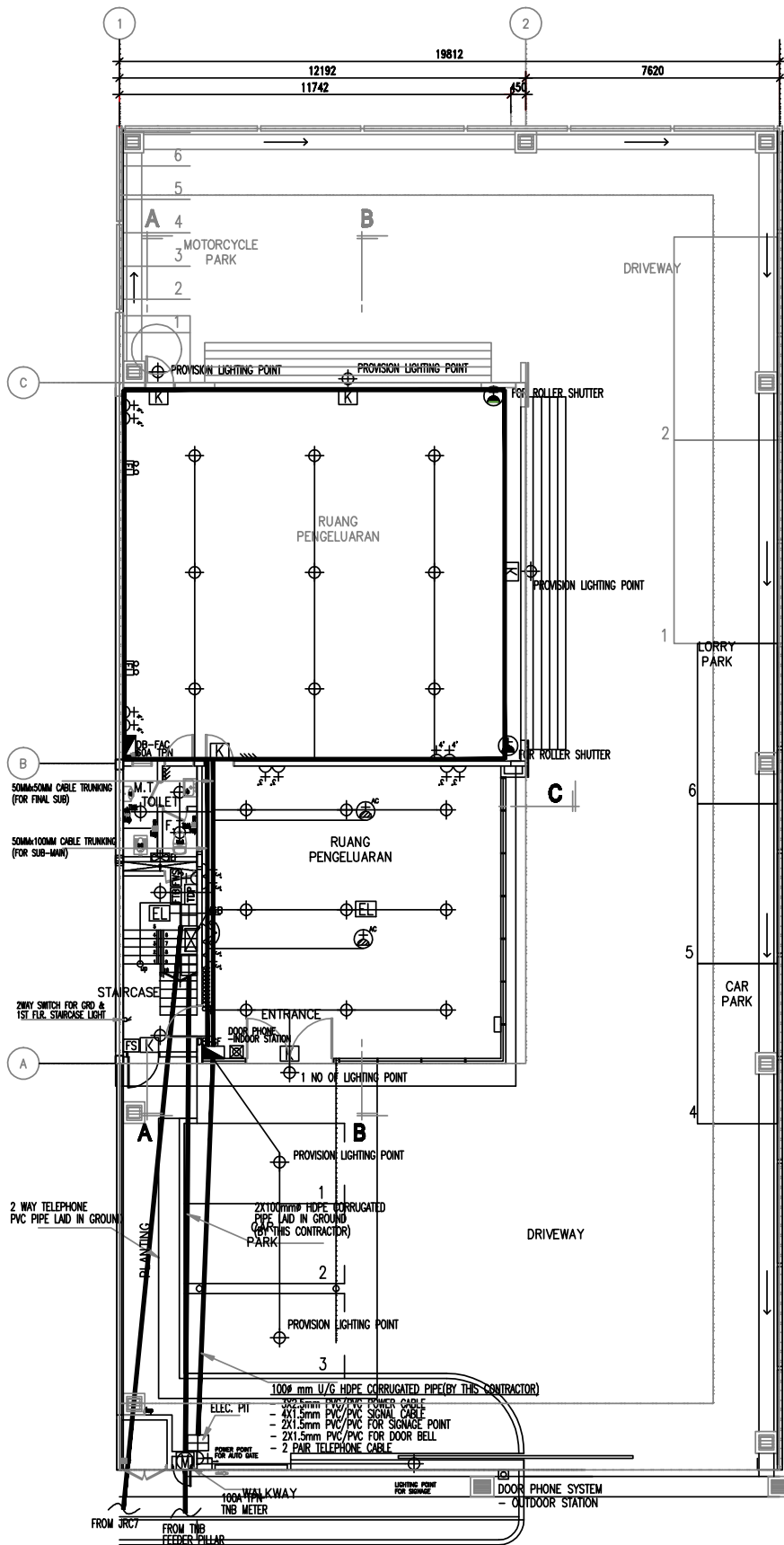
**GROUND FLOOR PLAN
ELECTRICAL LAYOUT PLAN FOR TYPE A**



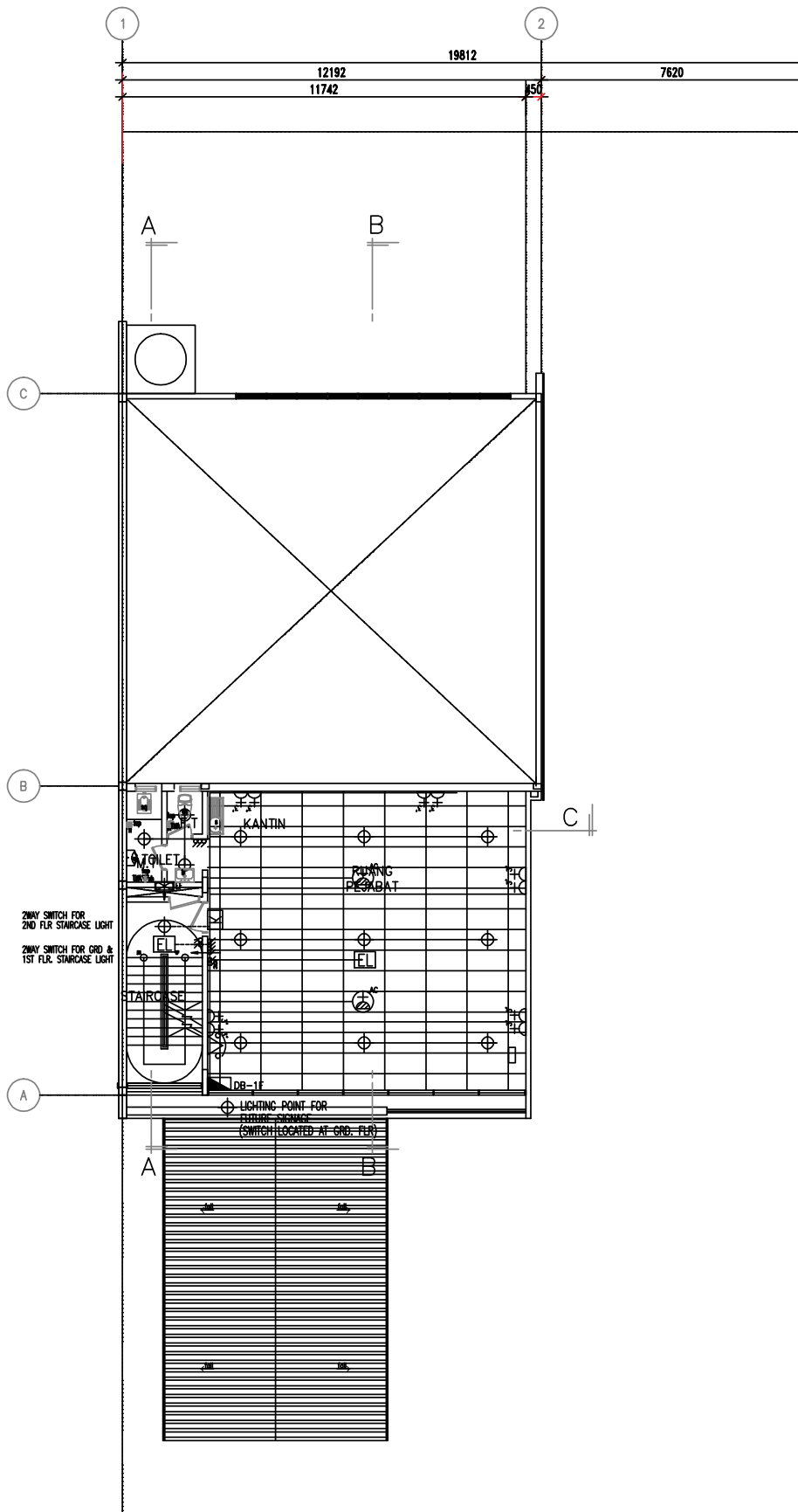
FIRST FLOOR PLAN
ELECTRICAL LAYOUT PLAN FOR TYPE A



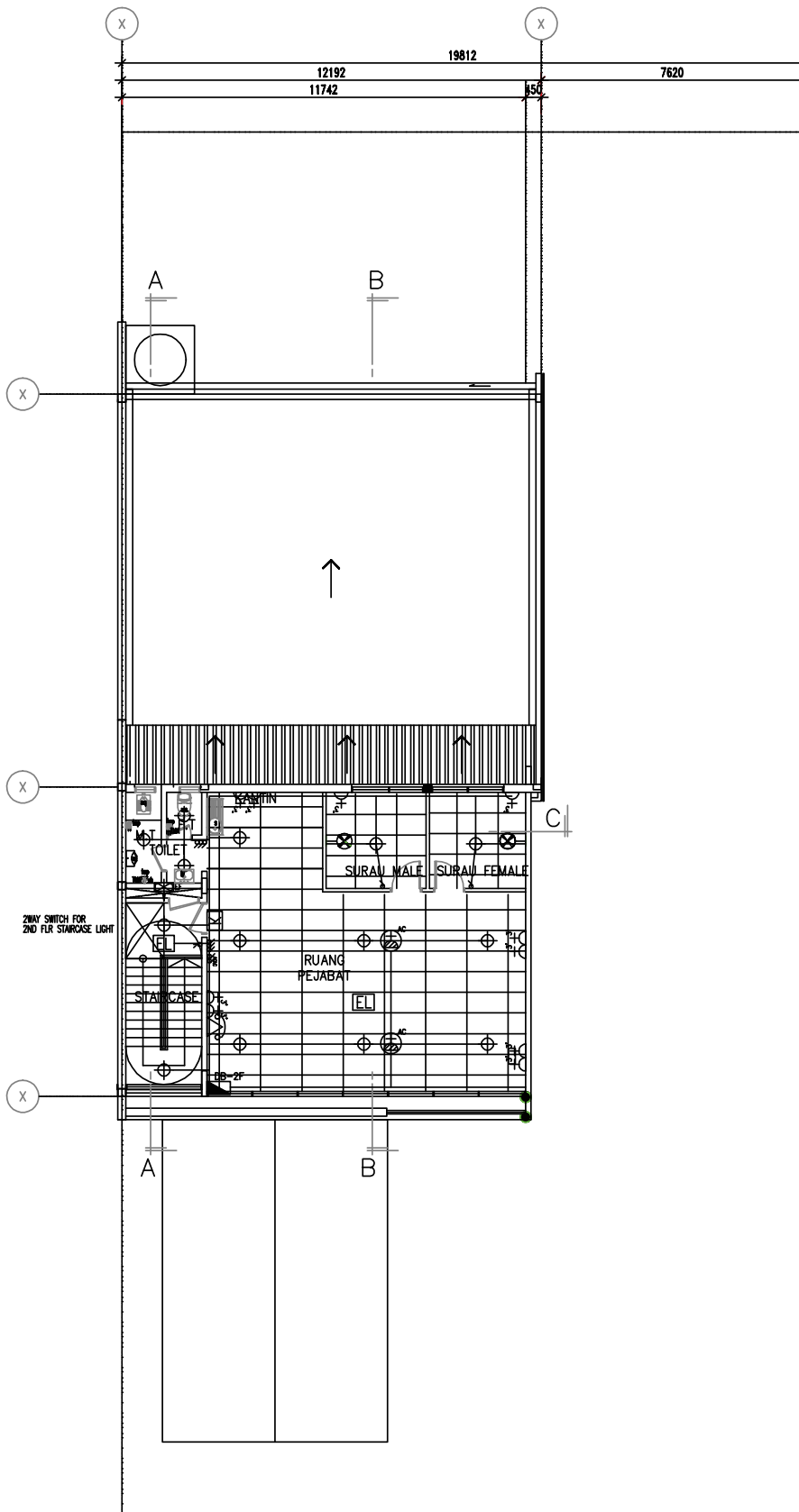
**SECOND FLOOR PLAN
ELECTRICAL LAYOUT PLAN FOR TYPE A**



**GROUND FLOOR PLAN
 ELECTRICAL LAYOUT PLAN FOR TYPE B AND C**



FIRST FLOOR PLAN
ELECTRICAL LAYOUT PLAN FOR TYPE B AND C



SECOND FLOOR PLAN
ELECTRICAL LAYOUT PLAN FOR TYPE B AND C

SCHEDULE OF CABLE SIZING :-

- 1) UNLESS OTHERWISE STATED IN THE SINGLE LINE DIAGRAM ALL CABLE SIZE FOR THE RESPECTIVE CIRCUIT BREAKER SHALL BE AS PER TABLE SHOWN.
(e.g. IF 60A TPN MCB IS USED, AND LABELLED AS 'B' THE CABLING SCHEDULE SHALL BE REFERRED AS 'B5')
- 2) CABLE SHALL BE SIZED ACCORDING TO IEE REGULATION LATEST EDITION IF ANY OF THE BREAKER RATING IS NOT COVERED UNDER THE TABLE.
- 3) WHEN CABLE INSTALLATION METHOD SPECIFIED AS ON TRAY/LADDER IT IS STRICTLY CABLE ON TRAY/LADDER, IF FOUND INSTALLED OTHERWISE CONTRACTOR RESPONSIBLE TO UPGRADE SIZE WITHOUT ADDITIONAL COST.
- 4) ALL EXPOSED CONDUIT SHALL BE G.I.

CABLE SIZES TABLE	
CODE	DESCRIPTION FOR PVC CABLE (1φ)
A1	2x1C 1.5mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
A2	2x1C 2.5mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
A3	2x1C 4mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
A4	2x1C 2.5mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT. (FOR RING CIRCUIT ONLY)
A5	2x1C 6mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
A6	2x1C 10mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
A7	2x1C 16mm ² PVC CABLE c/w CPC IN CONCEALED CONDUIT.
CODE	DESCRIPTION FOR PVC/PVC & XLPE/PVC CABLE (3φ)
B1	4x1C 2.5mm ² PVC/PVC CABLE c/w CPC IN TRUNKING.
B2	4x1C 4mm ² PVC/PVC CABLE c/w CPC IN TRUNKING.
B3	4x1C 10mm ² PVC/PVC CABLE c/w CPC IN TRUNKING.
B4	4x1C 16mm ² PVC/PVC CABLE c/w CPC IN TRUNKING/TRAY.
B5	4x1C 25mm ² PVC/PVC CABLE c/w CPC IN TRUNKING/TRAY.
B6	4x1C 35mm ² XLPE/PVC CABLE c/w CPC IN TRUNKING/TRAY.
B7	4x1C 50mm ² XLPE/PVC CABLE c/w CPC ON TRAY
B8	4x1C 70mm ² XLPE/PVC CABLE c/w CPC ON TRAY

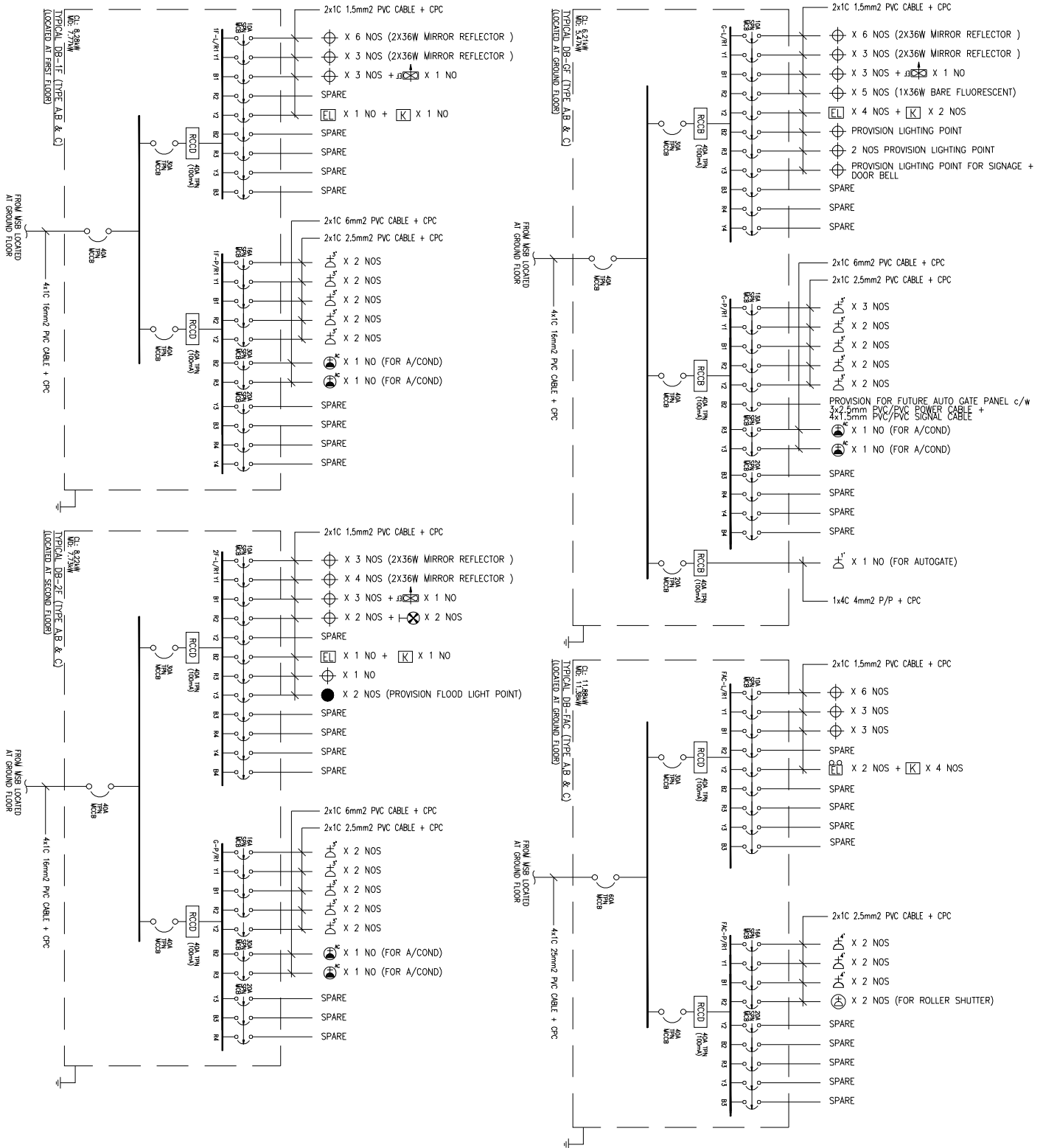
CPC TABLE

CABLE SIZE	1.5	2.5	4	6	10	16	25	35	50	70
EARTH CABLE OR COPPER TAPE	1.5	2.5	4	6	10	16	16	16	25	35

CABLE SIZE	95	120	150	185	240	300	400	500	630
EARTH CABLE OR COPPER TAPE	50	70	95	95	120	150	240	300	400

CODE	MCB RATING (AMPERE)	DESCRIPTION FOR PVC/SWA/PVC CABLE (1φ)
C1	16A	1x3C 1.5mm ² PVC/SWA/PVC CABLE BURRED U/G.
C2	20A	1x3C 2.5mm ² PVC/SWA/PVC CABLE BURRED U/G.
C3	30A	1x3C 4mm ² PVC/SWA/PVC CABLE BURRED U/G.
C4	40A	1x3C 10mm ² PVC/SWA/PVC CABLE BURRED U/G.
C5	60A	1x3C 16mm ² PVC/SWA/PVC CABLE BURRED U/G.
CODE	MCB/MCB RATING (AMPERE)	DESCRIPTION FOR XLPE/SWA/PVC & PVC/SWA/PVC CABLE (3φ)
D1	16A	1x4C 2.5mm ² PVC/SWA/PVC CABLE + CPC BURRED U/G.
D2	20A	1x4C 4mm ² PVC/SWA/PVC CABLE + CPC BURRED U/G.
D3	30A	1x4C 6mm ² PVC/SWA/PVC CABLE + CPC BURRED U/G.
D4	40A	1x4C 10mm ² PVC/SWA/PVC CABLE + CPC BURRED U/G.
D5	60A	1x4C 25mm ² PVC/SWA/PVC CABLE + CPC BURRED U/G.
D6	100A	1x4C 50mm ² XLPE/SWA/PVC CABLE + CPC BURRED U/G.
D7	150A	1x4C 95mm ² XLPE/SWA/PVC CABLE + CPC BURRED U/G.
D8	200A	1x4C 150mm ² XLPE/SWA/PVC CABLE + CPC BURRED U/G.
CODE	MCB RATING (AMPERE)	DESCRIPTION FOR MFR CABLE (1φ)
E1	16A	2x1C 1.5mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT.
E2	20A	2x1C 2.5mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT.
E3	30A	2x1C 2.5mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT. (FOR RING CIRCUIT ONLY)
E4	30A	2x1C 4mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT.
E5	40A	2x1C 6mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT.
E6	60A	2x1C 10mm ² MFR CABLE c/w CPC IN CONCEALED CONDUIT.
CODE	MCB/MCB RATING (AMPERE)	DESCRIPTION FOR MFR/FR CABLE(3φ)
F1	16A	4x1C 1.5mm ² MFR/FR CABLE c/w CPC IN TRUNKING.
F2	20A	4x1C 2.5mm ² MFR/FR CABLE c/w CPC IN TRUNKING.
F3	30A	4x1C 4mm ² MFR/FR CABLE c/w CPC IN TRUNKING.
F4	40A	4x1C 6mm ² MFR/FR CABLE c/w CPC IN TRUNKING/TRAY.
F5	60A	4x1C 16mm ² MFR/FR CABLE c/w CPC IN TRUNKING/TRAY.
F6	100A	4x1C 35mm ² MFR/FR CABLE c/w CPC IN TRUNKING/IRAY.
F7	150A	4x1C 50mm ² MFR/FR CABLE c/w CPC ON TRAY
F8	200A	4x1C 70mm ² MFR/FR CABLE c/w CPC ON TRAY

LEGEND FOR ELECTRICAL FOR ALL TYPE



ELECTRICAL SCHEMATIC DIAGRAM FOR ALL TYPE



Exhaust Vent. Pipe



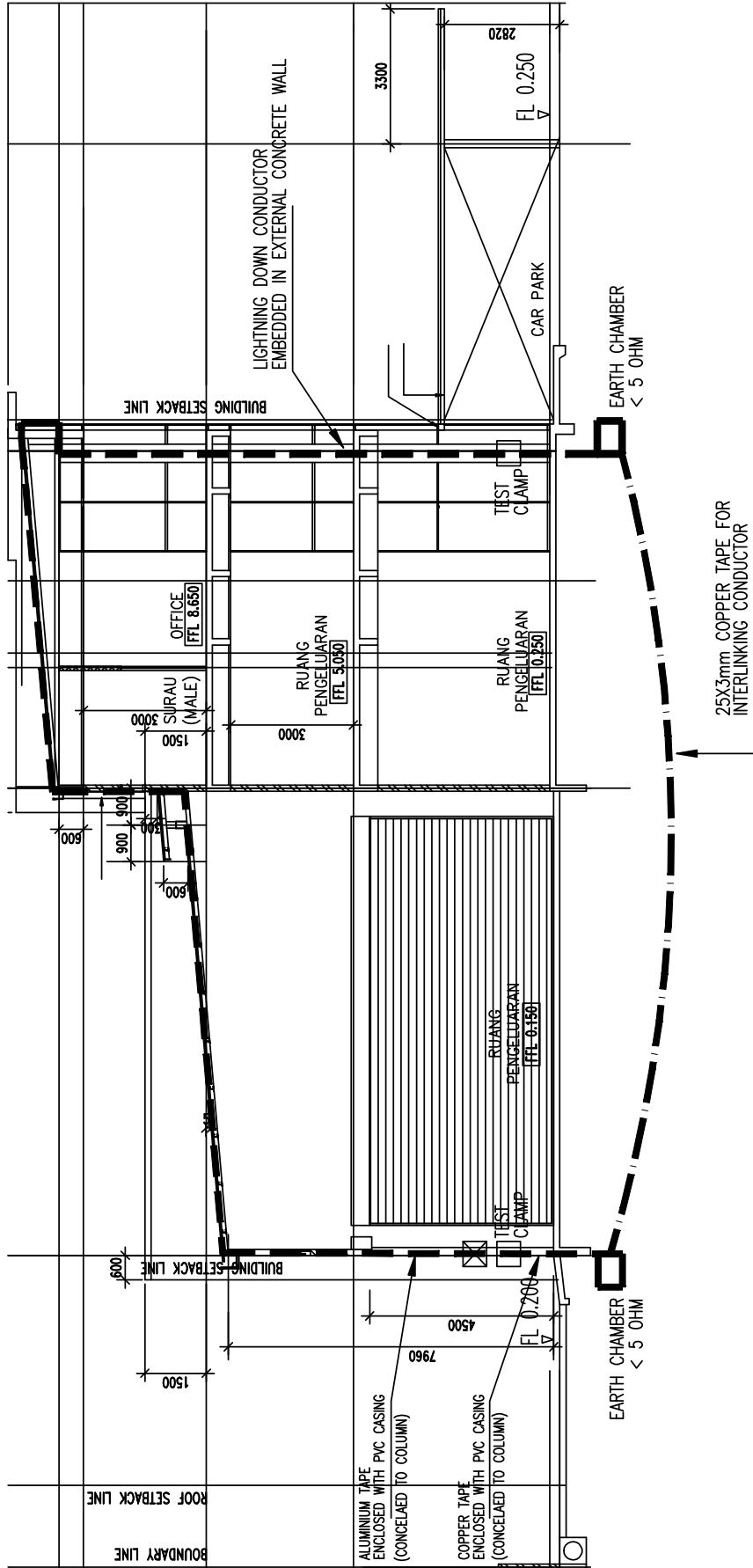
Incoming pipe from SYABAS

Ventilation Pipe

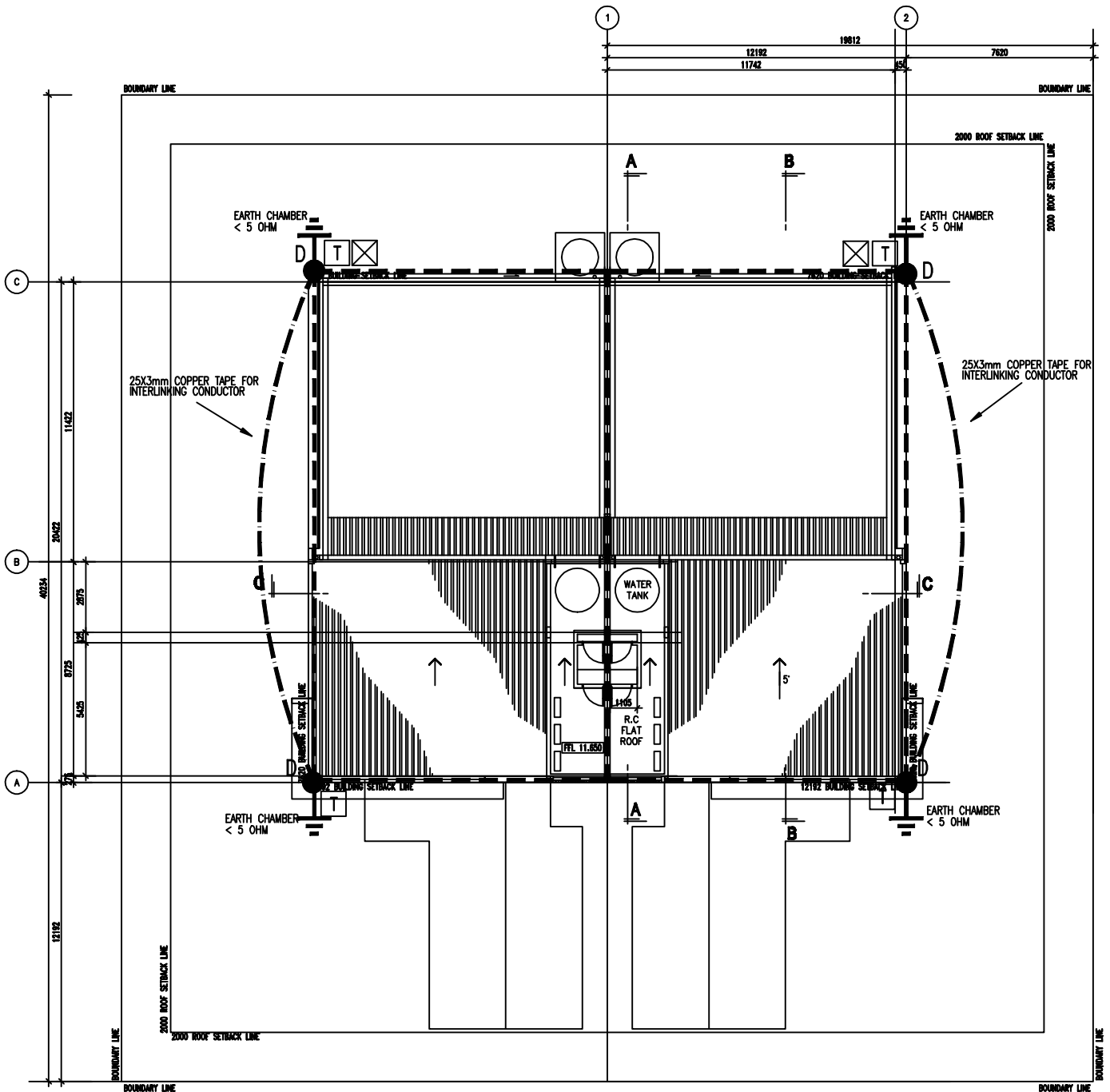


Distribution Pipe from Roof Tank

RISER – FOR ALL TYPE









TYPICAL LIGHTING AND EARTHING PROTECTION
FOR ALL TYPE - SIDE VIEW



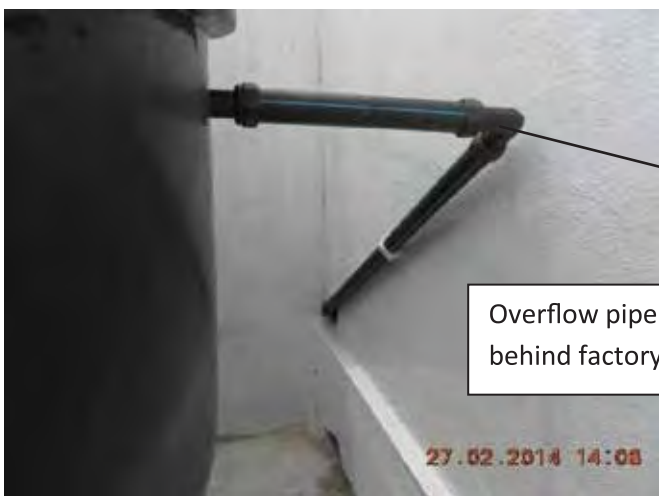
TYPICAL LIGHTING AND EARTHING PROTECTION
FOR ALL TYPE - ROOF PLAN

LEGEND

	25mmx3mm ALUMINIUM TAPE DOWN CONDUCTOR C/W BONDING TO METAL ROOF
	25x3mm THICK ALUMINIUM TAPE AT ROOF c/w GLUE DOWN DC TAPE CLIP TESTED TO BS-EN 50164-1 REQUIREMENT
	25X3mm COPPER TAPE FOR INTERLINKING CONDUCTOR
	BIMETALLIC TEST CLAMP c/w BLANK PLATE
	LIGHTNING COUNTER
	LIGHTNING DOWN CONDUCTIR TO EARTH CHAMBER

REMARKS :

- LIGHTNING PROTECTION SYSTEM SHALL BE CONFORM TO IEC62305
- EARTHING SYSTEM SHALL BE ACCORDANCE TO BS7430:1991/IEC 62305-3
- ALL EARTHING & LIGHTNING PROTECTION ACCESSORIES SHALL BE CONFORMING TO BS EN 50164 TEST STANDARDS, SIMILAR TO FURSE OR APPROVED EQUIVALENT
- EARTHING CONDUCTOR SHALL BE 25MM x 3MM ALUMINIUM TAPE TESTED TO BS EN 50164 REQUIREMENT, SIMILAR TO FURSE ALUMINIUM TAPE
- ALL CONNECTION JOINT SHALL BE EXOTHERMIC WELDING TYPE TO IEEE 837 TEST STANDARDS SIMILAR TO FURSEWELD/THERMOWELD CONFORMITY CERTIFICATE TO BS EN 50164 SHALL BE SUBMITTED FOR EVALUATION & APPROVAL
- EARTHING/LIGHTNING SPECIALIST PASS PROJECT REFERENCE & COMPANY PROFILE SHALL BE SUBMITTER FOR EVALUATION & APPROVAL
- NOTE FOR FIXING CENTRES OF CLIPS:
 - HORIZONTAL CONDUCTORS ON HORIZONTAL SURFACE SHALL BE 1M APART
 - HORIZONTAL CONDUCTORS ON VERTICAL SURFACE SHALL BE 0.5M APART
 - VERTICAL CONDUCTOR BELOW 20M SHALL BE 1M APART
 - VERTICAL CONDUCTOR OVER 20M SHALL BE 0.75M APART
 - VERTICAL CONDUCTOR OVER 25M SHALL BE 0.5M APART
- ALL LIGHTNING TEST POINT SHALL BE INSTALLED 1800MM ABOVE FFL & SERVICES TEST POINT



ROOF – WATER TANK FOR TYPE A, B AND C



First Flush Filter System

Incoming water from rainwater



Overflow pipe

**RAINWATER HARVESTING TANK
FOR TYPE A, B AND C**



Distribution Pipe



Incoming water from SYABAS

Connected to fill rain water harvesting tank to ¼ full only.
Part fill valve installed



Safety hook – provided at rainwater harvest tank



SCHEDULE OF FINISHES – TYPE A, B AND C

Floor and wall tiles Code

Item	Location	Floor Finishes	Skirting	Wall Finishes
1	a). Male & female toilet	300 x 300mm porcelain tiles Code : Guocera CMT – KP131EH	N/A	300 x 300mm porcelain tiles Code : Guocera CMT – DRP02
	b). Feature wall			300 x 300mm porcelain tiles Code : Guocera CMT – DRP04
2	a). Staircase	300 x 300mm homogeneous tiles Code : Guocera CMT – KV950	100mm high	N/A
	b). Nosing Tiles	75 x 197mm homogeneous tiles Code : Guocera CMT – ESN950		

Painting Code

Item	Location	Paint Code
1	<u>External Paint</u>	
	a). External wall generally	Nippon Weatherbond, 1001 , Brilliant White
	b). Feature wall	Nippon Weatherbond, 262A, Sashay Red
	c). M.s fascia / Railing & handrail / circular m.s column	Nippon Micaceous Iron Oxide, 905, Dark Grey
	d). Door / door frame	Nippon 9000, 1145, White
2	<u>Internal Paint</u>	
	a). internal wall and ceiling generally	Nippon Super Matex, 9102, White
	b). Railing / Handrail	Nippon Odourlite Soft Matt Finish, PRO 0228, Graphite
	c). Door / door frame	Nippon Odourlite Soft Matt Finish, 1145, White

Sanitary Wares and Tap Fitting Codes

Item	Location	WC	Basin / Basin Tap	Bib Tap	Shower	Urinal
1	Female toilet	Globe WC 4510/ LC301D 'Grus' VC Washdown WC	N/A	Claytan BTE 1 ½" Chromed	N/A	N/A
2	Male toilet	Claytan WC / LC3010A 'Oriental' VC Squatting Pan	N/A	Claytan BTE 1 ½" Chromed	Claytan Omega ½" Chromed Fixed Shower Rose Head & Arm	Claytan Omega 'Shenton' VC Wall Hung Urinal Bowl
3	Toilet	N/A	Globe WB704 'Stella' VC Wall Hung Basin	N/A	N/A	N/A
4	Canteen	N/A	CAM AH0810A alum. anodized kitchen sink	Claytan WSTE1 ½" wall Mounted sink tap with swivel Spout	N/A	N/A
5	External (Production area and carporch)	N/A	N/A	Claytan BTE1 ½" Chromed Bib tap	N/A	N/A

Suntrack Development Sdn. Bhd.

QMS-SM-F02 Rev.00

FORM FOR DEFECTS & COMPLAINTS

Lot No.:		Customer:		
Address:		Tel (O):		
		Tel (H):		
		Tel (HP):		
		Ref:		
Date.	Defects or Complaints	Received by	Date	Action Taken / Remark (for Official Use)

Notes to our dear customers:

1. Please fill in location of the premises for the defect.
2. We will make every effort to ensure that your defects are rectified at the soonest time possible. Nonetheless we appreciate your patience while the contractor is making necessary arrangement. Our target is to rectify within 14 days.
3. We require a set of your keys for access.
4. We will notify you by phone when the defects are rectified and return of your keys.

EMERGENCIES AND CARELINE CONTACT NUMBER

Suntrack Development SDN BHD
03 – 83183188/89
012 - 2255259

HOSPITAL

Bandar Baru Bangi
Hospital Pakar An - Nur
03 - 8921 2525

POLICE

IPPD Kajang
03 - 8736 2222

Bandar Baru Bangi
03 - 8925 0282

Talian Nur
15999

TNB Careline
15454
1300 88 5454 (Billing Enquiries)

Gas Malaysia
03 - 26854276

SYABAS
1 800 885 252

Indah Water Konsortium (IWK)
03 - 8318 5834 / 03 8320 2118
(Kajang and Sepang)

MPKJ
03 - 87377899 (Talian Utama)

KTM KAJANG KOMUTER
03 - 8733 1159

TAXI SERVICE

Bandar Baru Bangi
Sunlight Radio Taxi Service
03 - 90575757

Park and GO Taxi Service (Private)
03 - 8955 2649

LRT EXPRESS RAIL LINK

03 - 2267 8088 (General Line)
03 - 2267 8000

TICKETING

Malaysia Airlines
1 300 88 300

Air Asia
03 - 8775 4000 (Ticketing)

KLIA

(Kuala Lumpur International Airport)
03 - 8776 2000

BOMBA

Bandar Baru Bangi, Seksyen 16
03 - 8925 4444

HOTEL

Bangi - Kajang
Hotel Equatorial
03 - 8210 2222

GOLF

Bangi
Bangi Golf Resort
03 - 8925 3728

