

# PLAYA

CLIENT AND PROJECT MANAGEMENT : MIDDLE EAST FOR INVESTMENT AND TOURISTIC DEVELOPMENTS

شركة الشرق الأوسط  
التطوير والاستثمار السياحي

LEAD CONSULTANT, STRUCTURE DESIGN, MASTER PLAN AND LANDSCAPE CONSULTANT: ENGINEERING CONSULTANTS GROUP

EGC  
مجموعة الاستشارات الهندسية  
ENGINEERING CONSULTANTS GROUP S.A.

DESIGN AND SUPERVISION ARCHITECTURE CONSULTANT: ALCHEMY



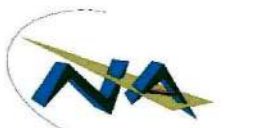
SUPERVISION STRUCTURE CONSULTANT: GEO-CONSULTANTS



DESIGN AND SUPERVISION MEP CONSULTANT: SHAKER CONSULTANTS



SURVEY SUPERVISION CONSULTANT: NEW ANGLES



MAIN CONTRACTOR: RME-G (JV)



SUB CONTRACTOR: SEVEN HANDS TECHNICAL OFFICE



Key Plan:

NOTES:

ENGINEERING DOCUMENTS REVIEW

<input type="checkbox"/>	A	APPROVED
<input type="checkbox"/>	B	APPROVED WITH COMMENTS
<input type="checkbox"/>	C	REVISE AND RESUBMIT
<input type="checkbox"/>	D	REJECTED, NOT REQUIRED
<input type="checkbox"/>	E	FOR INFORMATION ONLY
<input type="checkbox"/>	SS	SUPERSEDED

ENG. NAME  
COMPANY  
ENG. SIGNATURE  
APPROVAL DATE

DRAWING REVISION HISTORY

REVISION NO	ISSUE PURPOSE	REV. DATE

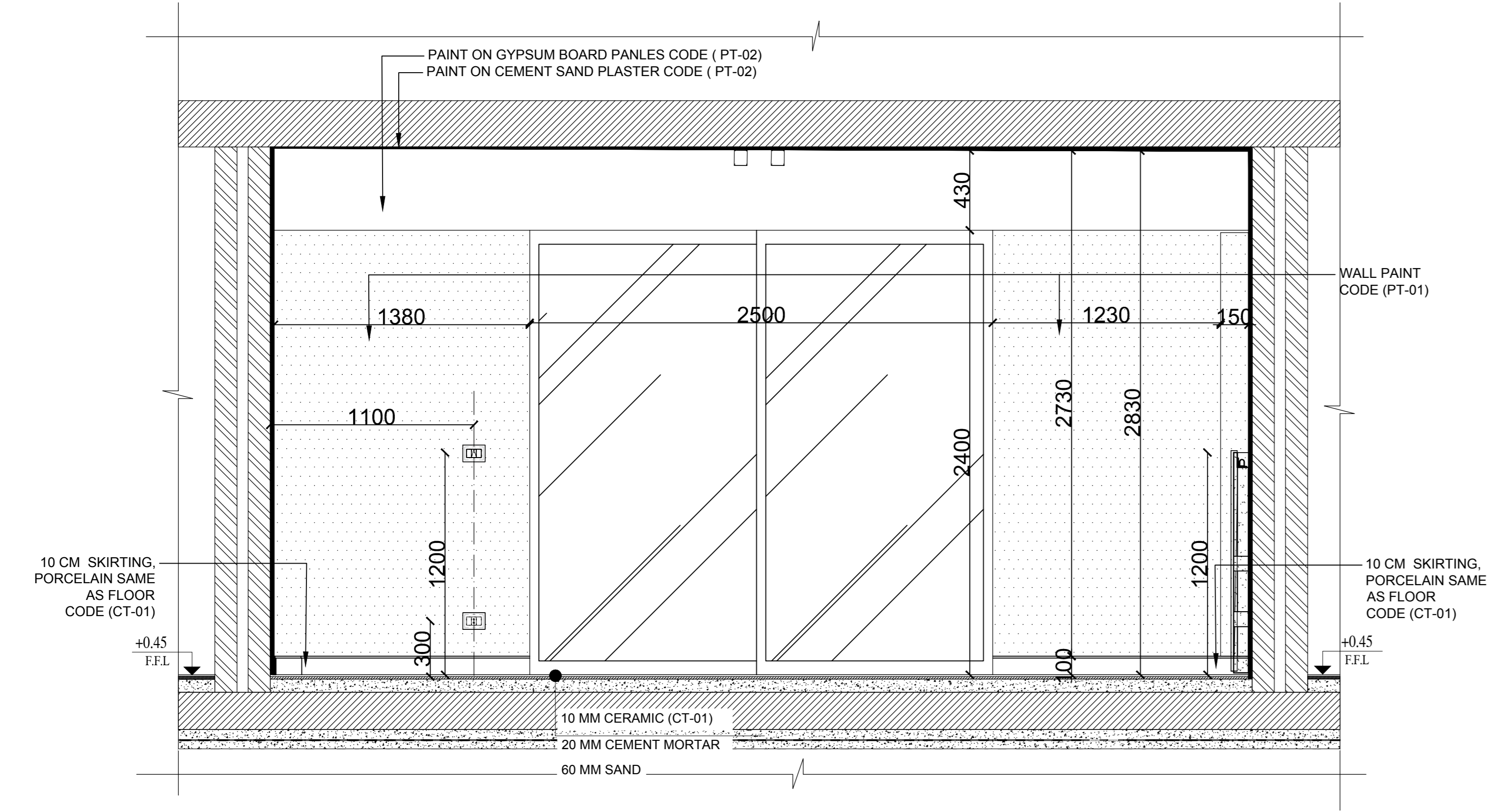
DESIGN DRAWINGS REFERENCES

REFERENCE	PACKAGE	REV	CONS.	DATE

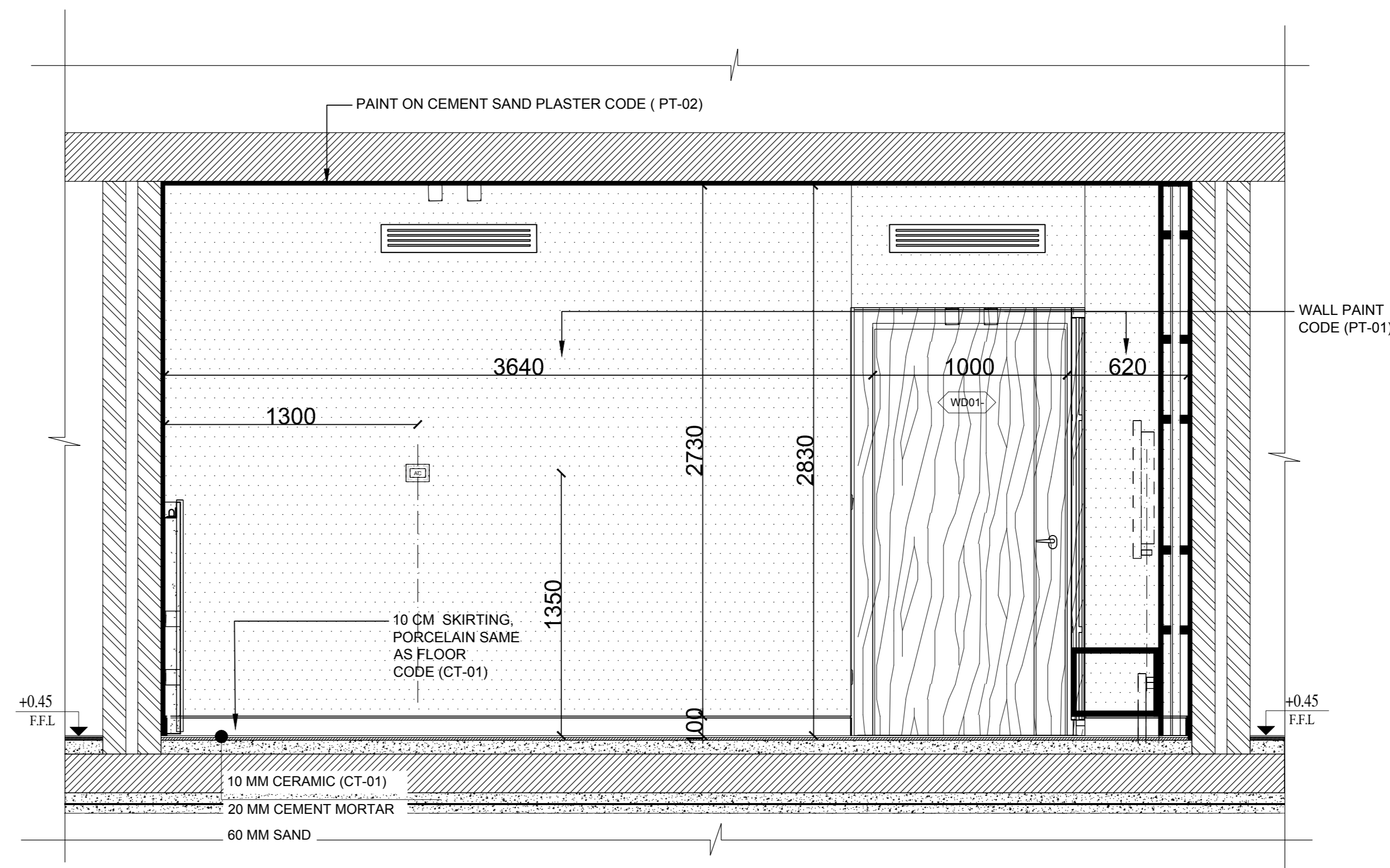
LOCATION:

DRAWING TITLE :  
VILLA 03 GROUND FLOOR PLAN  
WALL COMPOSITE ZONE 09

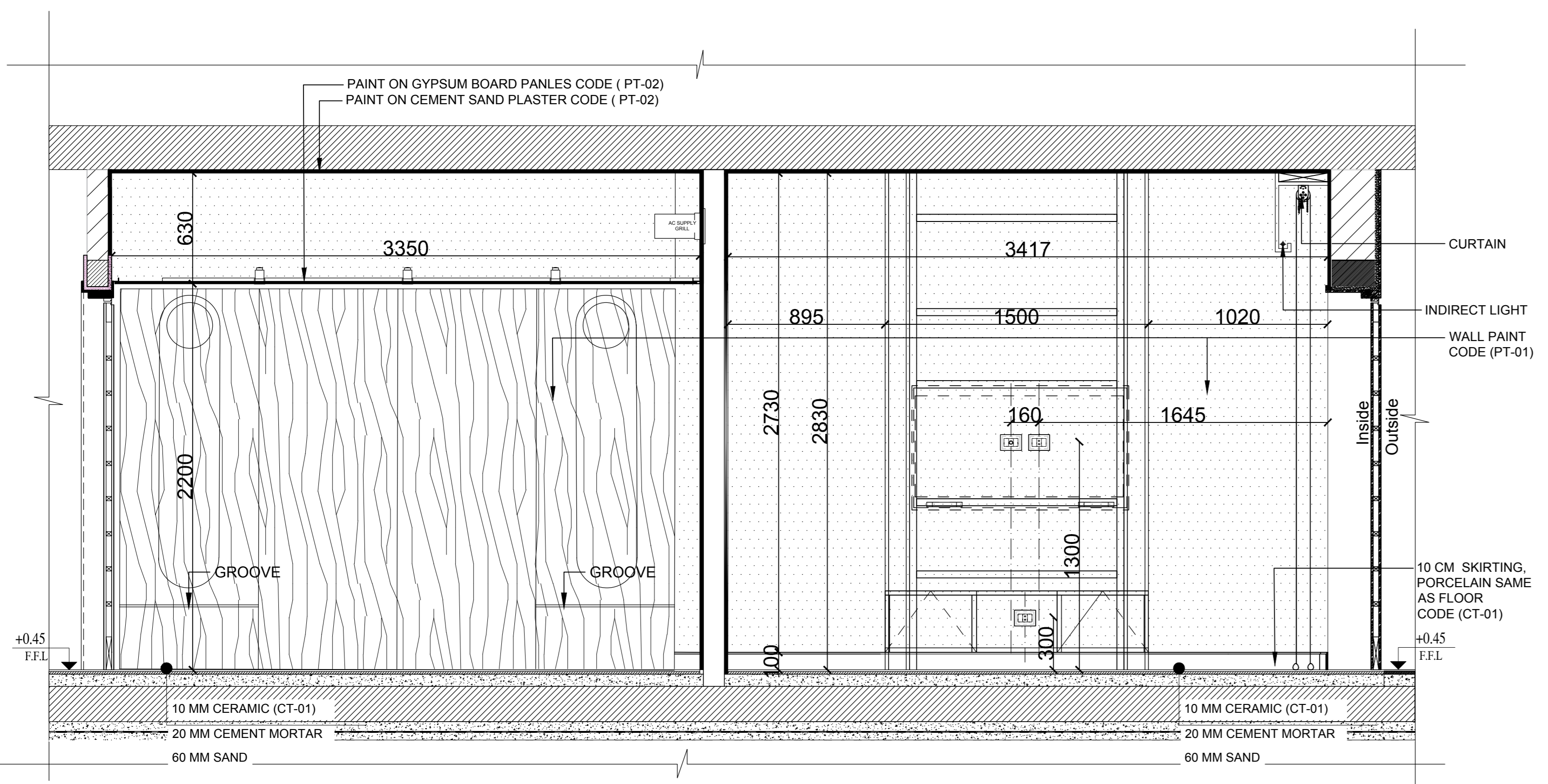
DRAWING BY	7H	CHECK BY	7H
APPROVED BY		SCALE	As indicated
DRAWING NO		REV	00
REV DATE	22-01-2023	DISCIPLINE	ARCHITECTURE



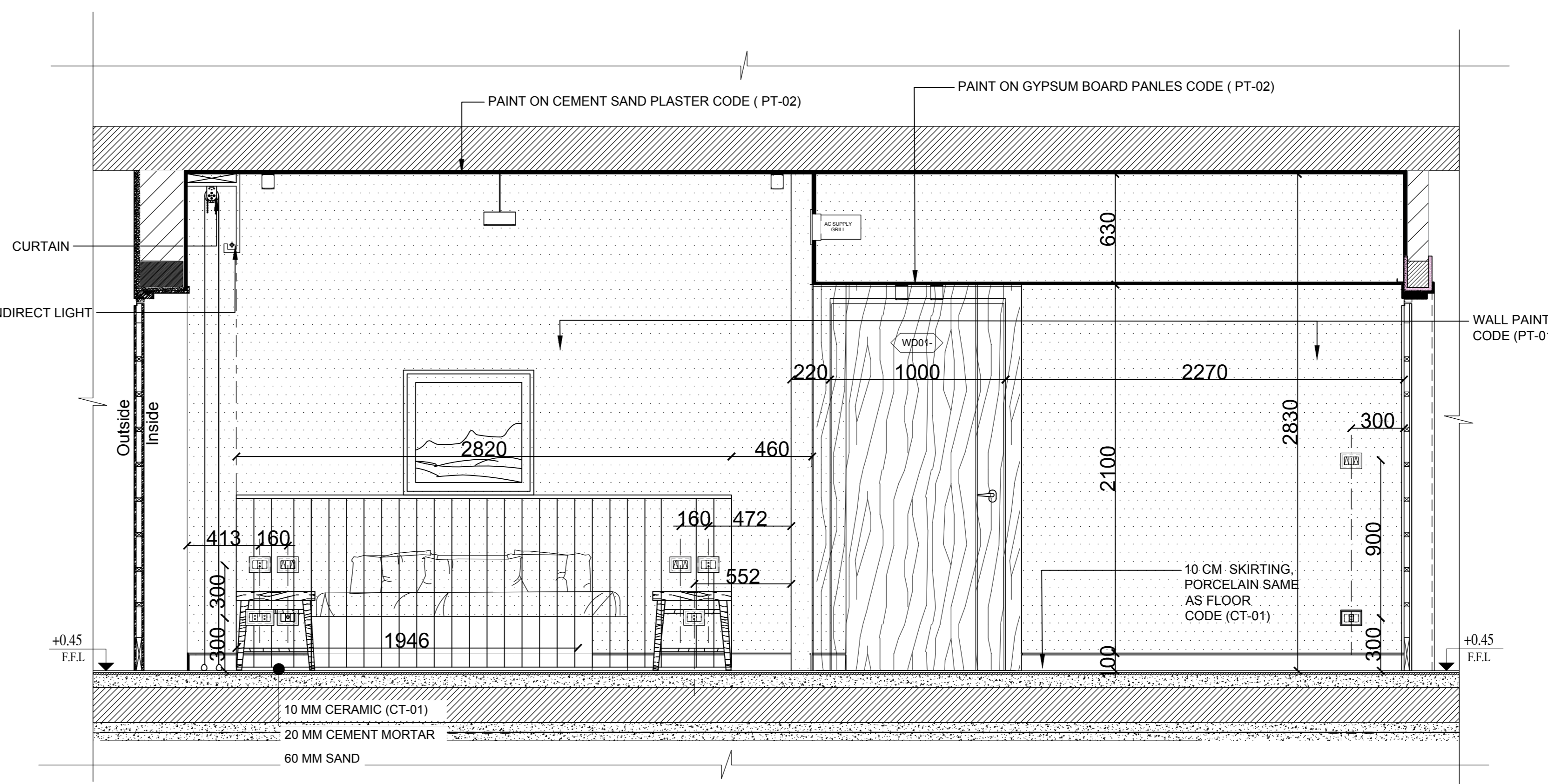
ELEV. (1) ZONE 09



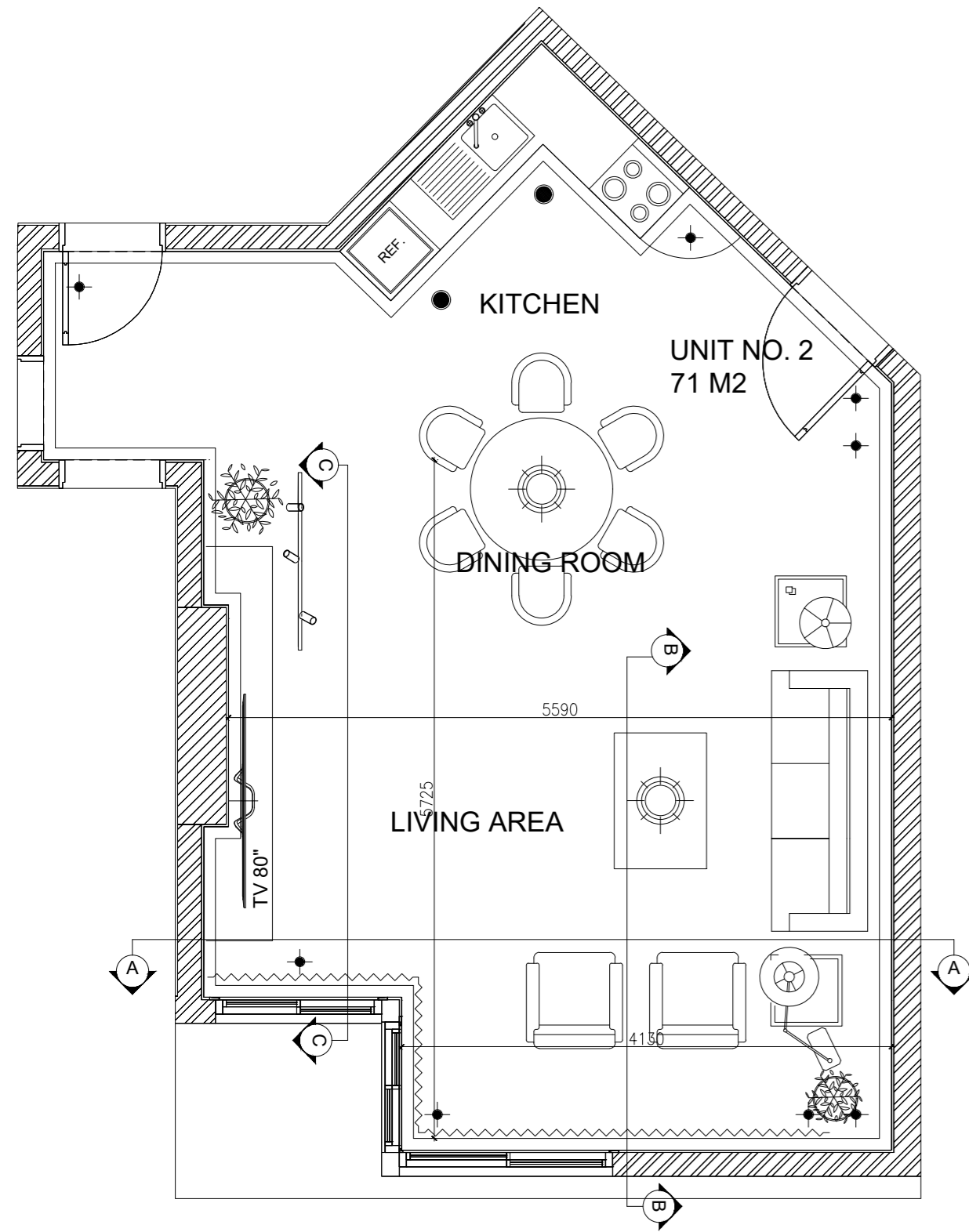
ELEV.(3) ZONE 09



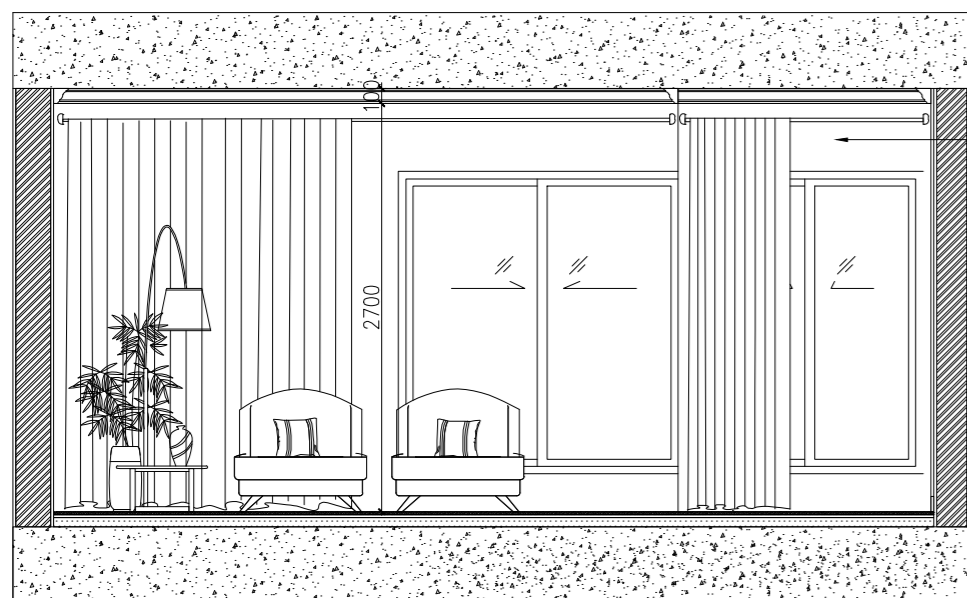
ELEV. (2) ZONE 09



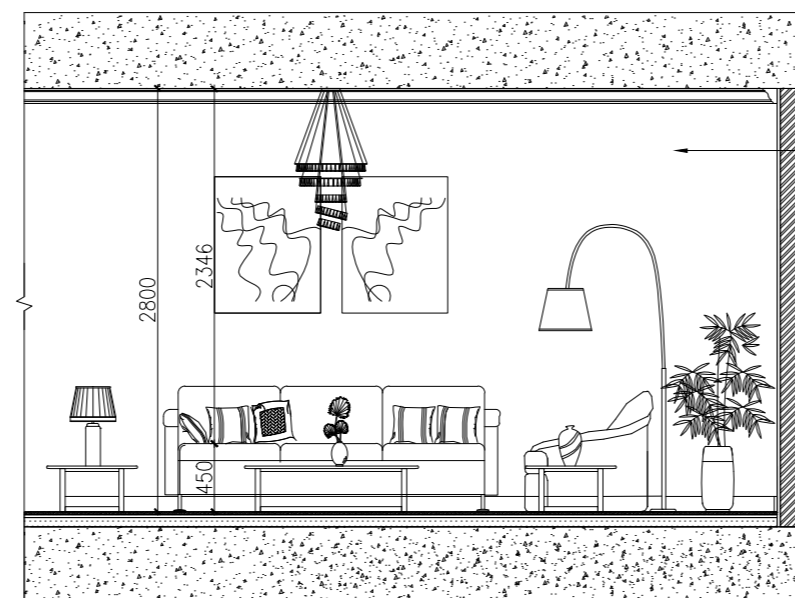
ELEV.(4) ZONE 09



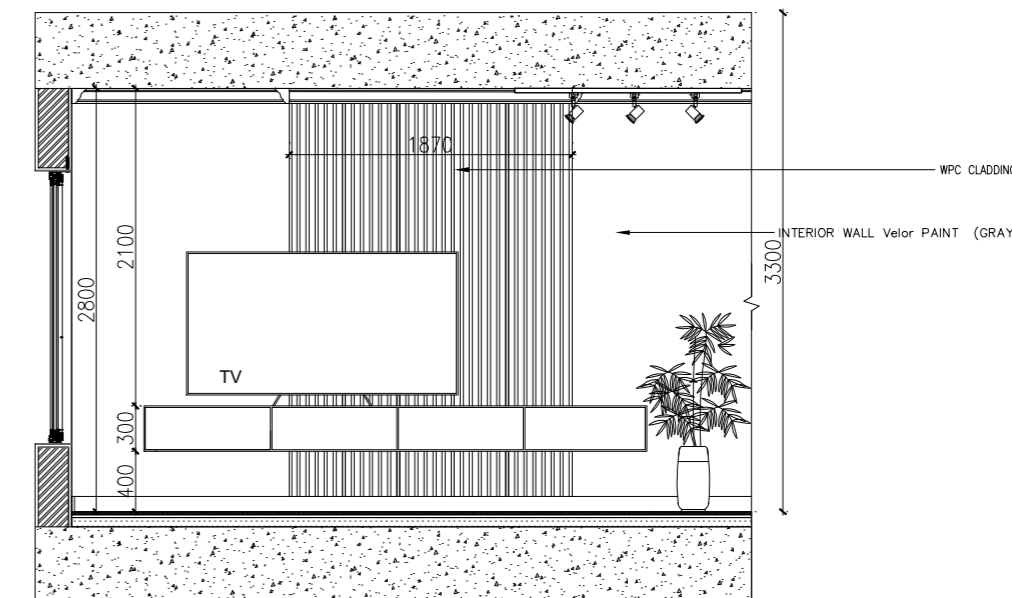
LIVING ROOM PLAN  
SCALE 1:50



SECTION A  
SCALE 1:50



SECTION B  
SCALE 1:50



SECTION C  
SCALE 1:50

LIVING ROOM INTERIOR DESIGN

SCALE: 1:50  
31 ST FLOOR

GENERAL NOTES

1. This drawing shall be read in conjunction with all other relevant architectural, structural & electrical drawings including those of other consultants.
2. It is the responsibility of contractors & manufacturers to check all relevant site dimensions prior to the start of construction or manufacture.
3. All materials and components must be installed on site in accordance with manufacturer's instructions, shop drawings & standard details, drawings and standard details.
4. All dimensions are in millimeters unless noted otherwise.

LEGENDS:

DESIGNER



GOLDEN SECTION CONTRACTING  
KSA-JEDDAH 23335 - 6512 - FALASTIN STREET

00	ISSUED	SMM	SMM	AFZ	2023.01
REV.#	GENERAL NOTES	DRAWN BY	CHECKED BY	APPROVED BY	DATE

PROJECT TITLE

MR. ALI APARTMENT

DRAWING TITLE

LIVING ROOM INTERIOR DESIGN

DRAWING NUMBER

ID-501

REVISION

00

SCALE

1:50

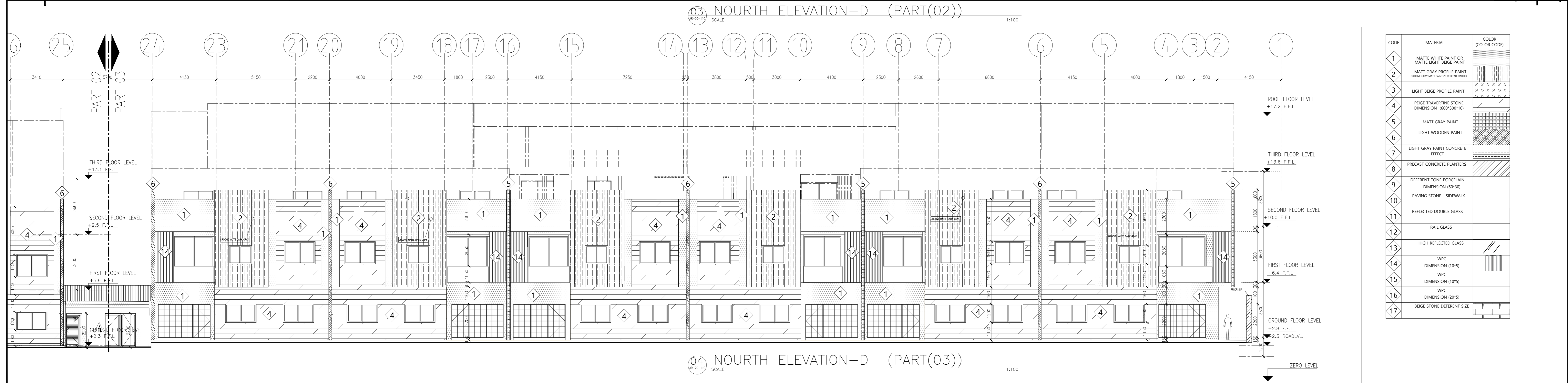
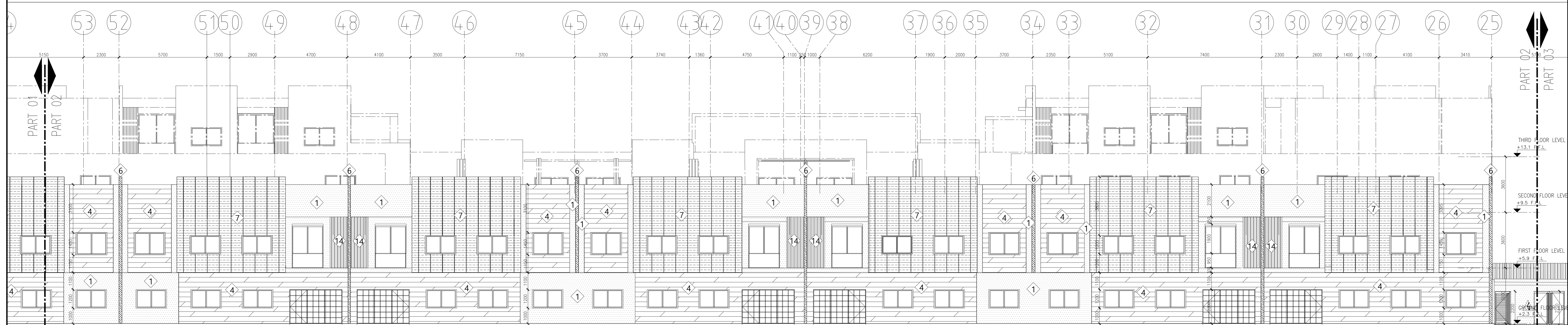
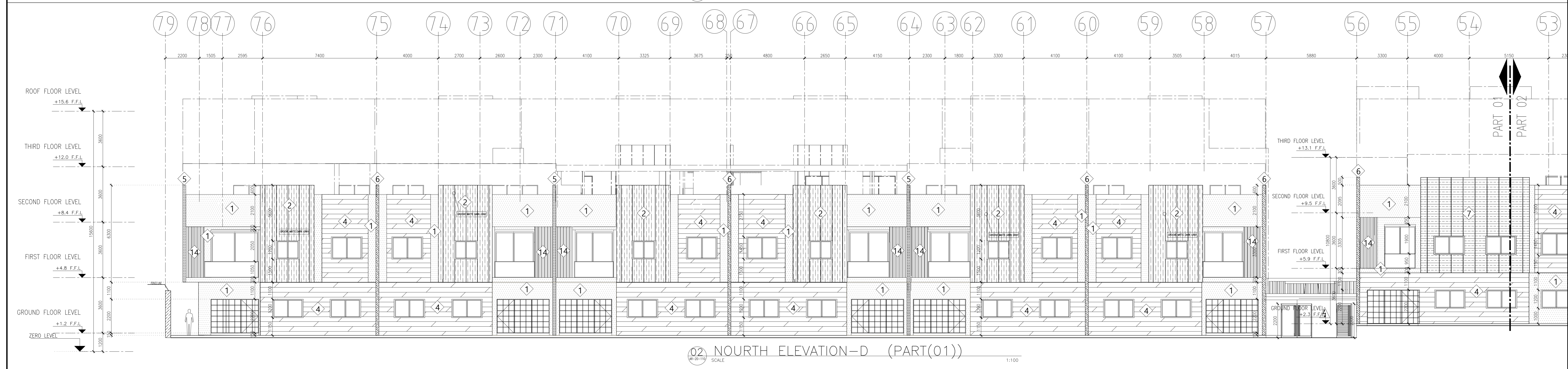
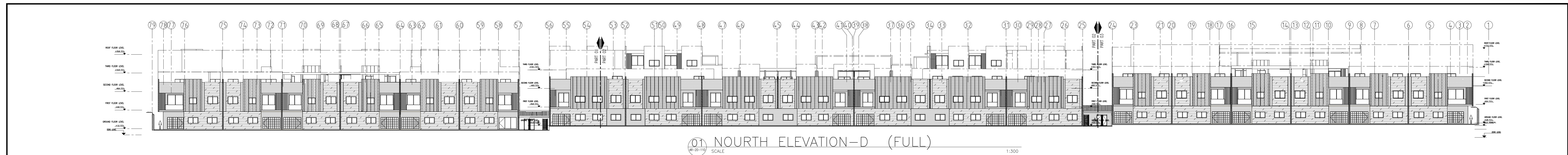
FORMAT

A2

ADDITIONAL NOTES

CLIENT APPROVAL - SIGNATURE

This document including all drawing and text is the property & copyright of GSC STUDIOS for use solely with respect to this Project and shall not be copied or reproduced by any means except by agreement in writing from GSC STUDIOS.



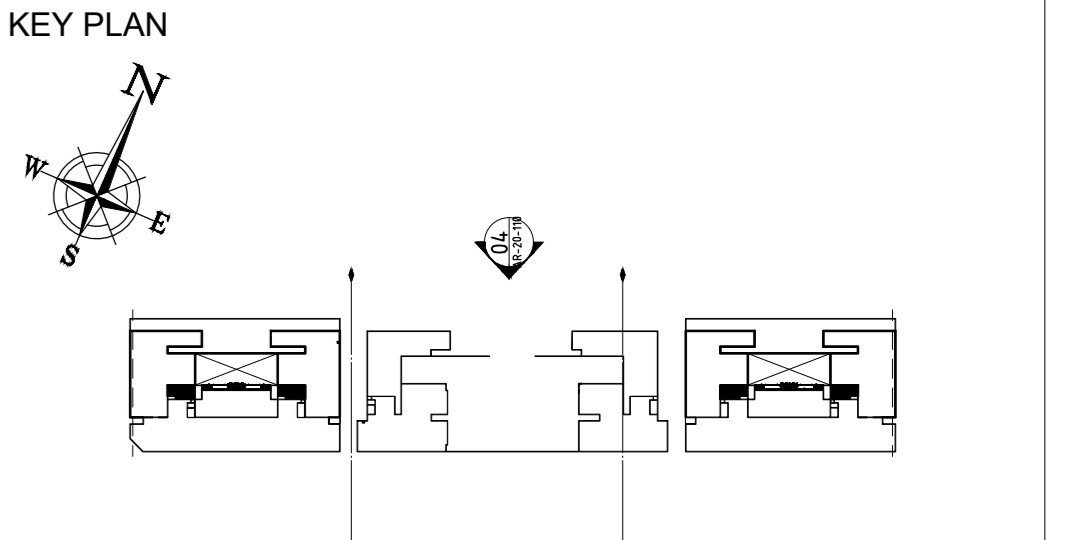
CODE	MATERIAL	COLOR (COLOR CODE)
1	MATTE WHITE PAINT OR MATTE LIGHT BEIGE PAINT	
2	MATT GRAY PROFILE PAINT	
3	LIGHT BEIGE PROFILE PAINT	
4	BEIGE TRAVERTINE STONE DIMENSION: (600*300*15)	
5	MATT GRAY PAINT	
6	LIGHT WOODEN PAINT	
7	LIGHT GRAY PAINT CONCRETE (EPACT)	
8	PRECAST CONCRETE PLANTERS	
9	DEFERENT TONE PORCELAIN DIMENSION: (60*30)	
10	PAVING STONE - SIENNAK	
11	REFLECTED DOUBLE GLASS	
12	RAIL GLASS	
13	HIGH REFLECTED GLASS	
14	WPC DIMENSION: (10*5)	
15	WPC DIMENSION: (10*5)	
16	WPC DIMENSION: (20*5)	
17	BEIGE STONE DEFERENT SIZE	

- Notes:**
- This Drawing scaled as shown.
  - All dimensions shown are in millimeters and do not take into account applied finishes unless specifically indicated otherwise.
  - Any omissions or discrepancies found shall be reported to the Architect / Engineer immediately.
  - Levels are given in meters to three decimal places above survey datum.
  - This drawing is to be read in conjunction with the relevant section of the specification and schedules.

**LEGEND:**

**REFERENCE**

1. BASEMENT FLOOR PLAN	-AR-10-110
2. GROUND FLOOR PLAN	-AR-10-120
3. FIRST FLOOR PLAN	-AR-10-130
4. SECOND FLOOR PLAN	-AR-10-140
5. THIRD FLOOR PLAN	-AR-10-150
6. ROOF FLOOR PLAN	-AR-10-160
7. SECTION(1-1)	-AR-30-110
8. SECTION(2-2)	-AR-30-120



**DRAWING REFERENCES:**

DWG	DESCRIPTION	REV.
01	17-11-2022	
00	25-10-2022	

OWNER

OASIS RESIDENCE FOR REAL ESTATE COMPANY (LLC)  
شركة مساكن الواحة العقارية

CONSULTANT

**SAUDI ARABIA HAEAHN**

SUB-CONSULTANT

**RAKA DESIGN**

PROJECT

OASIS RESIDENCE GATED COMMUNITY

LOCATION

RIYADH, KSA

DRAWING TITLE

**NORTH ELEVATION FULL (D)**

PREPARED	RAKA	Checked	RAKA	Approved	HAEAHN
Scale	AS SHOWN	@ A0	@ A2		

Project No. Zone Drawing No. Rev.

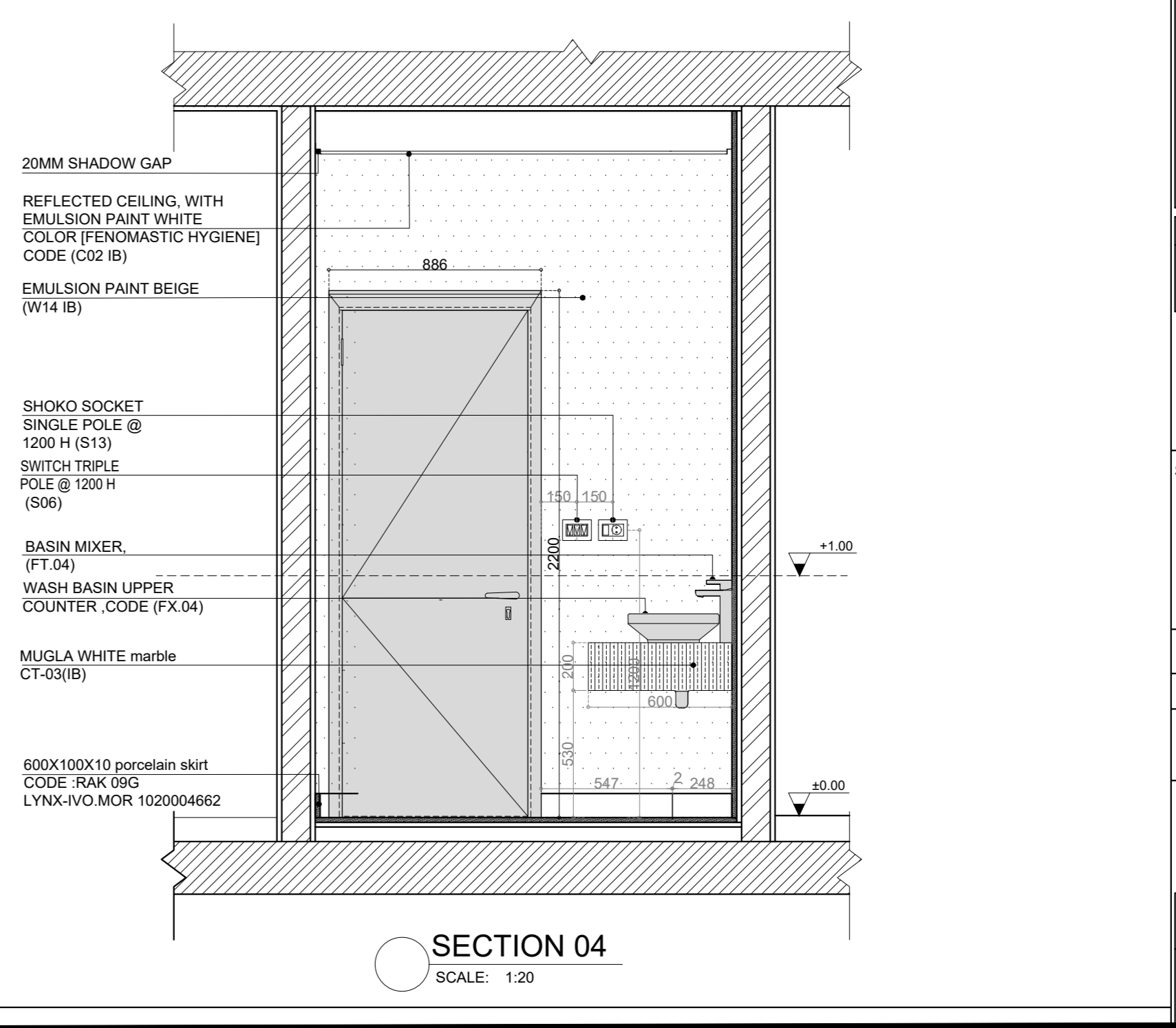
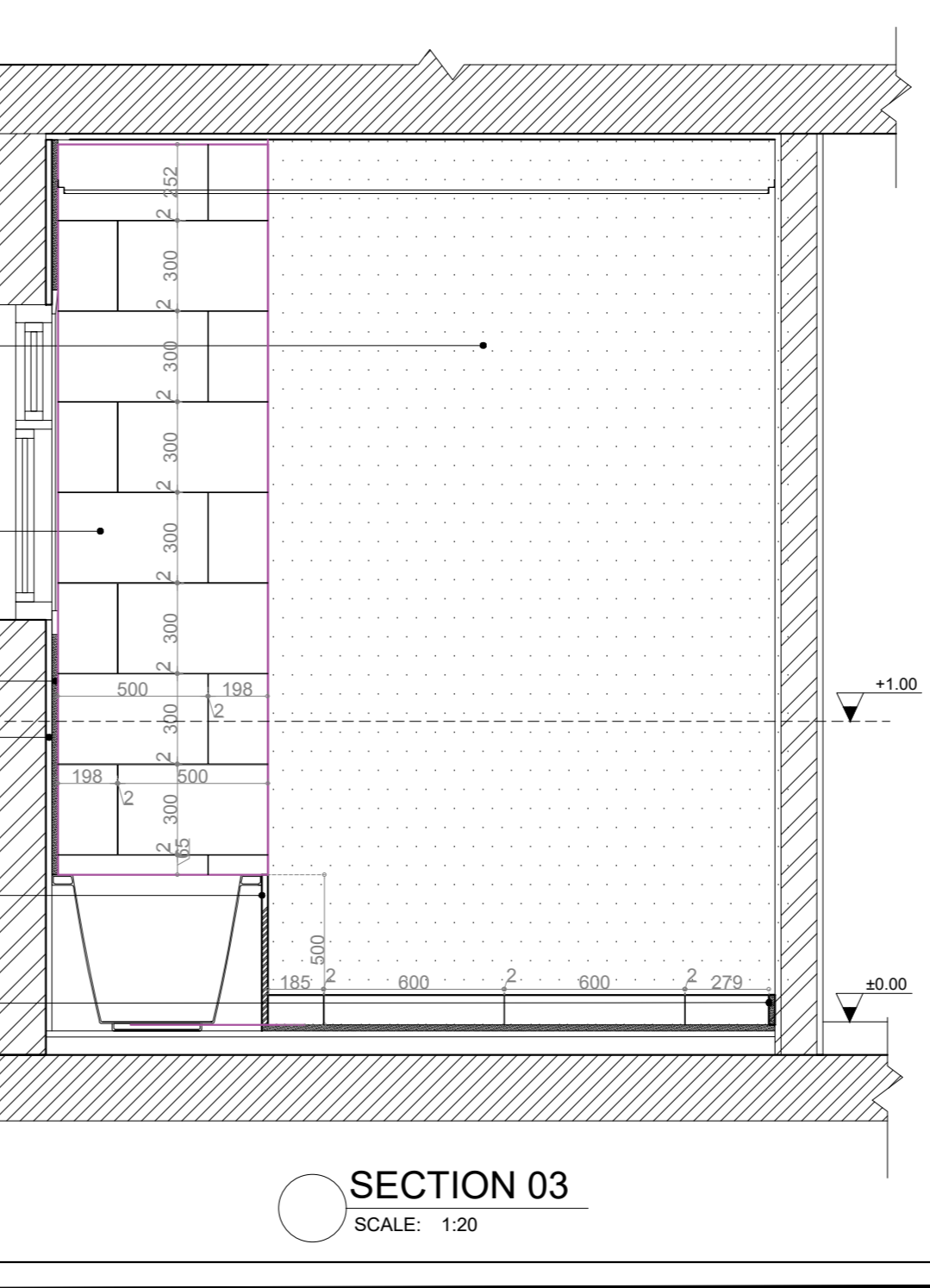
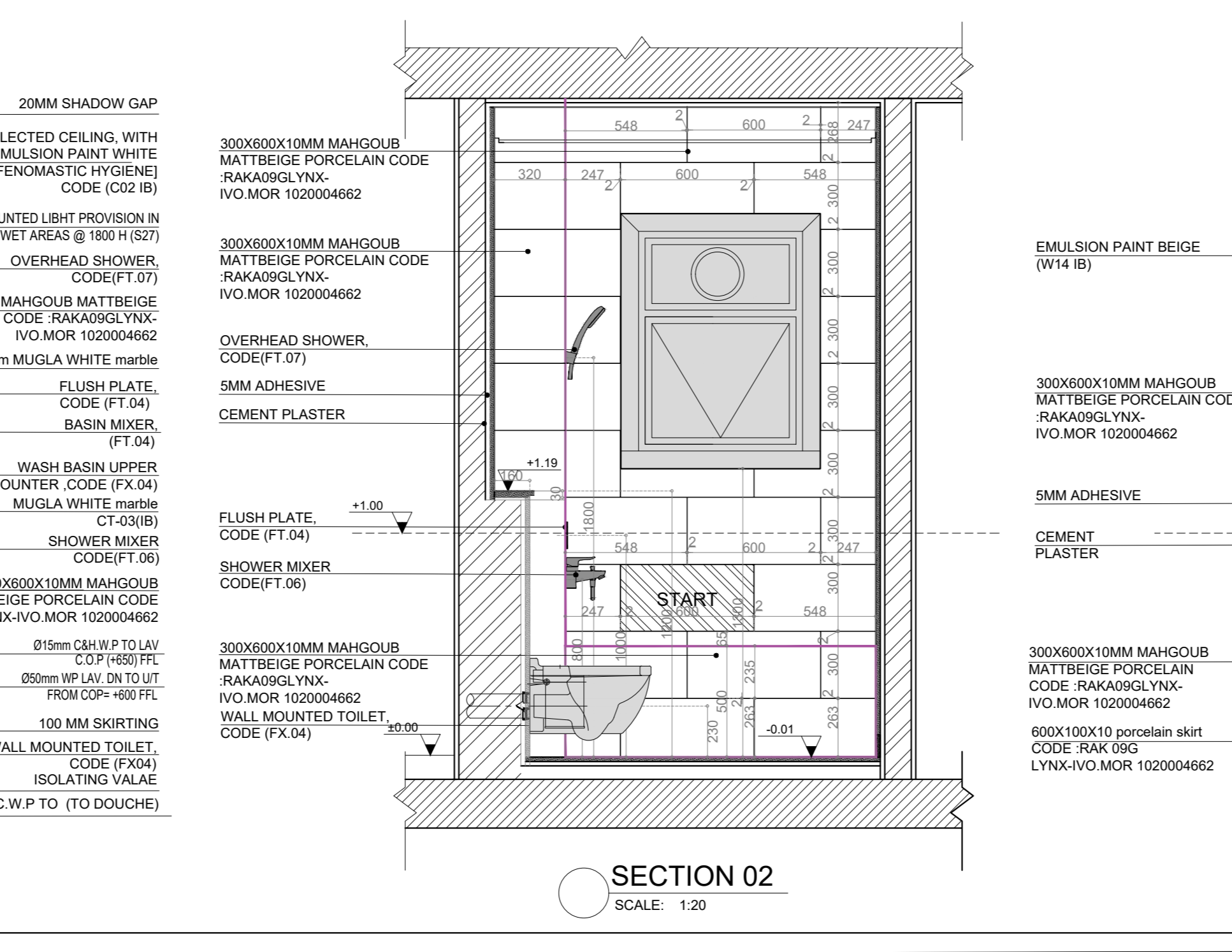
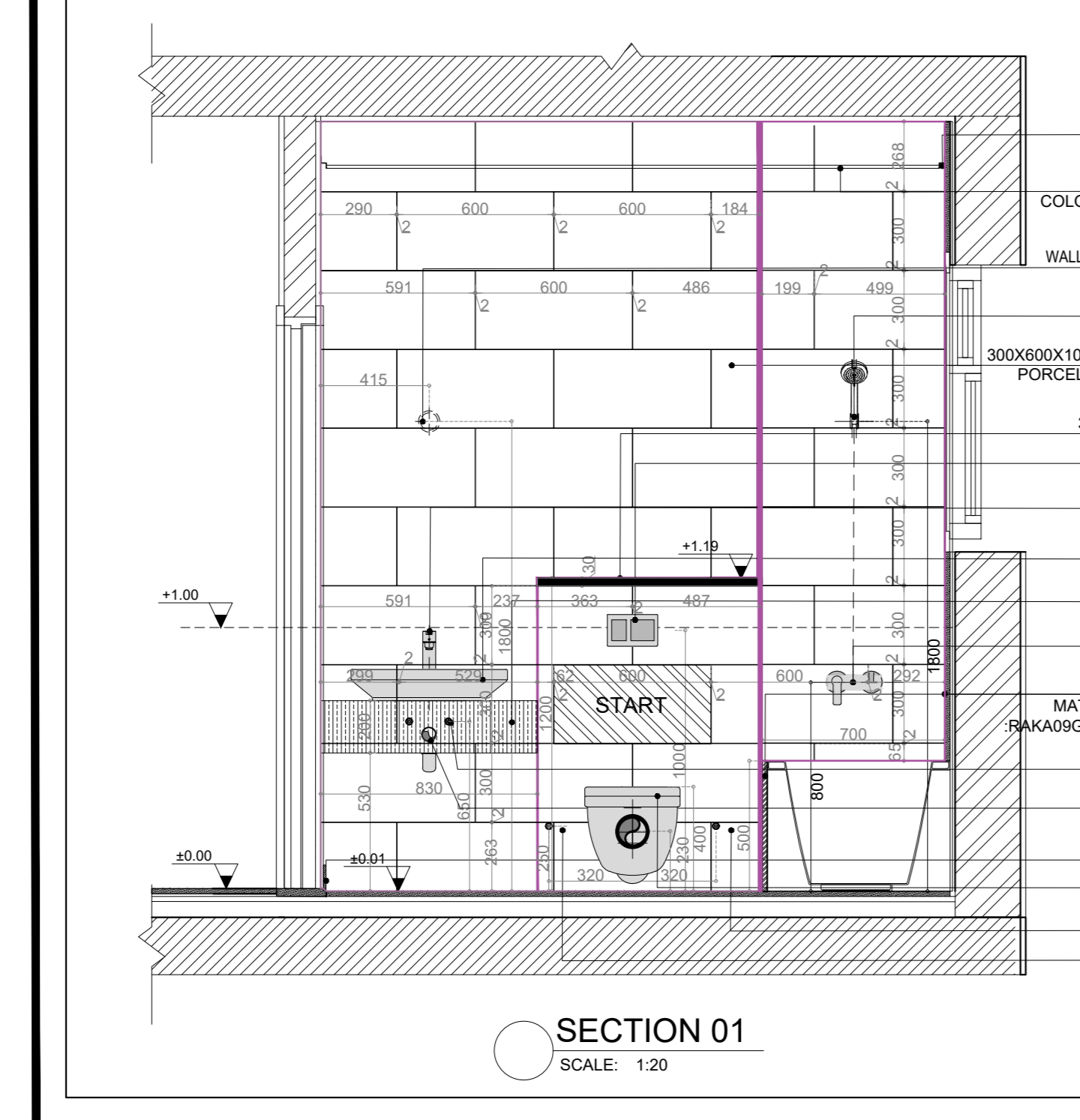
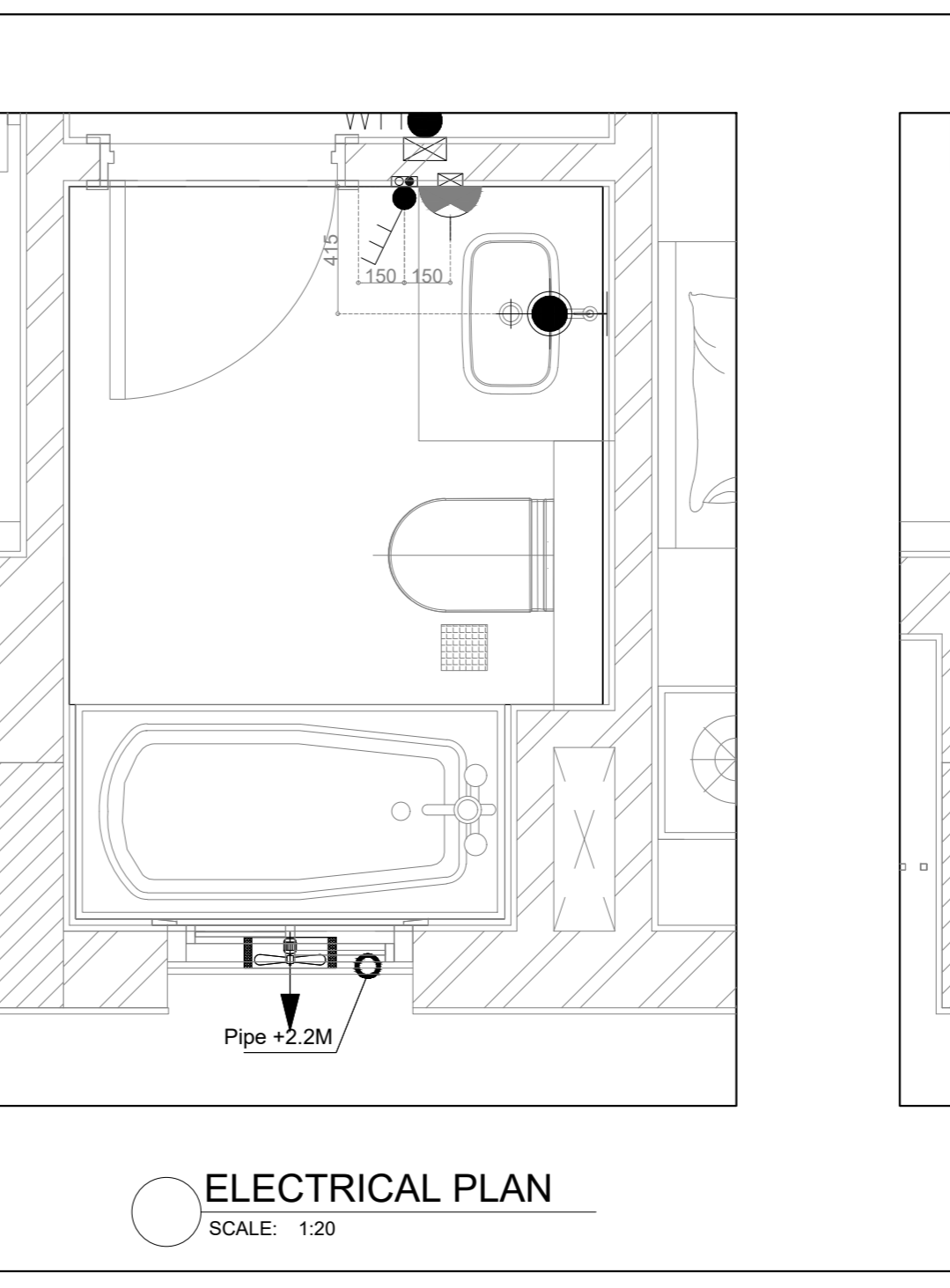
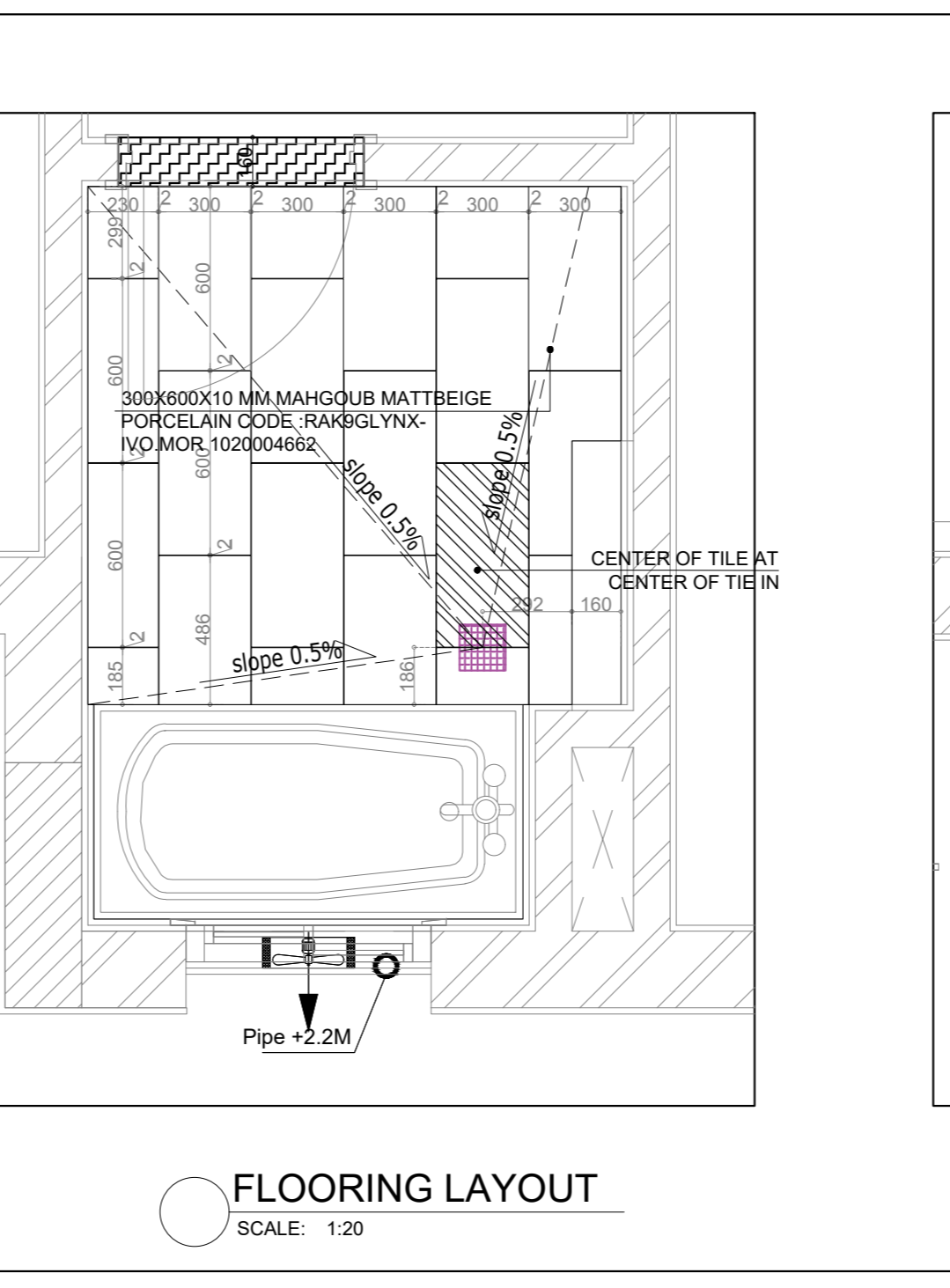
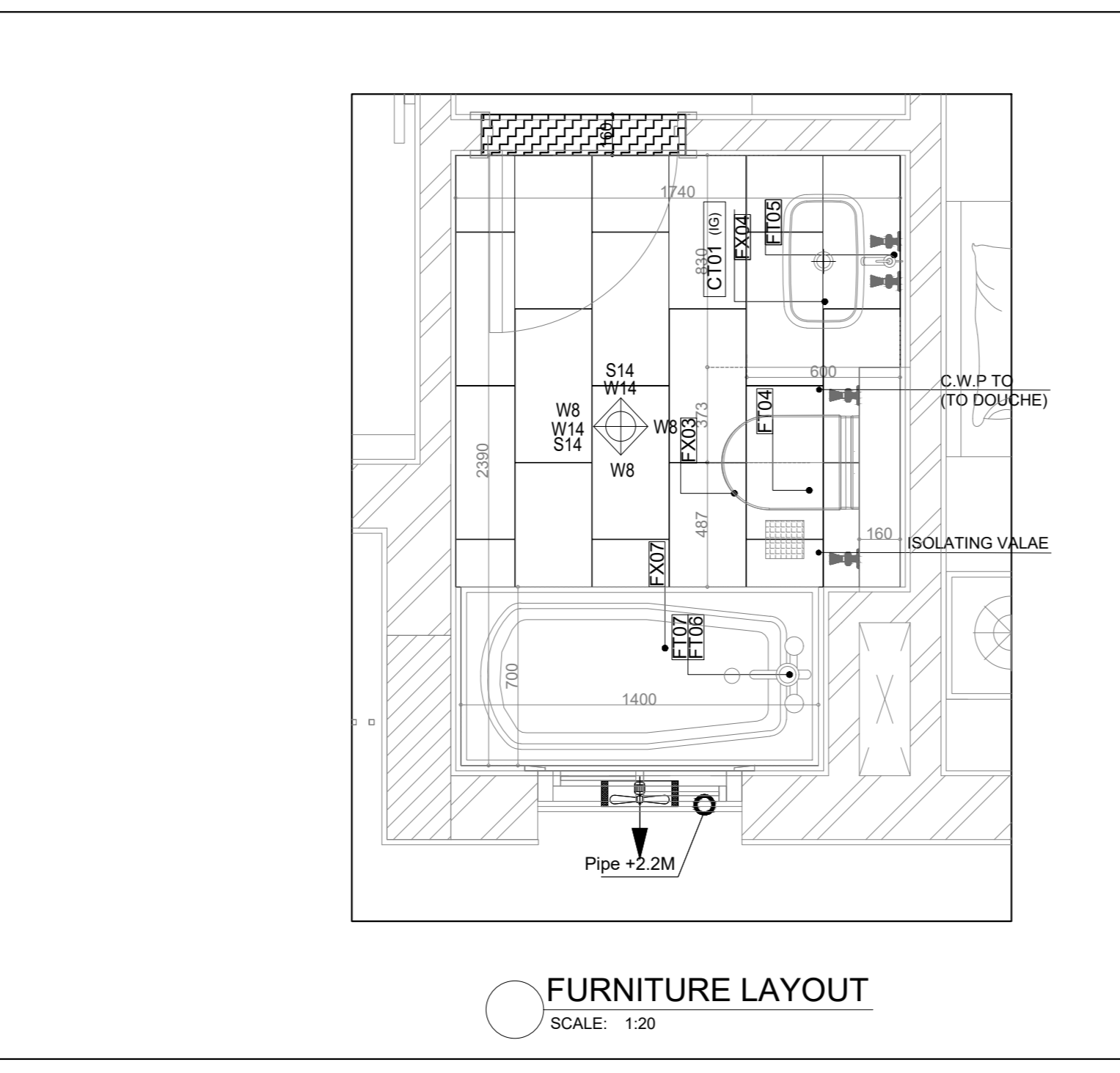
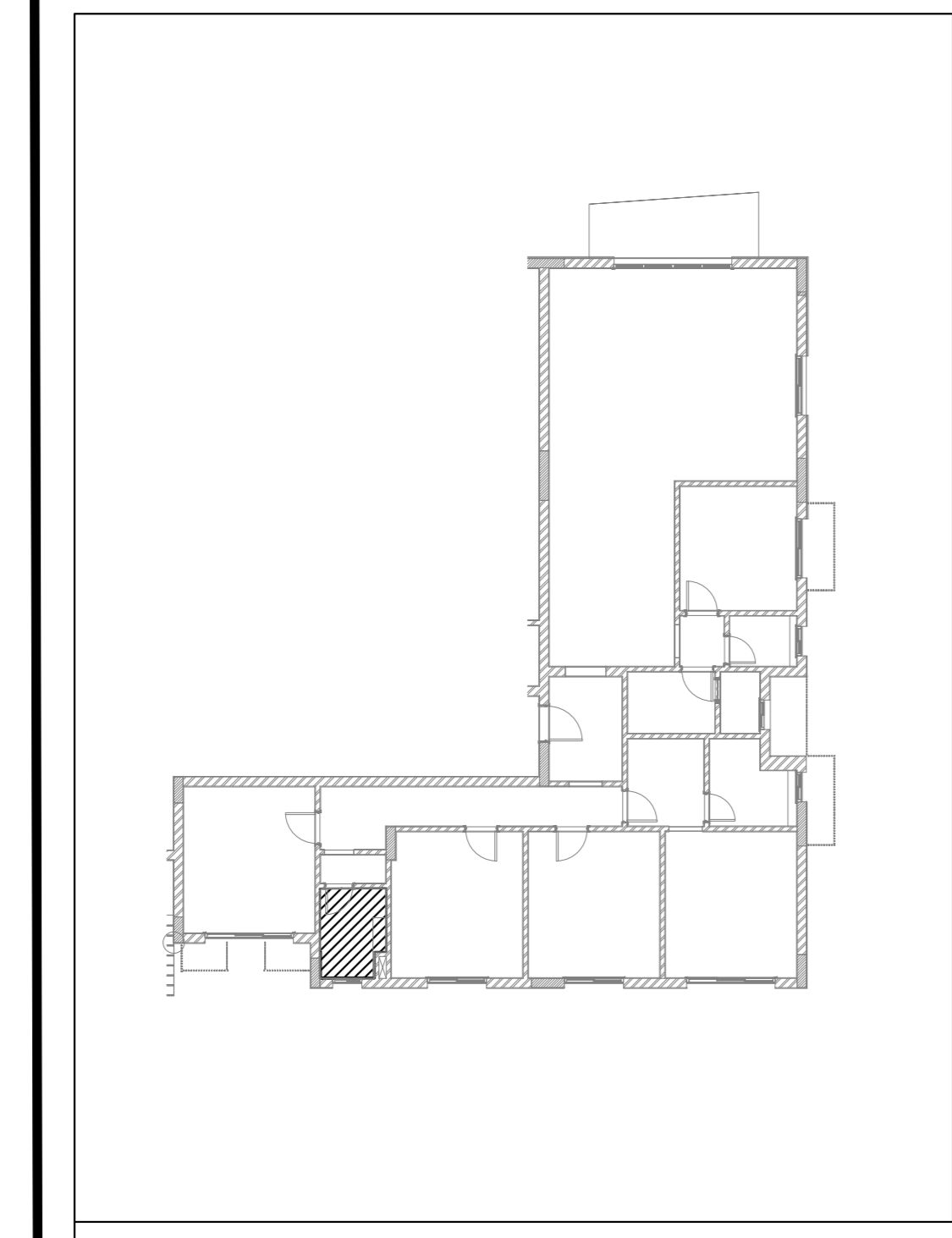
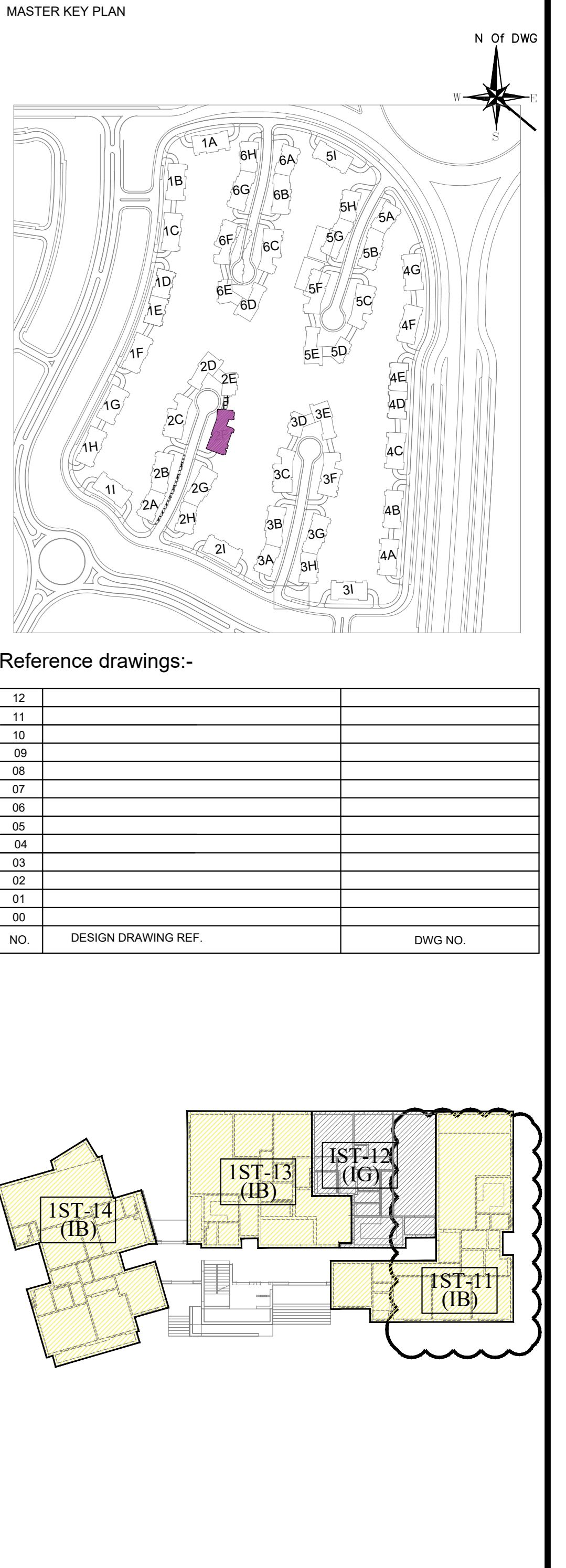
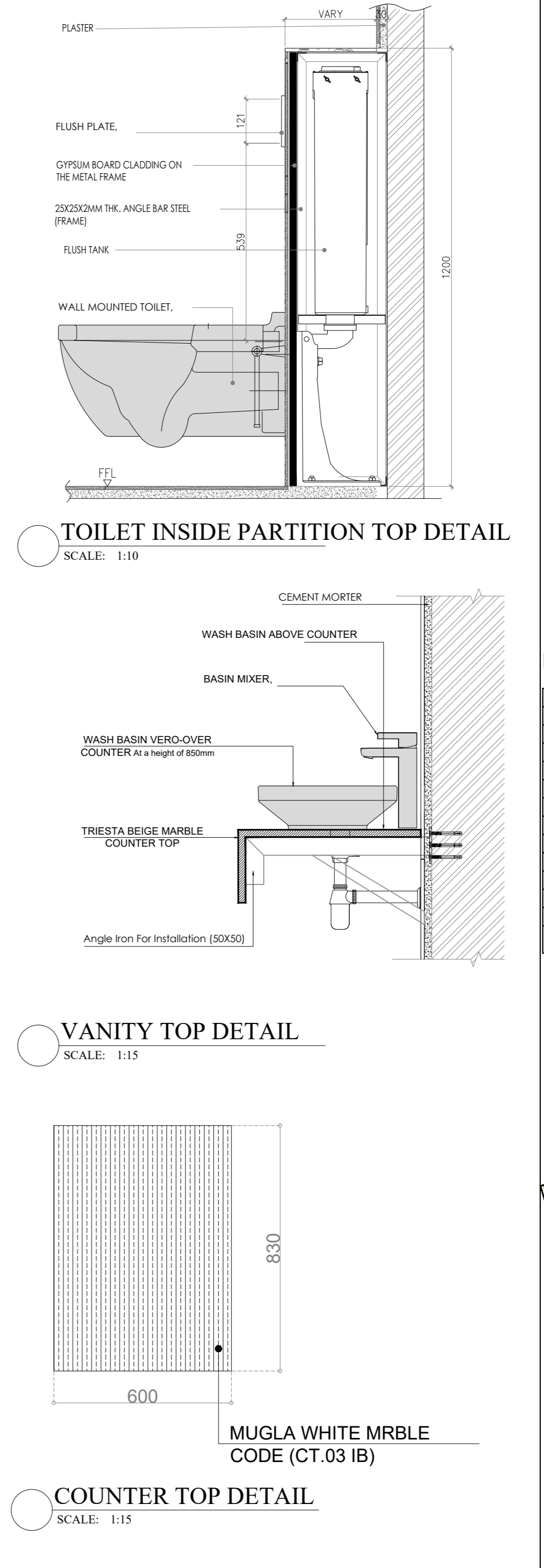
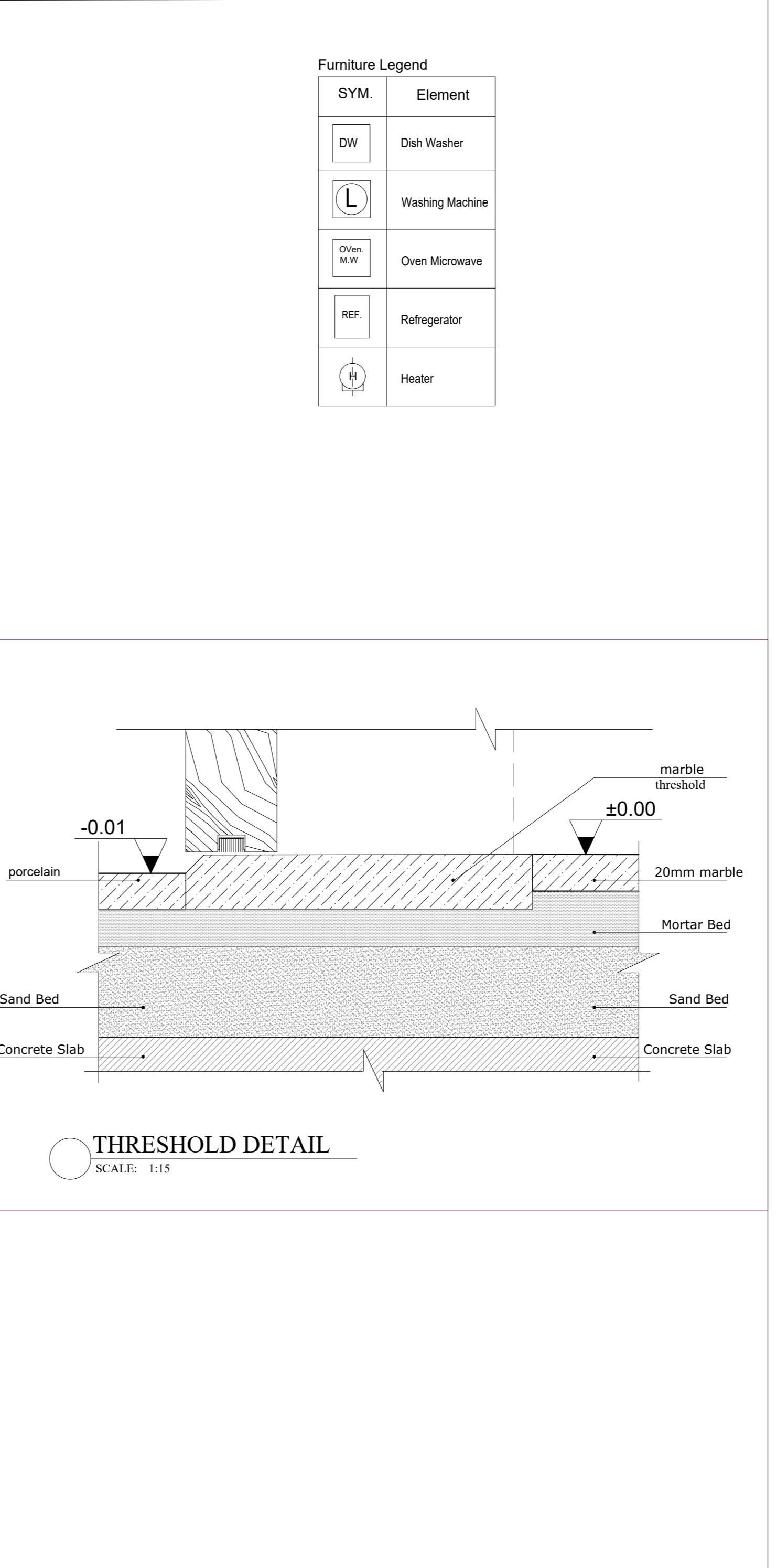
AR-20-110 01

Item ID	Item Description	Dimensions	Item Location	Notes
FX01	TOILET	370 x 620 mm	MASTER BATHROOM	WALL MOUNTED
	TOILET	370 x 620 mm	GUEST TOILET	WALL MOUNTED
FX02	WASHBASIN	600 mm	MASTER BATHROOM	WASH BASIN VERO-OVER COUNTER
FX03	TOILET	360 x 540 mm	SECONDARY BATHROOM	WALL MOUNTED
FX04	WASHBASIN	600 mm	SECONDARY BATHROOM	WASHBASIN VERO-OVER COUNTER
FX06	Bathub	1200x700 mm	SECONDARY BATHROOM	WASHBASIN VERO-OVER COUNTER
FX07	Bathub	1400x700 mm	SECONDARY BATHROOM	WASHBASIN VERO-OVER COUNTER
FX08	Bathub	1500x700 mm	SECONDARY BATHROOM	WASHBASIN VERO-OVER COUNTER
FX09	Bathub	600 mm	GUEST TOILET	white color
FX10	TOILET	370 x 620 mm	NANNY'S TOILET	FLOOR STANDING TOILET
FX11	WASHBASIN	450 mm	NANNY'S TOILET	FLOOR STANDING TOILET
FT.01	WASHBASIN MIXERS	266 mm	MASTER BATHROOM	
FT.02	SHOWE MIXERS	208x140 mm	MASTER BATHROOM	
FT.03	shower head	over head shower 228 mm	MASTER BATHROOM	chrome
FT.04	GERBERT FLUSH PLATE	213x142m	MASTER BATHROOM	WHITE
FT.04'	FLUSH TANK	1140x500 mm	MASTER BATHROOM	Geberit DuoFit element for wall-hung WC, 114 cm, with Alpha
FT.05	WASHBASIN MIXERS	266 mm	SECONDARY BATHROOM	chrome
FT.06	Bathub MIXERS	208x140 mm	SECONDARY BATHROOM	chrome
FT.07	shower head	200 mm X 200 mm	SECONDARY BATHROOM	chrome
FT.08	WASHBASIN MIXERS	266 mm	GUEST TOILET	chrome
FT.09	WASHBASIN MIXERS	133mm	NANNY'S TOILET	chrome
FT.10	Bathub MIXERS		NANNY'S TOILET	chrome
FT.11	shower head	262 cm	NANNY'S TOILET	chrome

SYM on Plan	SYM on Elev.	Initials	Description	Height From F.F.L
			DEVIATOR SINGLE POLE	900 mm
			DEVIATOR SINGLE POLE	850 mm
			SWITCH SINGLE POLE	900 mm
			SWITCH DOUBLE POLE	900 mm
			SWITCH SINGLE POLE	1200mm
			SWITCH DOUBLE POLE	1200mm
			SWITCH TRIPLE POLE	1300mm
			SHOKO SOCKET SINGLE POLE	300 mm
			SHOKO SOCKET +NORMAL SOCKET	300 mm
			POWER SOCKET SINGLE POLE	1200mm
			POWER SOCKET DOUBLE POLE	1200mm
			SHOKO POWER SOCKET SINGLE POLE FOR(FILTER,DISH,WASHER,OVEN,STOVE)	600 mm
			POWER SOCKET FOR HEATERS SINGLE POLE	2500mm
			SOCKET SINGLE POLE	1200mm
			SOCKET SINGLE POLE	1300mm
			POWER SOCKET FOR KITCHEN EXHAUST FAN ABOVE CEILING	200 mm (FROM 18.140)
			SOCKET DOUBLE POLE	850 mm
			SOCKET DOUBLE POLE	1200mm

SYM on Plan	SYM on Elev.	Initials	Description	Height From F.F.L
			DEVIATOR SINGLE POLE	900 mm
			POWER SOCKET FOR KITCHEN HOOD SINGLE POLE	2200mm
			WATER PROOF SOCKET DOUBLE POLE	300 mm
			POWER SWITCH	1200mm
			POWER SWITCH	1700mm
			AC DISCONNECTED	1200mm
			AC DISCONNECTED	1050mm
			AC DISCONNECTED	1350mm
			HDMI CABLE	300 mm
			HDMI CABLE	1200 mm
			TRIPLE PLAY SYSTEM	300 mm
			TRIPLE PLAY SYSTEM	1200 mm
			TRIPLE PLAY BOX	2400 mm
			TRIPLE PLAY BOX	1800 mm
			TRIPLE PLAY SYSTEM	650 mm
			TRIPLE PLAY SYSTEM	2400 mm
			BELL SWITCH SINGLE POLE	900 mm
			OUTLET	1500 mm
			OUTLET	1200 mm
			WALL MOUNTED LIGHT PROVISION IN WET AREAS	1800 mm
			WALL MOUNTED LIGHT PROVISION IN WET AREAS	450 mm
			FLOOR SINGLE SOCKET	
			PANEL BOARD	1800 mm (TOP ENDS)
			SOCKET SINGLE POLE	2500 mm
			BELL	2400 mm
			THERMOSTAT	1200 mm
			SWITCH+SOCKET SINGLE POLE	1200 mm
			SOCKET DOUBLE POLE	1900 mm

Room Name	Flooring	Cladding	Shelf	Toilet Cavity wall	Counter Top	Shower Flooring Base
<b>GUEST TOILET</b>	FLOORING: TURKISH BEIGE marble	Cladding: TURKISH BEIGE marble	Shelf: TURKISH BEIGE marble	Toilet Cavity wall: MUGLA WHITE marble	Counter Top: MUGLA WHITE marble	Shower Flooring Base: TERESTA MARBLE
<b>MASTER BATHROOM</b>	FLOORING: botticino beige marble	Cladding: Botticino marble	Shelf: MUGLA WHITE marble	Toilet Cavity wall: MUGLA WHITE marble	Counter Top: MUGLA WHITE marble	Shower Flooring Base: TERESTA MARBLE
<b>BATHROOM/ROOF BATHROOM</b>	FLOORING: mahgub matgray marble	Cladding: mahgub matgray porcelain	Shelf: mahgub matgray porcelain	Toilet Cavity wall: MUGLA WHITE marble	Counter Top: MUGLA WHITE marble	Bathube Cladding: MUGLA WHITE marble
<b>Nanny Toilet</b>	FLOORING: local matt white ceramic tile	Cladding: local matt white ceramic	Shelf: local matt white ceramic	Toilet Cavity wall: MUGLA WHITE marble	Counter Top: MUGLA WHITE marble	Shower Flooring Base: TERESTA MARBLE



**GENERAL NOTES:**

- CEILING AT WET AREA INCLUDED AT CEILING DRAWINGS
- ALL ELECTRICAL BOX AT INTERSECTION BETWEEN CERAMIC TILES AT SITE

03		
02		
01		
00	ISSUED FOR APPROVAL	10-2022
NO.	ISSUE	DATE

**REVISIONS:**

OWNER: **SOREAL**

MAIN CONSULTANT: **Khatib and Alami**

MEP CONSULTANT: **MAF**

MAIN CONTRACTOR: **AL SHAMS COMPANY FOR CONTRACTING**

ISSUE FOR	FILE F.	BY AC	PLUMBING	ELECT.	STR.	ARCH.
SHOP DRAWING						

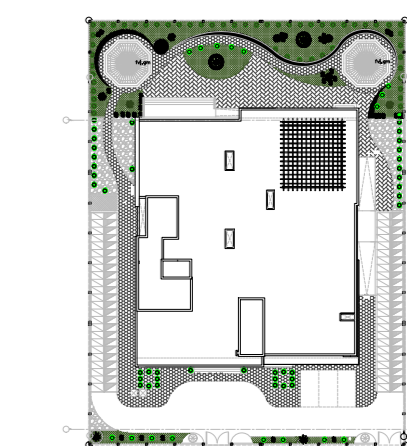
PROJECT: **SODIC VILLETTE ZONE (F)**

SHOP DRAWING TITLE: **(PROTOTYPE - BD) WET AREAS DETAILS TYPICAL FLOORS (IB) BD(11,21,31) SECONDARY BATHROOM**

DRAWN BY: <b>7H</b>	CHECKED BY: <b>7H</b>
DESIGNED BY: <b>7H</b>	APPROVED BY:
DISCIPLINE: <b>AR</b>	SCALE: AS SHOWN
SIZE: A0	DATE: 10-2022

VT-2F-SD-AR-WA(SB)1ST-BD11-03 Rev: 00

Key Plan OF PROJECT:



REFERENCE DRAWING:

TYPE DWG	DRAWING NUMBER	Rev.No:	DATE:
STR.		00	
ARC.		00	
ELEC.		00	
MEC.		00	

GENERAL NOTES:

- 1- ALL MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH GENERAL NOTES, MISCELLANEOUS DETAILS, ARCH/STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- 2- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- 3- THIS LAYOUT IS ALREADY COORDINATED WITH OTHER TRADES.
- 4- ALL DUCT SIZES MENTIONED ON PLANS ARE CLEAR SIZES, EXCLUDING THE THICKNESS OF INSULATION, AND OTHER DUCT LINING.
- 5- DUCTWORK, FITTINGS, HANGERS AND ACCESSORIES WILL BE AS PER SMACNA RECOMMENDATIONS.
- 6- ALL FREE RETURN DUCT SHALL BE WITH BELL MOUSE AND WIRE MESH SCREEN.
- 7- ALL BOTTOM OF DUCT (B.O.D.) IS THE DISTANCE FROM THE BOTTOM OF DUCTS TO FINISH FLOOR.
- 8- AIR OUTLETS SIZE ARE SUBJECT TO FINAL SELECTION AND APPROVAL.
- 9- FOR DUCT SUPPORT SCHEDULE REFER TO GENERAL DETAILS.
- 10- ACTUAL SIZE OF EQUIPMENT WILL BE REFLECTED TO DRAWING AFTER MATERIAL APPROVAL.
- 11- ALL TRADES WILL COORDINATE WITH FALSE CEILING FIXING DETAILS.

ACTION CODE:-

ACTION CODE	APPROVAL STATUS
A.	Approved
B.	Revise and resubmit, work may proceed
C.	Rejected, revise and resubmit, work may not proceed
D.	For information only - Review and required

Revisions

Rev. No.	DESCRIPTION	Date	Draw	Chk	Apr

Client:

المالك

Consultants:



Contractor:

المقاول

Type Of Document:

1ST FLOOR HVAC SYSTEM-LAYOUT

DRAWING TITLE:

1ST FLOOR HVAC SYSTEM-LAYOUT

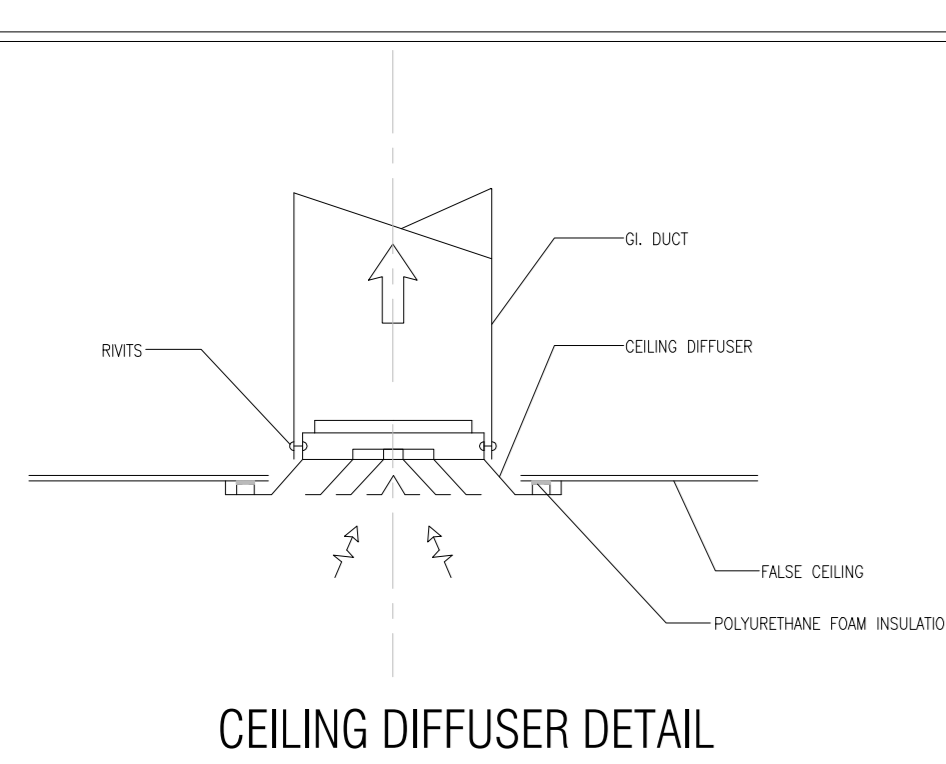
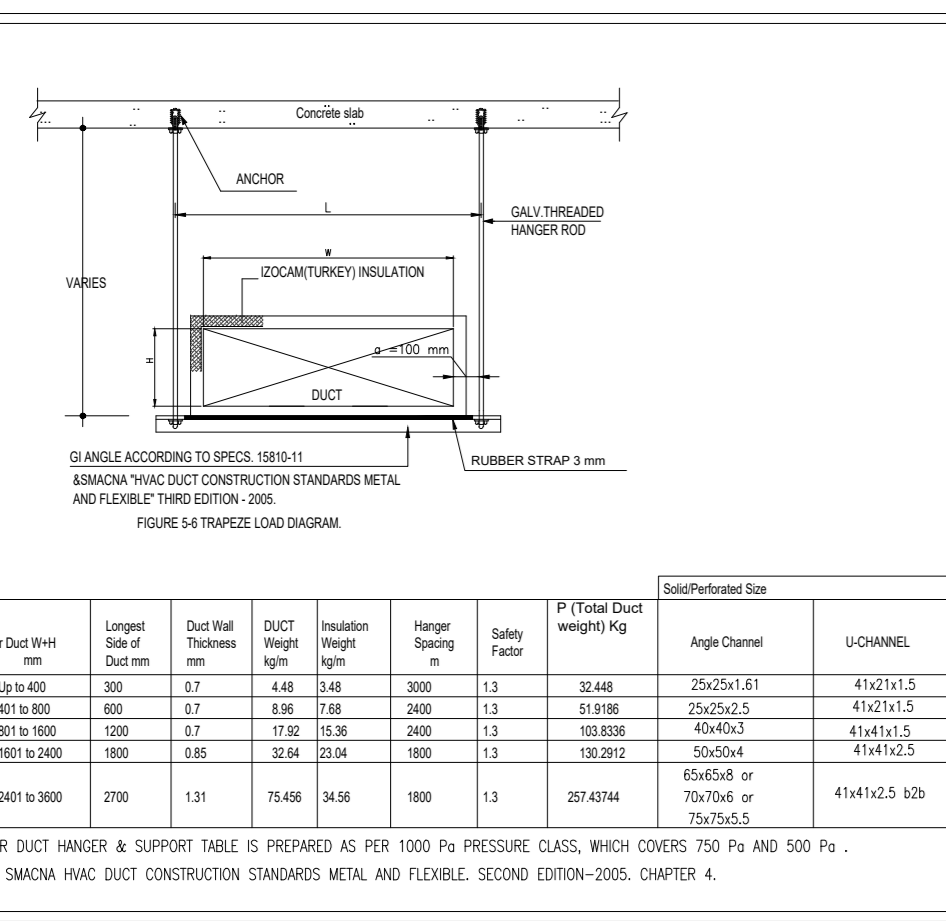
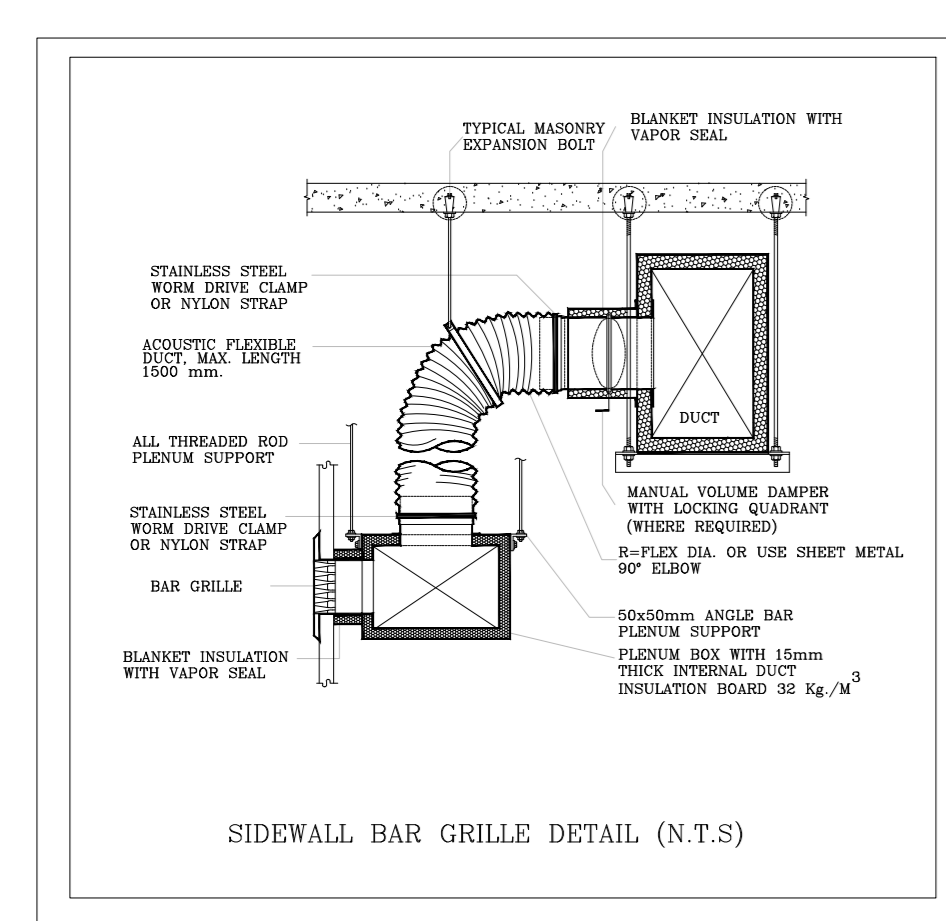
COORDINATION TABLE:

PEPPERED BY	REVISED	TYPE DWG			
		CIVIL	ARC.	MEC.	ELE.

DRAWING NUMBER:

EHH-SD-MECH-HVAC-003-01

PART No:	SIZE:	SCALE:	REV.No:	DATE:
A11	A0	1:20	00	23/2/2022



CORRIDOR  
1-CCD-07  
48000 BTU/HR  
1200 CFM EACH  
8-S.L.S 2FT. 2SLOTS 3/4"  
150 CFM EACH  
FLEX#150  
10-S.L.R 2FT. 2SLOTS 3/4"  
120 CFM EACH  
F.A 200 CFM

CORRIDOR  
1-CCD-05  
36000 BTU/HR  
900 CFM  
3-S.L.S 3FT. 3SLOTS 3/4"  
300 CFM EACH  
FLEX#200  
3-S.L.R 3FT. 3SLOTS 3/4"  
300 CFM EACH

CCD-03  
24000 BTU/HR  
600 CFM  
2-S.L.S 3FT. 3SLOTS 3/4"  
300 CFM EACH  
FLEX#200  
2-S.L.R 3FT. 3SLOTS 3/4"  
F.A 50 CFM

CCD-03  
24000 BTU/HR  
600 CFM  
2-S.L.S 3FT. 3SLOTS 3/4"  
300 CFM EACH  
FLEX#200  
2-S.L.R 3FT. 3SLOTS 3/4"  
F.A 50 CFM

CCD-03  
24000 BTU/HR  
600 CFM  
2-S.L.S 3FT. 3SLOTS 3/4"  
300 CFM EACH  
FLEX#200  
2-S.L.R 3FT. 3SLOTS 3/4"  
F.A 50 CFM

CCD-05  
34000 BTU/HR  
800 CFM  
2-S.L.S 4FT. 3SLOTS 3/4"  
400 CFM EACH  
FLEX#250  
2-S.L.R 4FT. 3SLOTS 3/4"  
F.A 60 CFM

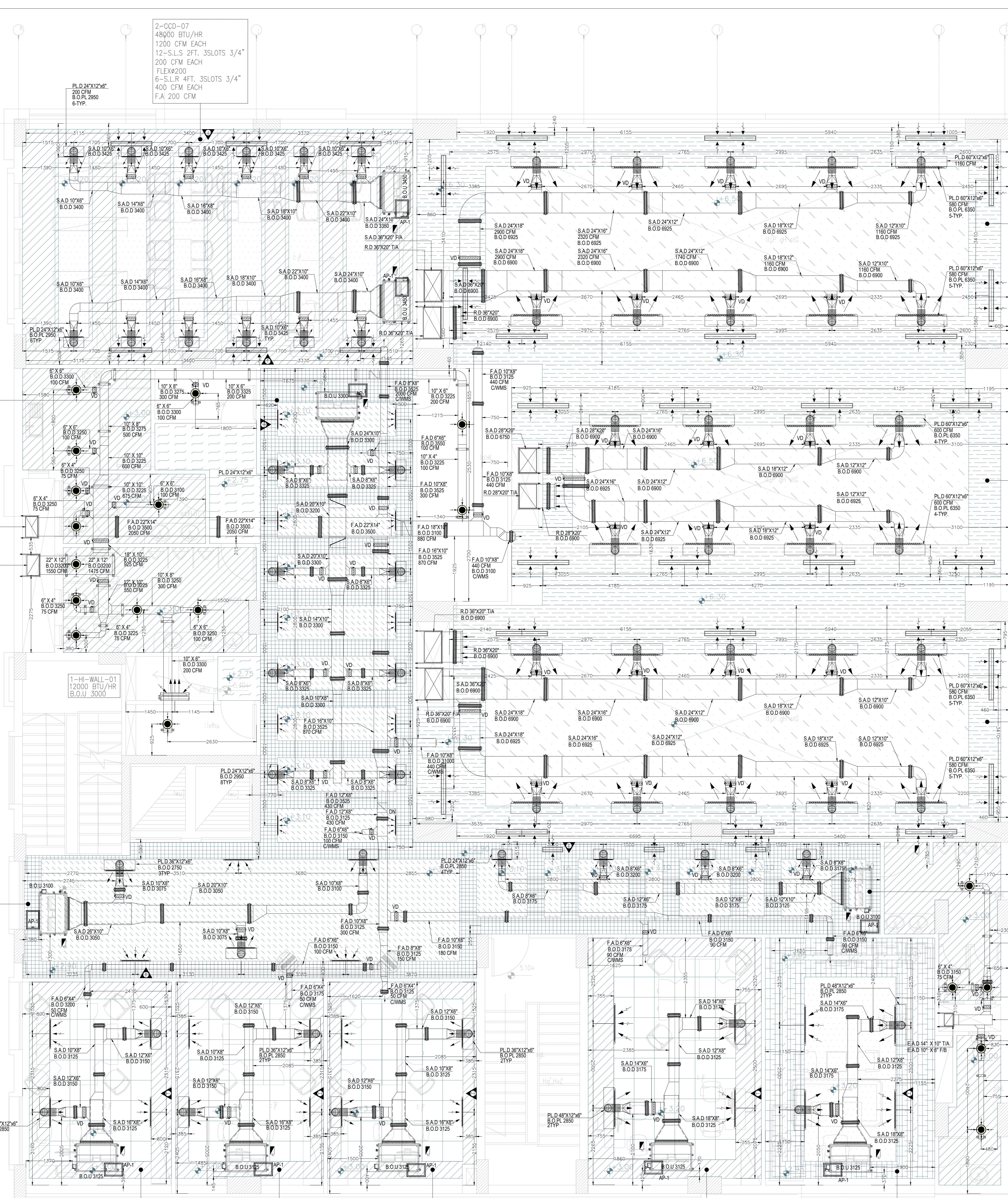
CCD-05  
34000 BTU/HR  
800 CFM  
2-S.L.S 4FT. 3SLOTS 3/4"  
400 CFM EACH  
FLEX#250  
2-S.L.R 4FT. 3SLOTS 3/4"  
F.A 60 CFM

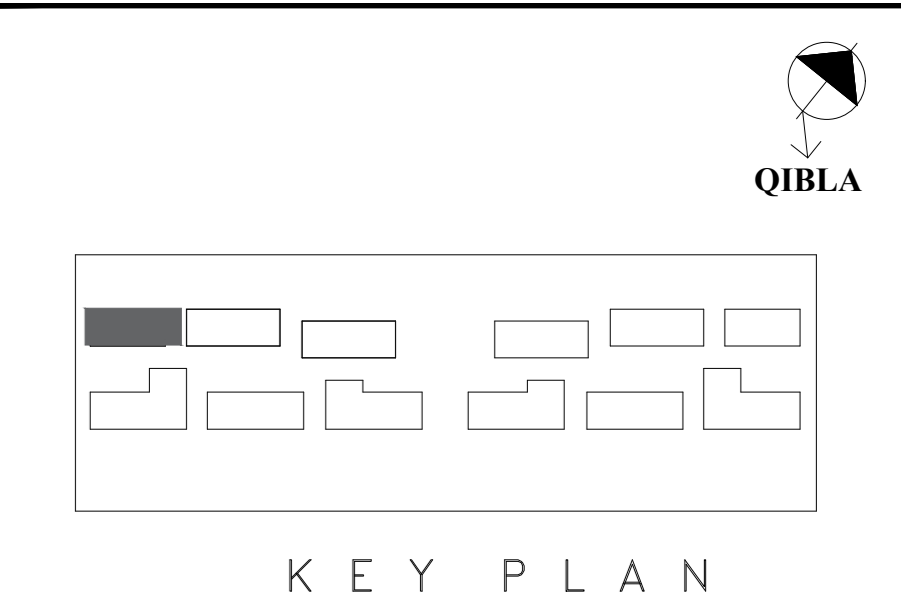
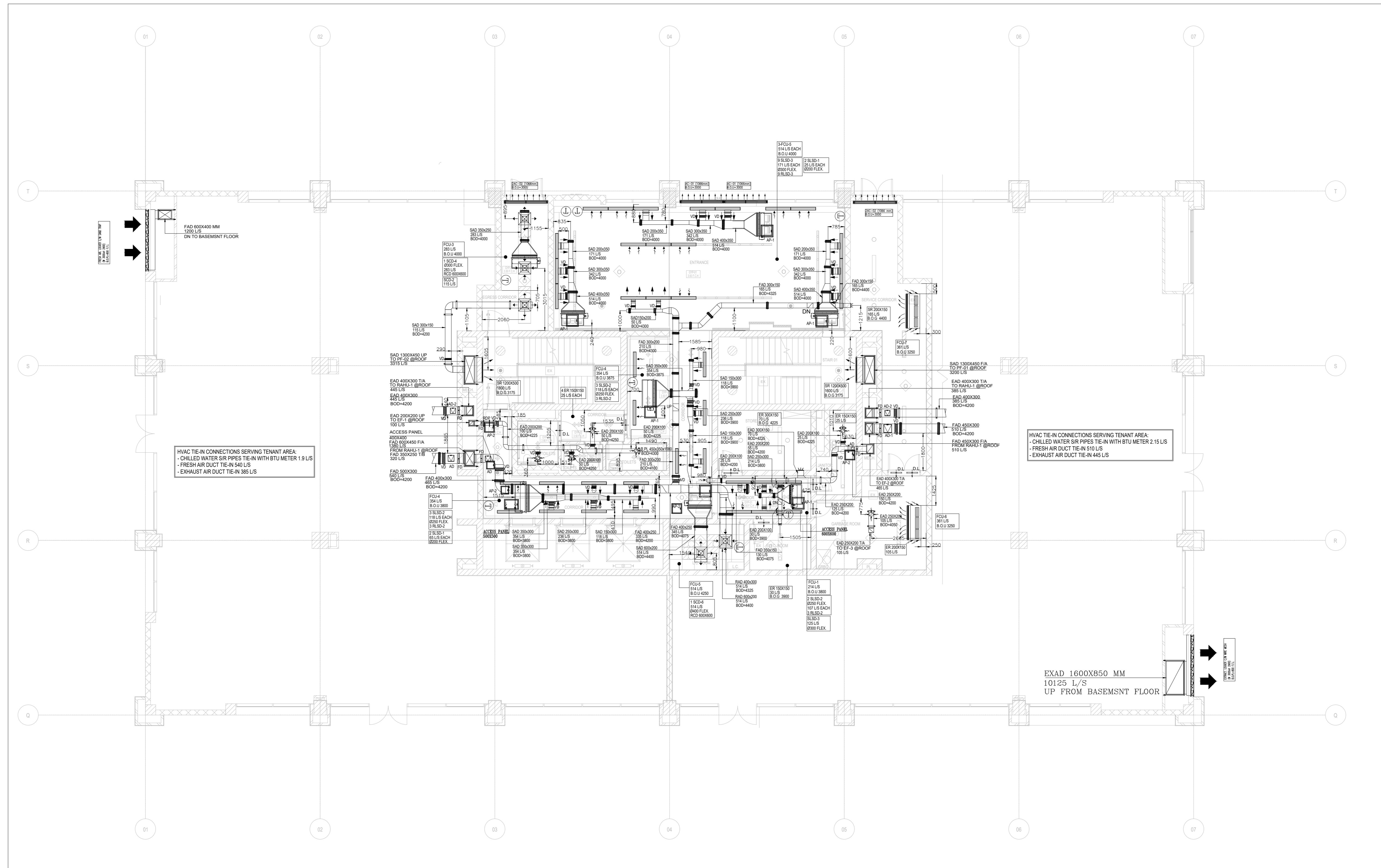
1-C-P-02  
16-TR -EACH  
5800 CFM EACH  
10-S.L.S 5FT. 3SLOTS 3/4"  
580 CFM EACH  
10-S.L.R 5FT. 3SLOTS 3/4"  
F.A 480 CFM

1-C-P-01  
12-TR -EACH  
4800 CFM EACH  
8-S.L.S 5FT. 3SLOTS 3/4"  
600 CFM EACH  
8-S.L.R 5FT. 3SLOTS 3/4"  
F.A 360 CFM

1-C-P-02  
16-TR -EACH  
5800 CFM EACH  
10-S.L.S 5FT. 3SLOTS 3/4"  
580 CFM EACH  
10-S.L.R 5FT. 3SLOTS 3/4"  
F.A 480 CFM

CORRIDOR  
1-CCD-02  
18000 BTU/HR  
600 CFM EACH  
4-S.L.S 2FT.2SLOTS 3/4"  
150 CFM EACH  
3-S.L.R 2FT.2SLOTS 3/4"  
200 CFM EACH





- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
  - THE DRAWINGS ARE ISSUED FOR HVAC WORKS ONLY AND SHALL NOT BE USED FOR ARCHITECTURAL, STRUCTURAL OR OTHER WORKS.
  - ALL DUCT LEVELS ARE TAKEN FROM TOC LEVEL.
  - ALL DUCTS PASSING THROUGH STRUCTURAL ELEMENTS SHALL BE PROVIDED WITH PIPE SLEEVE.
  - ANY MISSING DETAILS WILL BE SUBMITTED AFTER MATERIAL APPROVAL.
  - DUCT USED FOR FIRE RATED FANS WILL BE BLACK CARBON STEEL OTHERWISE WILL BE GALVANIZED STEEL.

- LEGEND AND ABBREVIATIONS:**
- FCU FAN COIL UNIT
  - VD VOLUME DAMPER
  - FD FIRE DAMPER
  - SAG SUPPLY AIR GRILL
  - RAG RETURN AIR GRILL
  - SUPPLY CEILING DIFFUSER
  - RETURN CEILING DIFFUSER
  - THERMOSTAT
  - FLEXIBLE AIR CURTAIN
  - ACCESS PANEL
  - FAN COIL UNIT UNDER-CEILING
  - SUPPORT INSULATION FOR DUCT
  - RDP REMOVE DUCT PISCÉ
  - DL DOOR LOUVER
  - BOD BOTTOM OF DUCT
  - TOC TOP OF CONCRETE
  - FFL FINISH FLOOR LEVEL
  - BOU BOTTOM OF UNIT
  - BOG BOTTOM OF GRILL
  - SAD SUPPLY AIR DUCT
  - EAD EXHAUST AIR DUCT
  - FAD FRESH AIR DUCT
  - L/S LITERS PER SECOND
  - ER EXHAUST REGISTER
  - EF EXHAUST FAN
  - WM WIRE MESH
  - BM BILL MOUTH
  - AD-1 ACCESS PANEL 600x600
  - AD-2 ACCESS PANEL 400x400

**REFERENCE**

Drawing Description	Drawing Number
HVAC SYSTEM	AMP.B01.M01.101.00
AIR RISER AIR RISER 1/2	AMP.B01.M00.012.00
AIR RISER AIR RISER 2/2	AMP.B01.M00.013.00
CHILLED WATER RISER	AMP.B01.M00.014.00

**ISSUE DETAILS**

REV.	DATE	FOR APPROVAL	ISSUE	7H	E.M.	A.M.
00	31-8-2020					

**OWNER:**  
 Capital Group Properties

**CONCEPTUAL DESIGNER:**  
**SQUIRE & PARTNERS**  
 77 Wicklow Street London WC1X 9JY  
 T: 020 778 8888 F: 020 7788 9498  
 info@squirepartners.com  
 www.squirepartners.com

**DESIGNER:**  
 raafat.miller.consulting architects & engineers  
 6 Boulos Hanna St, Third Floor  
 Dokki, 12311  
 Giza, Egypt  
 Tel: (020) 3760 7928  
 Fax: (020) 3760 7933

**CONSULTANT:**  
 raafat.miller.consulting architects & engineers  
 6 Boulos Hanna St, Third Floor  
 Dokki, 12311  
 Giza, Egypt  
 Tel: (020) 3760 7928  
 Fax: (020) 3760 7933

**CONTRACTOR:**  
 GAMA CONSTRUCTION

**PROJECT:** ALBUROUJ BUSINESS PARK

**DRAWING TITLE:** BUILDING 01 - GROUND FLOOR PLAN - DUCT WORK PLAN

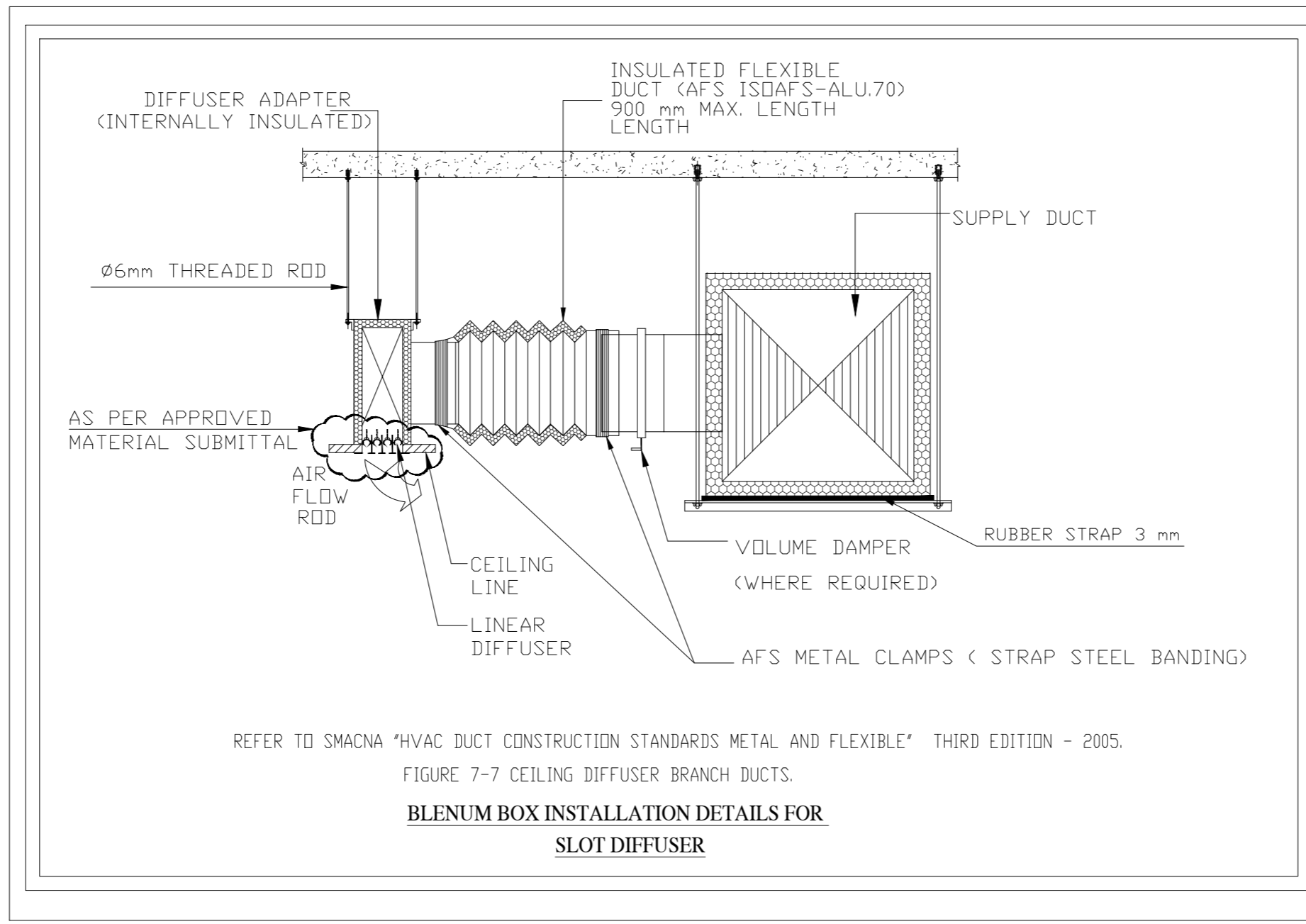
**LOCATION:** CAIRO - ISMAILIA ROAD , EGYPT

SCALE: DWG No. AD 1:100 [BR] Z1 [B0] ME [MD] GF [03] 001 SIZE: REV. AD 60  
 DRAWN BY: 7H CHECKED BY: E.M. APPROVED BY: A.M. DATE: 31-8-2020

**FIGURE 5-6 TRAPEZOID LOAD DIAGRAM**

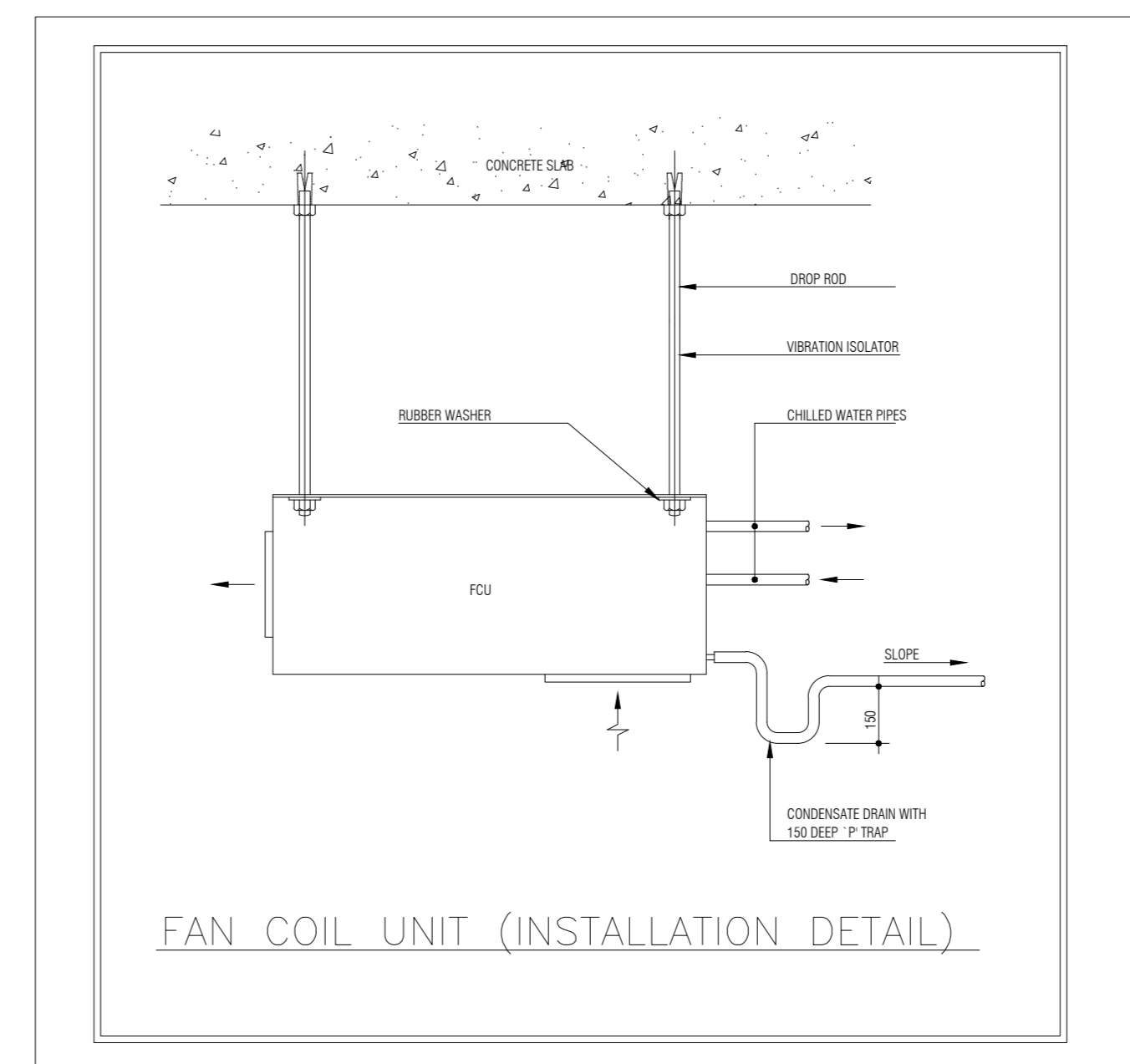
SUPPORT TYPE	Air Duct 1 WH (m)	Length of Duct (m)	Duct 1 Wall Thickness (mm)	DUCT Insulation Weight (kg/m)	Hanger Spacing (m)	Safety Factor	P (1/5th) Duct 1 Weight (kg)	Angle Channel	U-CHANNEL	Rod Size
TYPE 1	50 to 400	300	3.7	4.80	14.00	2.00	13.448	25x25x3.5	43x27x3.5	R8 x 2
TYPE 2	400 to 800	600	3.7	6.16	17.68	2.00	31.936	25x25x5	43x27x3.5	R8 x 2
TYPE 3	800 to 1600	1200	3.7	17.92	35.36	2.00	103.872	40x40x3	43x27x3.5	R8 x 2
TYPE 4	1600 to 2400	1800	3.65	30.44	55.84	3.00	138.264	50x50x4	43x27x3.5	R8 x 2
TYPE 5	2400 to 3600	2700	3.31	75.456	141.56	3.00	357.4314	65x65x6 or 70x70x6 or 75x75x5	43x27x3.5	R8 x 2

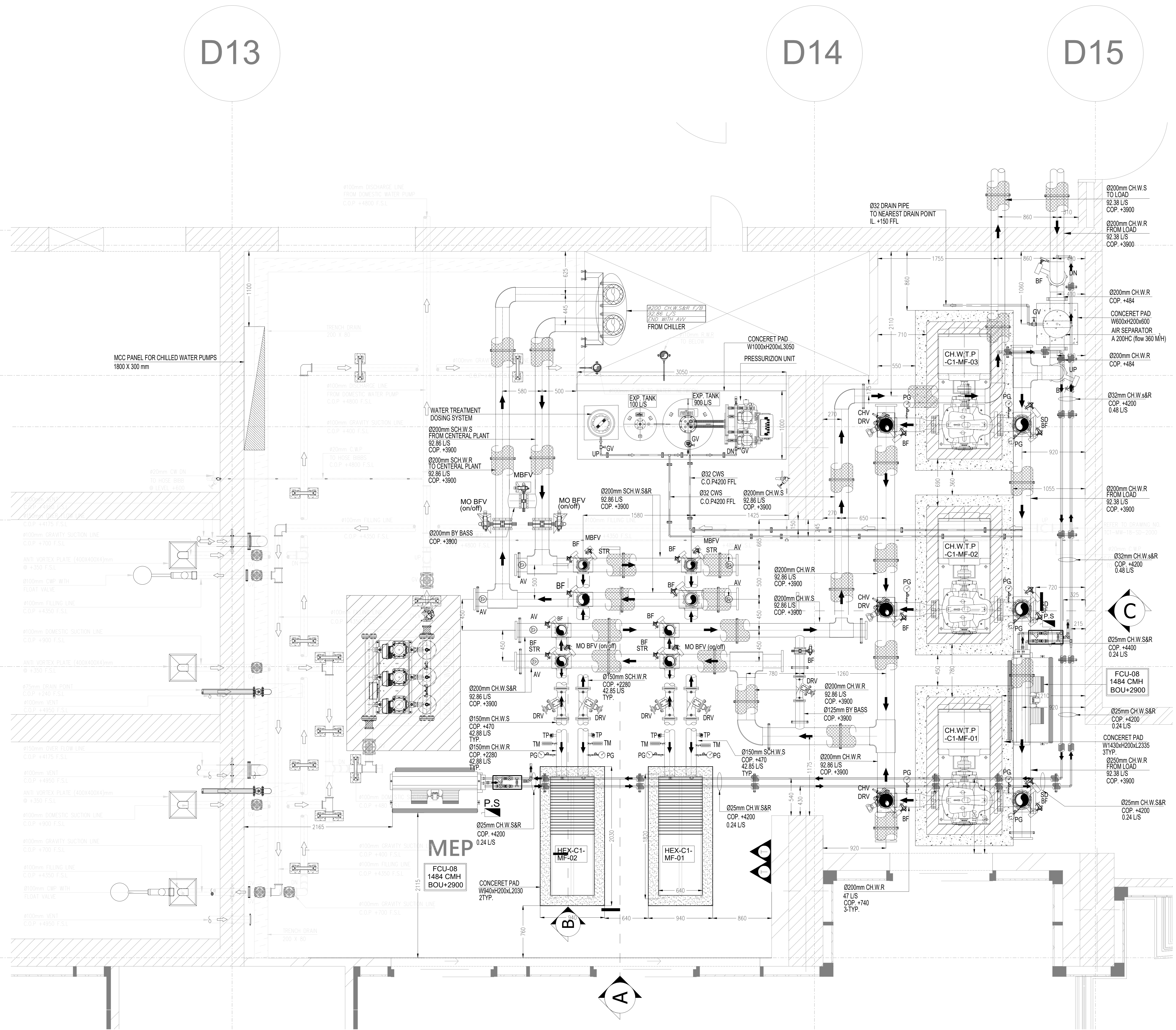
RECTANGULAR DUCT HANGER & SUPPORT TABLE IS PREPARED AS PER 1000 Pa PRESSURE CLASS, WHICH COVERS 750 Pa AND 500 Pa.  
 REFERENCE: SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, SECOND EDITION - 2005, CHAPTER 4.



**SCHEDULE No. 2 FAN COIL UNITS**

COLUMN NUMBER	1	2	3	4	5	6	7
UNIT NUMBER	FCU1	FCU2	FCU3	FCU4	FCU5	FCU6	FCU7
TYPE	CONCEALED DUCTED			UNDER CEILING (EXPOSED TYPE)			
SUPPLY AIRFLOW RATE (L/S)	214	214	283	354	514	361	361
EXTERNAL STATIC PRESSURE (Pa)	50	50	50	50	50	N/A	N/A
COOLING	ENTERING AIR TEMPERATURE (°C DB)	24	24	24	24	24	24
	COOLING CAPACITY (kW)	5.82	5.82	5.51	6.18	10.62	6.53
	ENTERING LEAVING WATER TEMP. (°C)	5.5/12.2	5.5/12.2	5.5/12.2	5.5/12.2	5.5/12.2	5.5/12.2
	WATER FLOW RATE (L/S)	0.208	0.208	0.197	0.2218	0.381	0.234





OWNER:

وزارة الإسكان والمرافق والمباني  
Ministry of Housing, Utilities and Urban Development  
Kingdom of Saudi Arabia

ARCHITECT DESIGNER:

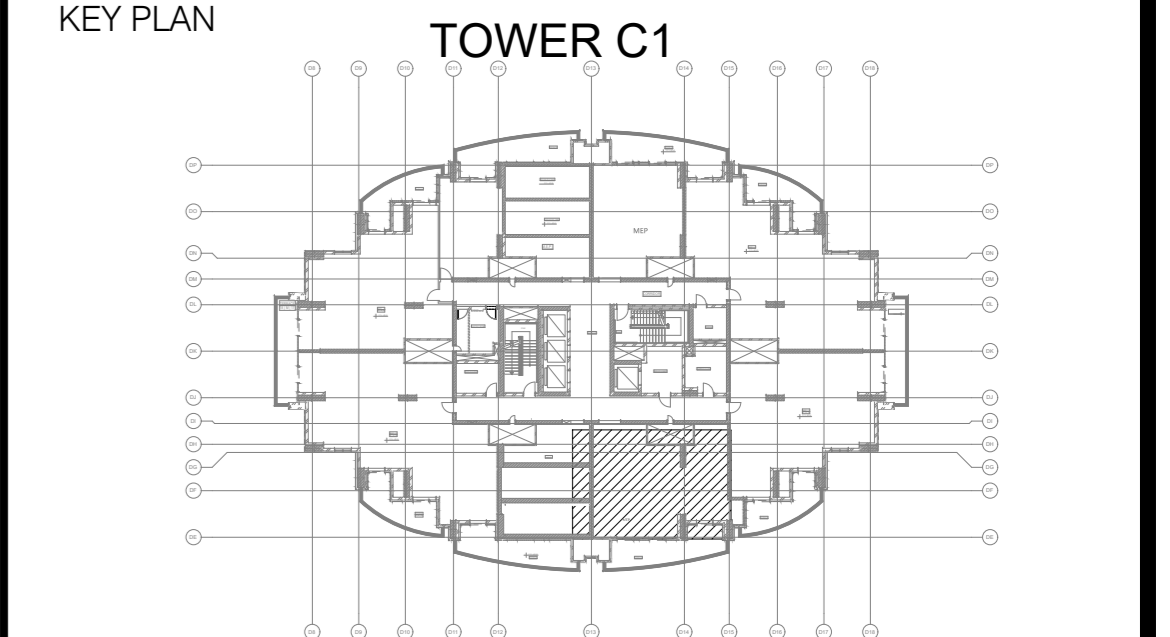
PAVILLION ARCHITECTS  
Youssef Al-Sayid

STRUCTURE DESIGNER:

ECG  
ENGINEERING CONSULTANTS GROUP s.a.  
www.ecg.sa.com

PROJECT: AL ALAMIEN TOWERS LD00

- 1- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.  
2- ALL LEVELS ARE MEASURED FROM F.F.L.  
3- FOR MATERIALS, MANUFACTURE & MODEL NUMBERS WILL BE AS PER APPROVED MANUFACTURE.  
4- ALL CHILLED WATER R. PIPES WILL BE BLACK STEEL PIPES WILL BE INSULATED BY FIBER GLASS.  
5- ALL CHILLED WATER PIPES SUPPORTS ARE RIGID TYPE.  
6- ALL EQUIPMENT WILL BE AS PER APPROVED MATERIAL SUBMITTAL.  
7- FOR CONSTRUCTION, THIS DRAWING SHOULD BE READ WITH COORDINATION PLAN.  
8- ALL DUCTS AND PIPES PENETRATION THROUGH CONCRETE WALLS SHALL BE SHOWN IN BUILDER WORK SHOP DWGS & THIS DWG IS COORDINATED WITH ALL OTHER TRADES.
- LEGEND:**
- FCU FAH COIL UNIT  
HEX HEAT EXCHANGER  
CH.W.S CHILLED WATER SUPPLY  
CH.W.R CHILLED WATER RETURN  
CH.W.T.P AIR SEPARATOR  
SD SUCTION DIFFUSER  
L/S LITER PER SECOND  
SD SUCTION DIFFUSER  
CMH CUBIC METER PER HOUR  
HVAC HEATING, VENTILATING & AIR CONDITIONING  
THERMOSTAT @ 1200mm FROM F.F.L.  
BOU BOTTOM OF UNIT (EQUIPMENT)  
COP CENTER OF PIPE ABOVE FINISH FLOOR LEVEL
- BTU/M BRITISH THERMAL UNIT METERS**
- |       |                                    |    |   |
|-------|------------------------------------|----|---|
| GV    | GATE VALVE                         | AV | AIR VENT CHW (ISOLATING VALVE BALL VALVE)       |
| BFV   | BUTTERFLY VALVE                    | BV | BELL VALVE                                      |
| MBV   | MODULATING BUTTERFLY VALVE         | TP | TEST POINT                                      |
| MBV-B | MOTORIZED BUTTERFLY VALVE (ON/OFF) | PG | PRESSURE GAUGE CHW (ISOLATING VALVE BALL VALVE) |
| DRV   | DOUBLE REGULATING VALVE            | TM | THERMOSTAT CHW (ISOLATING VALVE BALL VALVE)     |
| SD    | NON RETURN VALVE                   | FC | FLEXIBLE CONNECTION                             |
| STR   | STRAINER                           |    |   |



THE WORK REPRESENTED ON THIS DRAWING HAS BEEN COORDINATED WITH ALL SUB-CONTRACTORS AND OTHER AFFECTED CONTRACTORS.

**SHOP DRAWING HISTORY**

REV.	DESCRIPTION	DRAWN	CHKD	APPR	DATE
01	ISSUED FOR APPROVAL	7H	7H	AN	05/10/2022
00	ISSUED FOR APPROVAL	7H	7H	AN	15/05/2022

**CONTRACT DRAWING REFERENCES**

ARCHITECTURAL DRAWING NO.	STRUCTURAL DRAWING NO.	MEP DRAWING NO.	REV.	REV.	REV.
					00

**COORDINATION SIGNATURE BOX**

NO.	DESCRIPTION	COPY NAME	NAME	DESIGNATION	SIGNATURE	DATE

**MAIN CONTRACTOR:**

HASSAN ALLAM CONSTRUCTION  
Hassan Allam Construction

Consolidated Contractors Company

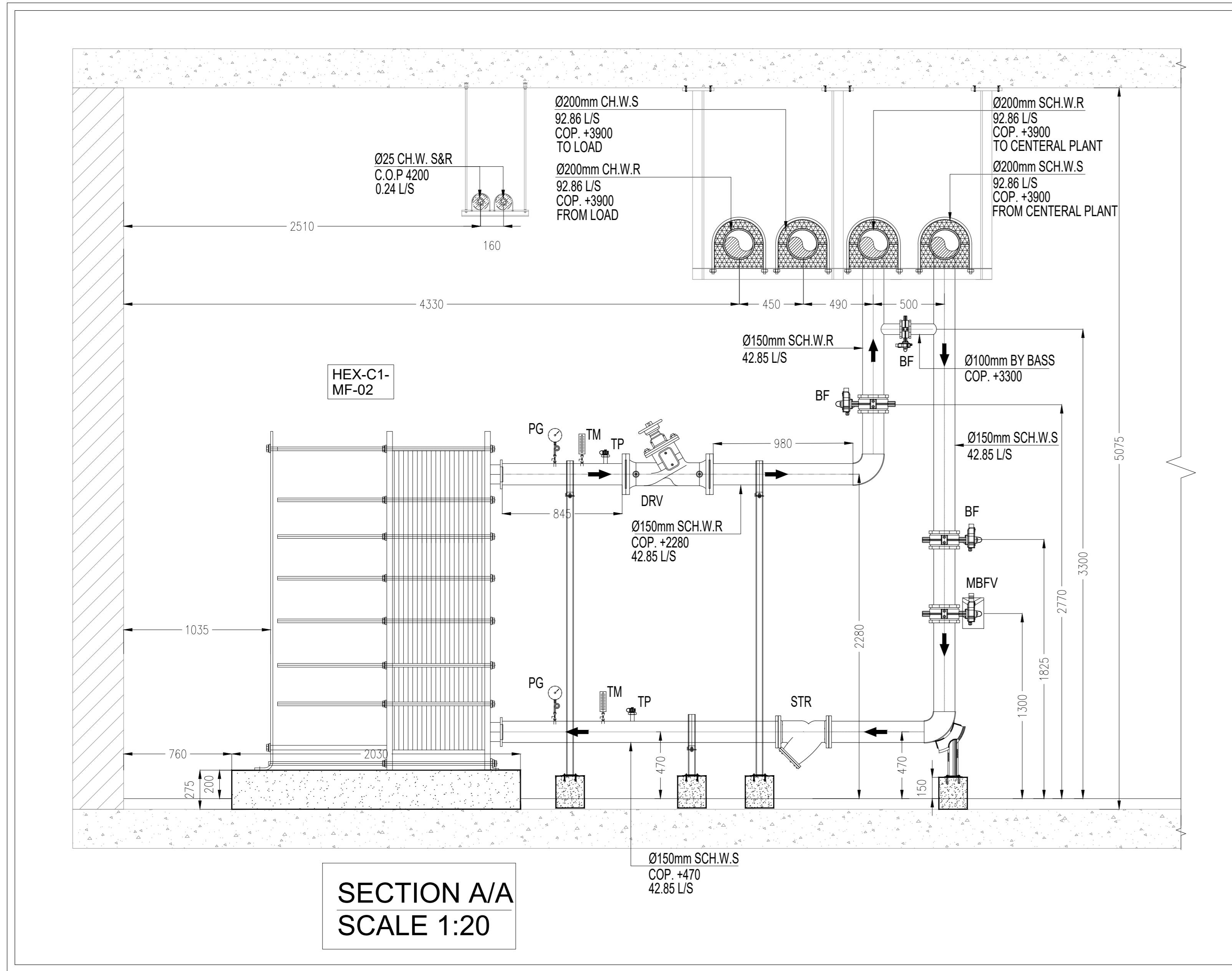
DRAWING TITLE/CONTENTS: TOWER C1 HVAC SYSTEM ETS ROOM PLAN-L18

Date of Issue: \_\_\_\_\_ Client Approval: \_\_\_\_\_  
Date: \_\_\_\_\_

SCALE: 1:20 SHEET SIZE: A0 SHEET NUMBER: 1 OF 3  
DRAWN BY: 7H CHECKED BY: 7H APPR: AN DATE: 05/10/2022

**SHOP DRAWING**

Proj. No.	1120862	Rev. No.	00	Scale	1:20	Sheet No.	18	Total No.	300	Rev. No.	01
-----------	---------	----------	----	-------	------	-----------	----	-----------	-----	----------	----



### CHILLED WATER HEAT EXCHANGER SCHEDULE

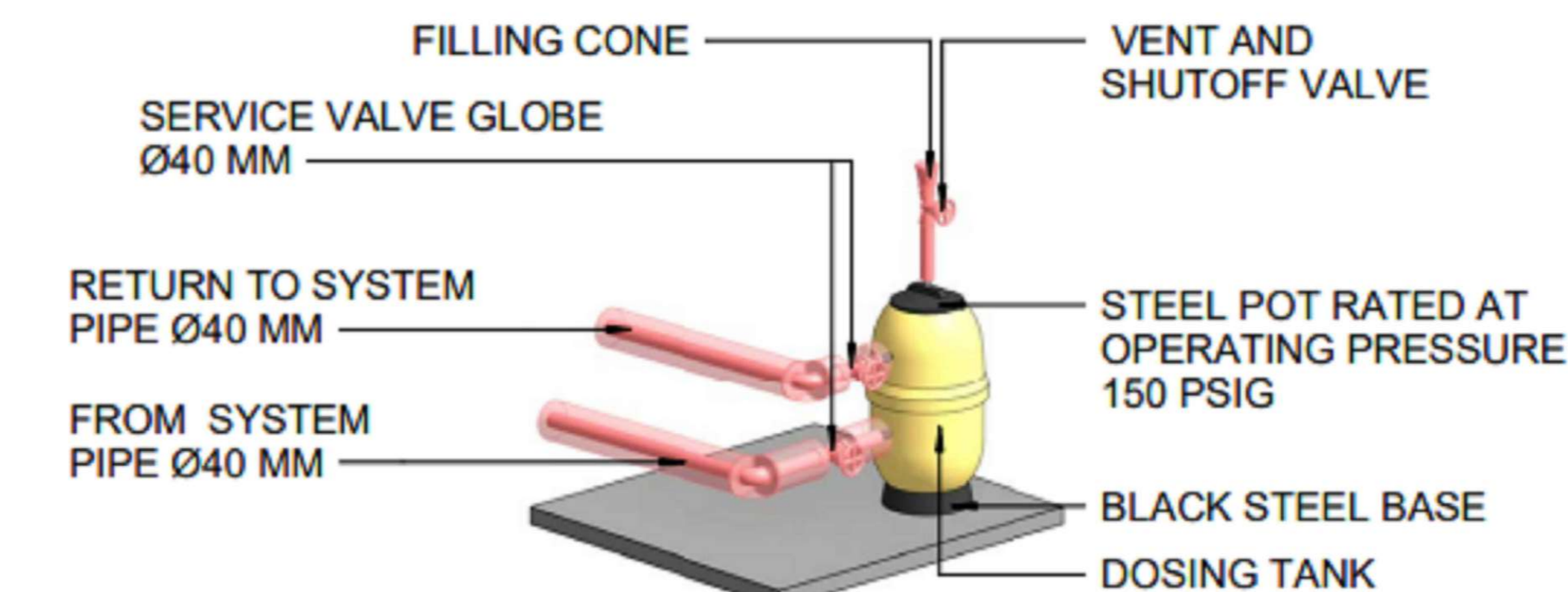
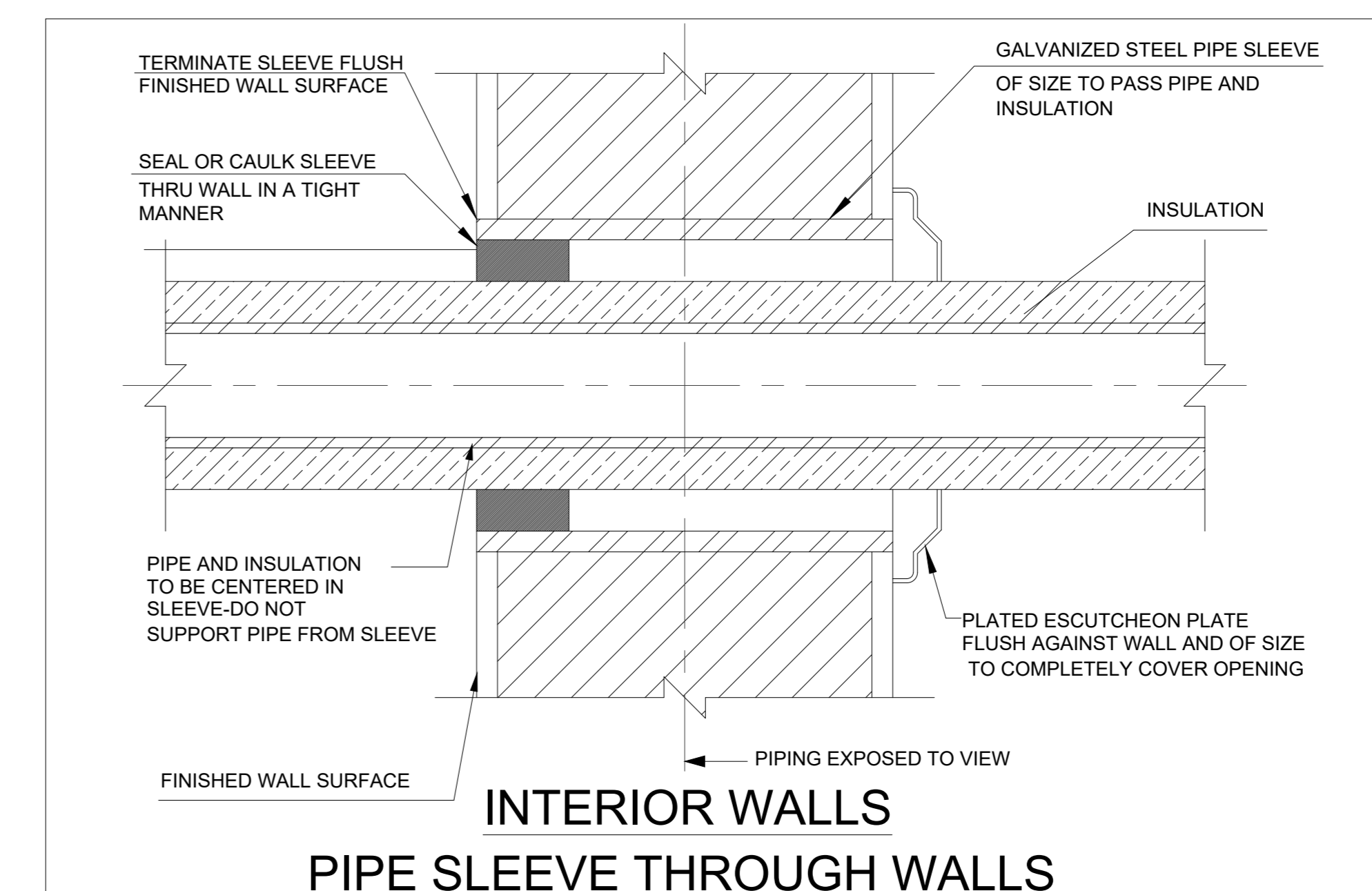
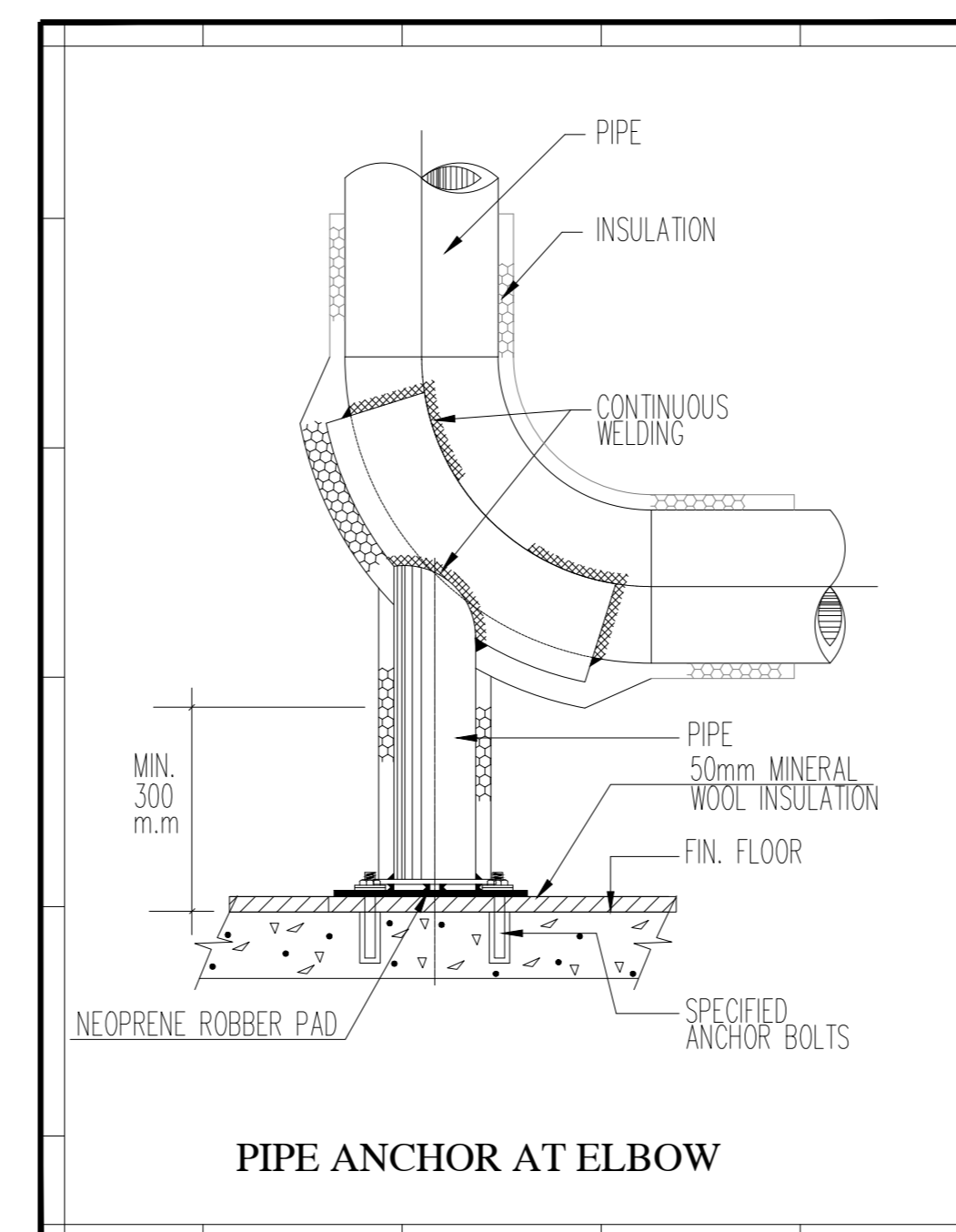
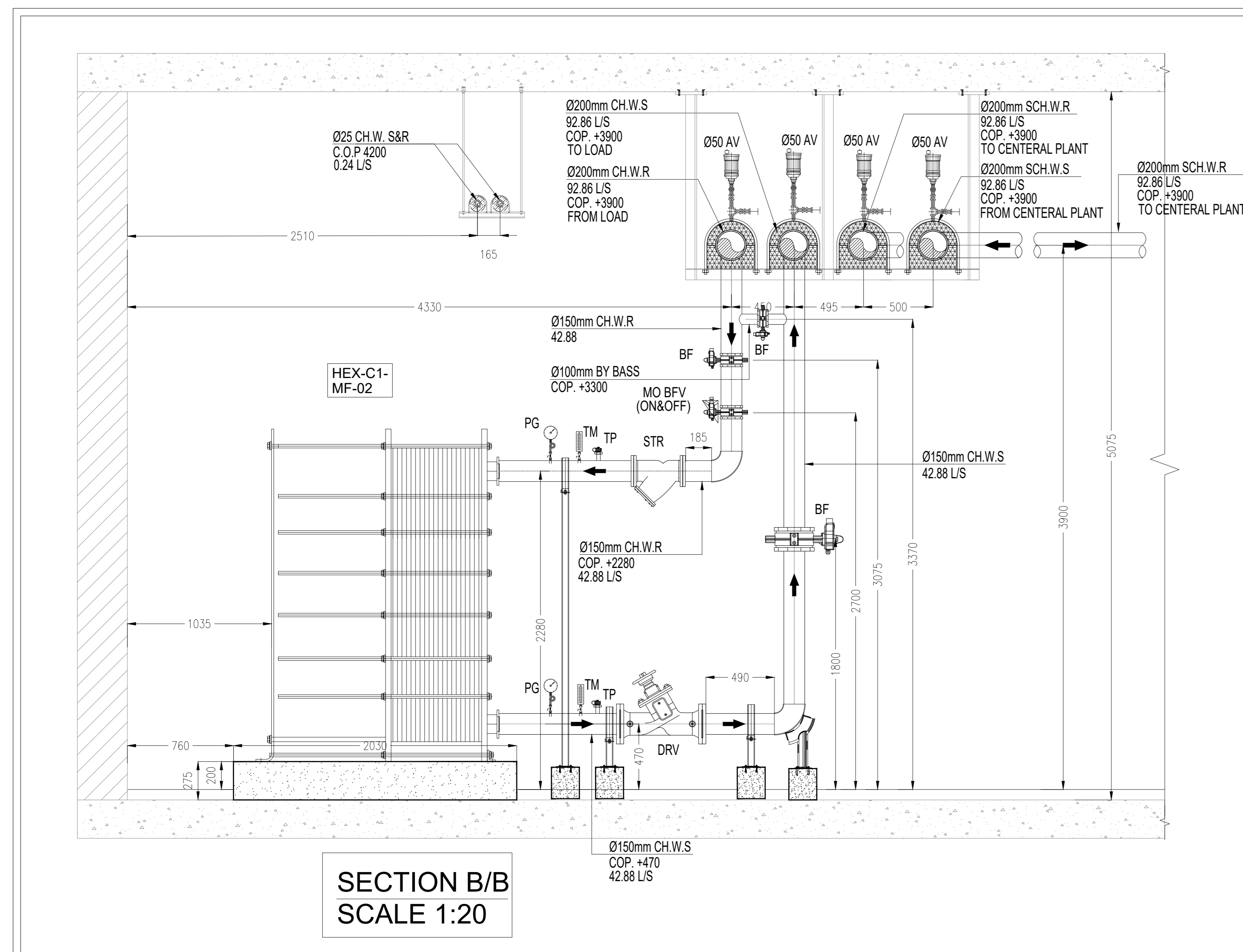
ITEMS	MODEL	LOCATION	HEAT EXCHANGER CAPACITY (K.W)	FLOW TYPE	QUANTITY	HOT WATER SIDE SECONDARY			COLD WATER SIDE PRIMARY			REMARKS		
						FLOW L/S	EWT °C	LWT °C	WPD KPA	FLOW L/S	EWT °C		LWT °C	WPD KPA
HEXC-C1-MF-01&02	NQ06X B-16	MECH FLOOR L18	1554	COUNTER	2	42.88	13.2	6	42.66	42.85	5	12.2	42.74	2-OPERATION PLATE TYPE

### PRESSURIZATION UNITS

ITEMS	MODEL	LOCATION	SERVICIE	RATED PRESSURE PSI	PUMP DISCHARGE PRESSURE	KW	ELEC.SERVICE V/PH/Hz	REMARKS

### FAN COIL UNITS SCHEDULE

UNIT NO.	ACTUAL	FAN / MOTOR DATA			COOLING DATA							
		EXT. STATIC PRE.	MAX. MOTOR WATTS	VOLTS/ PH/Hz	TOTAL CAP.	SENS. CAP.	ENT. AIR DB	ENT. AIR WB	ENT. WATER TEMP.	L.V.G. TEMP.	WATER FLOW RATE	ELEC. HEATER
FCU-8	1484	38	180	220/1/50	7.2	5.8	23.3	11.9	6	13.2	0.24	1



7 DETAIL-04

OWNER: وزارة الإسكان والمرافق والمباني العمرية  
Ministry of Housing, Utilities and Urban Development

Alamein  
هيئة المجتمعات العمرانية

ARCHITECT DESIGNER: PAVILLION ARCHITECTS

STRUCTURE DESIGNER: ECG  
ENGINEERING CONSULTANTS GROUP S.A.

PROJECT: AL ALAMIEEN TOWERS LD00

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE NOTED.
- ALL LEVELS ARE MEASURED FROM F.F.L.
- FOR MATERIALS, MANUFACTURE & MODEL NUMBERS WILL BE AS PER APPROVED MANUFACTURE.
- ALL CHILLED WATER PIPES WILL BE BLACK STEEL PIPES WILL BE INSULATED BY FIBER GLASS.
- ALL CHILLED WATER PIPES SUPPORTS ARE RIGID TYPE.
- ALL EQUIPMENT WILL BE AS PER APPROVED MATERIAL SUBMITTAL.
- FOR CONSTRUCTION, THIS DRAWING SHOULD BE READ WITH COORDINATION PLAN.
- ALL DUCTS AND PIPES PENETRATION THROUGH CONCRETE WALLS SHALL BE SHOWN IN BUILDER WORK SHOP DWGS & THIS DWG IS COORDINATED WITH ALL OTHER TRADES.

LEGEND:

FOU	FAN COIL UNIT	HEX	HEAT EXCHANGER
CH.W.S.	CHILLED WATER SUPPLY	CH.W.R.	CHILLED WATER RETURN
CH.W.T.P.	CHILLED WATER THERMOSTAT PUMP	SD	SUCTION DIFFUSER
L/S	LITER PER SECOND	CMH	CUBIC METER PER HOUR
DRV	DOUBLE REGULATING VALVE	NRV	NON RETURN VALVE
STR	STRAINER	BTU/M	BRITISH THERMAL UNIT METER

KEY PLAN: TOWER C1

THE WORK REPRESENTED ON THIS DRAWING HAS BEEN COORDINATED WITH ALL SUB-CONTRACTORS AND OTHER AFFECTED CONTRACTORS.

SHOP DRAWING HISTORY

REV.	DESCRIPTION	DATE
01	ISSUED FOR APPROVAL	05/10/2022
00	ISSUED FOR APPROVAL	15/05/2022

CONTRACT DRAWING REFERENCES

ARCHITECTURAL	STRUCTURAL	MEP
DRAWING NO.	DRAWING NO.	DRAWING NO.

COORDINATION SIGNATURE BOX

NO.	DESCRIPTION	COMPANY NAME	NAME	DESIGNATION	SIGNATURE	DATE

MAIN CONTRACTOR: HASSAN ALLAM CONSTRUCTION

DRAWING TITLE/CONTENTS: TOWER C1 HVAC SYSTEM ETS ROOM PLAN-L18 SECTION-1

Date of issue: Client Approval: Date:

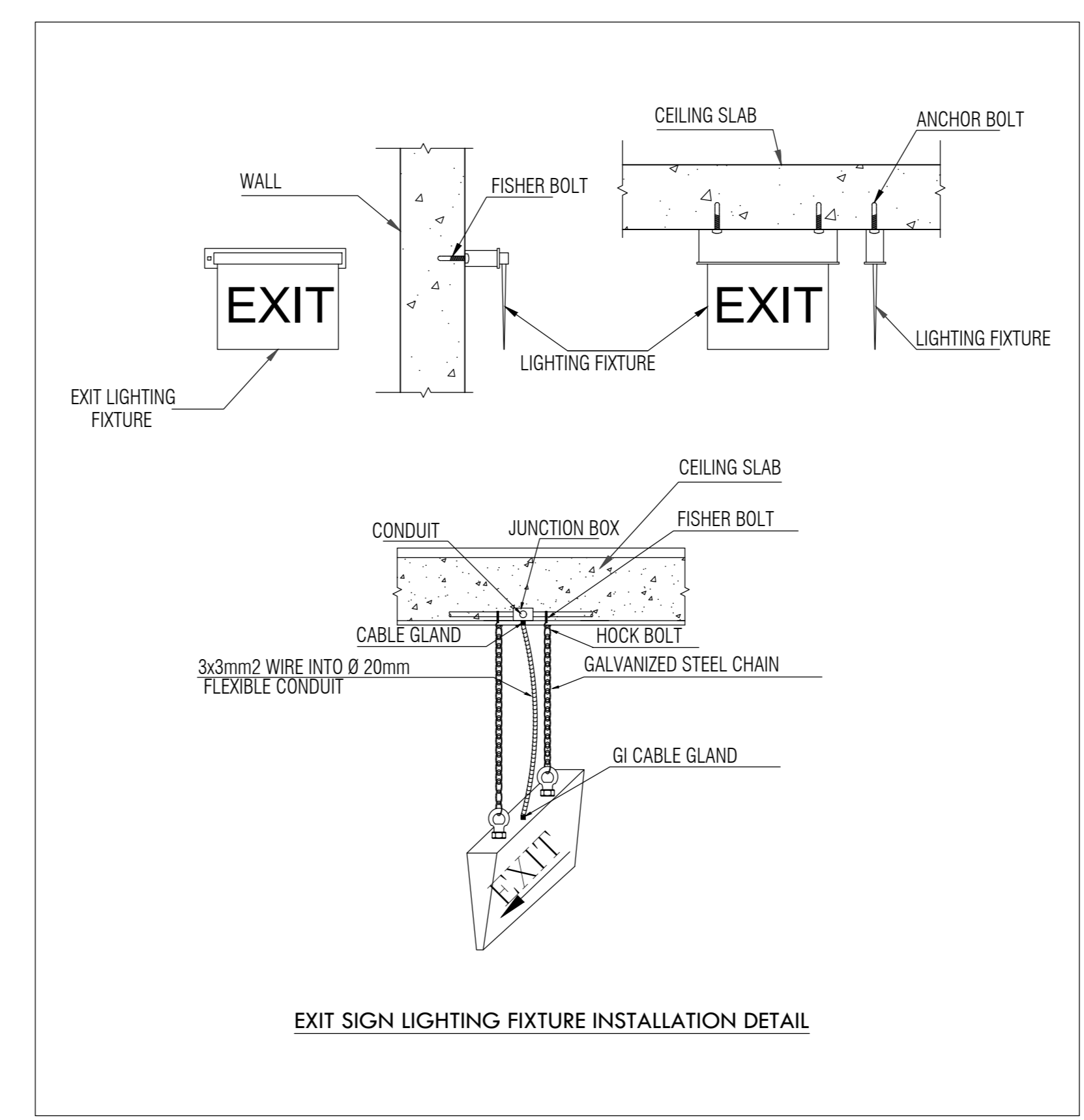
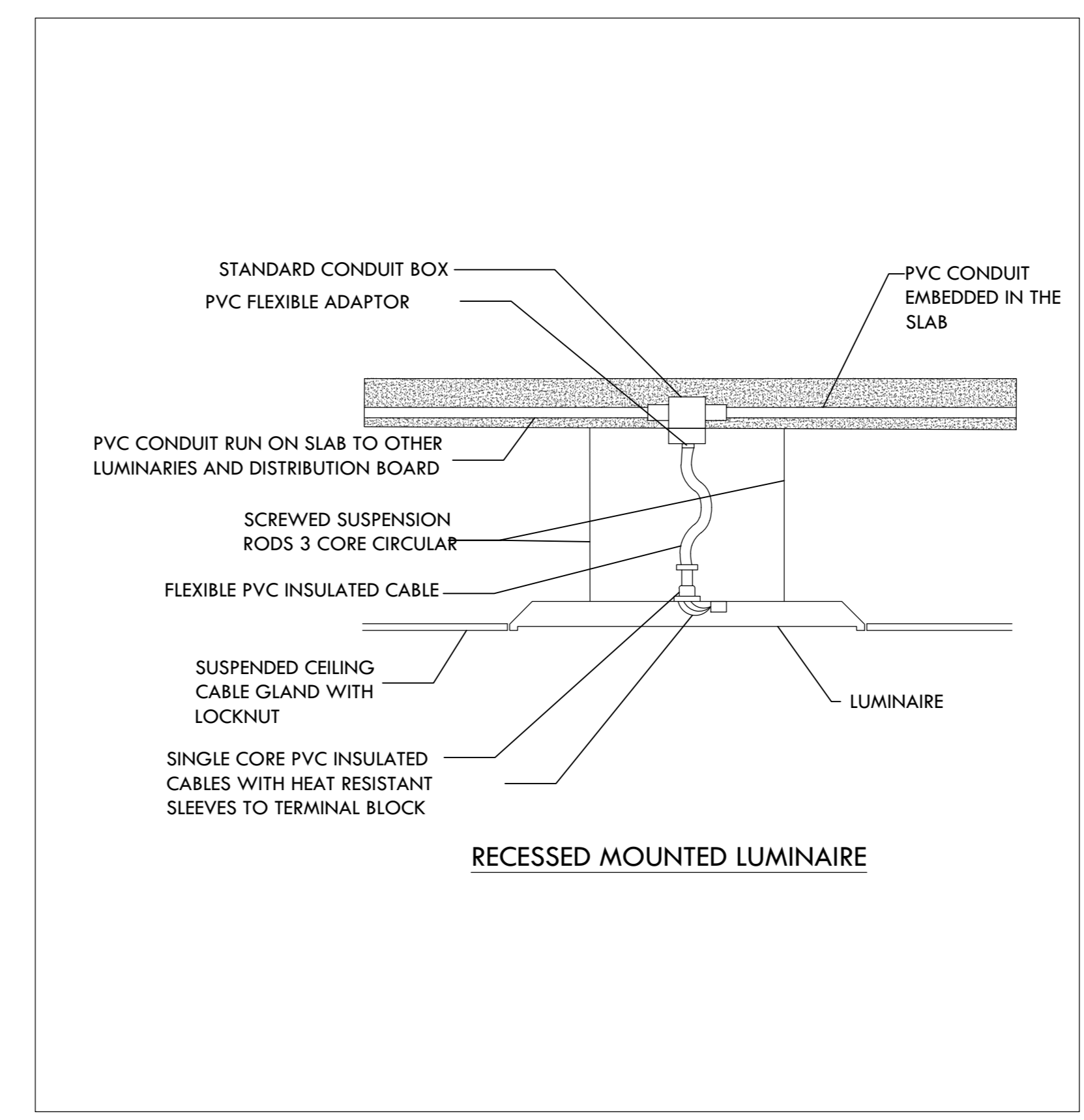
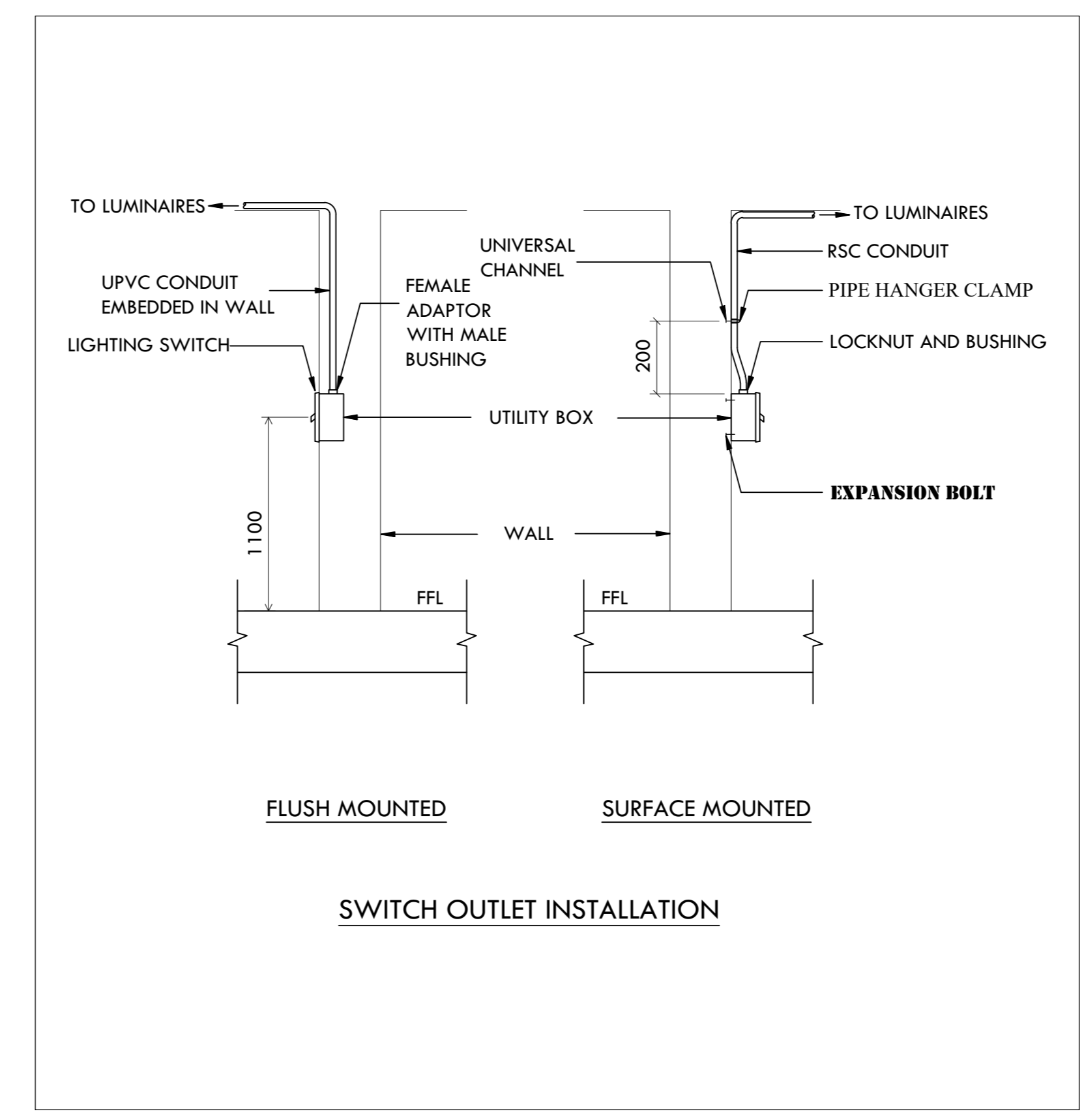
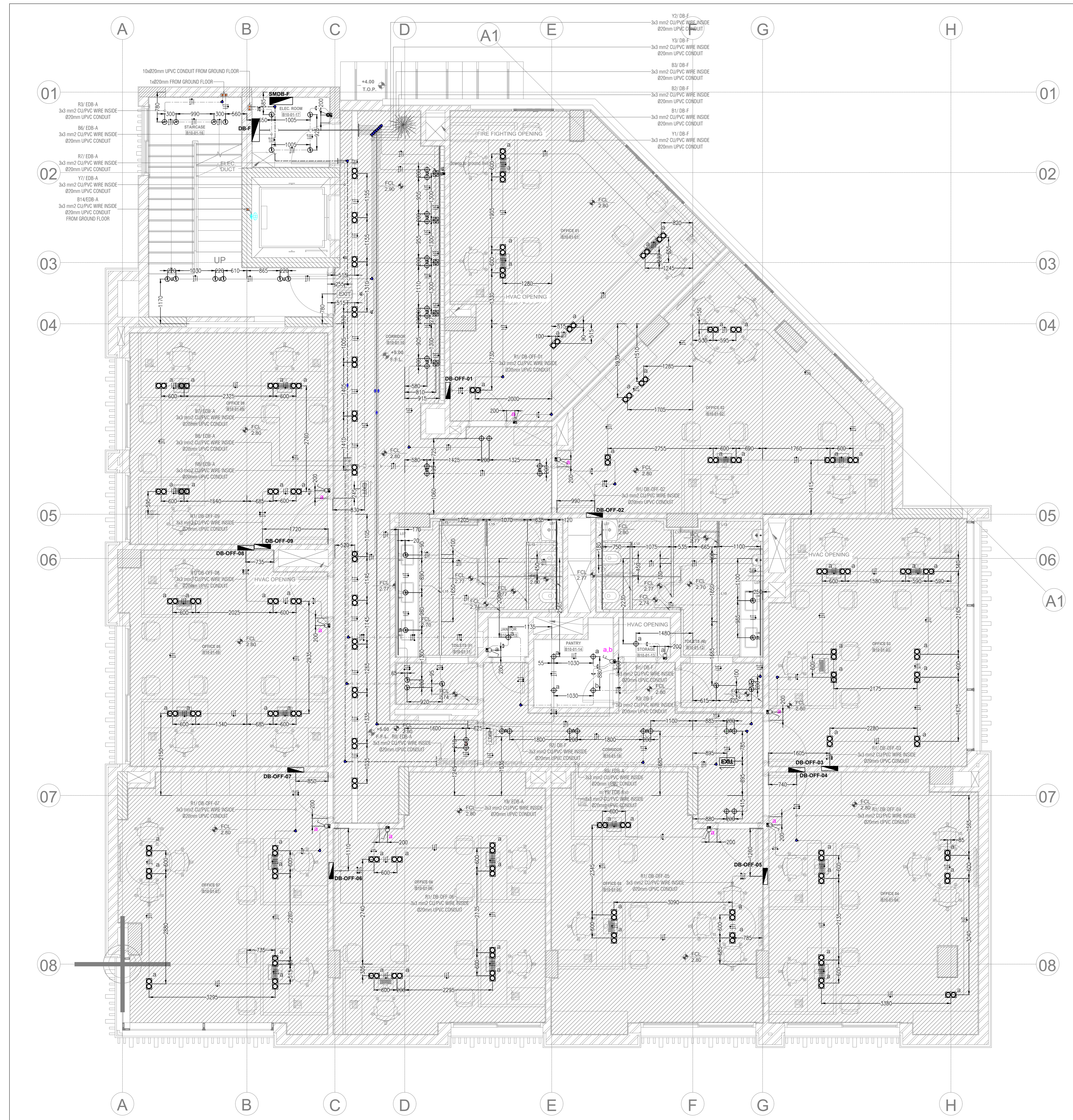
SCALE: 1:20 SHEET SIZE: A0 SHEET NUMBER: 1 OF 3

DRAWN BY: 7H CHECKED BY: 7H APPR: AN DATE: 05/10/2022

SHOP DRAWING

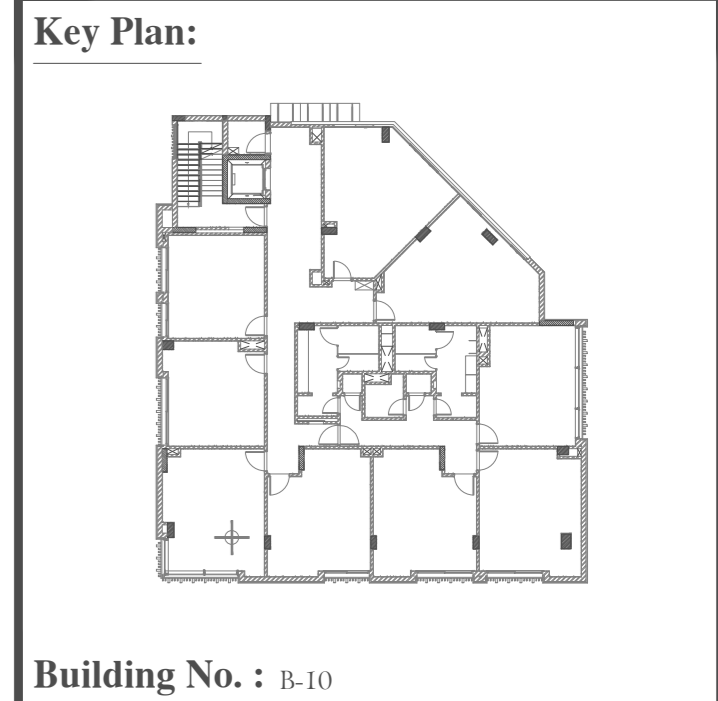
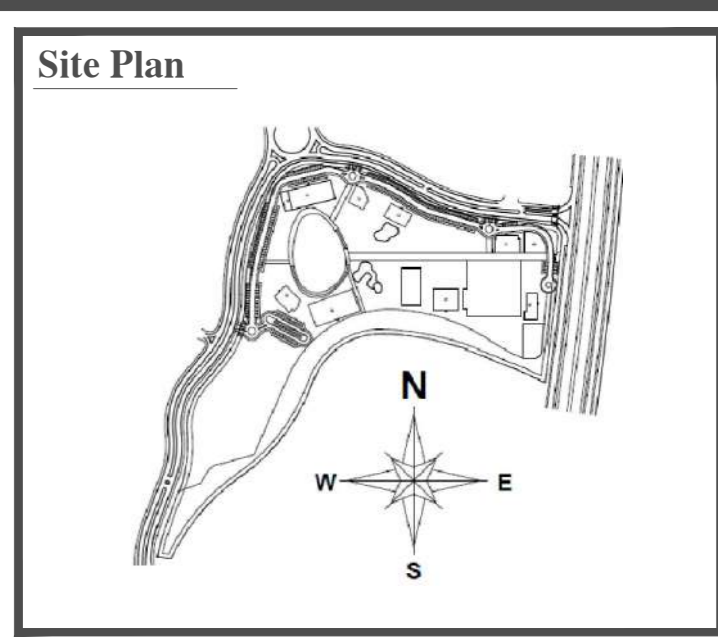
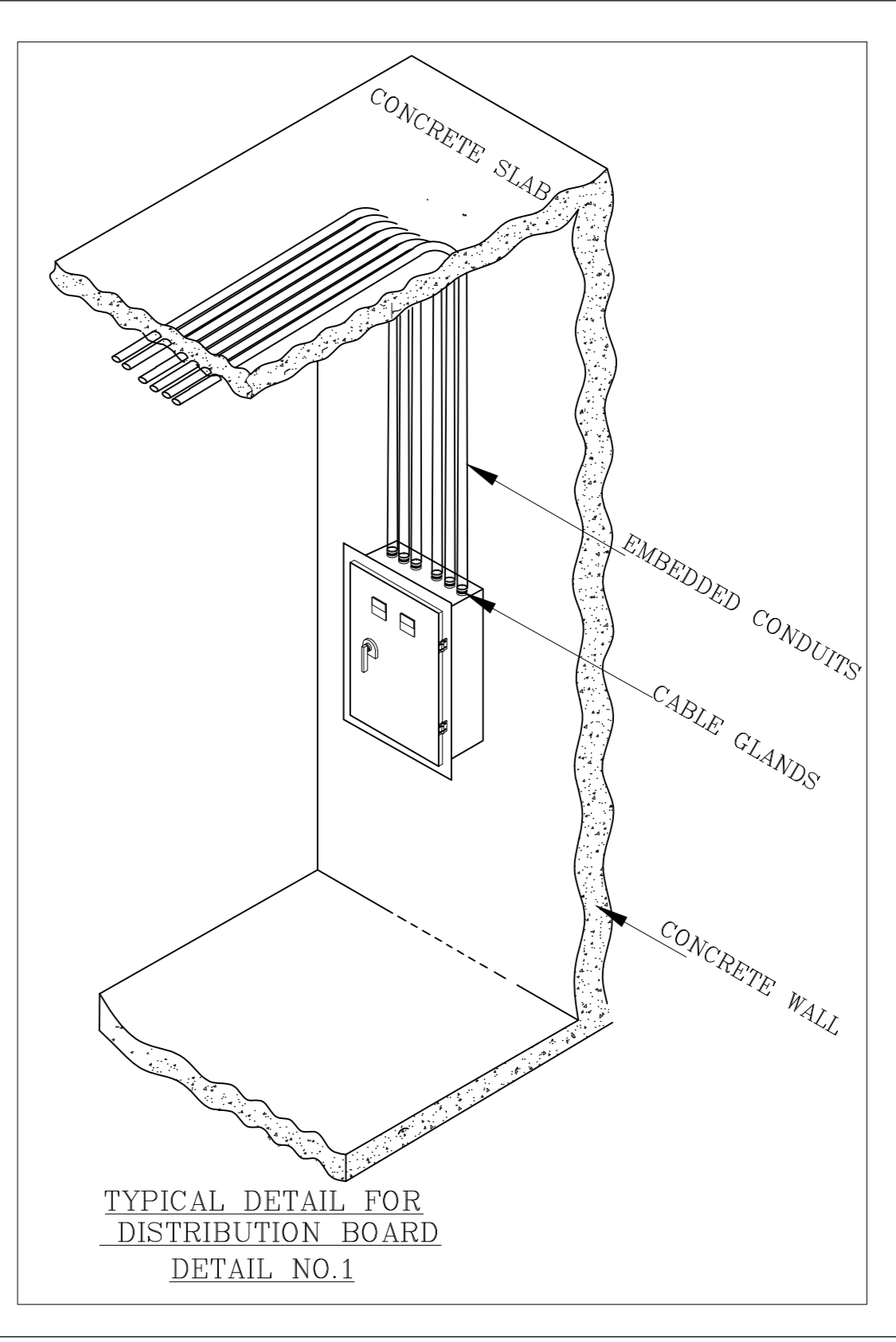
112.0.0.02 L D 010 00 T C1 MH 18 SD 3 0 0 1 011





**LIGHTING LEGEND**

TYPE	SYMBOLS	DESCRIPTION
101	[Symbol]	WALL/PORCELAIN & VERTICAL CONTINUOUS LINE PENDANT LIGHT
102	[Symbol]	LUMINAIRE - POWER = 100W
103	[Symbol]	LUMINAIRE - POWER = 100W (USE OVER PROJECTION)
104	[Symbol]	TRACK SYSTEM
105	[Symbol]	LUMINAIRE - POWER = 100W (USE OVER PROJECTION)
106	[Symbol]	MANUFACTURE SOURCE SIMILAR TO [Symbol] LIGHTING
107	[Symbol]	ELECTRICAL OUTLET
108	[Symbol]	USE LIGHT (CODE LIGHT)
109	[Symbol]	LUMINAIRE - POWER = 100W
110	[Symbol]	MANUFACTURE SOURCE SIMILAR TO [Symbol] LIGHTING
111	[Symbol]	WATER DRAIN
112	[Symbol]	MANUFACTURE SOURCE SIMILAR TO [Symbol] LIGHTING
113	[Symbol]	Track mounted luminaire
114	[Symbol]	LUMINAIRE - POWER = 100W
115	[Symbol]	MANUFACTURE SOURCE SIMILAR TO [Symbol] LIGHTING
116	[Symbol]	CONDUIT
117	[Symbol]	CONDUIT
118	[Symbol]	CONDUIT
119	[Symbol]	CONDUIT
120	[Symbol]	CONDUIT
121	[Symbol]	CONDUIT
122	[Symbol]	CONDUIT
123	[Symbol]	CONDUIT
124	[Symbol]	CONDUIT
125	[Symbol]	CONDUIT
126	[Symbol]	CONDUIT
127	[Symbol]	CONDUIT
128	[Symbol]	CONDUIT
129	[Symbol]	CONDUIT
130	[Symbol]	CONDUIT
131	[Symbol]	CONDUIT
132	[Symbol]	CONDUIT
133	[Symbol]	CONDUIT
134	[Symbol]	CONDUIT
135	[Symbol]	CONDUIT
136	[Symbol]	CONDUIT
137	[Symbol]	CONDUIT
138	[Symbol]	CONDUIT
139	[Symbol]	CONDUIT
140	[Symbol]	CONDUIT
141	[Symbol]	CONDUIT
142	[Symbol]	CONDUIT
143	[Symbol]	CONDUIT
144	[Symbol]	CONDUIT
145	[Symbol]	CONDUIT
146	[Symbol]	CONDUIT
147	[Symbol]	CONDUIT
148	[Symbol]	CONDUIT
149	[Symbol]	CONDUIT
150	[Symbol]	CONDUIT
151	[Symbol]	CONDUIT
152	[Symbol]	CONDUIT
153	[Symbol]	CONDUIT
154	[Symbol]	CONDUIT
155	[Symbol]	CONDUIT
156	[Symbol]	CONDUIT
157	[Symbol]	CONDUIT
158	[Symbol]	CONDUIT
159	[Symbol]	CONDUIT
160	[Symbol]	CONDUIT
161	[Symbol]	CONDUIT
162	[Symbol]	CONDUIT
163	[Symbol]	CONDUIT
164	[Symbol]	CONDUIT
165	[Symbol]	CONDUIT
166	[Symbol]	CONDUIT
167	[Symbol]	CONDUIT
168	[Symbol]	CONDUIT
169	[Symbol]	CONDUIT
170	[Symbol]	CONDUIT
171	[Symbol]	CONDUIT
172	[Symbol]	CONDUIT
173	[Symbol]	CONDUIT
174	[Symbol]	CONDUIT
175	[Symbol]	CONDUIT
176	[Symbol]	CONDUIT
177	[Symbol]	CONDUIT
178	[Symbol]	CONDUIT
179	[Symbol]	CONDUIT
180	[Symbol]	CONDUIT
181	[Symbol]	CONDUIT
182	[Symbol]	CONDUIT
183	[Symbol]	CONDUIT
184	[Symbol]	CONDUIT
185	[Symbol]	CONDUIT
186	[Symbol]	CONDUIT
187	[Symbol]	CONDUIT
188	[Symbol]	CONDUIT
189	[Symbol]	CONDUIT
190	[Symbol]	CONDUIT
191	[Symbol]	CONDUIT
192	[Symbol]	CONDUIT
193	[Symbol]	CONDUIT
194	[Symbol]	CONDUIT
195	[Symbol]	CONDUIT
196	[Symbol]	CONDUIT
197	[Symbol]	CONDUIT
198	[Symbol]	CONDUIT
199	[Symbol]	CONDUIT
200	[Symbol]	CONDUIT



**GENERAL NOTES:**

- ALL DIMENSIONS ARE IN MILLIMETER EXCEPT OTHERWISE INDICATED IN THE DRAWINGS
- FINAL CIRCUIT NUMBER, AND SIZE SHALL BE IN ACCORDANCE WITH PANEL BOARD SCHEDULE
- PULL BOXES SHALL BE PROVIDED EVERY 15M OR AFTER TWO 90° BENDS
- MINIMUM CONDUIT SIZE SHALL BE 20MM, AND CONDUITS FILLING RATIO SHALL NOT EXCEED 40%.

**APPROVAL STATUS**

CODE	DESCRIPTION	CODE	DESCRIPTION
A	APPROVED	D	DISAPPROVED
B	APPROVED AS NOTED	E	FOR INFORMATION ONLY
C	REVISED AS RESUBMITTED	F	REVIEW IS NOT REQUIRED

**DESIGN/SHOP DRAWINGS REFERENCES**

NO.	DRAWING REFERENCE	DRAWING TITLE	REV.
001	B10-EG-00	ELECTRICAL LEGEND	001
002	B10-EG-01	FIRST FLOOR PLAN (LIGHTING SYSTEM)	001
003	B10-EG-02	ELECTRICAL LIGHTING LAYOUT	001
004	B10-EG-03	FIRST FLOOR PLAN (SINGLE LINE DIAGRAM FOR PLANS)	001
005	B10-EG-04	FIRST FLOOR PLAN (SINGLE LINE DIAGRAM FOR PLANS)	001

**PROJECT: VILLETTE NEW CAIRO (S-CLUB)**

**VILLETTE NEW CAIRO**

**Owner: SODIC**

Sixth of October Development and Investment Company  
Km 38, Cairo/Alexandria Desert Road  
P.O.Box 119 Sheikh Zayed City, Giza, Egypt  
www.sodic.com

**Main Consultant: SODIC DESIGN & ENGINEERING**

**LIFE PROTECTION SAFETY CONSULTANT: SAM-LINE CONSULT**

**MEP Consultant: MAF CONSULT**

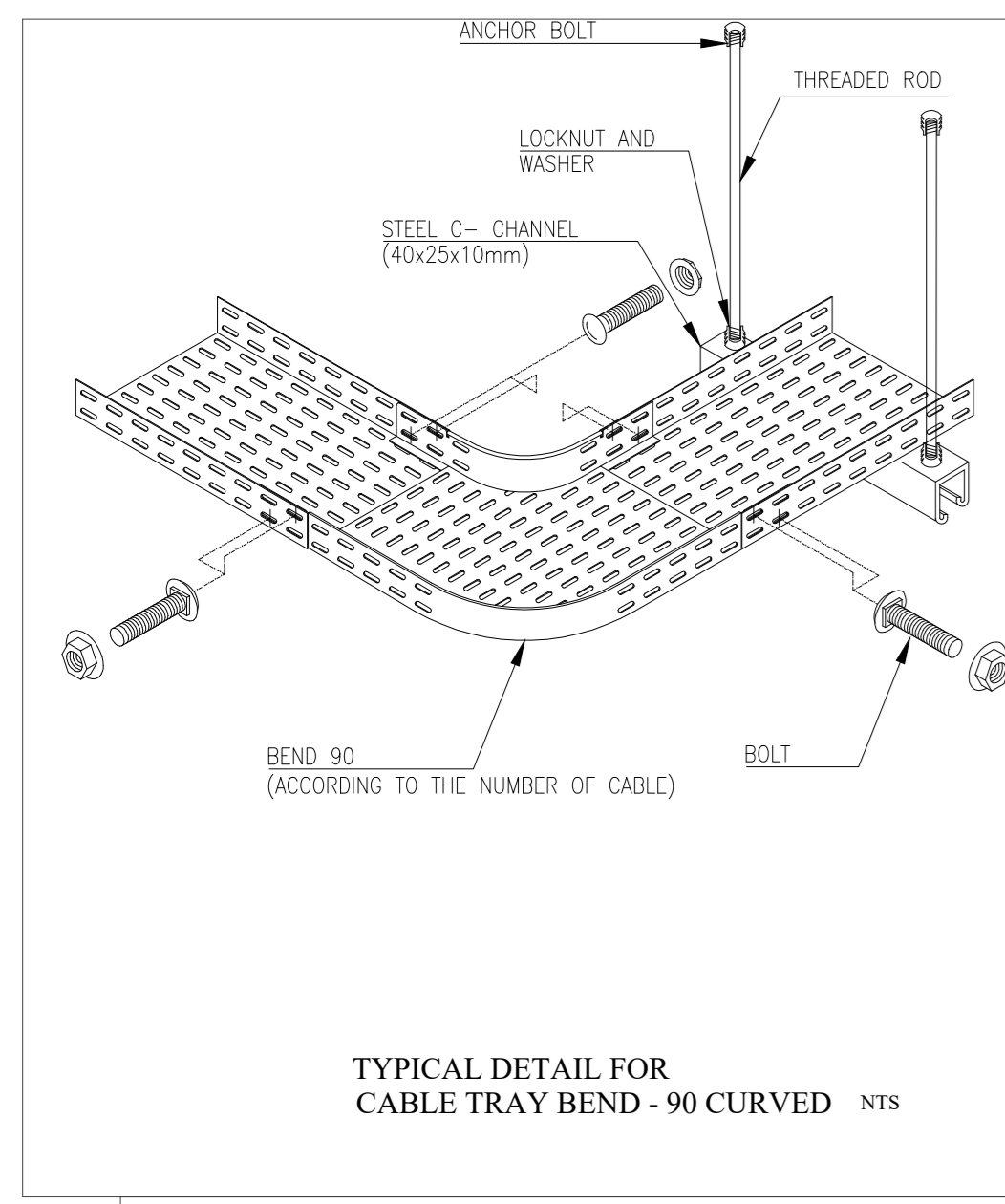
**Structural Consultant: rmc**

**Contracting Company: SHAMS FOR CONTRACTING**

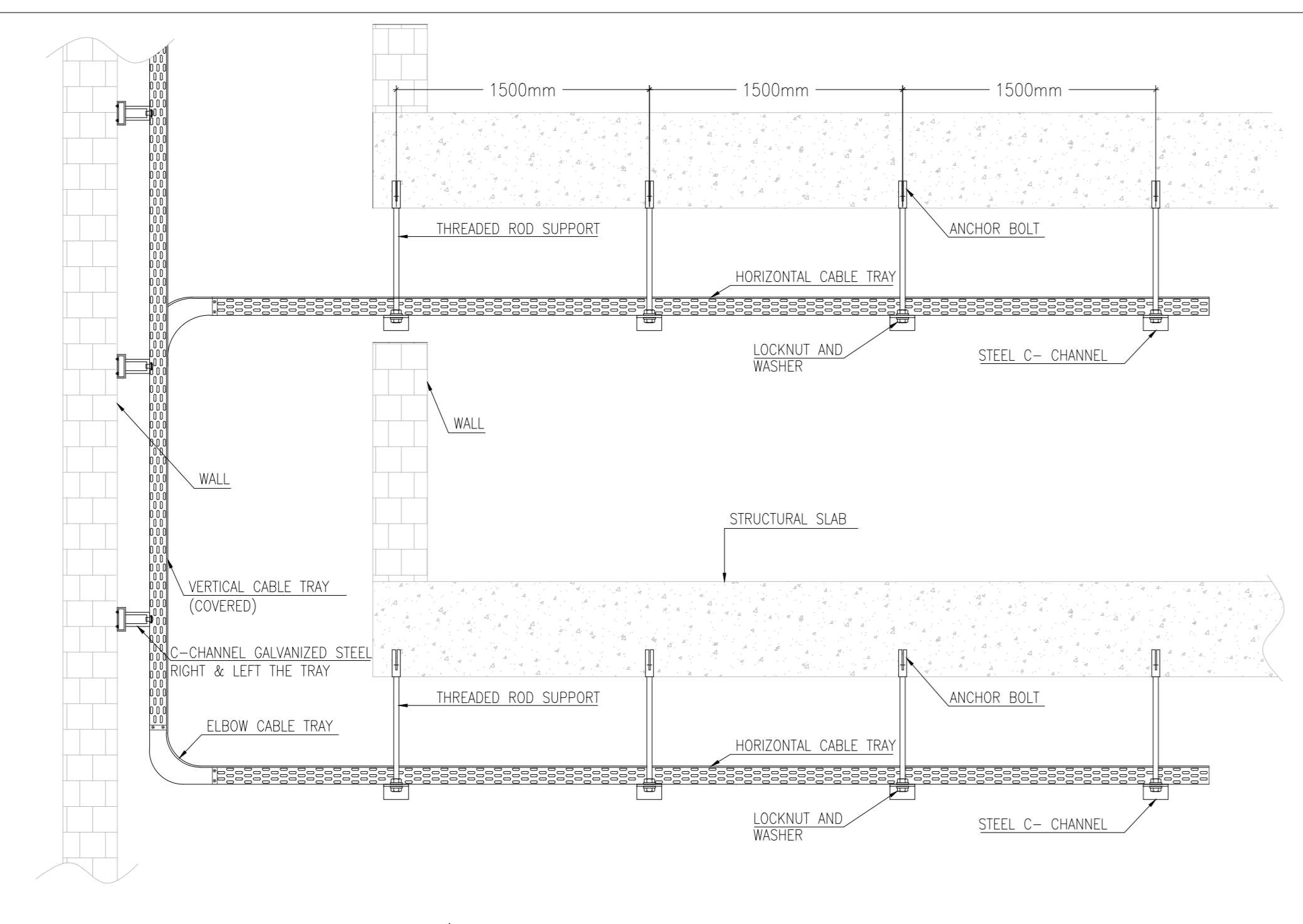
**DRAWING TITLE: BUILDING B10 (ADM) FIRST FLOOR LIGHTING SYSTEM LAYOUT**

**SCALE: 1:50**

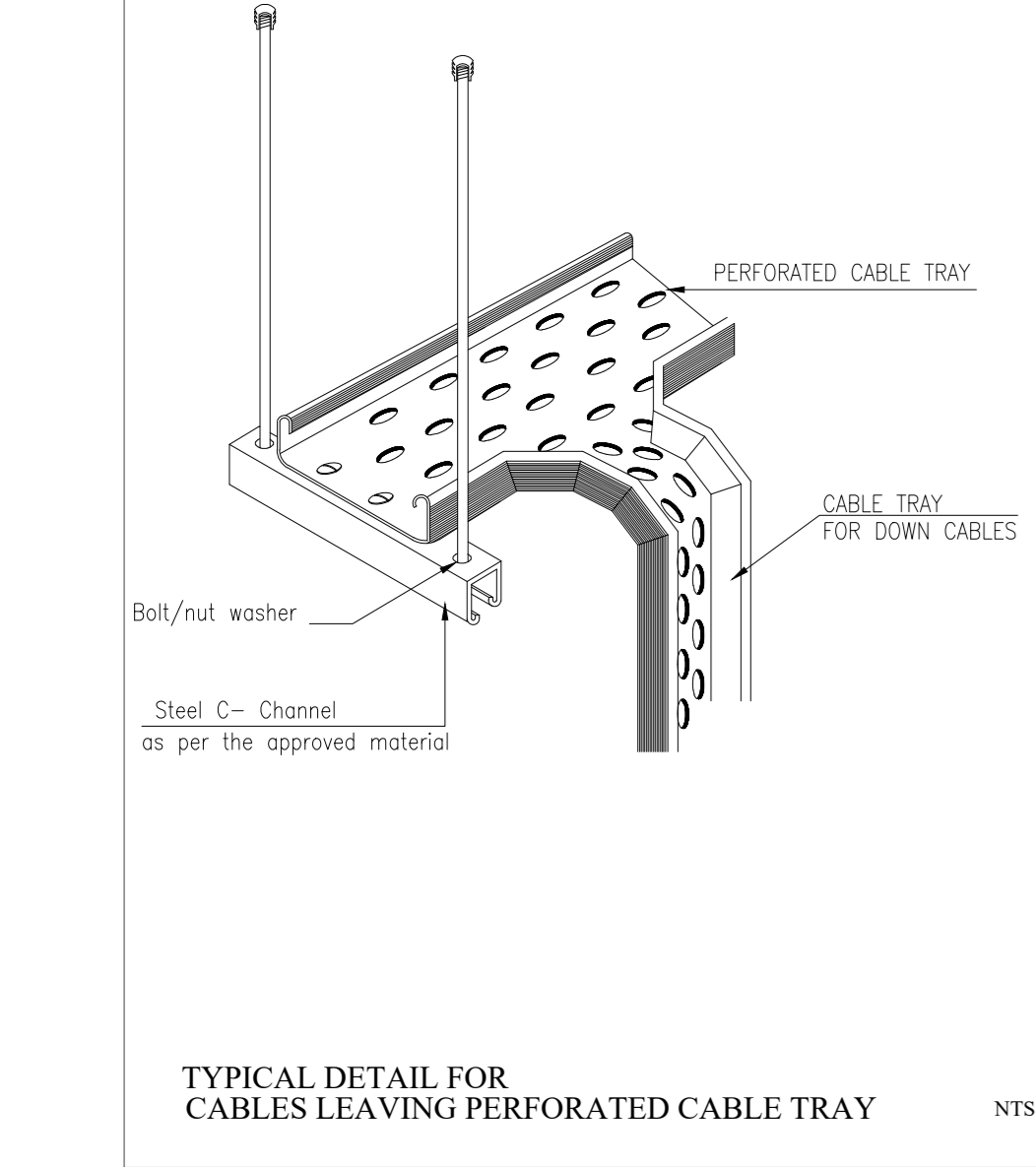
**DRAWING No. 1089-DWS-SCC-RMC-10-ELT-FF-00100**



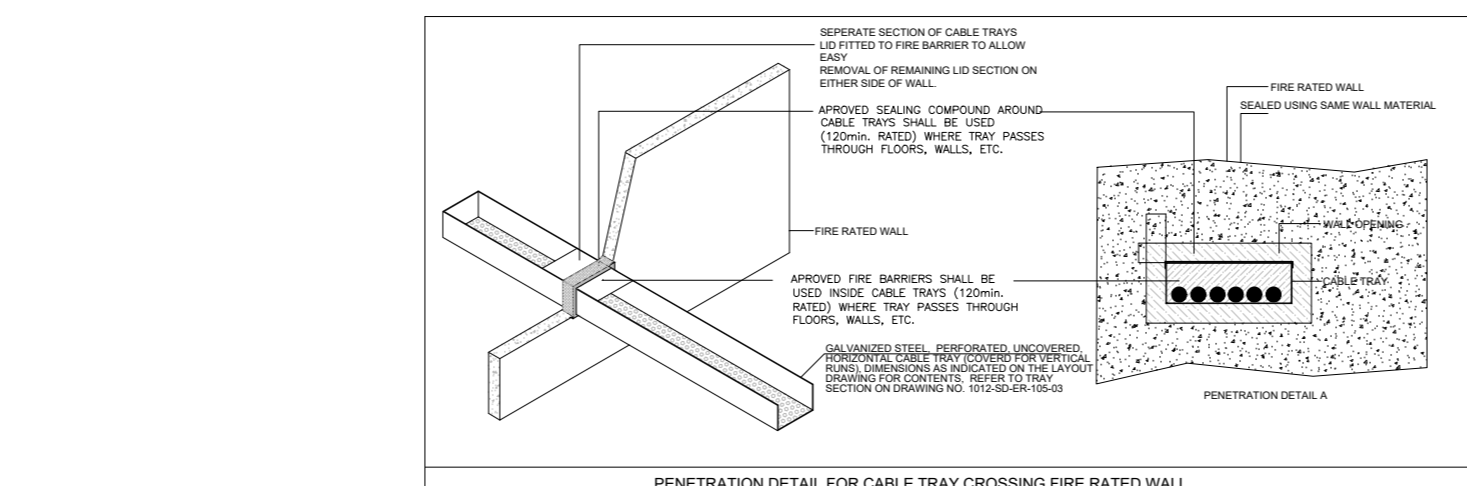
TYPICAL DETAIL FOR CABLE TRAY BEND - 90 CURVED NTS



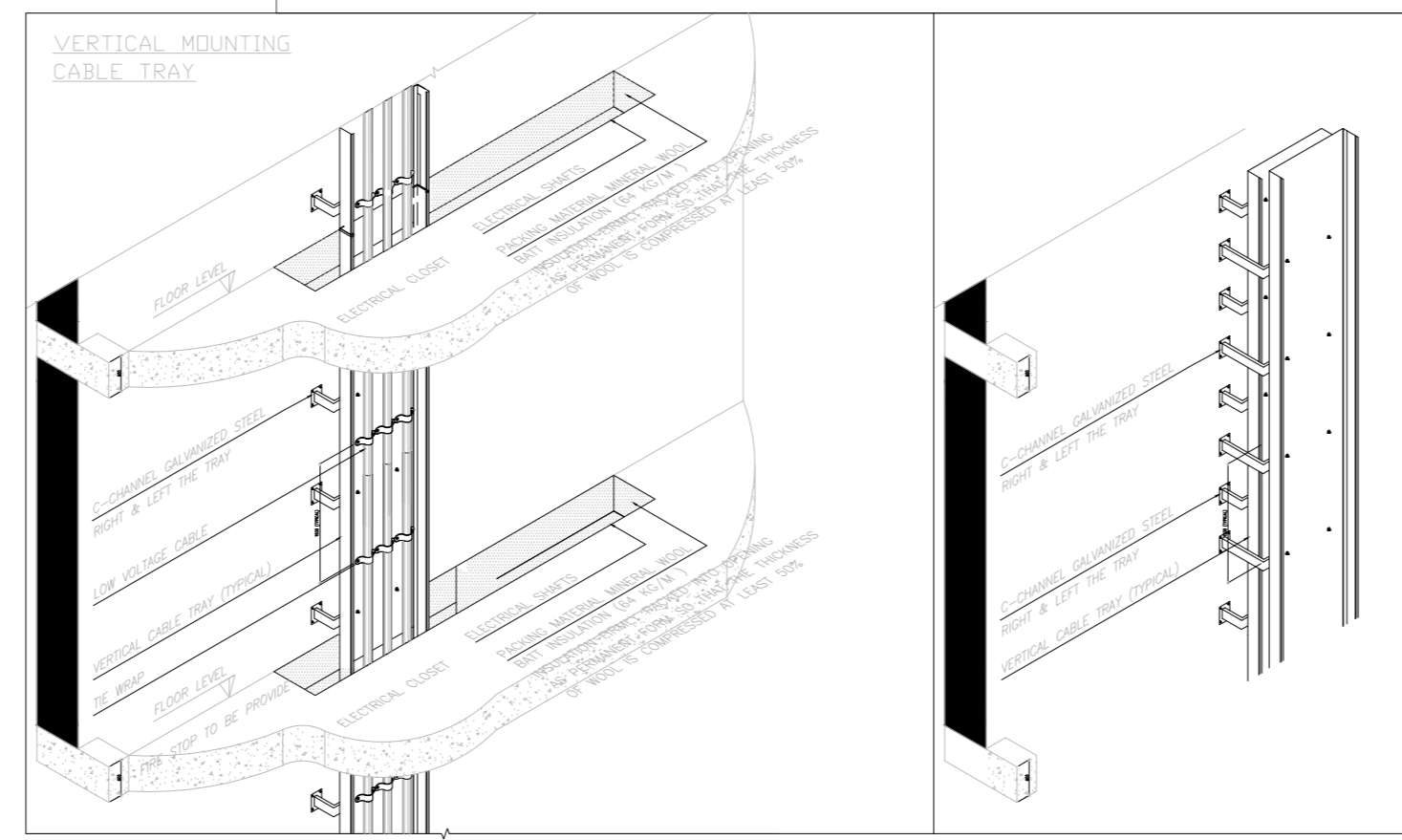
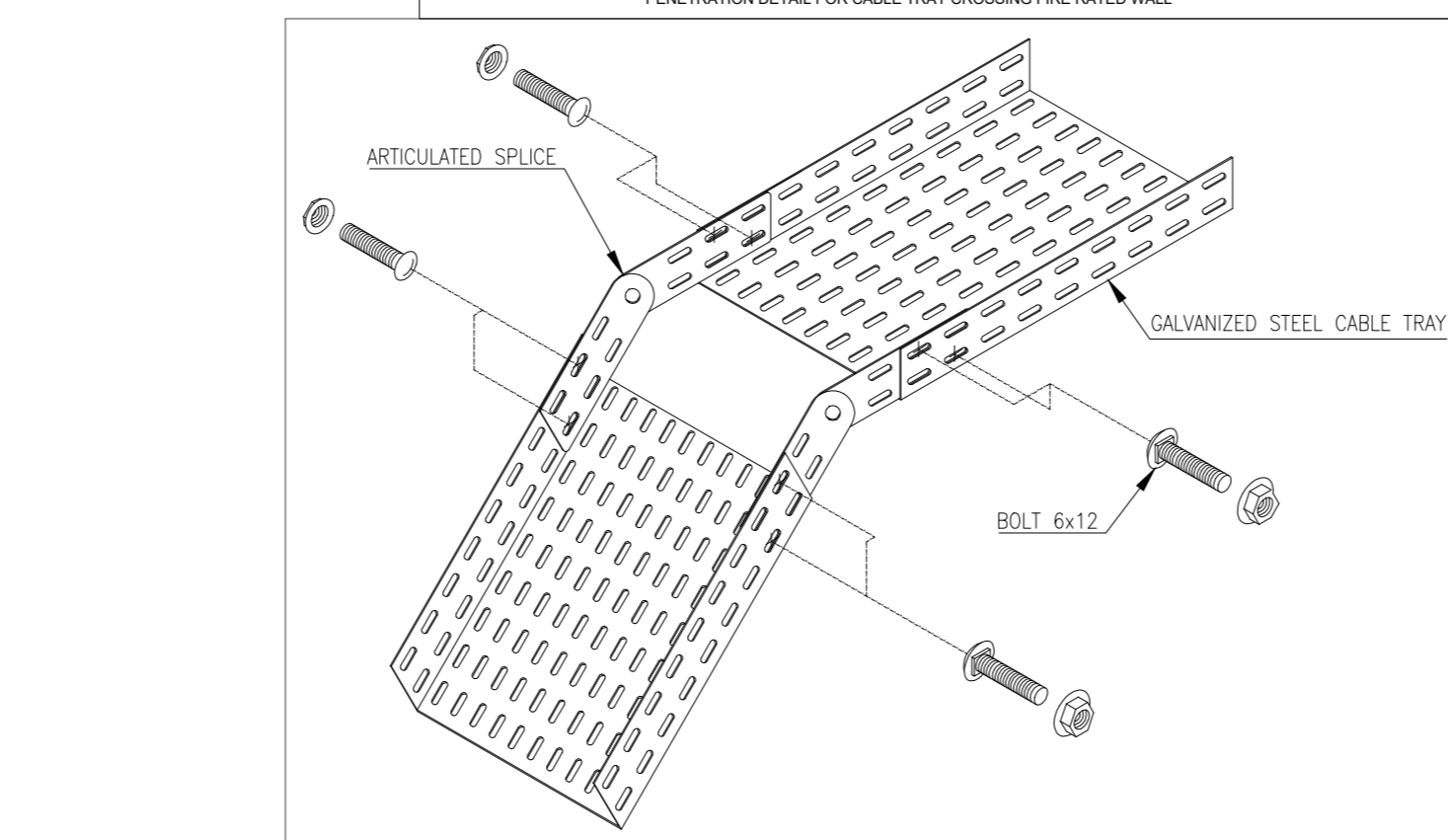
TYPICAL INSTALLATION DETAIL FOR EARTH FOR CABLE TRAY OR TRUNK



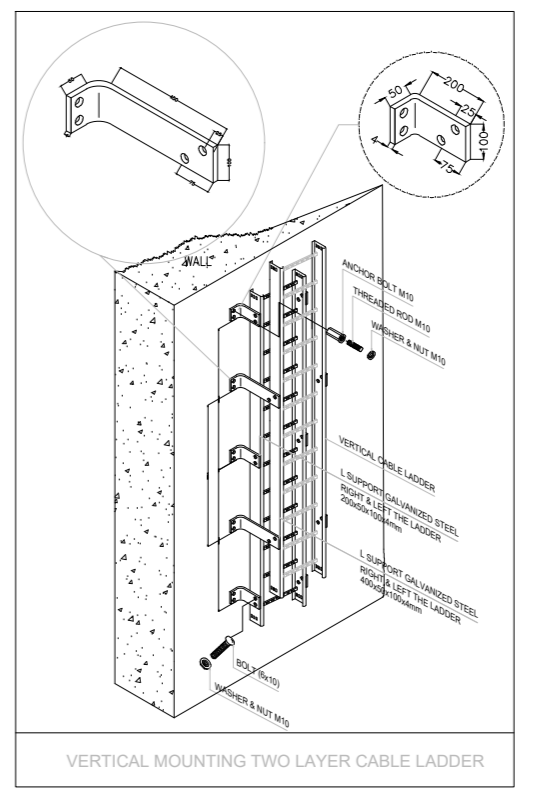
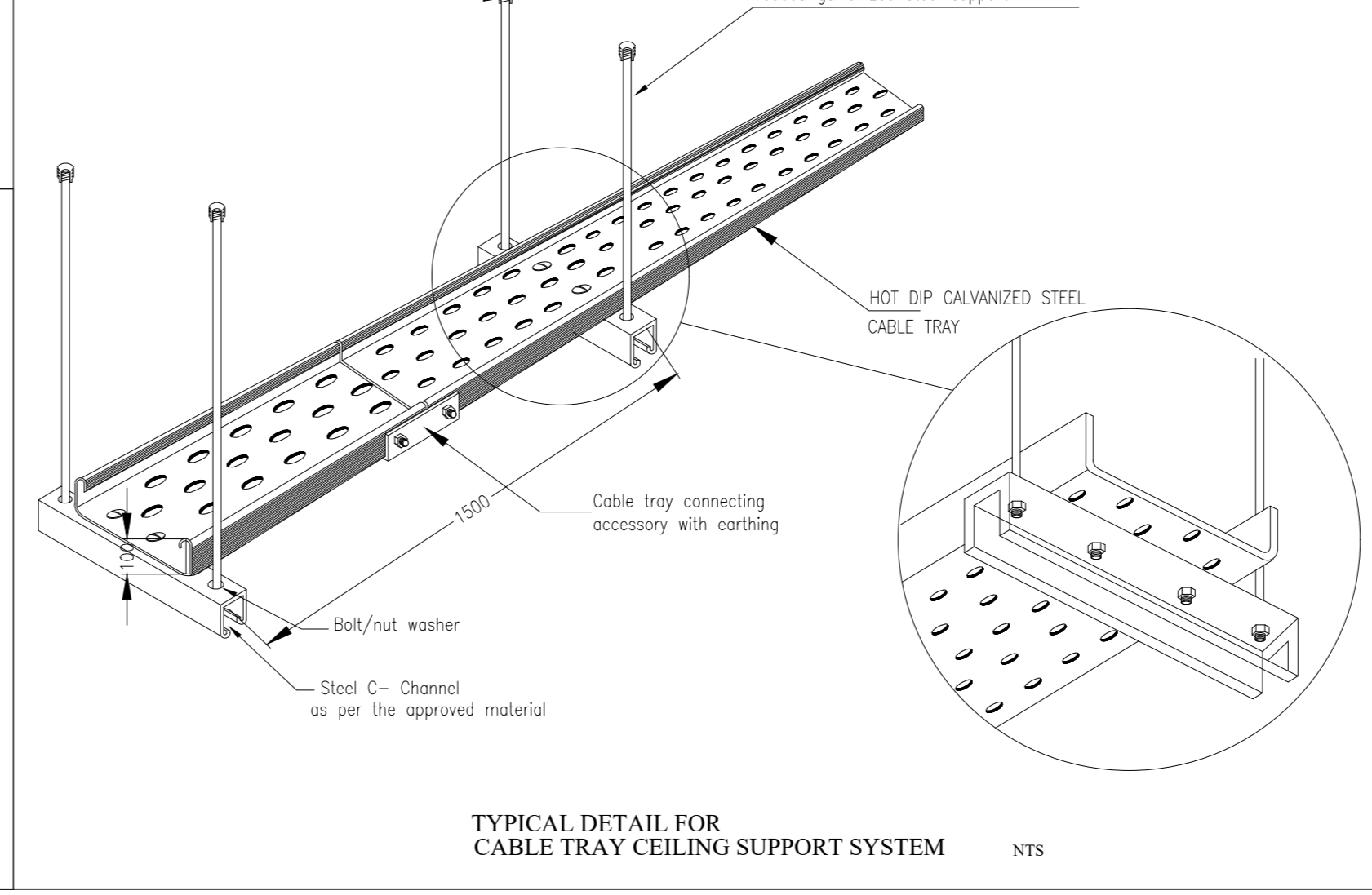
TYPICAL DETAIL FOR CABLES LEAVING PERFORATED CABLE TRAY NTS



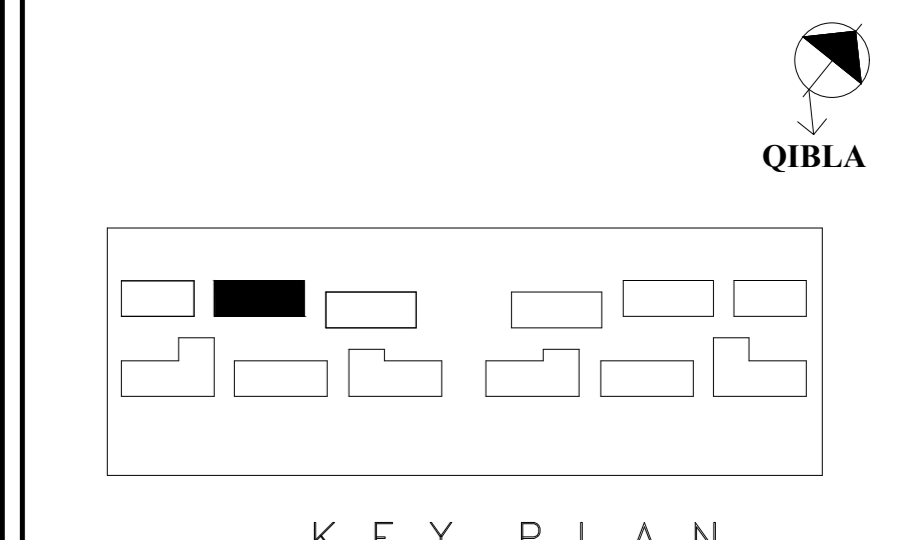
TYPICAL DETAIL FOR ARTICLED SPLICING FOR CABLE TRAY NTS



TYPICAL DETAIL FOR CABLE TRAY CEILING SUPPORT SYSTEM NTS

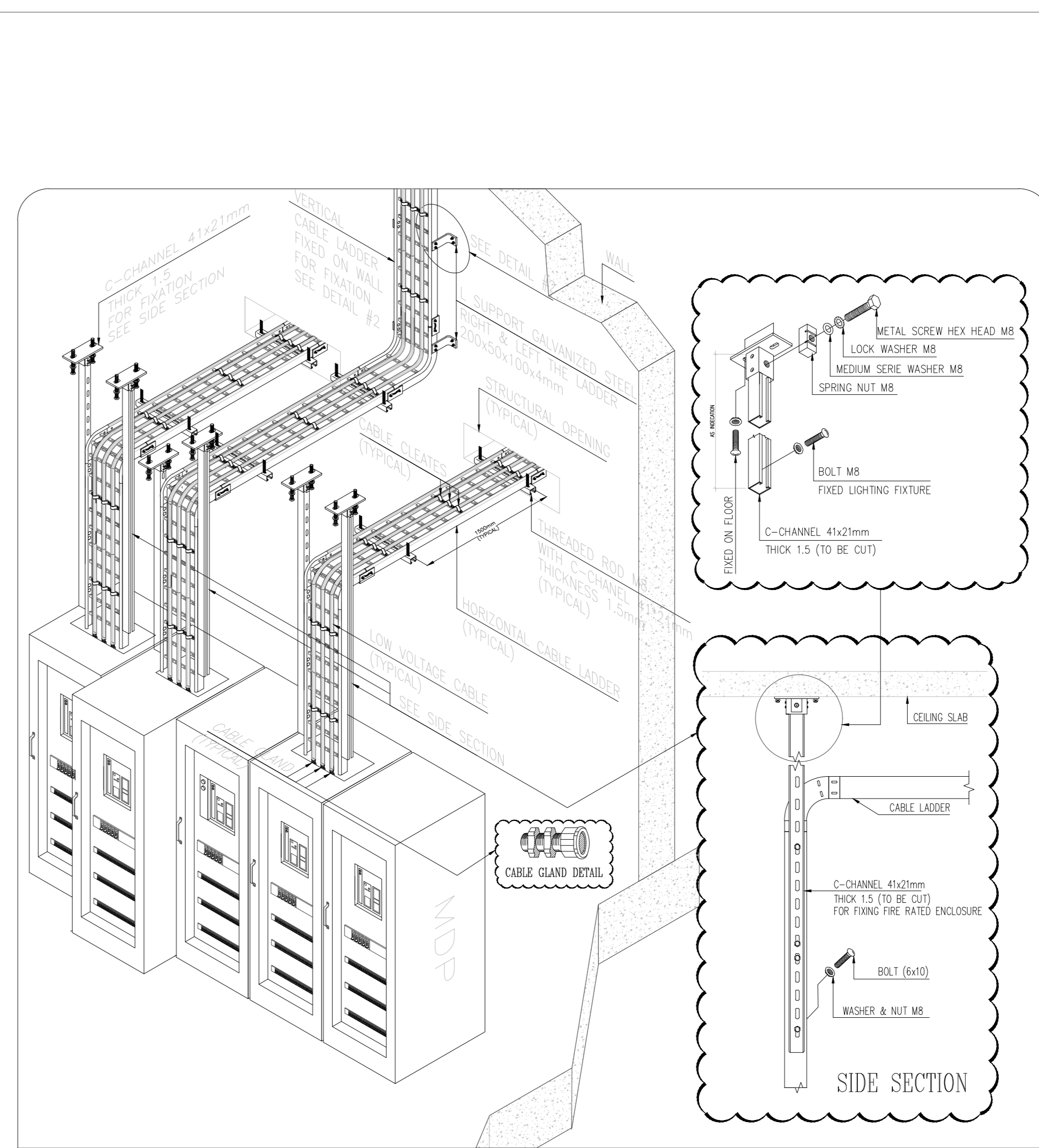
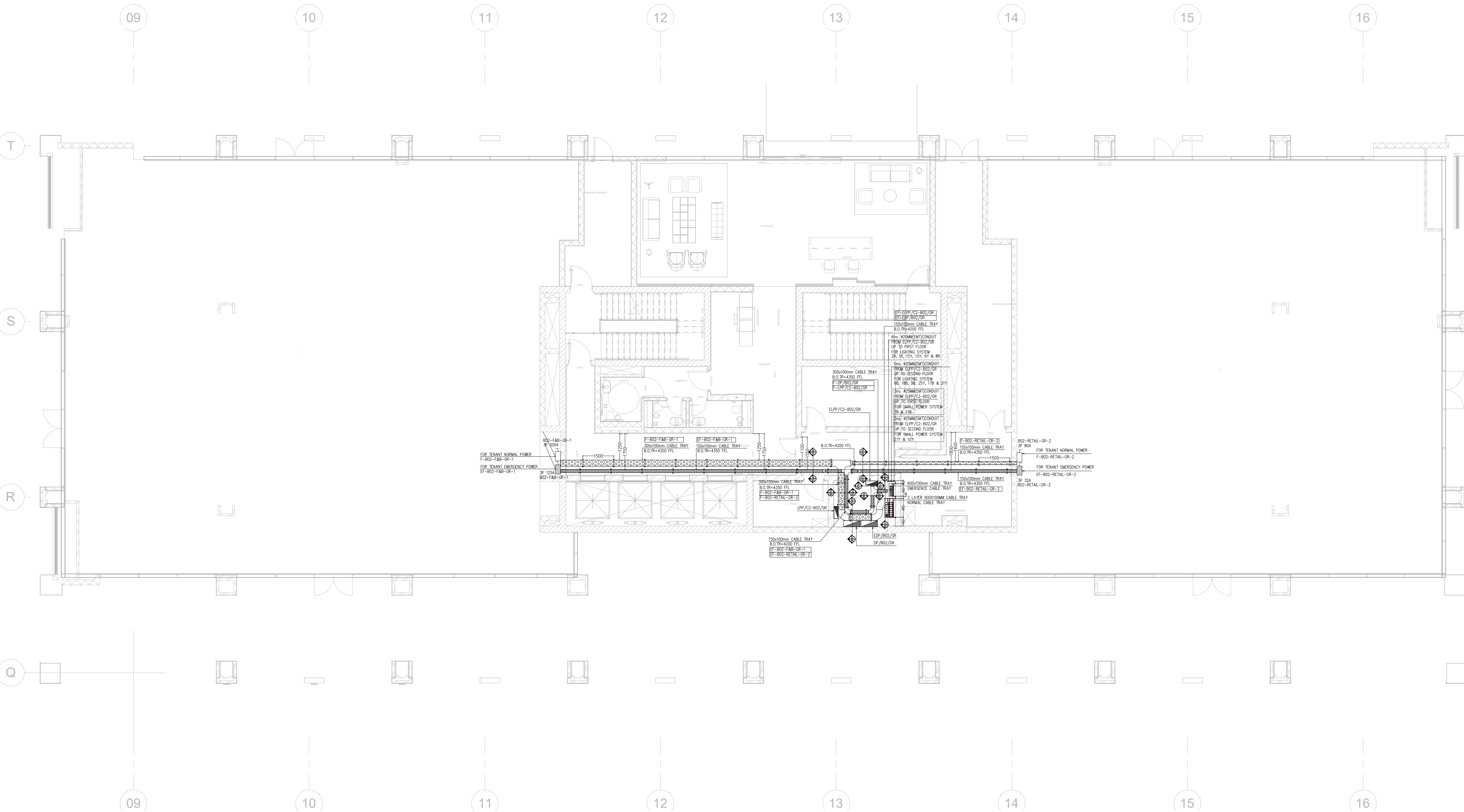


TYPICAL INSTALLATION DETAIL FOR VERTICAL MOUNTING CABLE LADDER



KEY PLAN

- NOTES:**
1. ALL LEVELS & DIMENSIONS ARE IN MILLIMETERS.
  2. THIS DRAWING IS READ IN CONJUNCTION WITH OTHER RELEVANT ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND RELEVANT SECTIONS OF THE SPECIFICATIONS. ONLY APPROVED MATERIALS SHALL BE USED.
  3. EARTHING STRIPS SHALL BE CONNECTED BETWEEN TRAY SUCCESSIVE PARTS TO ENSURE CONTINUITY OF EARTHING ALL OVER THE TRAY LENGTH.
  4. THE MINIMUM CLEARANCE BETWEEN LV CABLE TRAY AND LOW CURRENT CABLE TRAY WILL BE 200MM (AS MINIMUM).
  5. THE TYPE OF CABLE TRAYS & ASSOCIATED ACCESSORIES SHALL BE AS PER APPROVED MATERIAL SUBMITTALS.
  6. ALL CABLE TRAYS DIMENSIONS, MATERIAL, STEEL THICKNESS, ACCESSORIES, ETC. SHALL BE AS PER THE APPROVED MATERIAL SUBMITTAL.
  7. TRAYS SHALL NOT PRESENT SHARP EDGES, BURRS OR PROJECTIONS HARMFUL TO THE INSULATION OR JACKETS OF CABLES.
  8. CABLE TRAY SECTIONS SHALL BE BONDED USING SUITABLE BOLTED MECHANICAL CONNECTORS OR BONDING JUMPERS.
  9. EXACT CABLE TRAY LOCATION, INVERTED LEVELS SHALL BE SUBJECT TO THE APPROVAL OF THE FLOOR COMPOSITE COORDINATION DRAWING, THE SUBJECT DRAWING THEN RESUBMITTED SEPARATELY.
  10. FINAL CROSS SECTIONAL HEIGHTS SHALL BE ADJUSTED ACCORDING TO THE SUBMITTED VOLTAGE DROP CALCULATION.
  11. FINAL PANEL SIZES AND LOCATIONS ARE SUBJECT TO THE APPROVED MANUFACTURER SHOP DRAWINGS, CABLE ROUTES TO BE ADJUSTED ACCORDINGLY.
  12. APPROVED FIRE BARRIERS SHALL BE USED (120min. RATED) WHERE TRAY PASSES THROUGH FLOORS, WALLS, ETC.
  13. PVC-METAL COVERED SADDLES SHALL BE USED AND ALL CABLES SHALL BE CLAMPED TO THE TRAYS EACH 3m HORIZONTAL RUN AND EACH 0.9m VERTICAL RUN.
  14. WARNING SIGNS, PLASTIC END CAPS SHALL NOT BE USED.
  15. CABLE IDENTIFICATION SCHEME SHALL BE USED AND THE RESPECTIVE MATERIAL SUBMITTAL SHALL BE ADDRESSED TO EGS FOR REVIEW.
  16. CABLES PENDING RADIUS SHALL NOT BE LESS THAN TEN TIMES OF THE CABLE DIAMETER.
  17. CABLE TRAY SUPPORTS SHALL BE PLACED AT MAXIMUM EACH 1.5m INTERVAL AND SHALL BE WITHIN 50mm OF EACH ELBOW AND 1 CONNECTION POINT UNLESS OTHERWISE ADVISED BY THE CABLE TRAY SYSTEM MANUFACTURER.
  18. CABLE TRAY VERTICAL SPACING SHALL NOT BE LESS THAN 300mm FROM CEILING. FINAL SPACING IS SUBJECT TO THE APPROVED COORDINATION DRAWING.
  19. NO SITE FABRICATION FOR ANY OF THE CABLE TRAY ACCESSORIES SHALL BE MADE.
  20. VERTICAL CABLE TRAY RUNS SHALL BE COVERED.
  21. ALL CABLE TRAYS SHALL BE PROPERLY GROUNDED AND GROUNDING CONTINUATION SHALL BE BY MEANS OF LOW RESISTANCE COPPER CONDUCTOR.
  22. EARTHING STRIPS SHALL BE CONNECTED BETWEEN TRAY SUCCESSIVE PARTS TO ENSURE CONTINUITY OF EARTHING ALL OVER THE TRAY LENGTH.
  23. FIRE STOPPER SHALL BE INSTALLED BETWEEN NORMAL AND EMERGENCY CABLES INSTALLED ON THE SAME CABLE TRAY.
  24. CALCULATION OF CABLE TRAY SUPPORTS, SYSTEM MATERIAL SUBMITTAL SHALL BE SUBMITTED AFTER APPROVAL OF ELECTRICAL MATERIAL SUBMITTAL WHICH ARE CURRENTLY HOLD.
  25. FINAL SIZE OF CABLE TRAY WILL BE BASED ON APPROVED CABLE SIZES AFTER FINISHING SELECTIVITY STUDIES BY PANEL SUPPLIER, VOLTAGE DROP AND SHORT CIRCUIT CALCULATION.
  26. FINAL UPDATED FEEDER DATA WILL BE PROVIDED AFTER APPROVAL OF CABLE SIZES AFTER SELECTIVITY STUDY.
  27. COMPOSITE PLANS SHOWING ALL DISCIPLINES ELECTRICAL, MECHANICAL, STRUCTURAL AND WHICH WILL BE SUBMITTED AFTER ISSUING ALL DISCIPLINES DRAWING.
  28. SUPPLIER OF BUSDUCT SHALL PROVIDE COMPLETE SHOPDRAWING FOR BUSDUCT SYSTEM SHOWING ALL PARTS FITTING TO BE CONNECTED TO THE BUSDUCT SYSTEM.
  29. ELECTRICAL WORKS SHALL BE BASED ON FINAL DRAWINGS OF ARCHITECTURAL, STRUCTURAL DRAWINGS.
  30. VERTICAL DISTANCE BETWEEN BOTTOM OF SLAB AND THE FIRST CABLE TRAY SHALL NOT BE LESS THAN 200 mm.
  31. COMPOSITE PLANS SHOWING ALL DISCIPLINES ELECTRICAL, MECHANICAL, STRUCTURAL AND WHICH WILL BE SUBMITTED AFTER ISSUING ALL DISCIPLINES DRAWING.
  32. SUPPLIER OF BUSDUCT SHALL PROVIDE COMPLETE SHOPDRAWING FOR BUSDUCT SYSTEM SHOWING ALL PARTS FITTING TO BE CONNECTED TO THE BUSDUCT SYSTEM.
  33. CABLE TRAY SHALL BE CONNECTED TO THE NEAREST EARTHING BAR AT MAXIMUM SPACING OF 50m.



TYPICAL INSTALLATION DETAIL FOR OUT GOING CABLE LADDER FROM MDP

**REFERENCE**

Drawing Description	Drawing Number
GROUND FLOOR-BUILDING 02- POWER SYSTEM	ABP-B02-EP-101-00

**ISSUE DETAILS**

NO	DATE	FOR APPROVAL	A.S.	Y.M.	A.M.
00	20-03-2020				

**OWNER:**  
**Capital Group Properties**

**CONCEPTUAL DESIGNER:**  
**SQUIRE & PARTNERS**  
 77 Wicklow Street London WC1X 9JY  
 T: 020 7278 8888 F: 020 7278 0499  
 info@squirepartners.com  
 www.squirepartners.com

**DESIGNER:**  
**rmc raafat.miller.consulting**  
 architects & engineers  
 6 Route Hama St. Third Floor  
 Dokki, 12311  
 Giza, Egypt  
 Tel: (202) 3760 7928  
 Fax: (202) 3760 7933

**CONSULTANT:**  
**rmc raafat.miller.consulting**  
 architects & engineers  
 6 Route Hama St. Third Floor  
 Dokki, 12311  
 Giza, Egypt  
 Tel: (202) 3760 7928  
 Fax: (202) 3760 7933

**CONTRACTOR:**  
**GAMA CONSTRUCTION**

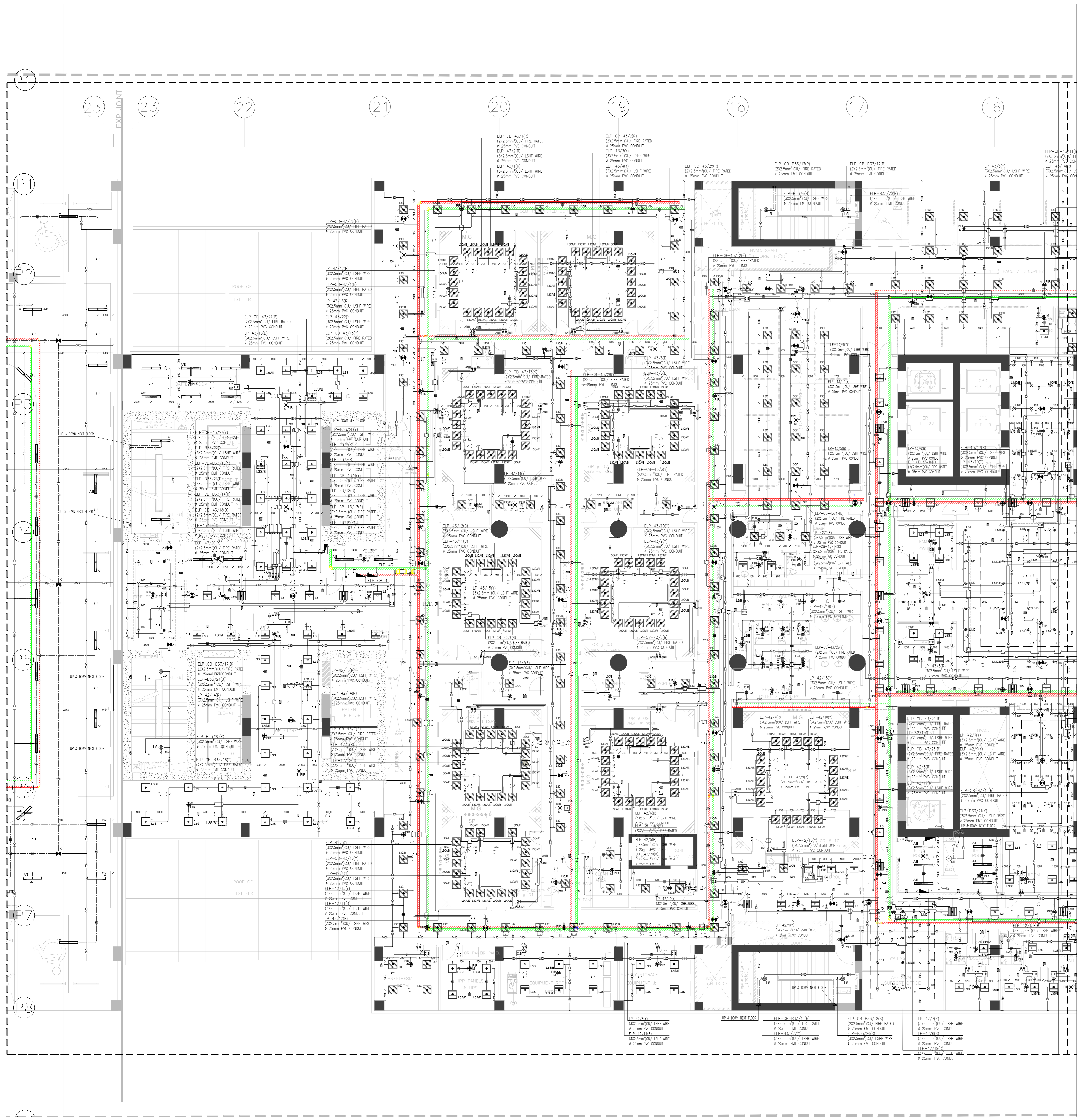
**PROJECT:**  
**ALBUROUJ BUSINESS PARK**

**DRAWING TITLE:**  
 GROUND FLOOR-BUILDING 02  
 CABLE ROUTING SYSTEM

**LOCATION:**  
 CAIRO - ISMAILIA ROAD , EGYPT

SCALE:	DWG No.	SIZE:	REV:
1:100	BRJ   Z1   B02   EL   CR   GF   00   001	A0	00

DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
A.S.	Y.M.	A.M.	20-03-2020



### LIGHTING LEGEND:

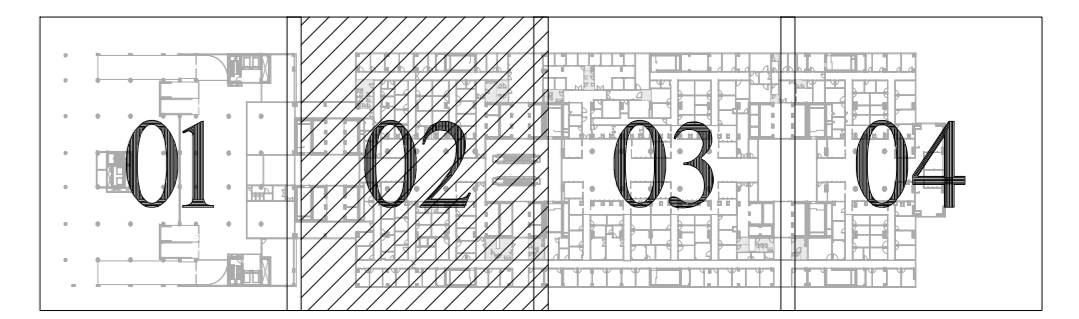
SYMBOL	DESCRIPTION
L1	RECESSED MOUNTED DOWN LIGHT 22w 2100 LUMEN 4000K IP-20 MADE OF POLYCARBONATE COMPLETE WITH POWER SUPPLY UNIT SAME AS PHILIPS CORELINE DN131B LED205/840 PSU P16 ALU7 OR APPROVED EQUAL
L1/E	SIMILAR TO TYPE (L1); THE LUMINAIRE IS FED FROM THE CENTRAL BATTERY SYSTEM AND SHALL BE PROVIDED WITH ACM CHANGEOVER RELAY AND EASICHECK ADDRESSABLE INTERFACE MODULE
L2	SIMILAR TO TYPE (L1); BUT IP:44
L2/E	SIMILAR TO TYPE (L2); THE LUMINAIRE IS FED FROM THE CENTRAL BATTERY SYSTEM AND SHALL BE PROVIDED WITH ACM CHANGEOVER RELAY AND EASICHECK ADDRESSABLE INTERFACE MODULE
L3	RECESSED MOUNTED LUMINAIRE LIGHT 32w 4000 LUMEN 4000K IP-20 MADE OF METAL COMPLETE WITH POWER SUPPLY UNIT SAME AS PHILIPS POWERBALANCE RCG008 LED40S/840 PSD WEDLO CAU7 OR APPROVED EQUAL
L3/E	SIMILAR TO TYPE (L3); THE LUMINAIRE IS FED FROM THE CENTRAL BATTERY SYSTEM AND SHALL BE PROVIDED WITH ACM CHANGEOVER RELAY AND EASICHECK ADDRESSABLE INTERFACE MODULE
L3A	RECESSED MOUNTED LUMINAIRE 27w 4000 LUMEN 4000K IP-20 MADE OF SHEET STEEL COMPLETE WITH POWER SUPPLY UNIT SAME AS PHILIPS BELVISO C1 600 CDP LED3900w Et 017 OR APPROVED EQUAL
L3A/E	RECESSED MOUNTED LUMINAIRE 27w 4000 LUMEN 4000K IP-20 MADE OF SHEET STEEL COMPLETE WITH POWER SUPPLY UNIT SAME AS PHILIPS BELVISO C1 600 CDP LED3900w Et 017 OR APPROVED EQUAL
L3B	LED STRIP 5m Ww 24V 60LED/m IP67 4000K ,1200 Lm/m 14.4 W/m
L3B/E	LED STRIP 5m Ww 24V 60LED/m IP67 4000K ,1200 Lm/m 14.4 W/m
L5	SURFACE MOUNTED OR WALL MOUNTED LED LUMINAIRES EQUIPPED WITH 38 W LED LAMP WITH HIGH LUMINOUS EFFICIENCY 4000 LUMENS 4000K DEGREE OF PROTECTION IP 65 , COMPLETE WITH POWER SUPPLY UNIT SAME AS (PHILIPS WT120C LED40S/840 PSU L1200) OR APPROVED EQUAL
L5/E	SURFACE MOUNTED OR WALL MOUNTED LED LUMINAIRE EQUIPPED WITH 42W LED LAMP WITH HIGH LUMINOUS EFFICIENCY 4000 LUMENS. TYPE (A/B)
L5/E/B	THE LUMINAIRE IS FED FROM THE CENTRAL BATTERY SYSTEM AND SHALL BE PROVIDED WITH ACM CHANGEOVER RELAY AND EASICHECK ADDRESSABLE INTERFACE MODULE.
AE	CEILING MOUNTED LIGHTING CONNECTED ON EMERGENCY SUPPLY (X-TYPE)
AB	CEILING MOUNTED LIGHTING CONNECTED ON CENTRAL BATTERY SUPPLY (X-TYPE)
L5	CEILING MOUNTED OUTLET CONNECTED ON EMERGENCY CIRCUIT (X-TYPE)
X	WALL MOUNTED OUTLET CONNECTED ON EMERGENCY CIRCUIT MOUNTED AT 2.4m AFFL. TYPE (X) - SUSPENDED DOUBLE FACE EMERGENCY EXIT WITH HIGH INTENSITY 3W WHITE LED STRIP. TYPE (X1) - SIMILAR TO TYPE (X) BUT SINGLE FACE WALL MOUNTED. TYPE (X2) - SIMILAR TO TYPE (X) BUT DEGREE OF PROTECTION IP-55. TYPE (X3) - SIMILAR TO TYPE (X1) BUT DEGREE OF PROTECTION IP-55.
P.B.P. BXX	ELECTRICAL PANEL BOARD WALL MOUNTED AT 1800mm AFFL (TOP OF PANEL)
CB	PUSH BUTTON PANEL
OTHER	LIGHTING CONTACTORS PANEL
PS	CEILING MOUNTED OCCUPANCY SENSOR
X	X: M (MASTER) , S (SLAVE)
PHASE	PHASE
1	NATURAL
2	EARTH
3	RETURN
4	TWO WAY CONNECTION
5	NORMAL CABLE TRUNK
6	EMERGENCY CABLE TRUNK
7	TURNED UP OR TURNED DOWN SLEEVE
8	PULL BOX (100mmx100mm)
9	PULL BOX (100mmx100mm) WITH FLEXIBLE
10	ONE WAY SWITCH 10A MOUNTED AT 1200mm AFFL
11	ONE WAY SWITCH - ONE GANG 10A (W.P : WEATHER PROOF TYPE) MOUNTED AT 1200mm AFFL
12	ONE WAY SWITCH 10A - EXPLOSION PROOF TYPE. MOUNTED AT 1200mm AFFL
13	ONE - WAY SWITCH , THREE GANGS 10A MOUNTED AT 1200mm AFFL
14	ONE - WAY SWITCH , THREE GANGS 10A (W.P : WEATHER PROOF TYPE) MOUNTED AT 1200mm AFFL
15	TWO WAY SWITCH - ONE GANGS 10A MOUNTED AT 1200mm AFFL
16	TWO WAY SWITCH - ONE GANGS 10A (W.P : WEATHER PROOF TYPE) MOUNTED AT 1200mm AFFL
17	TWO WAY SWITCH - TWO GANGS 10A MOUNTED AT 1200mm AFFL
18	TWO - WAY SWITCH , TWO GANGS 10A (W.P : WEATHER PROOF TYPE) MOUNTED AT 1200mm AFFL
19	TOUCH SCREEN MOUNTED AT 1200mm AFFL
20	NETWORK SENSOR
N	EMT CONDUIT
EM	EXPOSED EMT CONDUIT
CB	EXPOSED PVC CONDUIT ABOVE FALSE CEILING
SIGNAL	DALI CONTROL CABLE AS PER MANUFACTURE RECOMMENDATION
N	EMT CONDUIT
EM	EXPOSED EMT CONDUIT
UPS	EXPOSED PVC CONDUIT ABOVE FALSE CEILING
SIGNAL	DALI CONTROL CABLE AS PER MANUFACTURE RECOMMENDATION

### LIGHTING GENERAL NOTES:-

- 01-ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE INDICATED.
- 02-DRAWING TO BE READ IN CONJUNCTION WITH ALL ASEP DRAWINGS AND DESIGN BASIS REPORT AS ISSUED.
- 03-UNLESS OTHERWISE SHOWN ON THE DRAWINGS, MOUNTING HEIGHT FROM FINISHED FLOOR LEVEL SHALL BE:
- 04-LIGHTING SWITCHES: 1200 mm
- 05-LIGHTING SWITCHES: 1800 mm
- 06-ALL MATERIAL USED SHALL BE AS PER APPROVED MATERIAL.
- 07-ANY CONDUIT PASSING THROUGH EXPANSION SENSOR SHALL BE PROVIDED WITH AN EXPANSION JOINT.
- 08-THE LOCATION OF LIGHTING FIXTURE SHALL BE COORDINATED WITH THE FINAL EQUIPMENT LAYOUT.
- 09-ALL DIMENSIONS SHALL BE SUBMITTED LATER FOR THE COMPLETE ROUTE FROM SOURCE TO END LOAD.
- 10-ALL LINEAR LED LUMINAIRES SHALL HAVE LAMPS OF SAME COLOR TEMPERATURE.
- 11-THE WIRING OF THE OCCUPANCY SENSORS /CONTACTOR BOX SHALL BE AS APPROVED BY CLIENT/ENGINEER.
- 12-THE LIGHTING CONTROL SYSTEM SHALL BE INTERFACED TO THE BUILDING MANAGEMENT SYSTEM.
- 13-THE LIGHTING LAYOUTS ARE SUBJECT TO CHANGE BASED ON FINAL ARCHITECTURAL, REFLECTED CEILING PLAN AND FURNITURE LAYOUT.
- 14-FOR PANEL BOARD SCHEDULES REFER TO DWG: SA-SD-EPB-02-01 SA-SD-EPB-02-07
- 15-FOR LIGHTING CONTROL CONNECTION DETAILS REFER TO DWG: SA-SD-ED-01
- 16-BUILDING WIRING INSULATION IS TO BE COLOR CODED AS FOLLOWS:
- 17-First floor and level of cable trays shall be as shown in CABLE CONTAMINATION layout (SA-SD-EPB-03)
- A. NEUTRAL IS TO BE BLACK
- B. PROTECTIVE EARTH IS TO BE GREEN OR GREEN/YELLOW STRIPED (D)
- C. PHASE WIRE IS TO BE RED, YELLOW, BLUE (R, Y, B).

MAXIMUM NUMBER OF L50H INSULATED CONDUCTORS IN EMT & RSC CONDUIT (AS PER NEC 40% CONDUIT FILL CAPACITY)		
CONDUIT SIZE >	3/4"	1"
14 AWG 2.5 mm <sup>2</sup>	7	11
12 AWG 4.0 mm <sup>2</sup>	6	9
10 AWG 6.0 mm <sup>2</sup>	4	8
8 AWG 10.0 mm <sup>2</sup>	2	5

### KEY PLAN



00	08/01/2022	ISSUED FOR APPROVAL	7H	7H	D.A	K.E
REV	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	QC	APPROVED

**GARB JEDDAH HOSPITAL**  
ANDULUS JEDDAH, SAUDI ARABIA

OWNER & EMPLOYER:

DR. Sulaiman Al Habib  
**DR SULAIMAN AL HABIB**  
medical group الطبية المجموعه

MEP DESIGNER:

**SHAKER CONSULTANCY GROUP**  
MEP Design & Construction Services  
P.O. BOX 9177 RIYADH 11543 TEL: +96611 4622222 FAX: +96611 4622222 SAUDI ARABIA

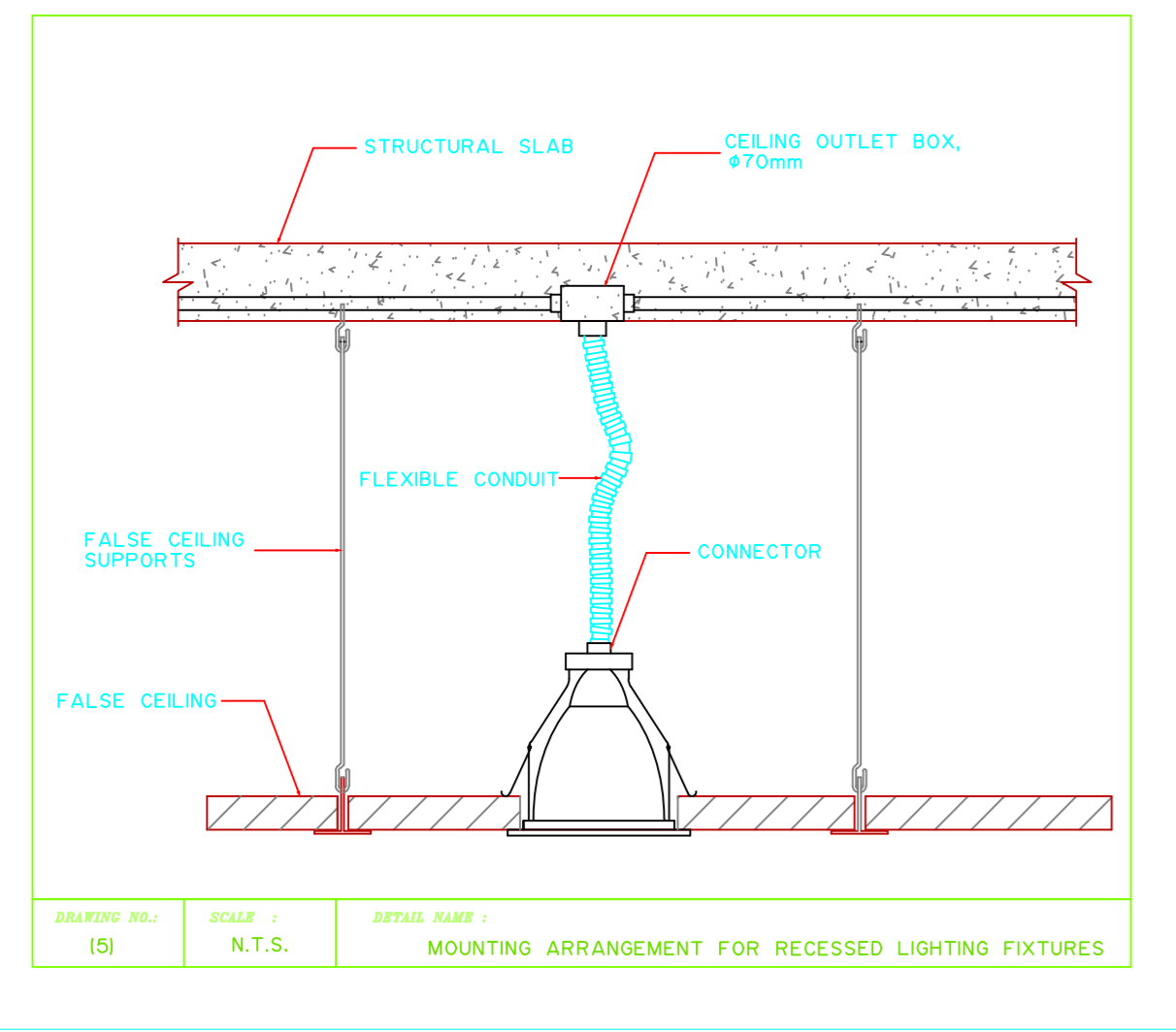
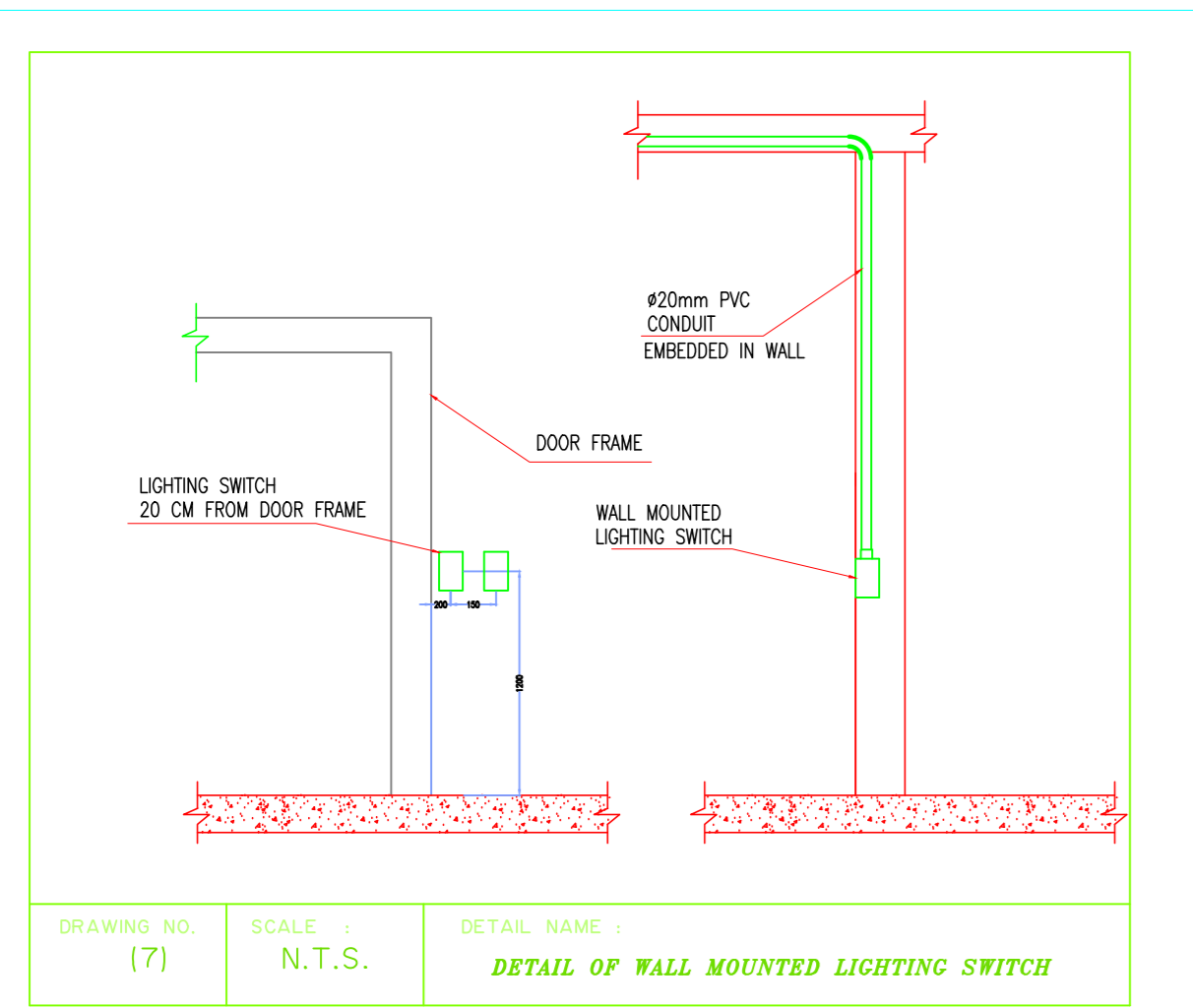
CONTRACTOR:

**Saudi Aircon**  
MEP CONTACTOR

Al-Hassa P.O. No. (03)39-0000 Fax No. (03)39-3344  
Al-Rabiah P.O. No. (03)897-1100 Fax No. (03)897-3426  
Al-Nahla P.O. No. (03)341-0700 Fax No. (03)341-6762

TITLE: **ELECTRICAL - LIGHTING SYSTEM**  
2ND FLOOR PLAN - PART (02)

SCALE	CONTRACT #	SIZE	DWG.#	SHT.#	REV.#
1:100	A0	A0	SA-SD-EL-08-02	SHEET-2	00



General Notes :- A0

- 1. L1000-G-LB 3x0.5 mm<sup>2</sup> CU/PVC WIRE INSIDE 80mm UPVC CONDUIT FOR NORMAL LIGHTING CIRCUITS (TRUNK RUN)
- 2. L1000-G-LB 3x0.5 mm<sup>2</sup> CU/PVC WIRE INSIDE 80mm UPVC CONDUIT FOR NORMAL LIGHTING CIRCUITS (TRUNK RUN)
- 3. L1000-G-LB 3x0.5 mm<sup>2</sup> CU/PVC WIRE INSIDE 80mm UPVC CONDUIT FOR EMERGENCY LIGHTING (TRUNK RUN)
- 4. L1000-G-LB 3x0.5 mm<sup>2</sup> CU/PVC WIRE INSIDE 80mm UPVC CONDUIT FOR EMERGENCY LIGHTING CIRCUITS

⊗ FALL BOX

LIGHTING SWITCHES

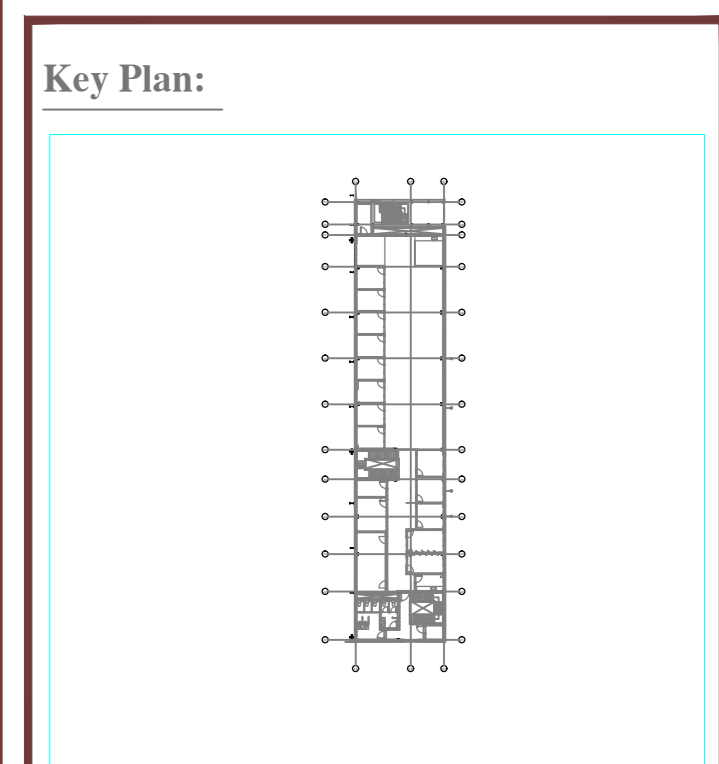
SYMBOL	DESCRIPTION
⊗	ONE WAY ONE GANG LIGHTING SWITCH (10A 1P 1E)
⊗	ONE WAY TWO GANG LIGHTING SWITCH (10A 2P 1E)
⊗	ONE WAY THREE GANG LIGHTING SWITCH (10A 3P 1E)
⊗	TWO WAY ONE GANG LIGHTING SWITCH (10A 1P 2E)
⊗	TWO WAY TWO GANG LIGHTING SWITCH (10A 2P 2E)

SWITCHES LEGEND:-

SYMBOL	DESCRIPTION
L	LIVE WIRE
E	EARTH WIRE
N	NEUTRAL WIRE
R	SWITCH LEG WIRE
C	CONTROL WIRE

⊗ PANELS  
 ⊗ BRANCH CIRCUIT LIGHTING & POWER NORMAL DISTRIBUTION PANEL  
 ⊗ BRANCH CIRCUIT LIGHTING & POWER NORMAL DISTRIBUTION PANEL  
 ⊗ BRANCH CIRCUIT LIGHTING & POWER NORMAL DISTRIBUTION PANEL  
 ⊗ BRANCH CIRCUIT LIGHTING & POWER NORMAL DISTRIBUTION PANEL  
 ⊗ BRANCH CIRCUIT LIGHTING & POWER NORMAL DISTRIBUTION PANEL

Site Plan



Building Code :

REV. NO.	DATE	BY	DESCRIPTION
01	04-09-2024	701	SHOP DRAWING

اسم المشروع  
**ADHESIVE MANUFACTURING EGYPT**  
**HB FULLER**



الاستشاري العام  
**COSMOS-E**  
 COSMOS ENGINEERING & CONSULTING  
 100 EL DOKKI, EL DOKKI, CAIRO, EGYPT  
 100 EL DOKKI, EL DOKKI, CAIRO, EGYPT  
 100 EL DOKKI, EL DOKKI, CAIRO, EGYPT  
 100 EL DOKKI, EL DOKKI, CAIRO, EGYPT



ALSHAMS FOR CONTRACTING

اسم العميل  
**ADHESIVE MANUFACTURING EGYPT**  
**HB FULLER**

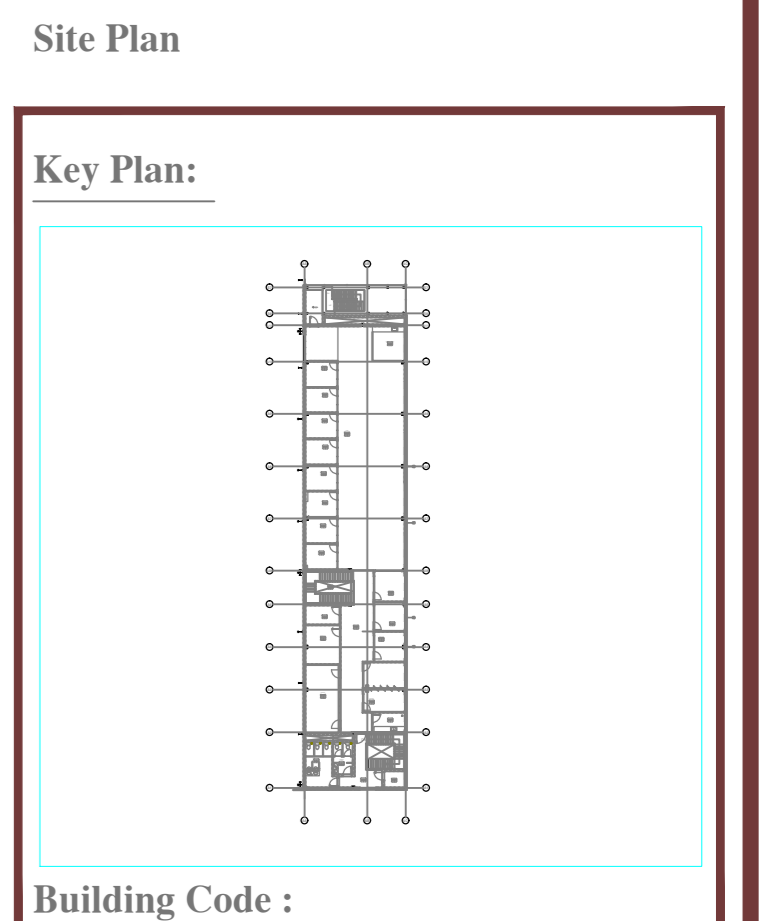
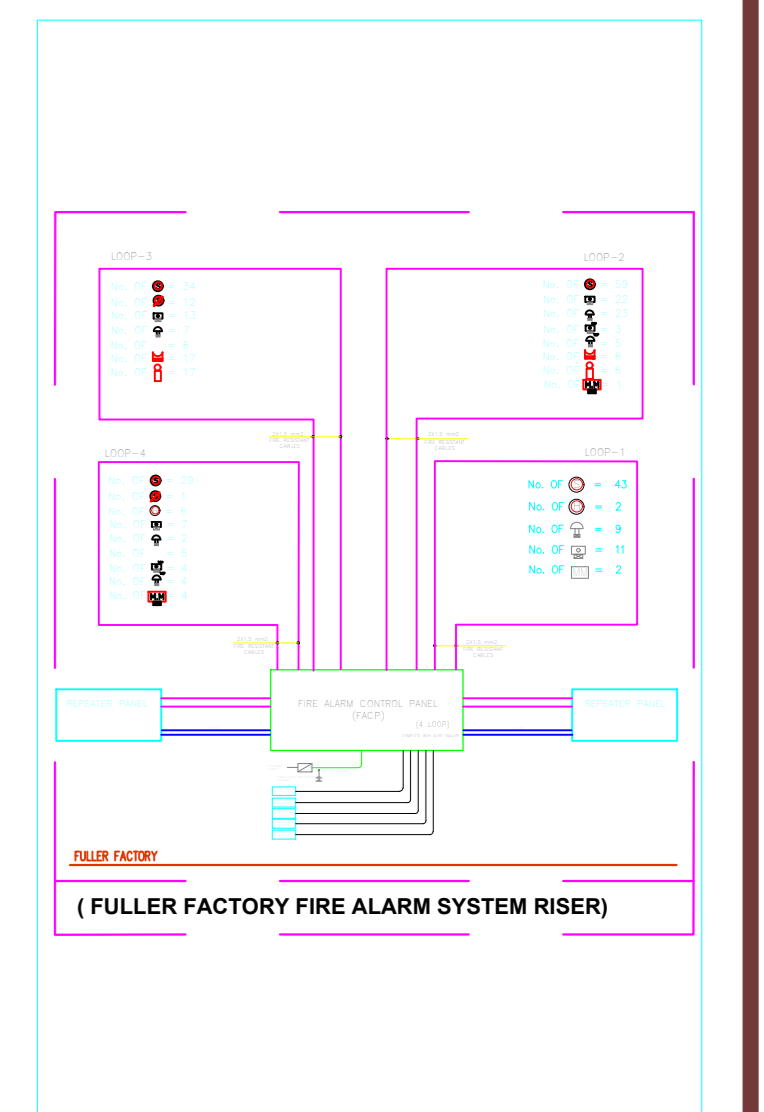
اسم الوحدة  
**ELECTRICAL**  
**LIGHTING ADMIN PLAN**

رقم الوحدة  
 1/50

رقم اللوحة  
 E1838-001-EDE-019-19-00

SYMBOL	DESCRIPTION
	ADDRESSABLE SMOKE DETECTOR - PHOTO ELECTRIC
	ADDRESSABLE HEAT DETECTOR - PHOTO ELECTRIC
	ADDRESSABLE MANUAL CALL POINT MOUNTED AT 2100MM P.F.L. FIRE ALARM BOX WITH FLASHER MOUNTED AT 2100MM P.F.L.
	ADDRESSABLE MONITOR MODULE

- NOTES:
- CABLES & CONDUITS INSTALLATION LEGEND:
- EMBEDDED
  - 2x1.5 HV&E FIRE RESISTANT CABLES
  - 4 x 25 HV&E HEAVY GAUGE UPVC CONDUITS EMBEDDED IN CEILING
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS UNLESS NOTED OTHERWISE.
  2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL ENGINEERING SERVICES DRAWINGS, TOGETHER WITH THE SPECIFICATIONS.
  3. FIRE ALARM SYSTEM WIRE SHOULD BE 2000V 1.5 sqmm SHIELDED CABLE THRU 20mm UPVC CONDUIT.
  4. ALL FIRE ALARM SYSTEM CONDUITS ARE 25mm PVC EMBEDDED IN WALL/S LAB UNLESS OTHERWISE SPECIFIED.
  5. FIRE ALARM SYSTEM TO BE FINALIZED WITH RECOMMENDATION OF SUPPLIER, UNLESS OTHERWISE SPECIFIED.
  6. THE DRAWINGS (PLAN & LAYOUTS), A.0.0 AND THE SPECIFICATIONS READ TOGETHER AND COMPLETE EACH OTHERS.



REV. NO.	DATE	BY	DESCRIPTION
01	04-08-2021	TH	SHOP DRAWING

اسم المشروع  
**ADHESIVE MANUFACTURING EGYPT  
 HB FULLER**

المالك  
**H.B. Fuller**

الاستشاري العام  
**COSMOS-E**  
 ENGINEERS & CONSULTANTS

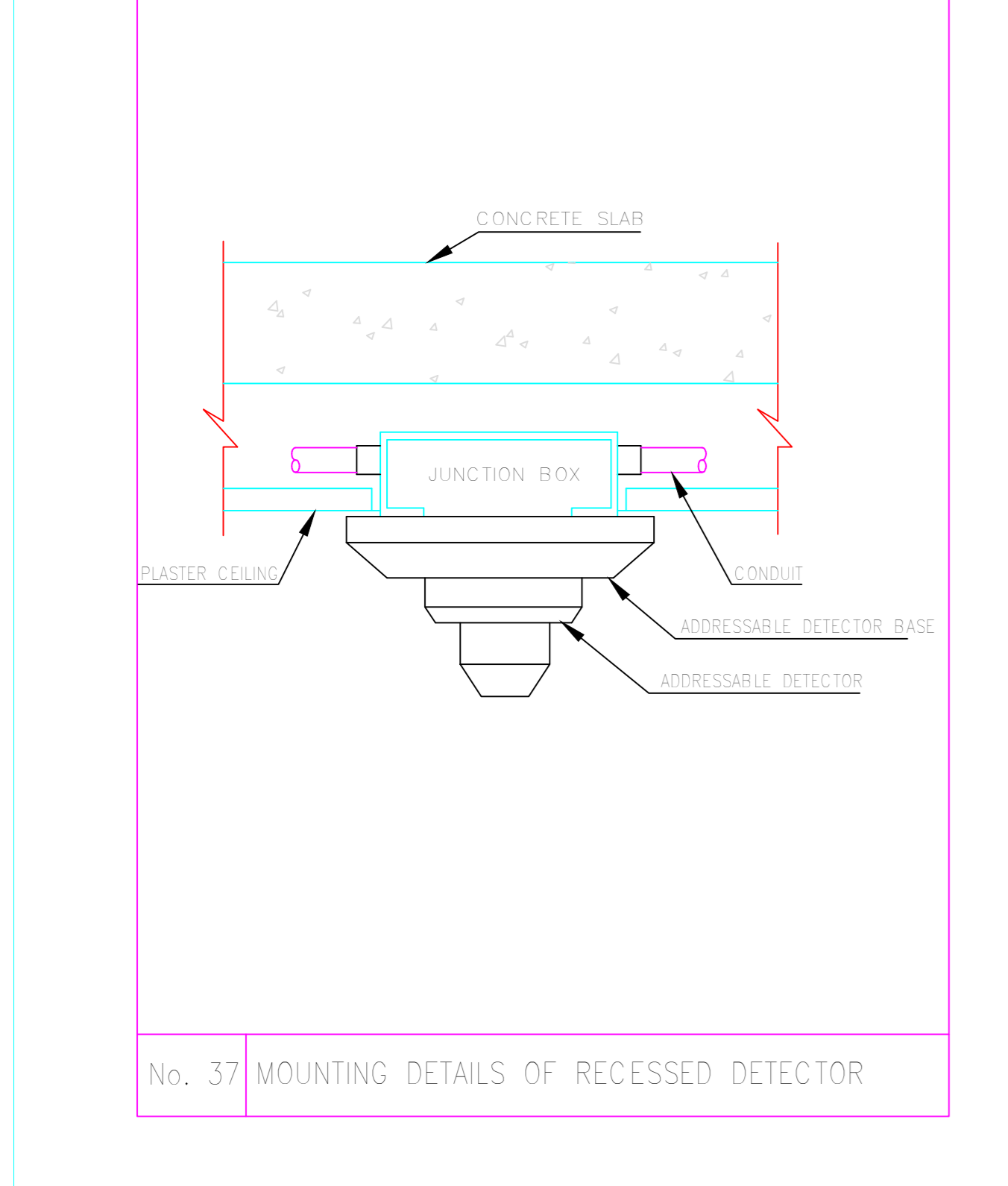
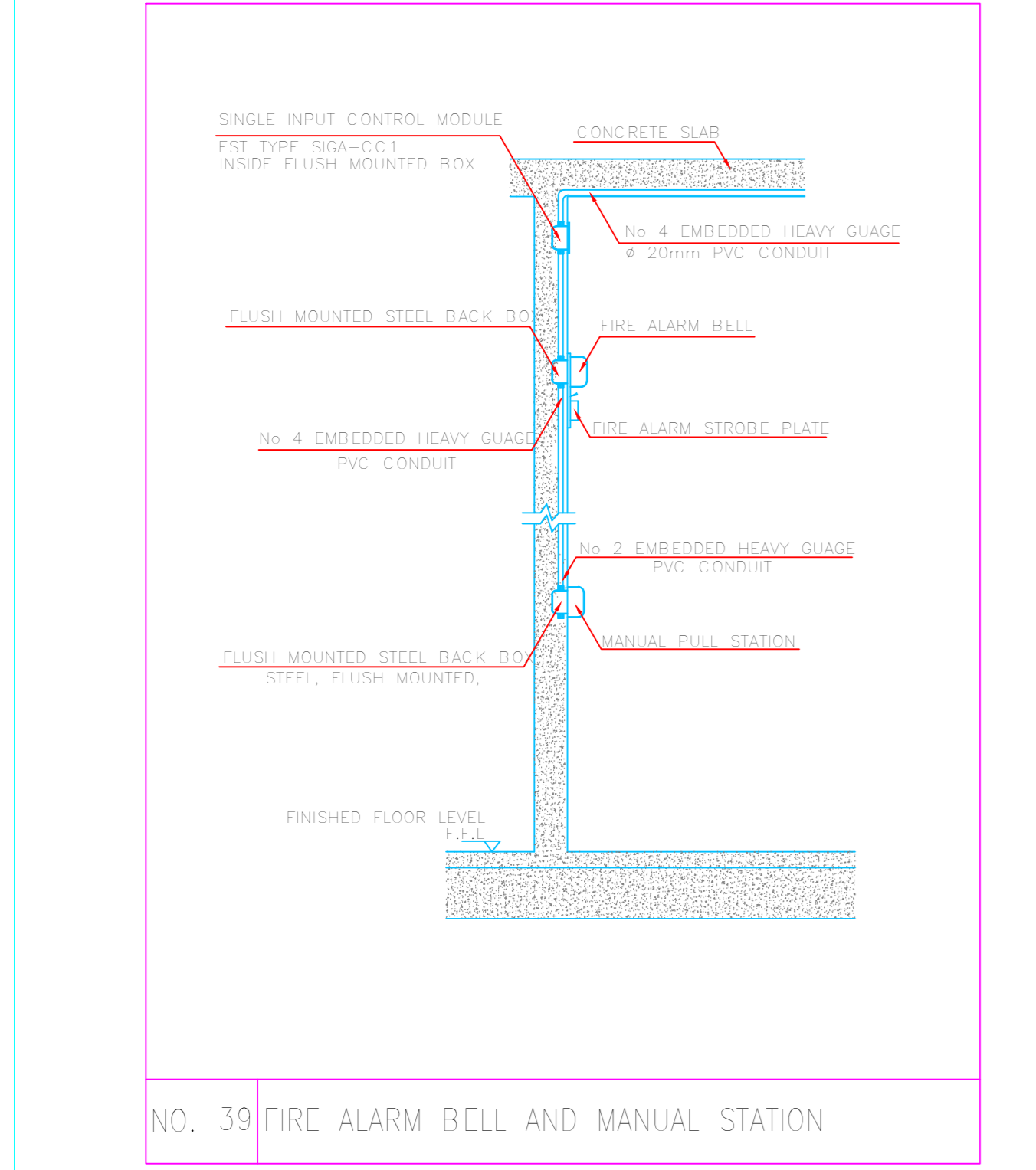
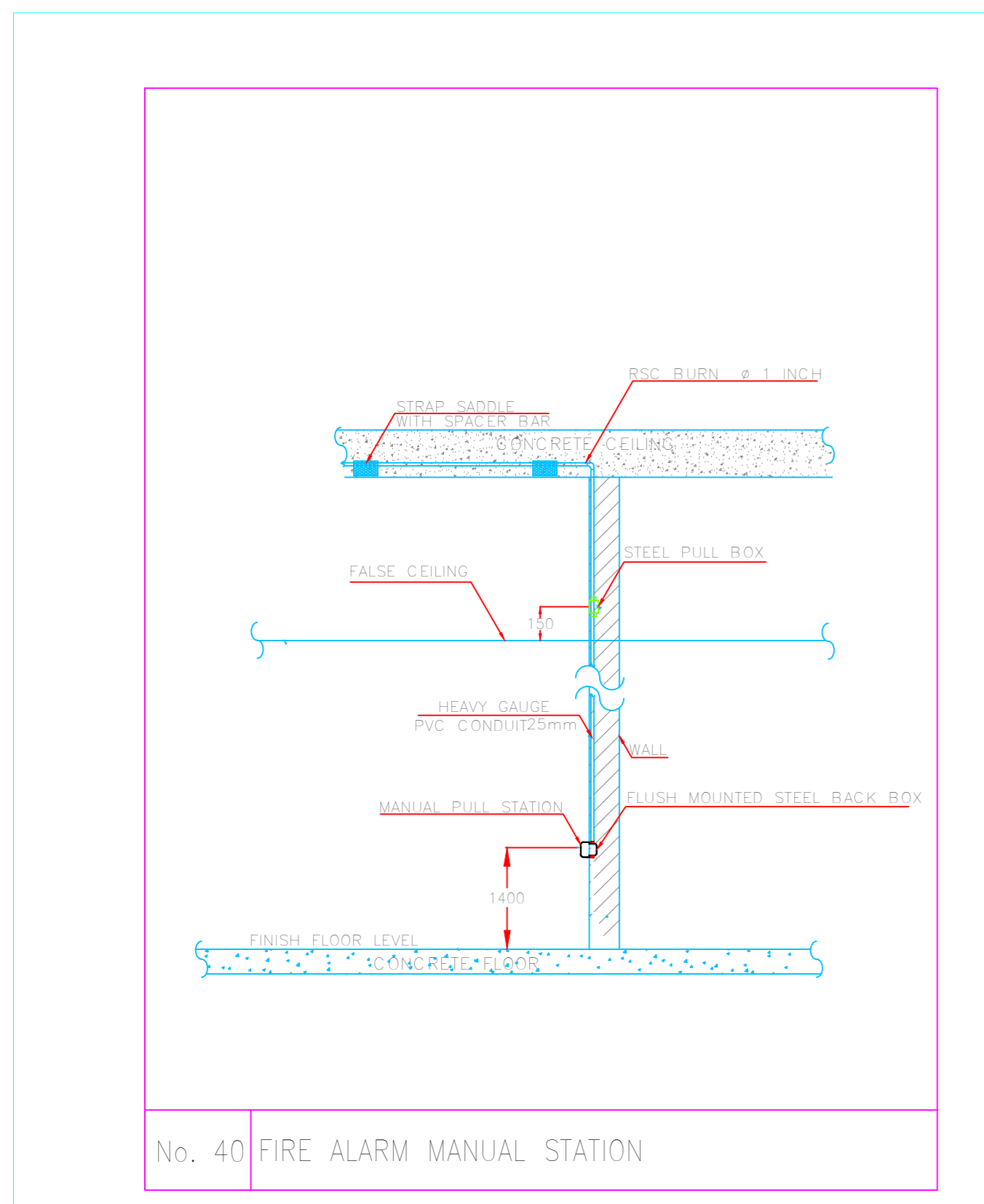
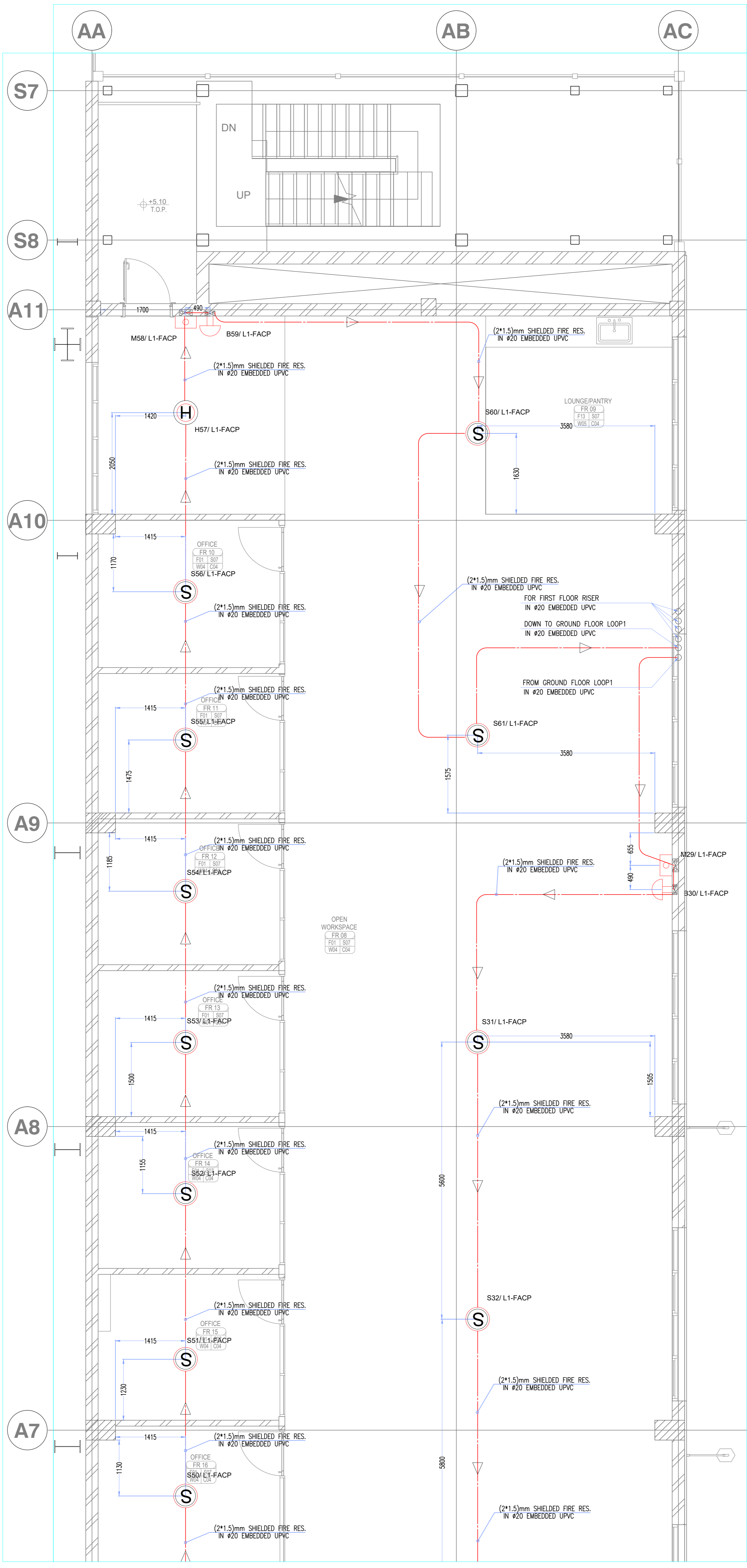
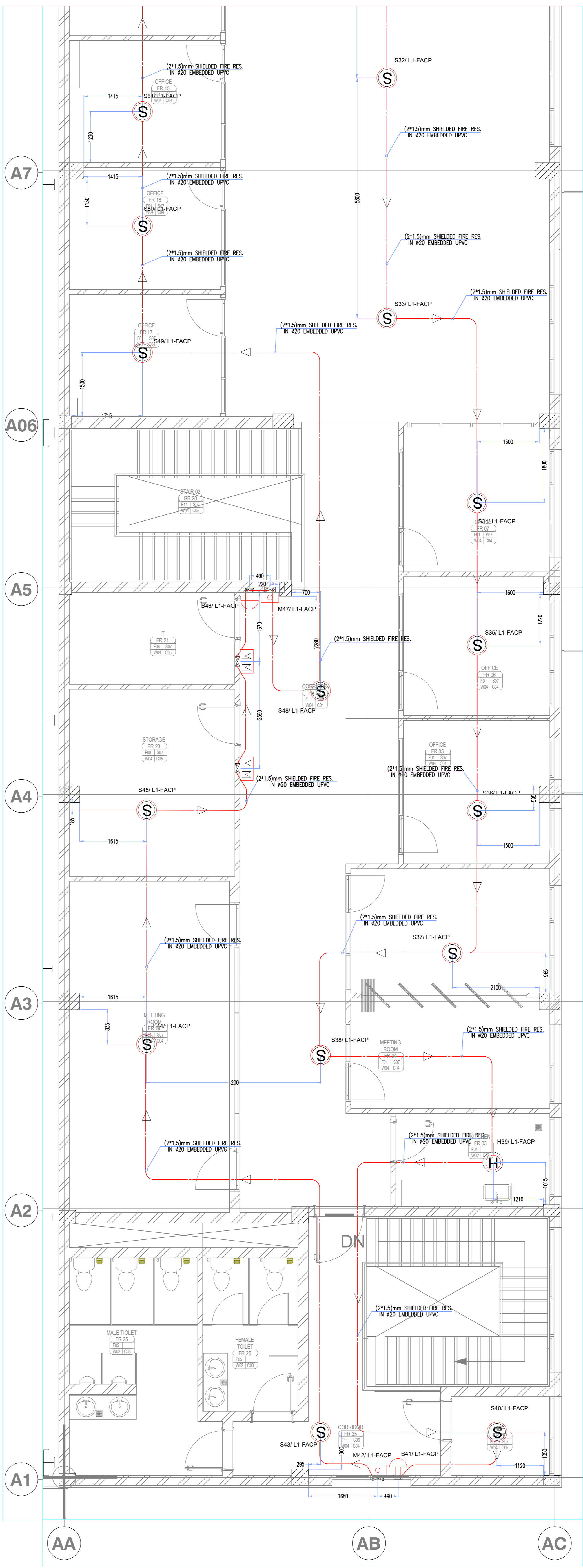
شركة الشامن للمقاولات والأعمال الهندسية  
**ALSHAMS FOR CONTRACTING**

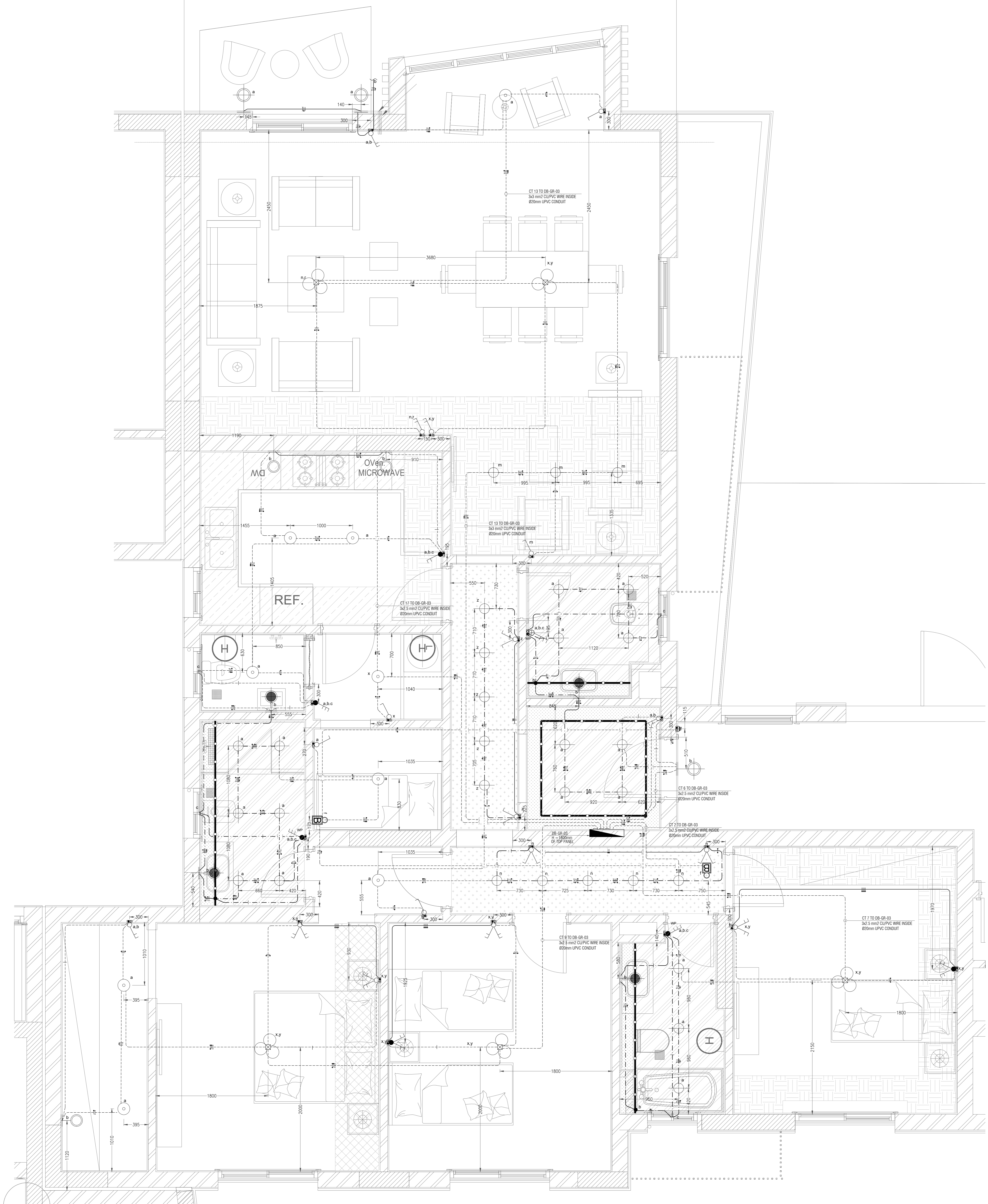
اسم العميل  
**ADHESIVE MANUFACTURING EGYPT  
 HB FULLER**

اسم اللوحة  
**FIRE ALARM ADMIN PLAN  
 FOR SLAB @ +8.00**

اسم المصمم  
 رقم اللوحة

E1838-ELE-SD-BL.A-014-014-00





1 LIGHTING SYSTEM -B2-01 FLX  
1:25

NOTE:

ELECTRICAL CIRCUIT WIRE & CABLE SIZE :

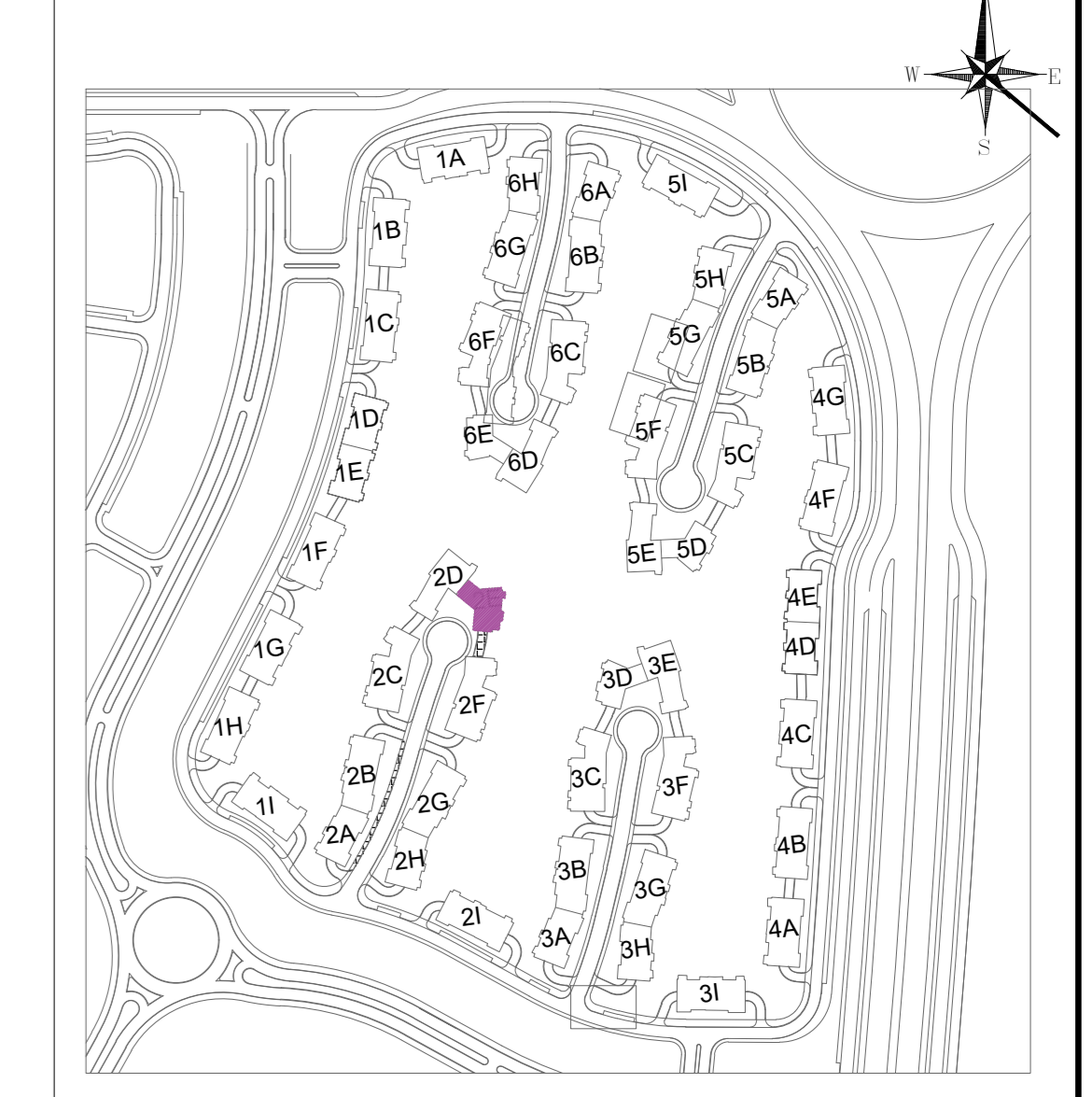
- ALL LIGHTING OUTLETS CIRCUITS WITH 16A C.B & 3X2.5mm CU WIRE
- ALL SOCKET OUTLETS CIRCUITS WITH 16A C.B & 3X3mm CU WIRE
- ALL POWER SOCKET CIRCUITS WITH 20A C.B & 3X4mm CU WIRE
- ALL AC OUTLETS CIRCUITS WITH 32A C.B & 3X6mm CU WIRE
- ALL ELECTRICAL OUTLETS FINAL LOCATION ,HEIGHTS REFER TO ID PACKAGE.
- ALL ELECTRICAL OUTLETS LOCATED IN WET AREAS SHALL BE WATER PROOF

LIGHTING SYSTEM LEGEND:

	S0	DEVIATOR SINGLE POLE @ 900 H
	S1	DEVIATOR SINGLE POLE @ 650 H
	S01	DEVIATOR DOUBLE POLE @ 900H
	S11	DEVIATOR DOUBLE POLE @ 650H
	S2	SWITCH SINGLE POLE @ 900 H
	S3	SWITCH DOUBLE POLE @ 900H
	S4	SWITCH SINGLE POLE @ 1200 H
	S5	SWITCH DOUBLE POLE @ 1200 H
	S66	SWITCH TRIPLE POLE @ 900 H
	S6	SWITCH TRIPLE POLE @ 1200 H
	S62	SWITCH TRIPLE POLE @ 1300H (WEATHER PROOF TYPE)
	S61	SWITCH TRIPLE POLE @ 1200H (WEATHER PROOF TYPE)
	S25	BELL SWITCH SINGLE POLE @ 900H
	S26	OUTLET @ 1500 H
	S27	WALL MOUNTED LIGHT PROVISION IN WET AREAS (WEATHER PROOF TYPE) @ 1800H
	S29	MINI STEP" EXTERIOR RECESSED SPOTS @ 1800H MODEL CODE 71525-PL-
	S291	MINI STEP" EXTERIOR RECESSED SPOTS @ 2300 H MODEL CODE 71525-PL-
	B	BELL @2400H
	S28	WALL MOUNTED LIGHT PROVISION IN WET AREAS @ 450 H
	L9	PENDENT CHANDELIER OUTLET
	L07	IP 65HIGH PERFORMANCE FLEXIBLE LED STRIP LIT - STRIP , CODE 861355 PANEL BOARD AT 1800mm ABOVE F.F.L(TOP ENDS), UNLESS OTHERWISE INDICATED. BACK BOX (77X77X54mm) UNLESS OTHERWISE INDICATED PULL BOX SIZE(84X84X50mm) UNLESS OTHERWISE INDICATED . JUNCTION BOX SIZE (105X105X63mm) UNLESS OTHERWISE INDICATED . UPVC CONDUIT RUN EMBEDDED IN SLAB UNLESS OTHERWISE INDICATED IN THE DWG. UPVC CONDUIT RUN EMBEDDED IN WALL UNLESS OTHERWISE INDICATED IN THE DWG. UPVC CONDUIT RUN EMBEDDED UNDER F.F.L UNLESS OTHERWISE INDICATED IN THE DWG. UPVC CONDUIT RUN EXPOSED ON CEILING UNLESS OTHERWISE INDICATED IN THE DWG.
	L4	Ceiling Recessed Spot Model Code 5623421
	L05	Waterproof spot in wetareas warm Ceiling Recessed Model Code 5661121

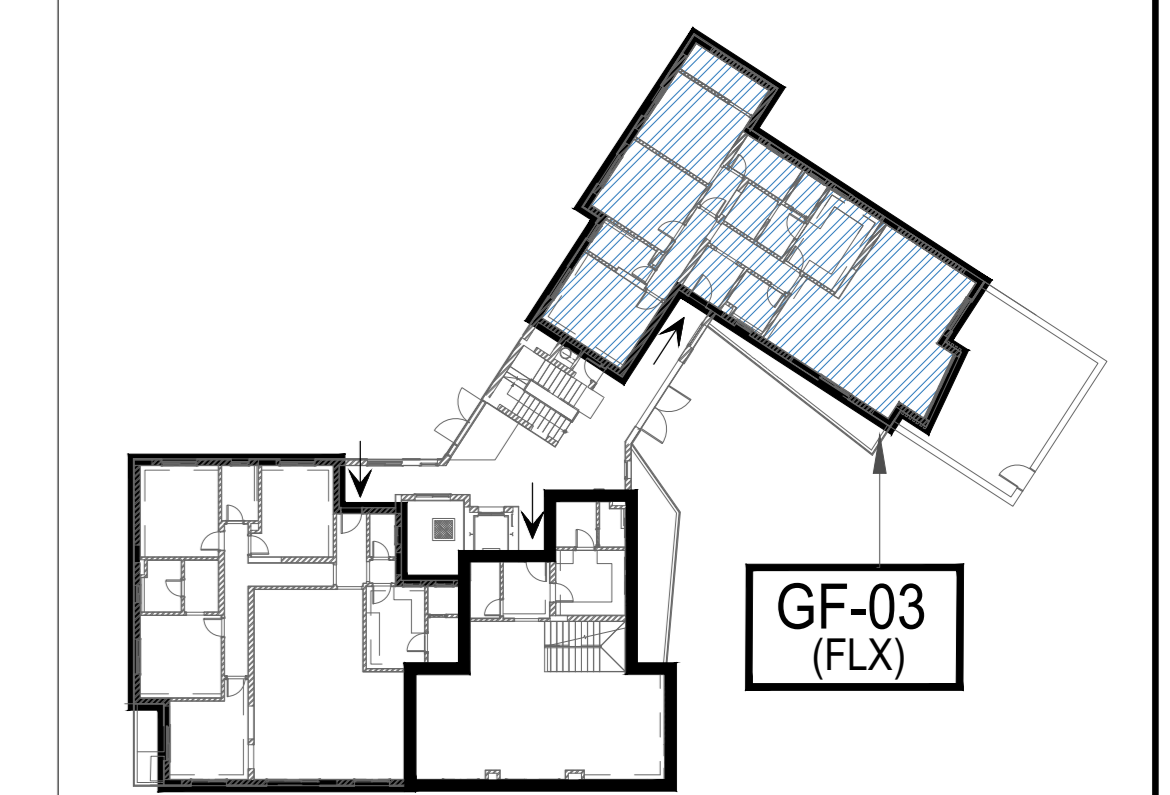
	PHASE
	NATURAL
	EARTH
	RETURN
	TWO WAY CONNECTION

Wire Size	Wire Type	Wire Diameter (mm)	Diameter Of UPVC Conduit (mm)	Area Of UPVC Conduit (mm²)	NO OF Wires	Area Of All Wires (mm²)	FILLING RATIO %
2.5 mm	CU /PVC	3.8	20	314	1	10.17	3.2%
					2	20.35	6.5%
					3	30.52	9.7%
3 mm	CU /PVC	3.8	20	314	3	34.01	10.8%
4 mm	CU /PVC	4.2	25	491	3	41.54	8.5%
6 mm	CU /PVC	4.7	25	491	2	34.68	7.1%
6 mm	CU /PVC	4.7	32	804	3	82.02	6.5%
CAT 6	UTP	6.2	20	314	1	30.18	9.6%



Reference drawings:-

03			
02			
01	FURNITURE PLAN B2-01	I-102-B2-01	
00	LIGHTING SYSTEM B2-01	E-301-B2-01	
NO.	DESIGN DRAWING REF.		DWG NO.



03			
02			
01	ISSUED FOR APPROVAL		07-2022
NO.	ISSUE		DATE

OWNER:  
**SOREAL**  
SOREAL for Real Estate Investment S.A.E  
شركة سوريال للاستثمار العقاري

MAIN CONSULTANT:  
**Khatib & Alami**  
Khatib and Alami  
Gazrat al arab ,Metobaa , Al Agoza  
GIZA Governorate  
TEL : +2 03378141

MEP CONSULTANT:  
**MAF**  
MAF Consult For Engineering Consultancy  
Building 606, The sixth neighboring Marj City, Maadi, Cairo  
Tel/Fax: (+2) 24477027 e\_mail admin@mafconsultancy.com

MAIN CONTRACTOR:  
**AL SHAMS COMPANY FOR CONTRACTING**  
CAIRO HAIR CITY , ST. AYMAN ALKADRY ST FROM METRO STATION BY  
e mail : 2009@alshamscompany.com

ISSUE FOR	FILE F.	HYAC	PLUMBING	ELECT.	STR.	ARCH.
SHOP DRAWING						

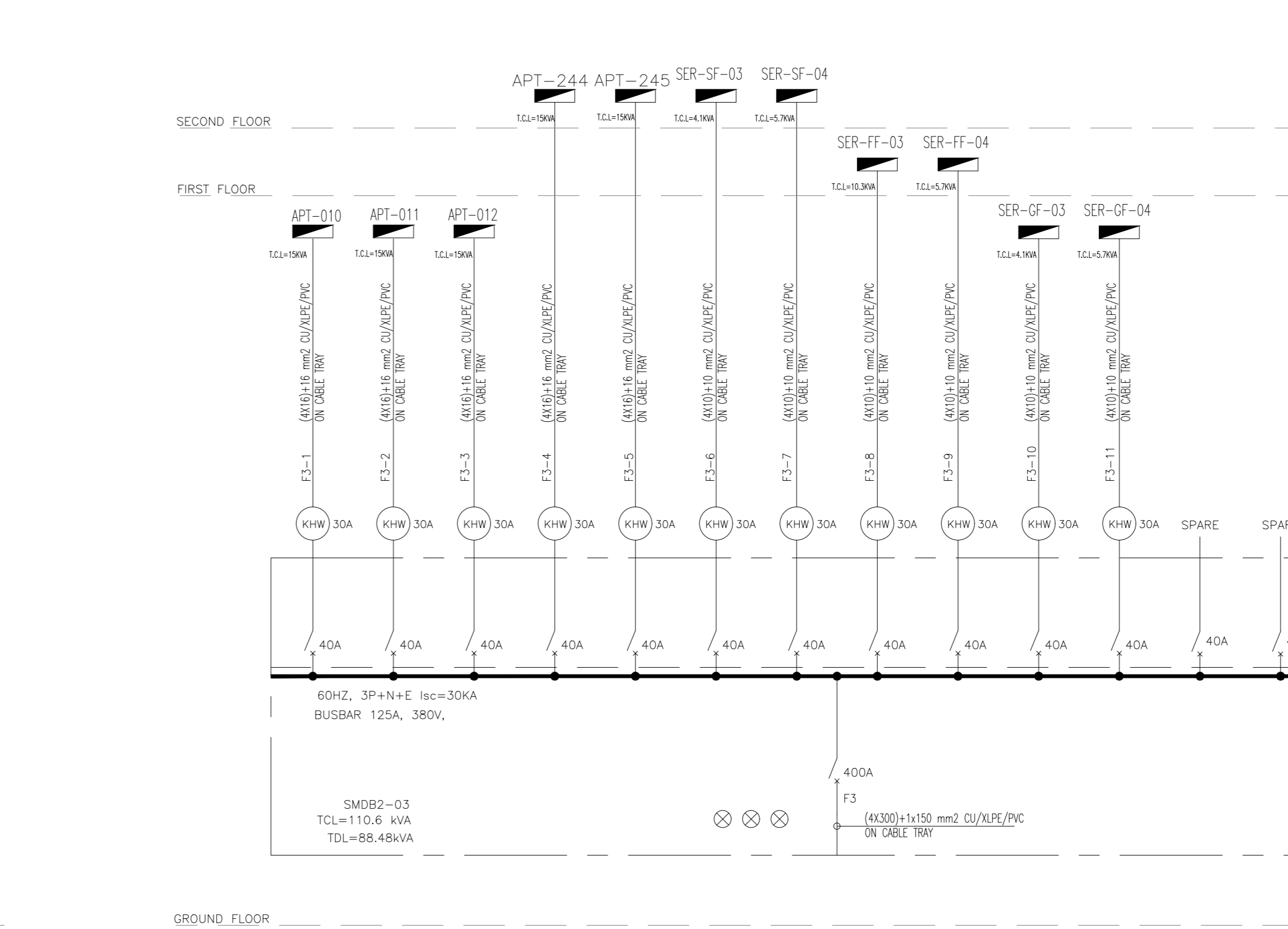
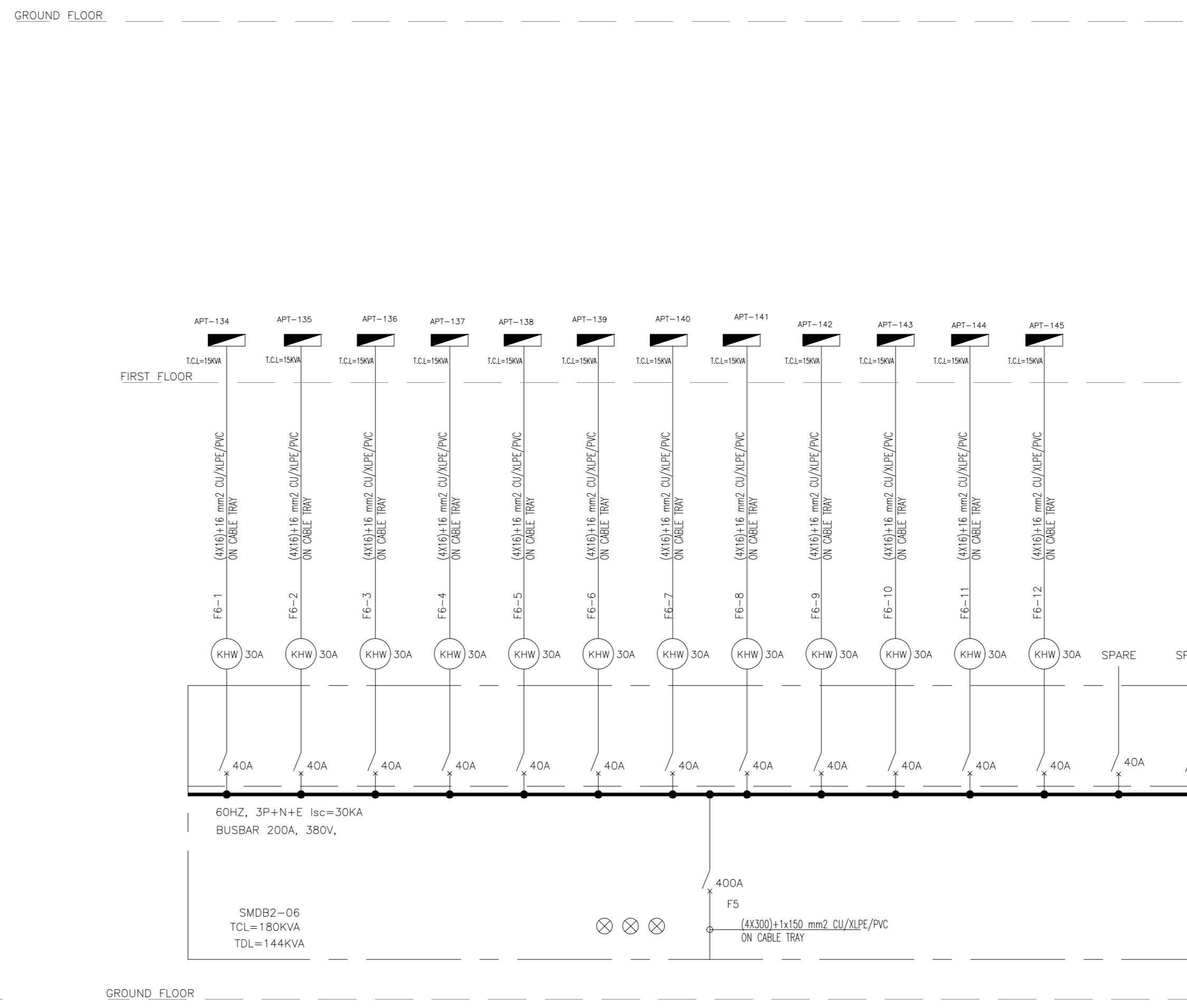
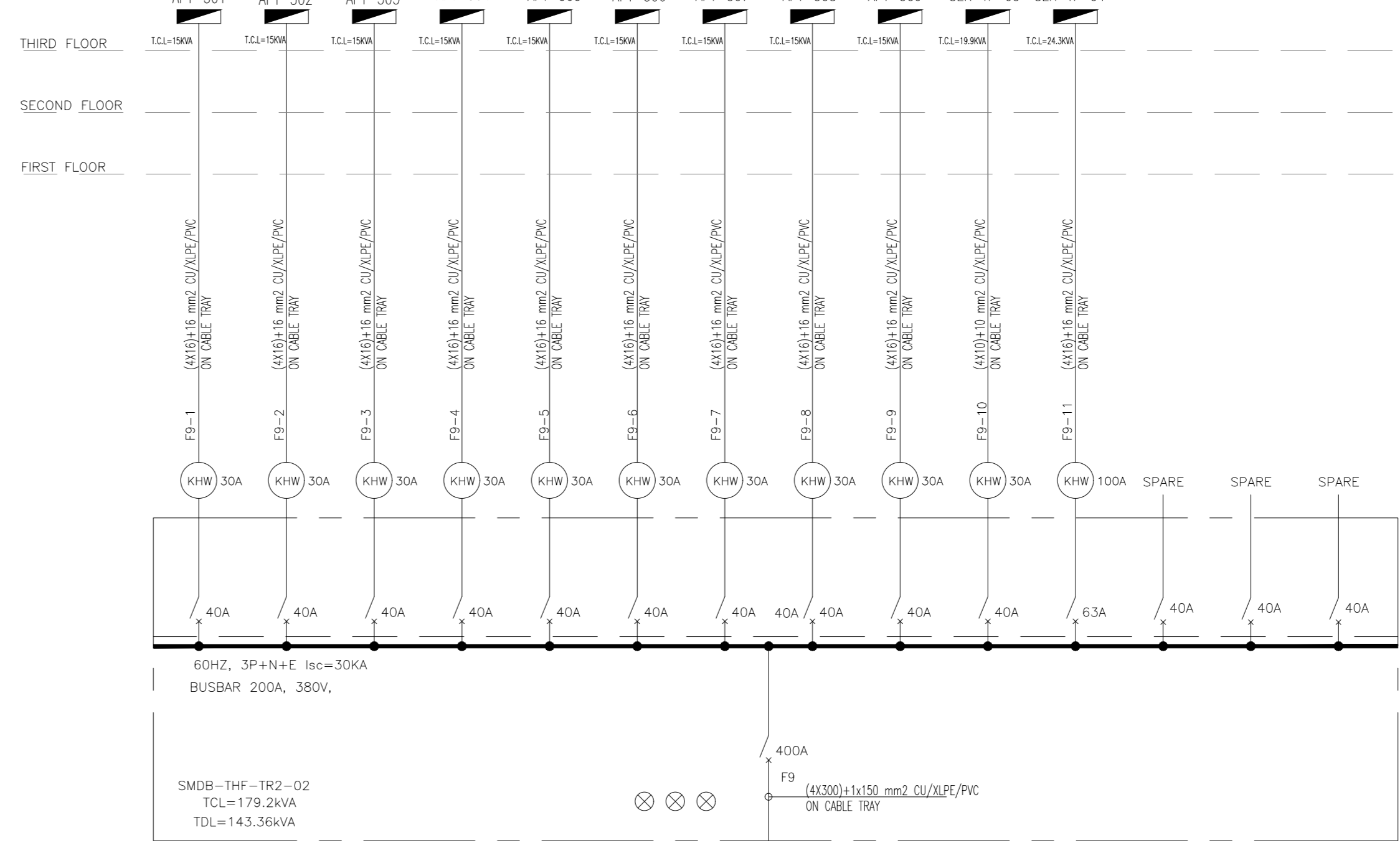
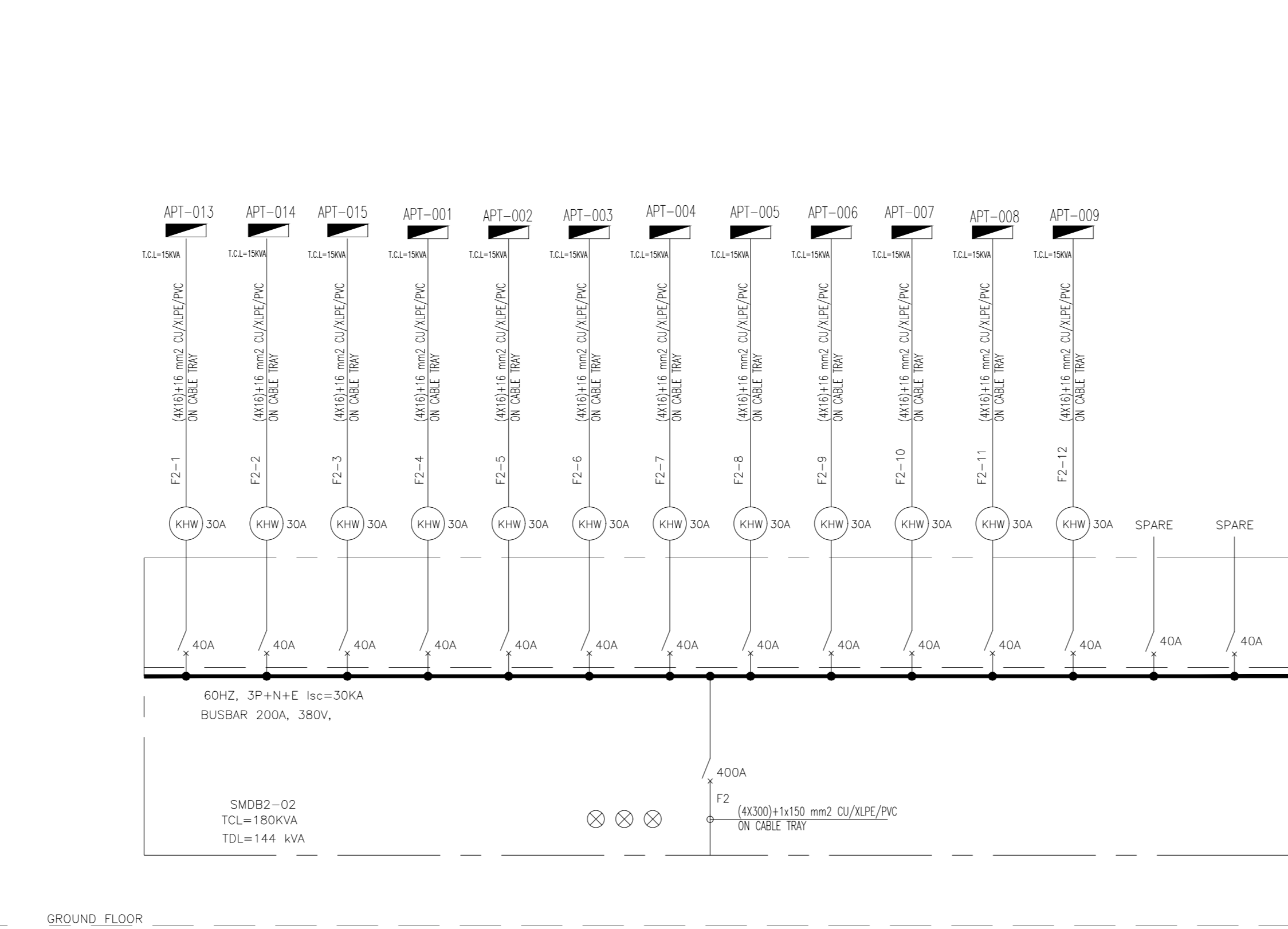
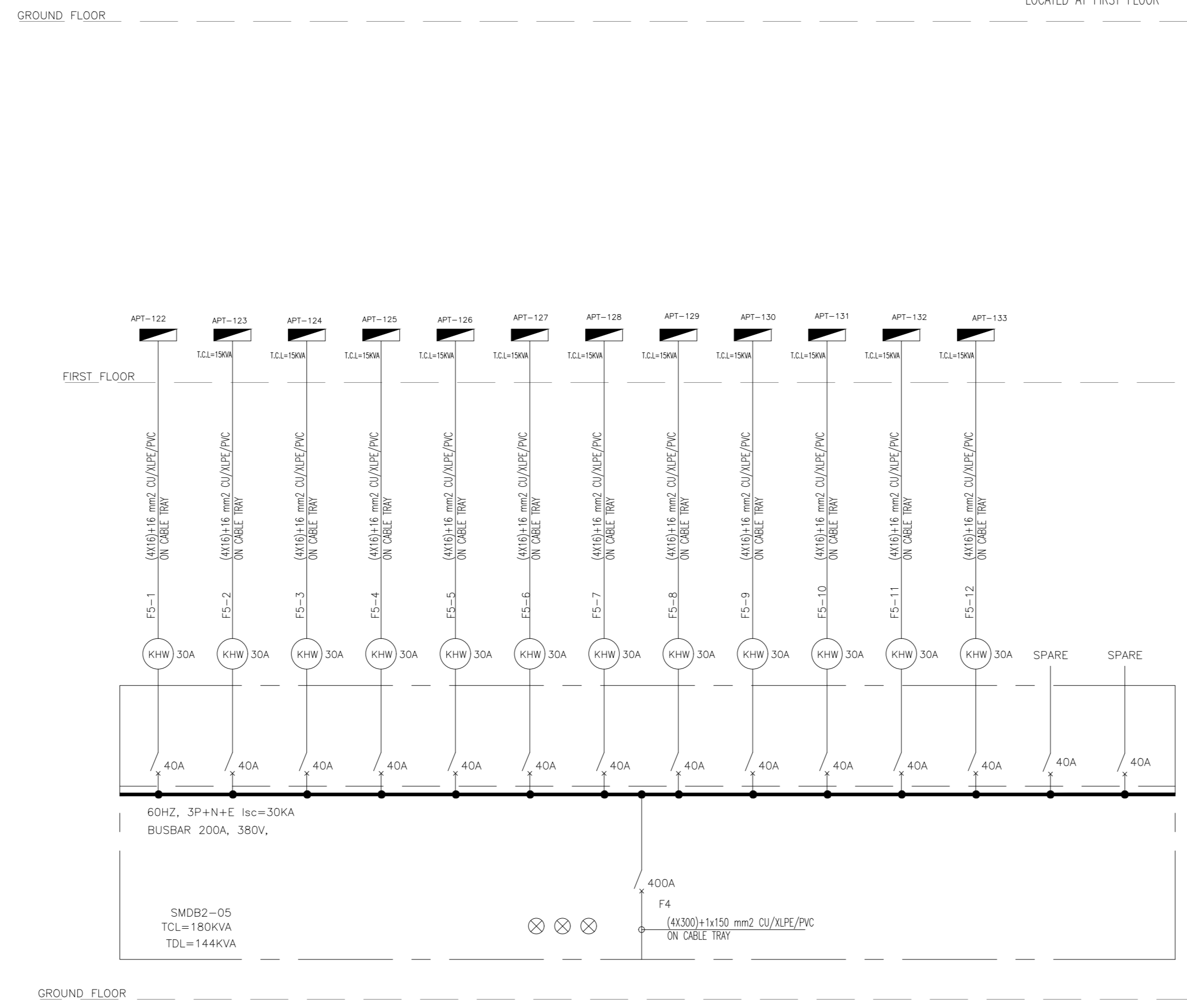
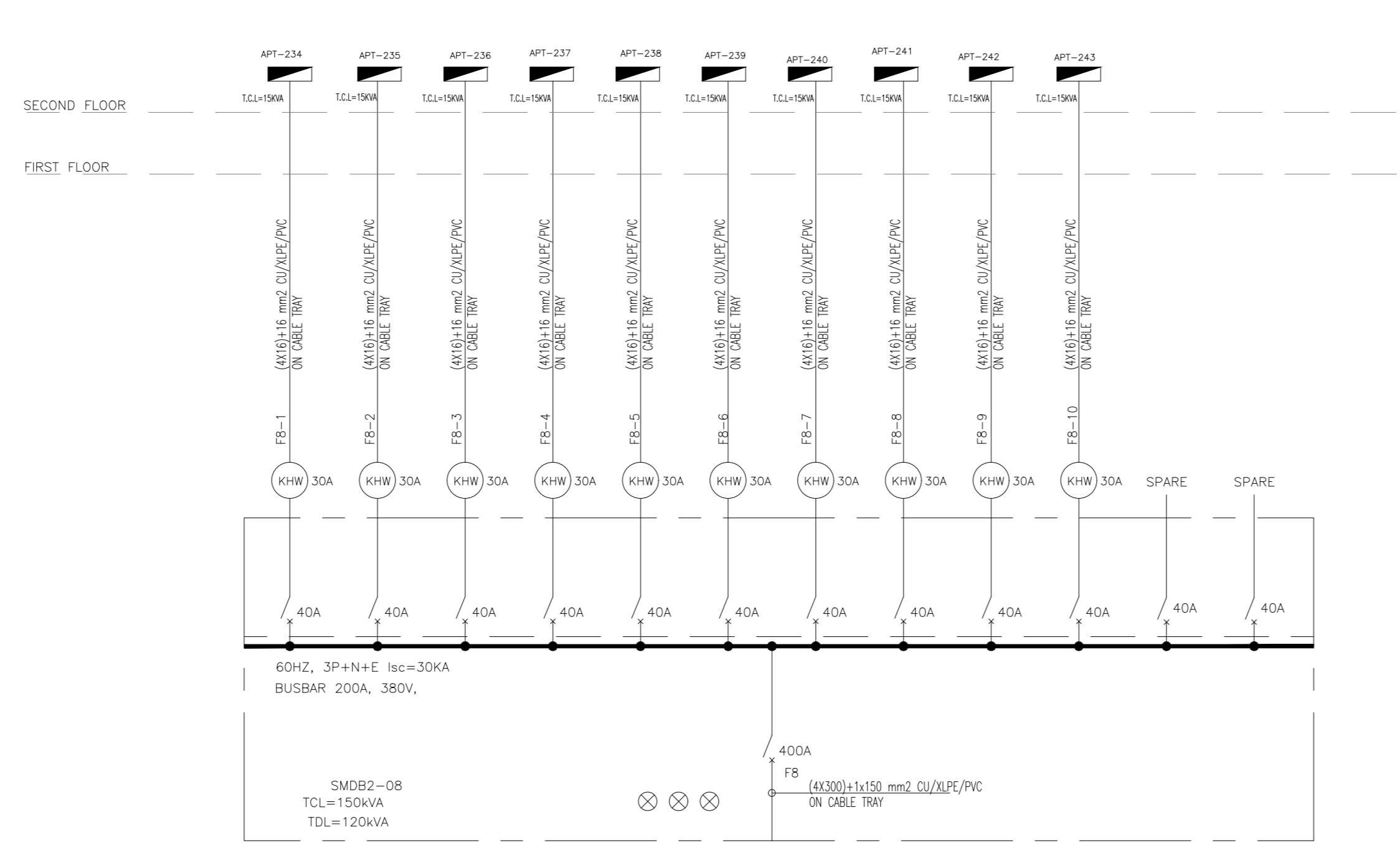
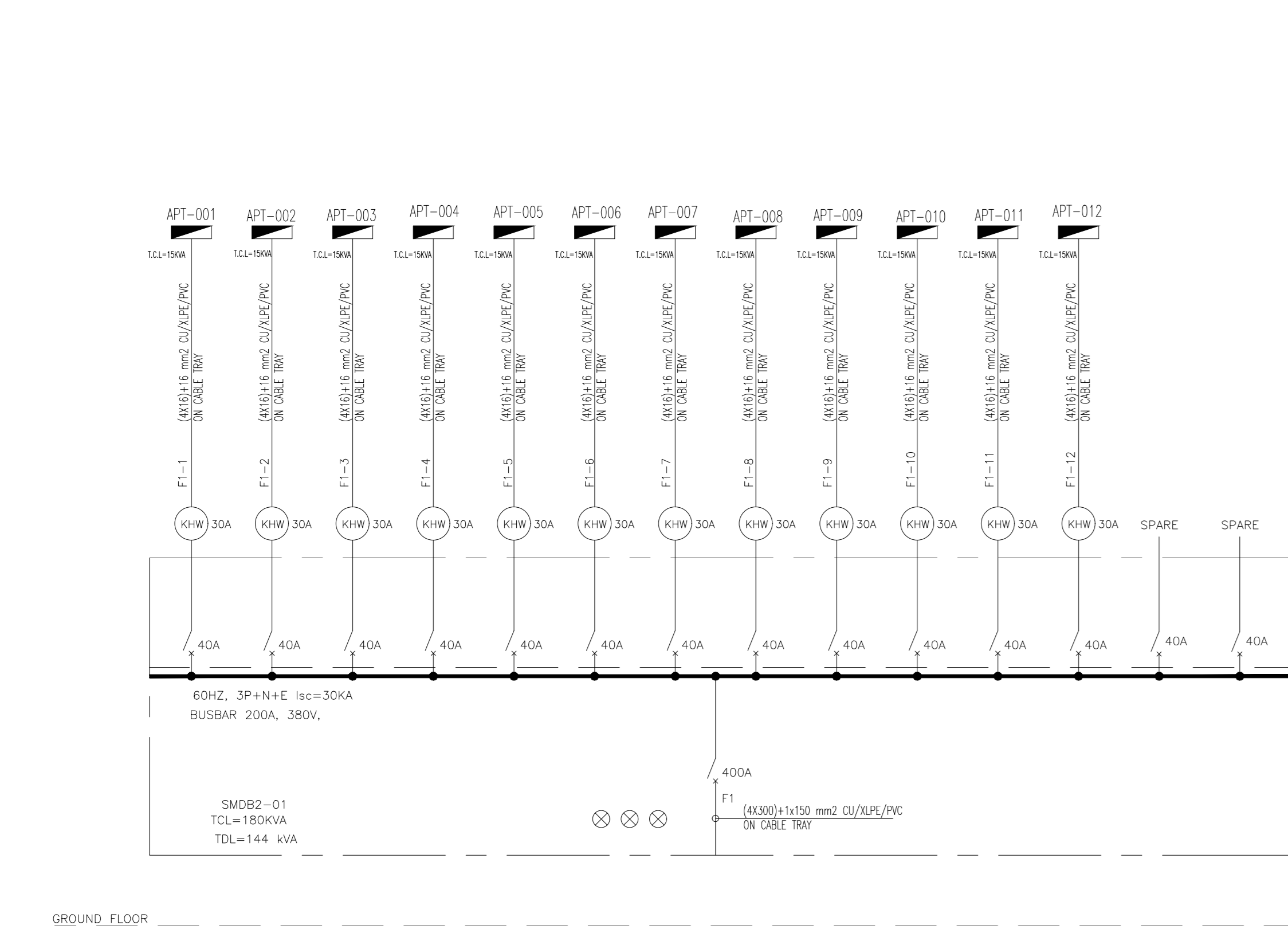
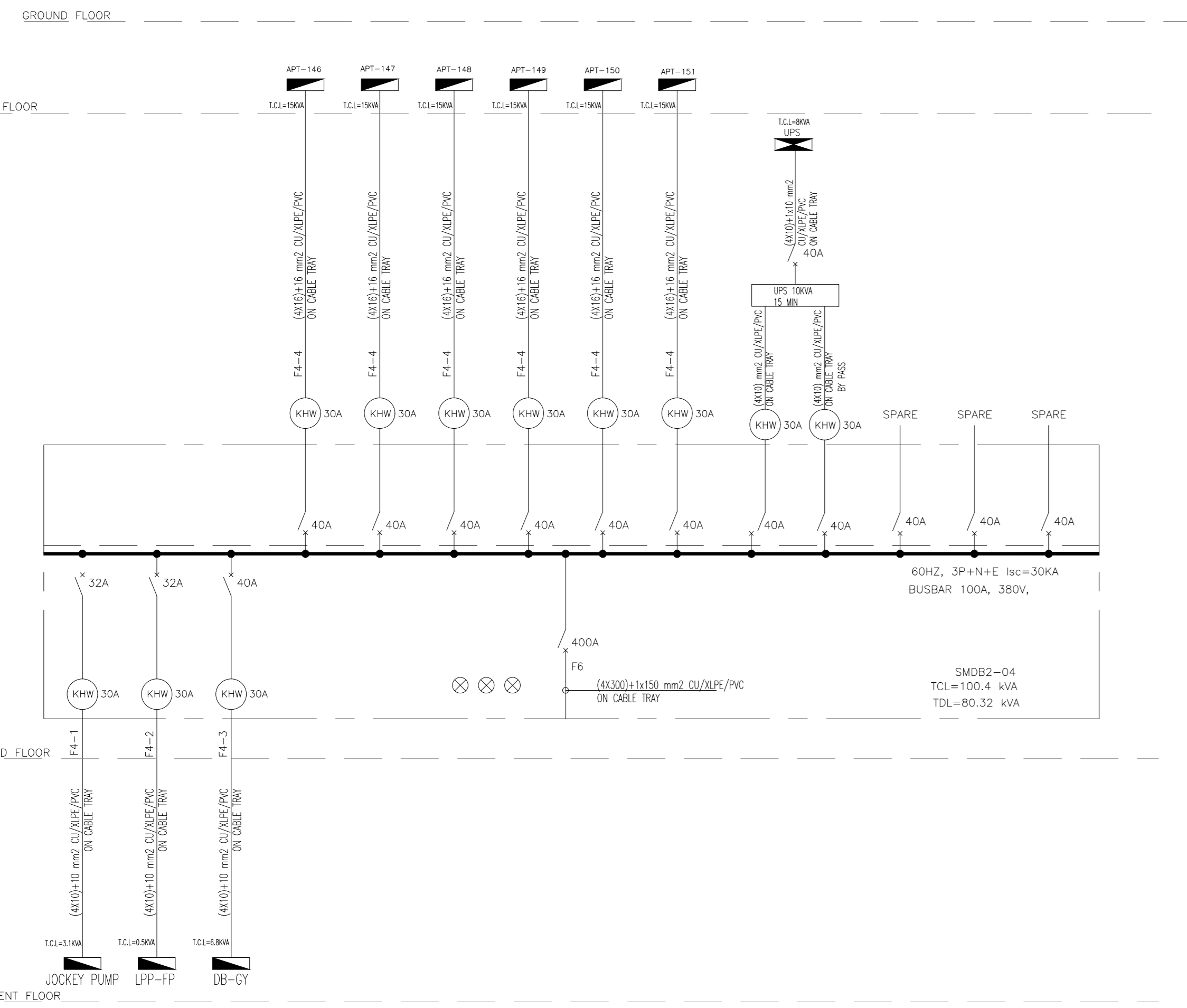
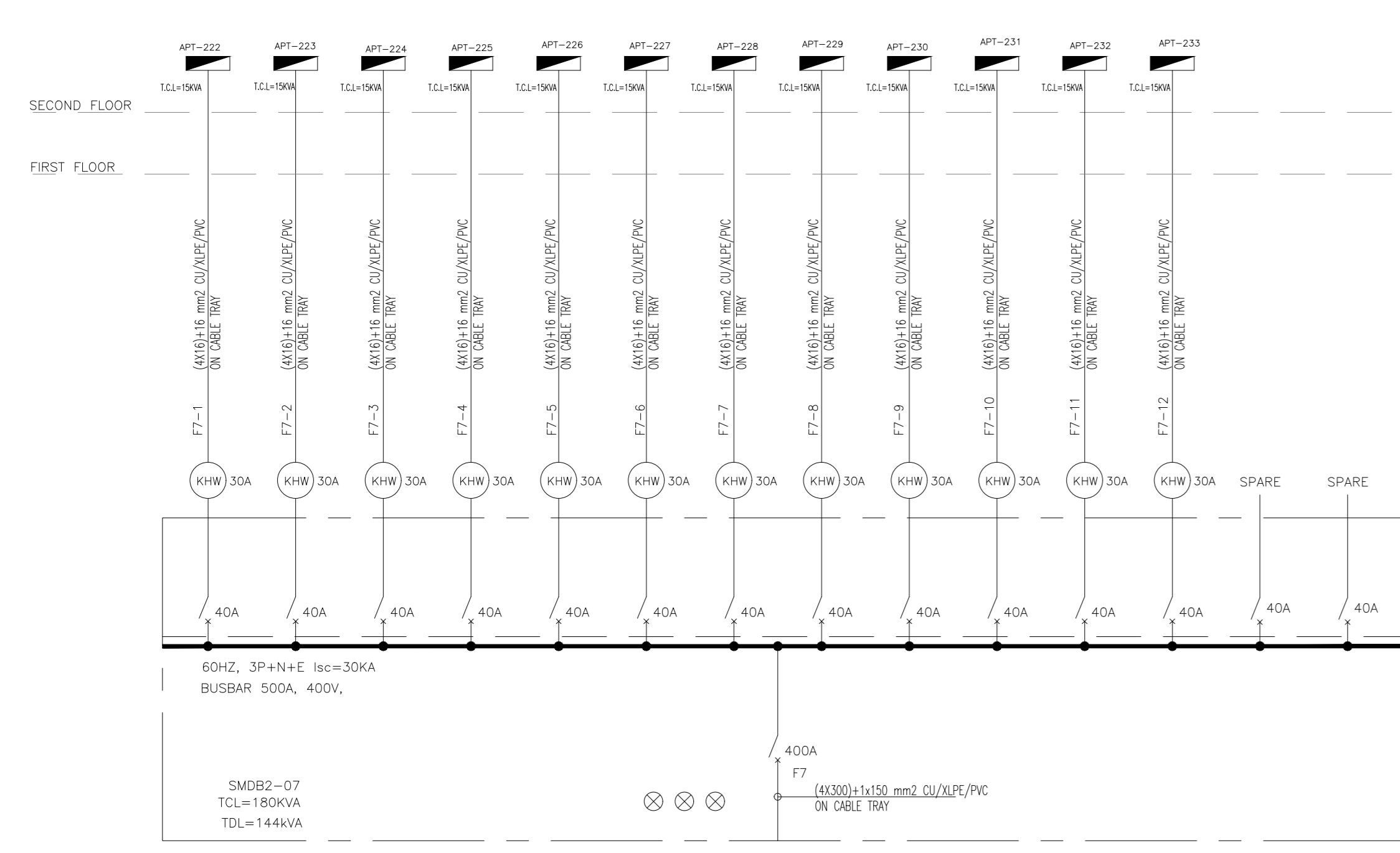
PROJECT: **SODIC VILLETTE ZONE (F)**

SHOP DRAWING TITLE: **(PROTOTYPE - B2) GROUND FLOOR PLAN (B2-01) LIGHTING SYSTEM PLANE**

DRAWN BY: <b>7H</b>	CHECKED BY: <b>7H</b>
DESIGNED BY: <b>7H</b>	APPROVED BY: <b>A.H</b>
DISCIPLINE: <b>ELEC</b>	SCALE: 1:25
SIZE: AD	DATE: 07-2022

VT-2E-SD-EL-GF-B2-03-01-R00 Rev: 00

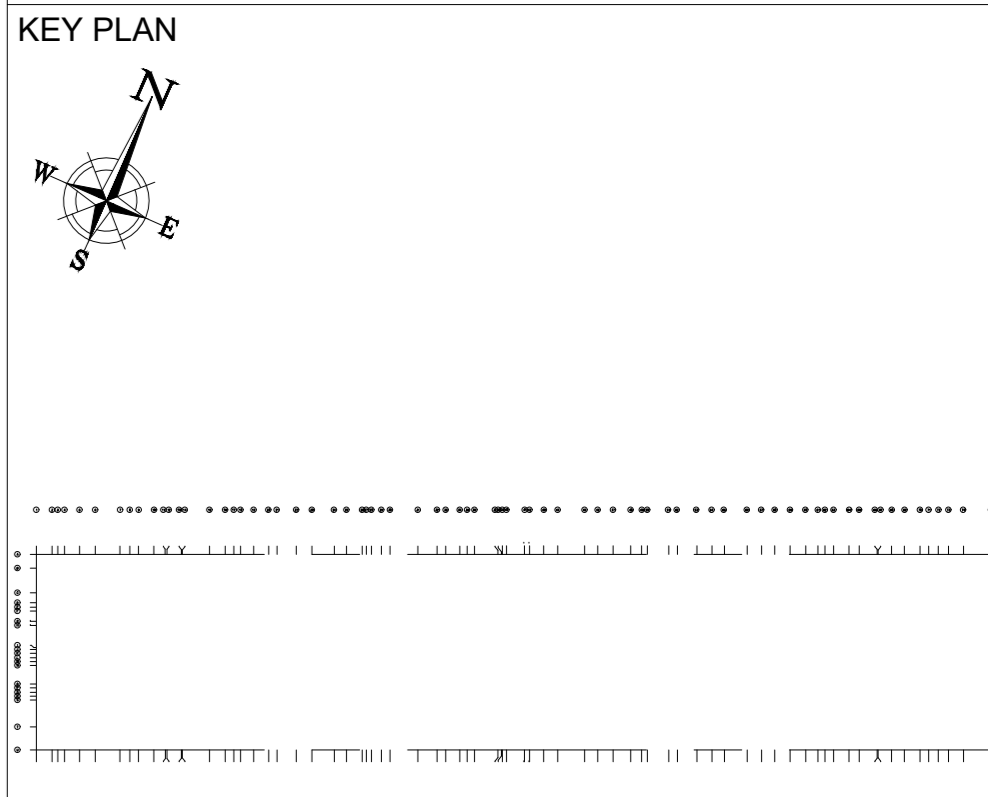
A (APPROVED)	B (APPROVED AS NOTED)	C (RESUBMIT FOR APPROVAL)	D (REJECTED)
--------------	-----------------------	---------------------------	--------------



**Notes:**  
 CB IN SMDB SHALL BE MCCB WITH AF 100 A MINIMUM.

**LEGEND:**

ITEM	DESCRIPTION
[Symbol]	12 KV WITHDRAWAL MOTORIZED, VACCUM CIRCUIT BREAKER WITH INTERLOCKED EARTHING SWITCH.
[Symbol]	12 KV SF6 LOAD BREAK SWITCH WITH INTERLOCKED EARTH SWITCH
[Symbol]	DISTRIBUTION TRANSFORMER (13.8/0.4 KV, DYN 11)
[Symbol]	LIGHTNING ARRESTER
[Symbol]	VOLTAGE PRESENCE INDICATOR (LED TYPE)
[Symbol]	INDICATION LAMP
[Symbol]	AIR CIRCUIT BREAKER.
[Symbol]	MOULDED CASE CIRCUIT BREAKER.
[Symbol]	SURGE PROTECTION DEVICE



**DRAWING REFERENCES:**

DWG	DESCRIPTION	REV.
00	12/11/2022	7H 7H 7H 7H
REV	DATE	DRW CHK TL PM

OWNER  
 OASIS RESIDENCE FOR REAL ESTATE COMPANY (LLC)  
 شركة مساكن الواحة العقارية

CONSULTANT  
 SAUDI ARABIA  
**HAEAHN**

SUB-CONSULTANT  
**RAKA DESIGN**

PROJECT  
 OASIS RESIDENCE GATED COMMUNITY

LOCATION  
 RIYADH,KSA

**DRAWING TITLE**  
 POWER SCHEMATIC DIAGRAM - SHEET-02

PREPARED	RAKA	Checked	RAKA	Approved	HAEAHN
Scale	N.T.S	@ A0	@A2		

Project No. Zone Drawing No. Drawing No. **EL-RS-002**