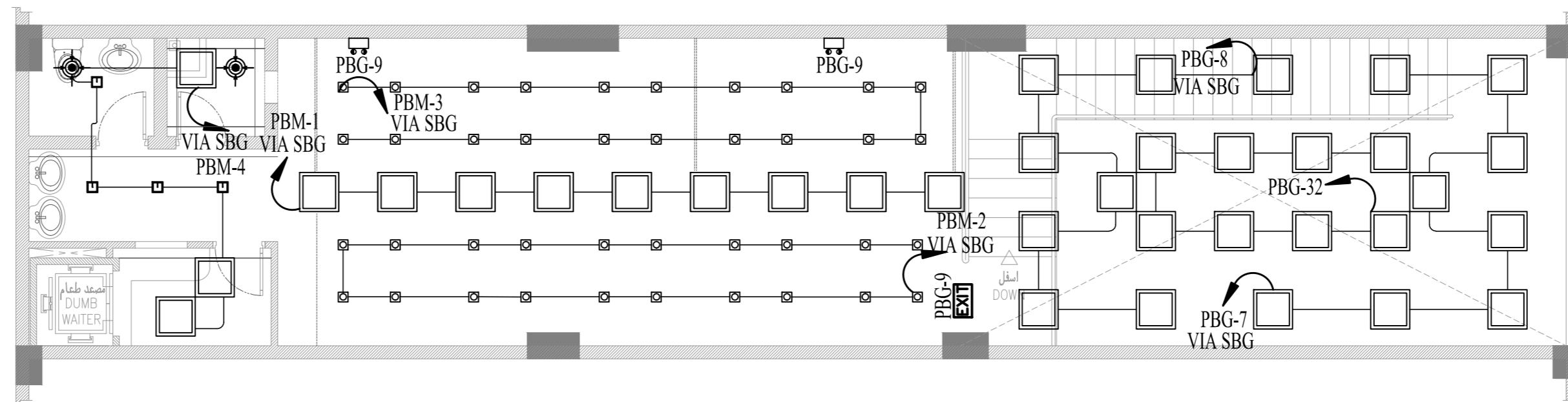


1 GROUND FLOOR LIGHTING LAYOUT
1:75

SYMBOL	DESCRIPTION
☒	BRAND: ULTRALIGHT PRODUCT CODE: 100209424 PRICE LIMIT: 68SR
○	220V, 31W LED VANCE OSRAM, 90mm DIA, 220mm HEIGHT
⊙	220V HOOD LIGHTING
☐	220V DOUBLE HEAD EMERGENCY LIGHTING SELF CONTAINED, FULLY AUTOMATIC WITH THREE HOUR BACKUP BATTERY
EXIT	220V EMERGENCY EXIT LIGHT WITH MAINTAINED PACK-BATTERY WITH ONE SIDED ENGLISH AND ARABIC EMERGENCY
SB	SWITCH BANK
J	JUNCTION BOX (TAPPING POINT)
↪	CIRCUIT HOMERUN

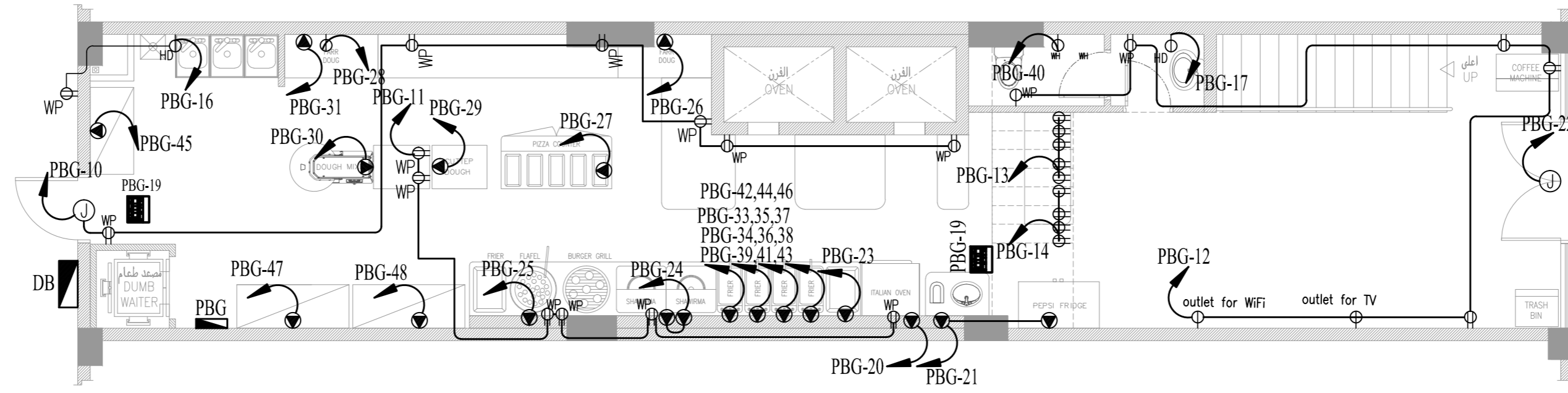
SYMBOL	DESCRIPTION
○	600x600mm 220V LIGHTING FIXTURES SLC BRAND PRICE LIMIT: 120SR EACH
☐	220V LED PANEL 600x600mm, 4W FROM ZAIN VENDOR, PRICE LIMIT: 175SR
☐	7" SQUARE LED 220V, 12W SPOT FROM ZAIN VENDOR, PRICE LIMIT: 36SR
△	220V LED FLOOD LIGHT ZAIN BRAND FROM ZAIN VENDOR
⊙	220V LED HIGH BAY LIGHTING FIXTURE ZAIN BRAND FROM ZAIN VENDOR
☐	EXHAUST FAN



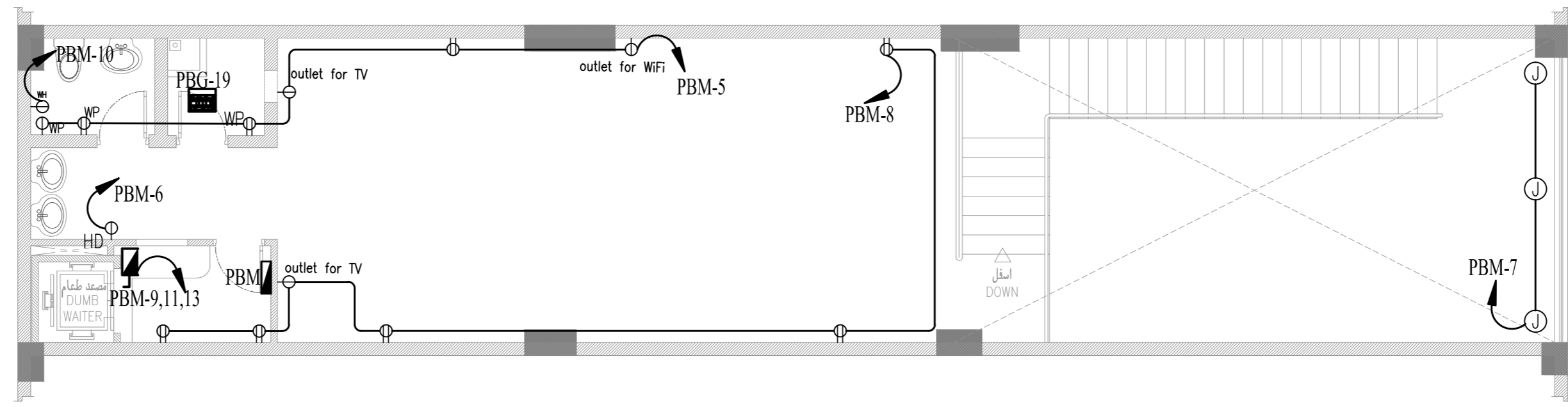
2 MEZZANINE FLOOR LIGHTING LAYOUT
1:75

SYMBOL	DESCRIPTION
☒	BRAND: ULTRALIGHT PRODUCT CODE: 100209424 PRICE LIMIT: 68SR
○	220V, 31W LED VANCE OSRAM, 90mm DIA, 220mm HEIGHT
⊙	220V HOOD LIGHTING
☐	220V DOUBLE HEAD EMERGENCY LIGHTING SELF CONTAINED, FULLY AUTOMATIC WITH THREE HOUR BACKUP BATTERY
EXIT	220V EMERGENCY EXIT LIGHT WITH MAINTAINED PACK-BATTERY WITH ONE SIDED ENGLISH AND ARABIC EMERGENCY
SB	SWITCH BANK
J	JUNCTION BOX (TAPPING POINT)
↪	CIRCUIT HOMERUN

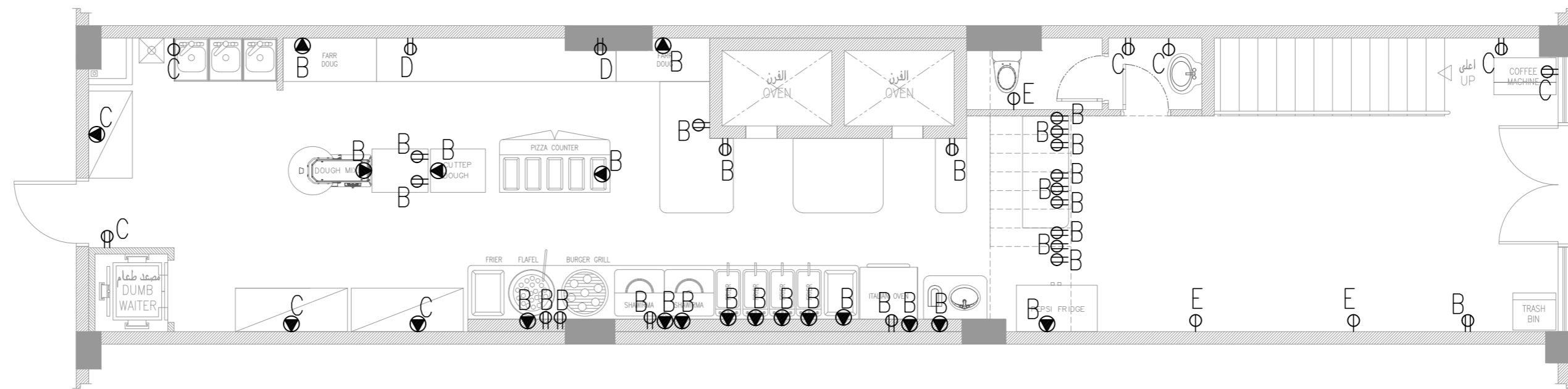
SYMBOL	DESCRIPTION
○	600x600mm 220V LIGHTING FIXTURES SLC BRAND PRICE LIMIT: 120SR EACH
☐	220V LED PANEL 600x600mm, 4W FROM ZAIN VENDOR, PRICE LIMIT: 175SR
☐	7" SQUARE LED 220V, 12W SPOT FROM ZAIN VENDOR, PRICE LIMIT: 36SR
△	220V LED FLOOD LIGHT ZAIN BRAND FROM ZAIN VENDOR
⊙	220V LED HIGH BAY LIGHTING FIXTURE ZAIN BRAND FROM ZAIN VENDOR
☐	EXHAUST FAN



1 GROUND FLOOR POWER LAYOUT
1:75

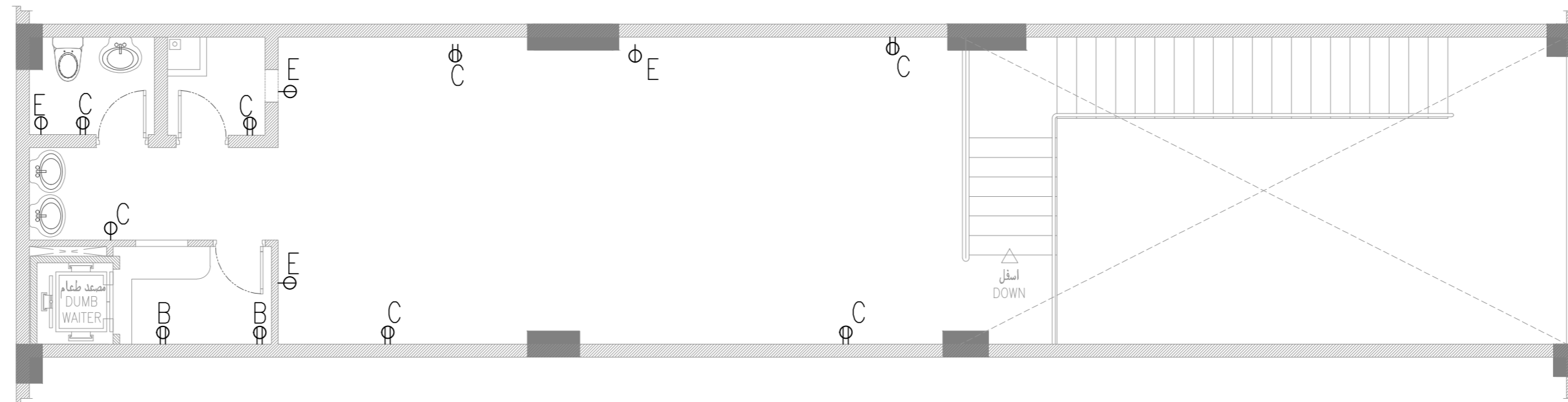


2 MEZZANINE FLOOR POWER LAYOUT
1:75



SYMBOL	DESCRIPTION
A	400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
B	550mm FROM FINISH FLOOR LINE TO THE TOP OF DEVICE
C	1200mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
D	1400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
E	400mm BELOW CEILING TO THE CENTER OF DEVICE

1 GROUND FLOOR CONVENIENCE OUTLET MOUNTING HEIGHT
1:75



SYMBOL	DESCRIPTION
A	400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
B	550mm FROM FINISH FLOOR LINE TO THE TOP OF DEVICE
C	1200mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
D	1400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
E	400mm BELOW CEILING TO THE CENTER OF DEVICE

2 MEZZANINE FLOOR CONVENIENCE OUTLET MOUNTING HEIGHT
1:75

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اشرف هندسي
ادارة مشروعات
ترخيص رقم (526)
كورنيش الدمام
شارع الخليج
ص.ب. 33333 الدمام 31516
المملكة العربية السعودية
تليفون/ 8090432-8090336
فاكس/ 8090204-3/8090204

رقم المشروع 17-102 SHEET NO. E-04

اسم المشروع
PROPOSED SENDEBAD RESTAURANT
مقترح مطعم سندباد

الموقع
AZIZIA-AL KHOBAR, KSA.
العزيرية الخبر

المالك
KINGDOM RESOURCES TRADING CO.
شركة مصادر المملكة التجارية

مهندس استشاري STRL. ENGR. معماري ARCHITECT
JUBEN AQEEL

التوقيع SIGNATURE
مهندس ميكانيكا MECH. ENGR. معماري ELEC. ENGR.
KHALID SALEH

التوقيع SIGNATURE
مهندس ميكانيكا MECH. ENGR. معماري ELEC. ENGR.
NOY JUBEN

التوقيع SIGNATURE
مهندس ميكانيكا MECH. ENGR. معماري ELEC. ENGR.
NOY JUBEN

التاريخ DATE
REVISION NO. DATE DRAWN BY

التاريخ DATE
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التاريخ DATE
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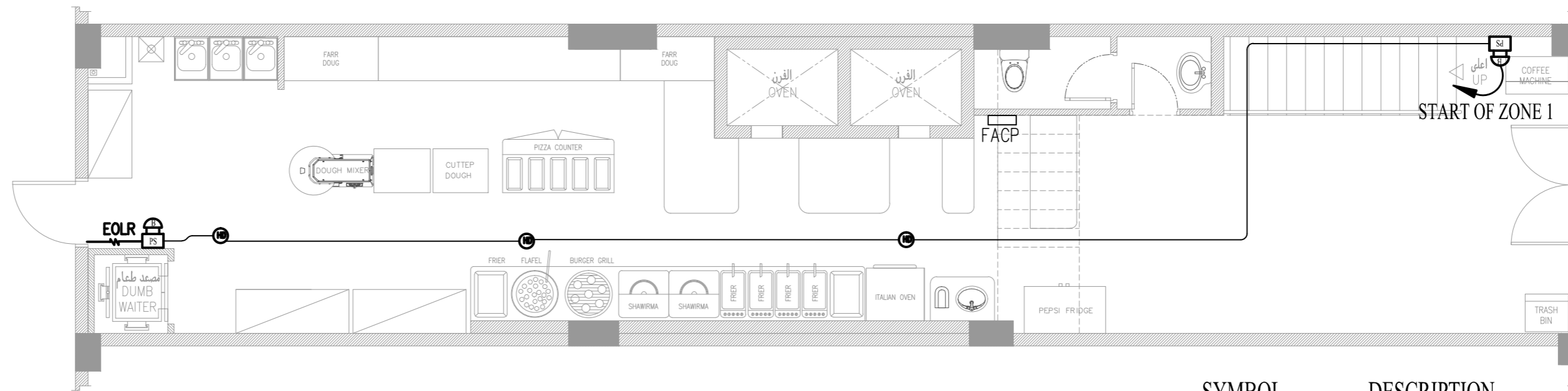
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التاريخ DATE
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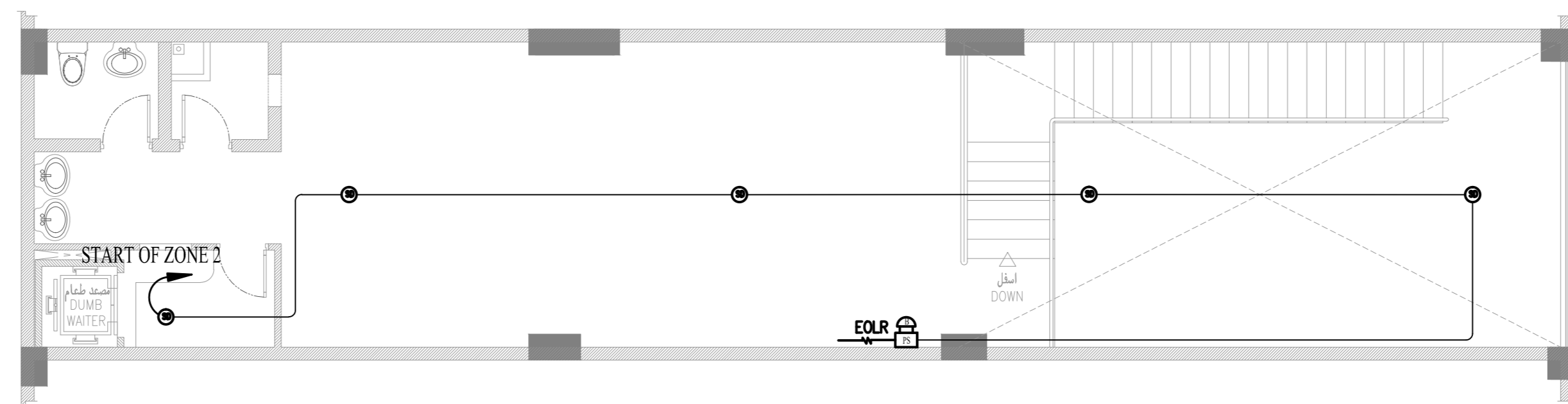
التاريخ DATE
REVISION NO. DATE DRAWN BY

المهندس/ وليد عبدالله القطري
ENGINEER: WALEED A. M. AL QATARI



SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	HEAT DETECTOR
	SMOKE DETECTOR
	CONVENTIONAL ALARM BELL
	CONVENTIONAL PULL ALARM
	END OF LINE RESISTOR
	CIRCUIT HOMERUN

1 GROUND FLOOR FIRE ALARM LAYOUT
1:75



SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	HEAT DETECTOR
	SMOKE DETECTOR
	CONVENTIONAL ALARM BELL
	CONVENTIONAL PULL ALARM
	END OF LINE RESISTOR
	CIRCUIT HOMERUN

2 MEZZANINE FLOOR FIRE ALARM LAYOUT
1:75

دراسات هندسية
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اشراف هندسي
ادارة مشروعات
ترخيص رقم (526)
كورنيش الدمام
شارع الخليج
ص.ب.3333 الدمام 516
المملكة العربية السعودية
تليفون/8843-8833
فاكس/ 8090204

رقم المشروع SHEET NO. رقم الورقة

17-102 E-05

اسم المشروع

PROPOSED SENDEBAD RESTAURANT

مقترح مطعم سندباد

الموقع

AZIZIA-AL KHOBAR, KSA.

العزيرية الخبر

المالك

KINGDOM RESOURCES TRADING CO.

شركة مصادر المملكة التجارية

مهندس استشاري STRL. ENGR. مهندس

JUBEN AQEEL

التوقيع SIGNATURE

التوقيع SIGNATURE

مهندس ميكانيكي MECH. ENGR. مهندس

KHALID SALEH

التوقيع SIGNATURE

التوقيع SIGNATURE

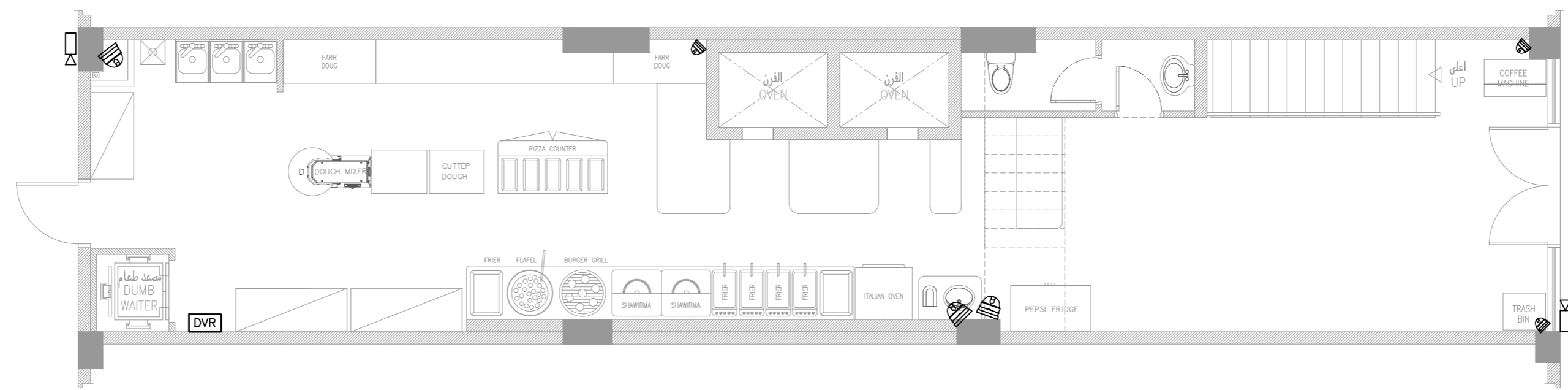
مهندس مدقق CHECKED BY

NOY JUBEN

التاريخ DATE

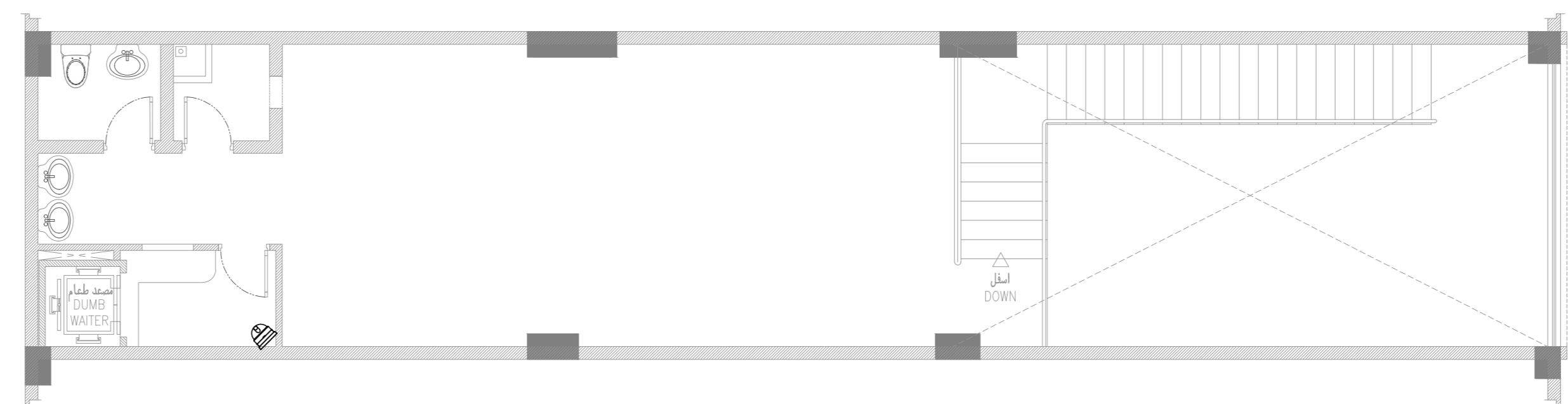
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REVISION NO. DATE DRAWN BY



1 GROUND FLOOR CCTV LAYOUT
1:75

SYMBOL	DESCRIPTION
	DIGITAL VIDEO RECORDER
	DOME TYPE CCTV (INDOOR)
	BOX TYPE CCTV (OUTDOOR)
	CEILING MOUNTED SPEAKER
	MICROPHONE
	AMPLIFIER



2 MEZZANINE FLOOR CCTV LAYOUT
1:75

SYMBOL	DESCRIPTION
	DIGITAL VIDEO RECORDER
	DOME TYPE CCTV (INDOOR)
	BOX TYPE CCTV (OUTDOOR)
	CEILING MOUNTED SPEAKER
	MICROPHONE
	AMPLIFIER

دراسات هندسية
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المملكة العربية السعودية
طيفون / 8090432-8090336
فاكس / 8090204

رقم المشروع SHEET NO.
17-102 E-06

اسم المشروع
PROPOSED SENDEBAD RESTAURANT
مقترح مطعم سندباد

الموقع
AZIZIA-AL KHOBAR, KSA.
العزيرية الخبر

المالك
KINGDOM RESOURCES TRADING CO.
شركة مصادر المملكة التجارية

مهندس استشاري STRL. ENGR.
JUBEN AQEEL

التوقيع
ELEC. ENGR. MECH. ENGR.
KHALID SALEH

التوقيع
DRAWN BY CHECKED BY
NOY JUBEN

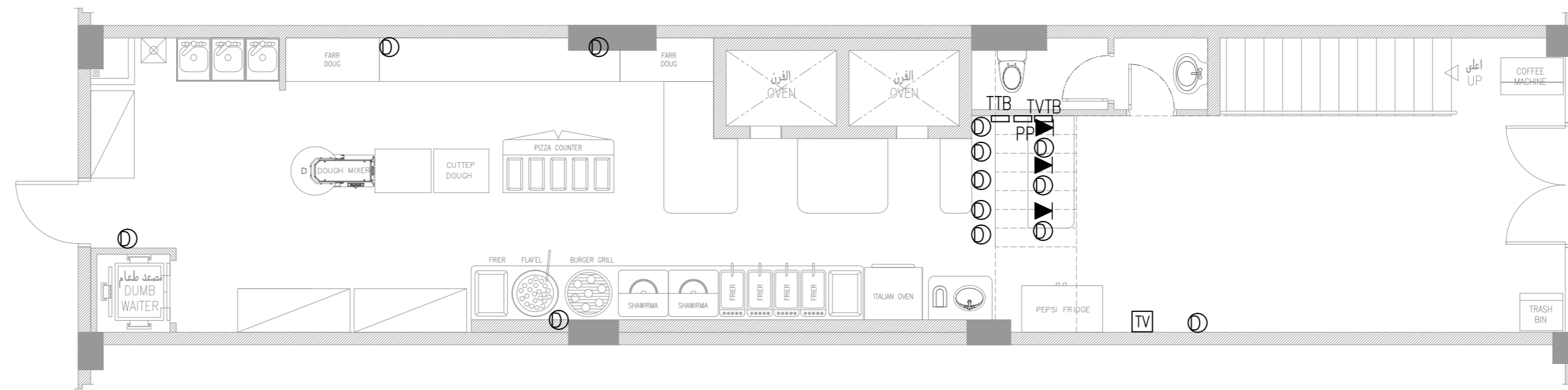
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DATE: DRAWN BY

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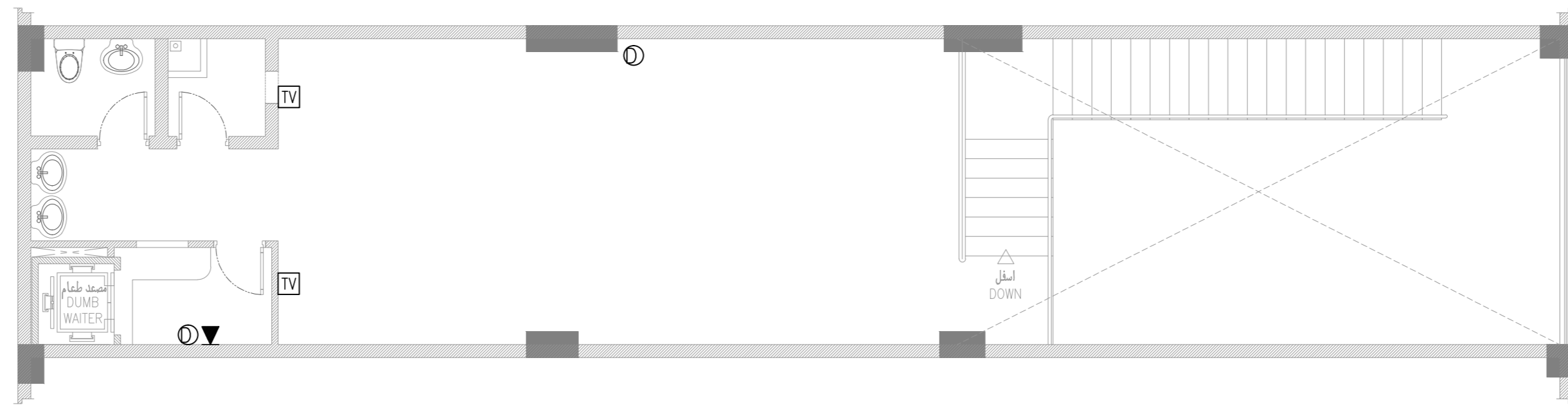
APPROVED BY:

المهندس/ وليد عبدالله القطري
ENGINEER: WALEED A. M. AL QATARI



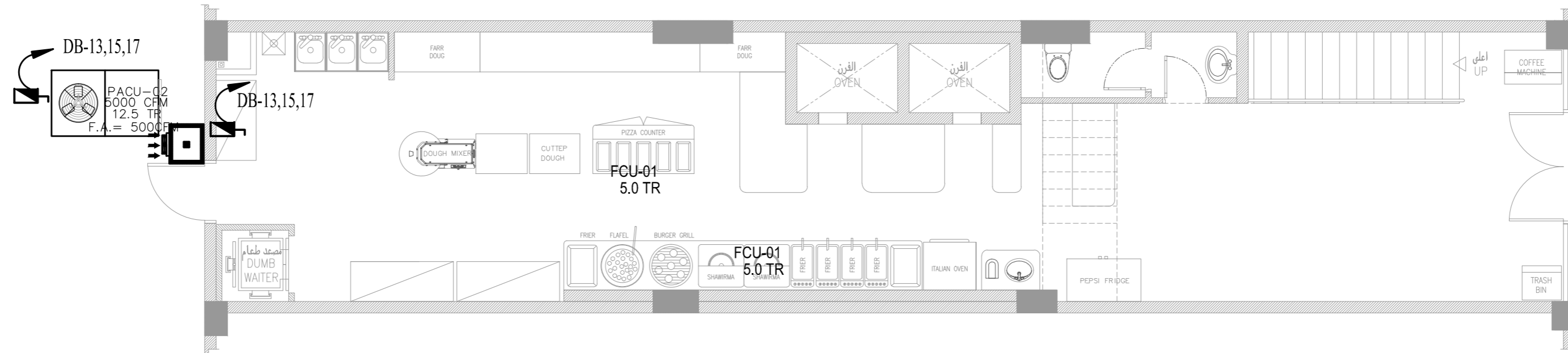
SYMBOL	DESCRIPTION
⊙	DATA OUTLET
PP	PATCH PANEL
▼	TELEPHONE OUTLET
TTB	TELEPHONE TERMINAL BOX
TV	TELEVISION OUTLET
TVTB	TELEVISION TERMINAL BOX

1 GROUND FLOOR DATA & TELEPHONE LAYOUT
1:75













SYMBOL	DESCRIPTION
⊙	DATA OUTLET
PP	PATCH PANEL
▼	TELEPHONE OUTLET
TTB	TELEPHONE TERMINAL BOX
TV	TELEVISION OUTLET
TVTB	TELEVISION TERMINAL BOX

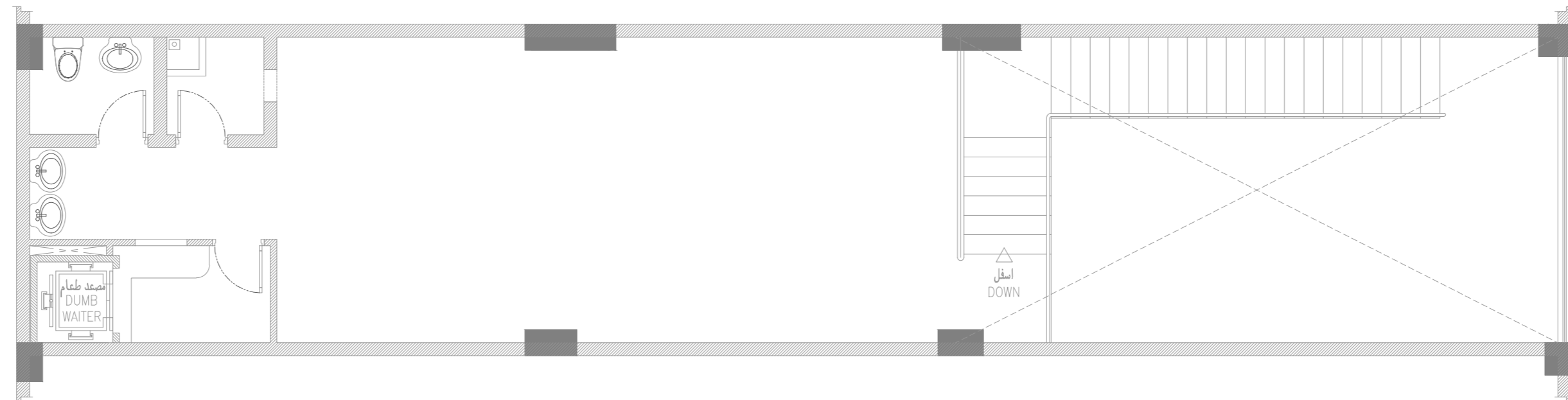
2 MEZZANINE FLOOR DATA & TELEPHONE LAYOUT
1:75








1 GROUND FLOOR POWER FOR A/C LAYOUT
1:75






SYMBOL	DESCRIPTION
	CIRCUIT HOMERUN
	SPECIAL PURPOSE OUTLET
	FLY CATCHER
	UNIVERSAL TYPE DUPLEX CONVENIENCE OUTLET, 230V, 60 HZ, 20A, 4600W
	UNIVERSAL TYPE WEATHER PROOF WITH GFCI CONVENIENCE OUTLET, 230V, 60 HZ, 20A, 4600W

SYMBOL	DESCRIPTION
	UNIVERSAL TYPE WATER HEATER OUTLET, 230V, 60 HZ, 20A, 4600W
	JUNCTION BOX (TAPPING POINT)
	PANELBOARD
	DISCONNECT SWITCH, RATED AS PER PANELBOARD LOAD SCHEDULE
	UNIVERSAL TYPE HAND DRYER OUTLET, 230V, 60 HZ, 20A, 4600W



2 MEZZANINE FLOOR POWER FOR A/C LAYOUT
1:75

SYMBOL	DESCRIPTION
	CIRCUIT HOMERUN
	SPECIAL PURPOSE OUTLET
	FLY CATCHER
	UNIVERSAL TYPE DUPLEX CONVENIENCE OUTLET, 230V, 60 HZ, 20A, 4600W
	UNIVERSAL TYPE WEATHER PROOF WITH GFCI CONVENIENCE OUTLET, 230V, 60 HZ, 20A, 4600W

SYMBOL	DESCRIPTION
	UNIVERSAL TYPE WATER HEATER OUTLET, 230V, 60 HZ, 20A, 4600W
	JUNCTION BOX (TAPPING POINT)
	PANELBOARD
	DISCONNECT SWITCH, RATED AS PER PANELBOARD LOAD SCHEDULE
	UNIVERSAL TYPE HAND DRYER OUTLET, 230V, 60 HZ, 20A, 4600W



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AL QATARI ENGINEERING CONSULTANTS



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شارع الخليج
ص.ب ٣٣٦٣ الدمام ٣١٥٦
المملكة العربية السعودية
تليفون / ٨٠٤٣٦-٨٠٤٣٦
فاكس / ٨٠٤٣٦-٨٠٤٣٦

ENG'G STUDIES
DESIGN-SURVEY
ENG'G SUPERVISION
PROJECT MGMT.
LICENSE NO. <526>
KORNICHE DAMMAM
GULF STREET
P.O.BOX 63063 DAM 31516
KINGDOM OF SAUDI ARABIA
TEL NO. 8090432-8090336
FAX NO. 8090204

رقم الورقة SHEET NO. E-08
رقم المشروع 17-102

اسم المشروع
PROPOSED SENDEBAD RESTAURANT
مقترح مطعم سنبداب

الموقع
AZIZIA-AL KHOBAR, KSA.
العزيرية الخبر

المالك
OWNER
KINGDOM RESOURCES TRADING CO.
شركة مصادر المملكة التجارية

مهندس انشائي STRL. ENGR. AQEEL
معماري ARCHITECT JUBEN

التوقيع
SIGNATURE
مهندس ميكانيكي MECH. ENGR. SALEH
ELEC. ENGR. KHALID

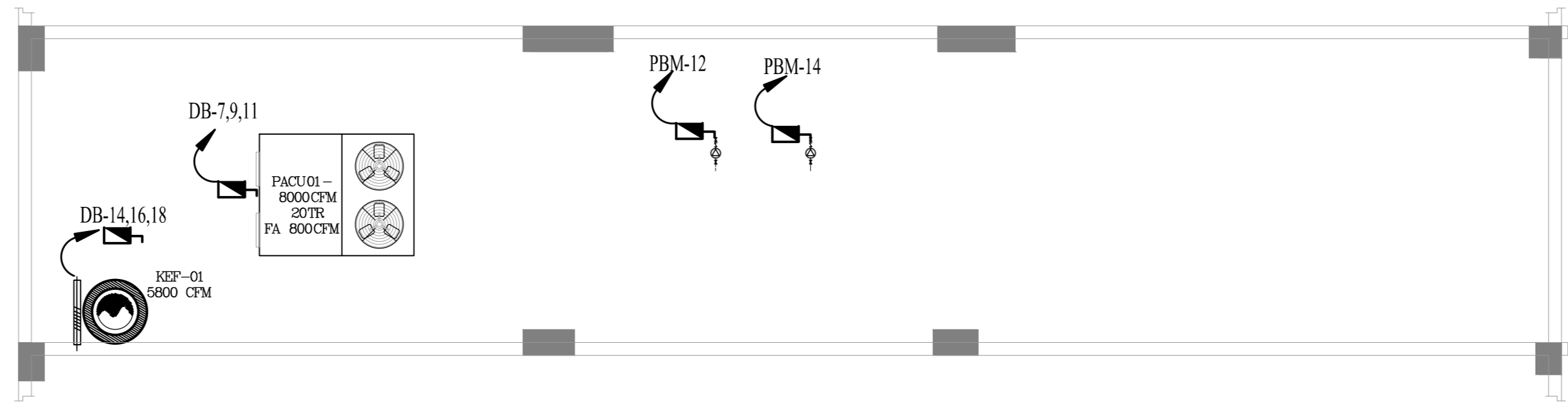
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SIGNATURE
مهندس ميكانيكي MECH. ENGR. SALEH
ELEC. ENGR. KHALID

التوقيع
SIGNATURE
التاريخ DATE:
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CHECKED BY JUBEN

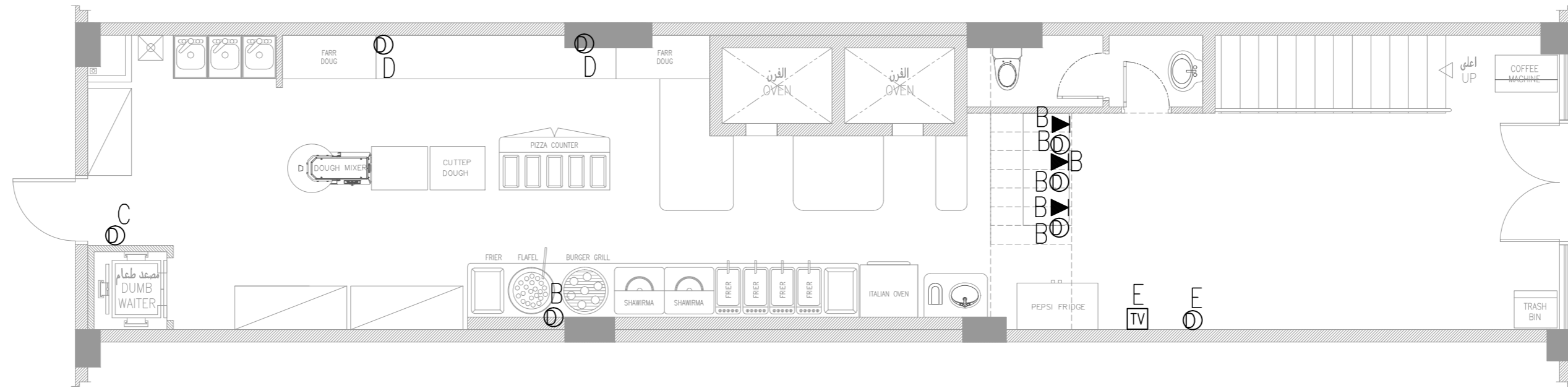
REVISION NO.	DATE	DRAWN BY

APPROVED BY:

المهندس/ وليد عبدالله القطري
ENGINEER: WALEED A. M. AL QATARI

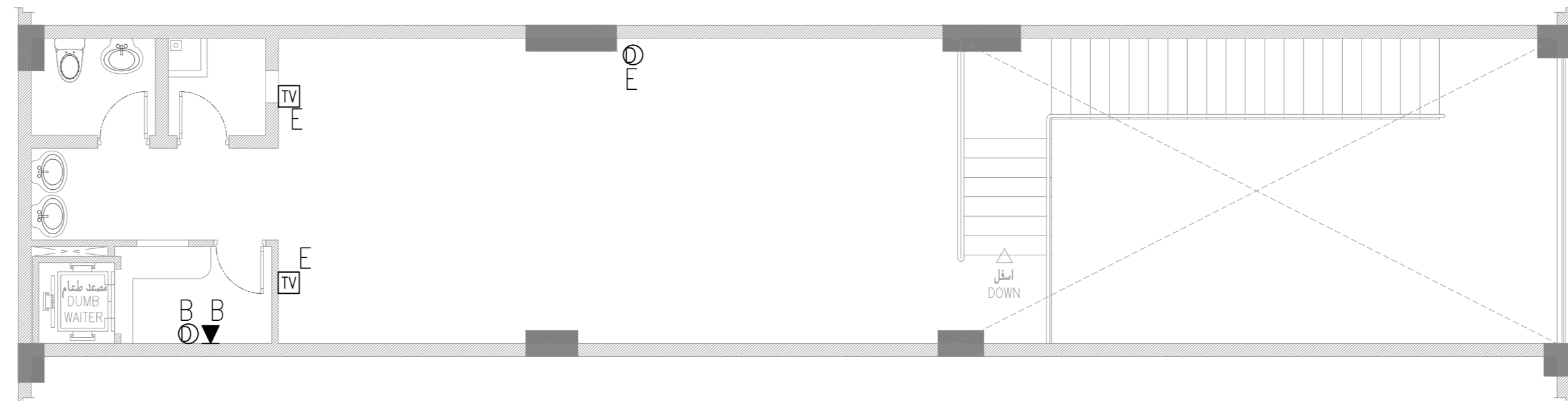


1 ROOF DECK POWER FOR A/C LAYOUT LAYOUT
- 1:75



SYMBOL	DESCRIPTION
A	400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
B	550mm FROM FINISH FLOOR LINE TO THE TOP OF DEVICE
C	1200mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
D	1400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
E	400mm BELOW CEILING TO THE CENTER OF DEVICE

1
-
GROUND FLOOR DATA AND TELEPHONE OUTLET MOUNTING HEIGHT
1:75



SYMBOL	DESCRIPTION
A	400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
B	550mm FROM FINISH FLOOR LINE TO THE TOP OF DEVICE
C	1200mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
D	1400mm FROM FINISH FLOOR LINE TO THE CENTER OF DEVICE
E	400mm BELOW CEILING TO THE CENTER OF DEVICE

1
-
MEZZANINE FLOOR DATA AND TELEPHONE OUTLET MOUNTING HEIGHT
1:75



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AL QATARI ENGINEERING CONSULTANTS



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ادارة مشروعات
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P.O.BOX 63063 DAM 31516
KINGDOM OF SAUDI ARABIA
TEL NO. 8090432-8090336
FAX NO. 8090204
المملكة العربية السعودية
طيفون/فاكس / ٠٢/٨٠٩٠٤٤

رقم الورقة SHEET NO. 17-102 E-10

اسم المشروع PROPOSED SENDEBAD RESTAURANT

مقترح مطعم سندباد

الموقع LOCATION AZIZIA-AL KHOBAR, KSA.

العنوان العزيرية الخبر

المالك OWNER KINGDOM RESOURCES TRADING CO.

شركة مصادر المملكة التجارية

مهندس انشائي STRL. ENGR. ARCHITECT JUBEN

مهندس ميكانيكي MECH. ENGR. ELEC. ENGR. KHALID

مهندس انشائي STRL. ENGR. ARCHITECT NOY

مهندس ميكانيكي MECH. ENGR. ELEC. ENGR. JUBEN

التاريخ DATE

التاريخ DATE

التاريخ DATE

التاريخ DATE

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التاريخ DATE

التاريخ DATE

التاريخ DATE

التاريخ DATE

PANEL : PBM MAIN CIRCUIT BREAKER 40 A LOCATION: MEZANENE FLOOR MOUNTING: FLUSHED MOUNTED

CKT. NOS.	LOADS DESCRIPTION	LOAD VA	LOAD PER PHASE			WIRE SIZES (mm ²)	CB AMPS	CB AMPS	WIRE SIZES (mm ²)	LOADS IN VA				LOADS DESCRIPTION	CKT. NOS.
			R	Y	B					R	Y	B	LOAD		
1	LIGHTING	550	550			3 X 4	20						LIGHTING	2	
3	LIGHTING	650		650		3 X 4	20			650			LIGHTING & EF	4	
5	CONVENIENCE OUTLET	1080			1080	3 X 4	20				2000	2000	HAND DRYER OUTLET.	6	
7	CURTAIN	1000	1000			3 X 4	20						CONVENIENCE OUTLET	8	
9				2018.3333									WATER HEATER	10	
11	DUMB WAITER	6055			2018.3333	5 X 6	30				1000	1000	BOOSTER PUMP	12	
13			2018.3333							1000			BOOSTER PUMP	14	
15	SPARE						20						SPARE	16	
SUB - TOTAL		9335	3568	2668.3333	3098.3333					2730	3250	3000	8980	SUB - TOTAL	

PHASE R: 6298.333 VA DEMAND FACTOR: 83% FEEDER: DB
 PHASE Y: 5918.333 VA DEMAND LOAD IN VA: 15682.9 VA CABLE SIZE: 4X10mm²+6
 PHASE B: 6098.333 VA DEMAND LOAD IN AMPERES: 23.83 AMPS.
 TOTAL CONNECTED LOAD: 18315 VA RATING OF CIRCUIT BREAKER BY 125%: 29.79 AMPS.

PANEL : PBG MAIN CIRCUIT BREAKER 125 A LOCATION: GROUND MOUNTING: FLUSHED MOUNTED

CKT. NOS.	LOADS DESCRIPTION	LOAD VA	LOAD PER PHASE			WIRE SIZES (mm ²)	CB AMPS	CB AMPS	WIRE SIZES (mm ²)	LOADS IN VA				LOADS DESCRIPTION	CKT. NOS.
			R	Y	B					R	Y	B	LOAD		
1	LIGHTING	600	600			3 X 4	20			750			LIGHTING	2	
3	LIGHTING	1000		1000		3 X 4	20				850		LIGHTING	4	
5	MENU BOARD & SIGNAGE	1000			1000	3 X 4	20				1000	1000	SIGNAGE	6	
7	LIGHTING	500	500			3 X 4	20			500			LIGHTING	8	
9	EMERGENCY & EXIT LIGHTING	450		450		3 X 4	20				1600	1600	CONVENIENCE OUTLET	10	
11	CONVENIENCE OUTLET	1080			1080	3 X 4	20				1400	1400	CONVENIENCE OUTLET	12	
13	CONVENIENCE OUTLET	1080	1080			3 X 4	20			1080			CONVENIENCE OUTLET	14	
15	FACP	1000		1000		3 X 4	20				2000	2000	HAND DRYER OUTLET	16	
17	HAND DRYER OUTLET	2000			2000	3 X 4	20					1000	DVR	18	
19	FLY CATCHER	600	600			3 X 4	20					180	ITALIAN OVEN	20	
21	PEPSI FRIDGE, JUICE	1600		1600		3 X 4	20			1000			AIR CURTAIN	22	
23	FRIER	700			700	3 X 4	20				540	540	SHAWARMA	24	
25	FRIER	250	250			3 X 4	20			2760		2760	FARRA DOUGH	26	
27	PIZZA COUNTER	850		850		3 X 4	20				2000	2000	WATER HEATER	28	
29	DOUGH CUTTER	2760			2760	3 X 4	20					1840	DOUGH MIXER	30	
31	FARRA DOUGH	2760	2760			3 X 4	20			500			LIGHTING	32	
33				2750							2750		FRIER	34	
35	FRIER	8250			2750	5 X 4	20				2750	8250	FRIER	36	
37				2750									FRIER	38	
39				2750									FRIER	40	
41	FRIER	8250			2750	5 X 4	20				2750	8250	FRIER	42	
43				2750									FRIER	44	
45	REFRIGERATOR	1000				3 X 4	20				2750		FRIER	46	
47	FREZZER	1000				3 X 4	20				2750		REFRIGERATOR	48	
49	SPARE						20						SPARE	50	
51	SPARE						20						SPARE	52	
SUB - TOTAL		36730	11290	10400	13040					11270	14450	11280	38000	SUB - TOTAL	

PHASE R: 22560 VA DEMAND FACTOR: 85% FEEDER: DB
 PHASE Y: 24850 VA DEMAND LOAD IN VA: 63367.5 VA CABLE SIZE: 4 X 50mm² + 16mm² (G)
 PHASE B: 24320 VA DEMAND LOAD IN AMPERES: 96.28 AMPS.
 TOTAL CONNECTED LOAD: 74730 VA RATING OF CIRCUIT BREAKER BY 125%: 120.35 AMPS.

1 PANELBOARD LOAD SCHEULE
 NTS.

المهندس/ وليد عبدالله القطري
 ENGINEER: WALEED A. M. AL QATARI



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التوقيع
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NOY JUBEN
التوقيع

PROJECT NO. رقم المشروع SHEET NO. رقم الورقة
17-102 E-11

PROJECT TITLE اسم المشروع
PROPOSED SENDEBAD RESTAURANT
مقترح مطعم سندباد

LOCATION الموقع
AZIZIA-AL KHOBAR, KSA.
العزيرية الخبر

OWNER المالك
KINGDOM RESOURCES TRADING CO.
شركة مصادر المملكة التجارية

ARCHITECT معماري STRL. ENGR. ميكانيكي
JUBEN AQEEL

SIGNATURE التوقيع
ELEC. ENGR. معماري MECH. ENGR. ميكانيكي
KHALID SALEH

SIGNATURE التوقيع
DRAWN BY معماري CHECKED BY بقلم
NOY JUBEN

SIGNATURE التوقيع
DATE: التاريخ

REVISION NO. DATE DRAWN BY

APPROVED BY:

المهندس/ وليد عبدالله القطري
ENGINEER: WALEED A. M. AL QATARI

PANEL : DB MAIN CIRCUIT BREAKER 300A LOCATION: GROUND FLOOR
VOLTAGE SYSTEM : 400 V, 3-PH MOUNTING: FLUSHED MOUNTED

CKT. NOS.	LOADS DESCRIPTION	LOAD VA	LOAD PER PHASE			WIRE SIZES (mm ²)	CB AMPS	CB AMPS	WIRE SIZES (mm ²)	LOADS IN VA				LOADS DESCRIPTION	CKT. NOS.	
			R	Y	B					R	Y	B	LOAD			
1	PBG	74780	24927			4 X 50 +16	125	40	4 X 10 + 6	6105			18315	PBM	2	
3				24927							6105					4
5					24927							6105				
7	PACU01	36250	12083			4 X 25+10	70	30		0				SPACE	8	
9				12083							0					10
11					12083							0				
13	KSF-1 (1.5HP)	2390	797			5 X 4	20	20	5 X 4	833			2500	KEF-1 (2.5HP)	14	
15				797							833					16
17					797							833				
19	PACU02	22750	7583.3333			4X16+6	50	30		0				SPACE	20	
21				7583.3333							0					22
23					7583.3333							0				
25	SPACE		0				30	20		0					26	
27				0							0					28
29					0							0				
SUB - TOTAL		136170	45390	45390	45390					6938	6938	6938	20815	SUB - TOTAL		

PHASE R: 52328 VA DEMAND FACTOR: 89% FEEDER: SCECO METER
 PHASE Y: 52328 VA DEMAND LOAD IN VA: 139717 VA CABLE SIZE: 4 X 185mm² CU/XLPE/PVC + 35mm² (G)
 PHASE B: 52328 VA DEMAND LOAD IN AMPERES: 212.28 AMPS.
 TOTAL CONNECTED LOAD: 156985 VA RATING OF CIRCUIT BREAKER BY 125% 265.35

1 PANELBOARD LOAD SCHEULE 2
 - NTS.

PBG CKT.# 01

PBG CKT.# 02

PBG CKT.# 03

PBG CKT.# 04

PBG CKT.# 05

PBG CKT.# 06

PBG CKT.# 07

PBG CKT.# 08

PBM CKT.# 01

PBM CKT.# 02

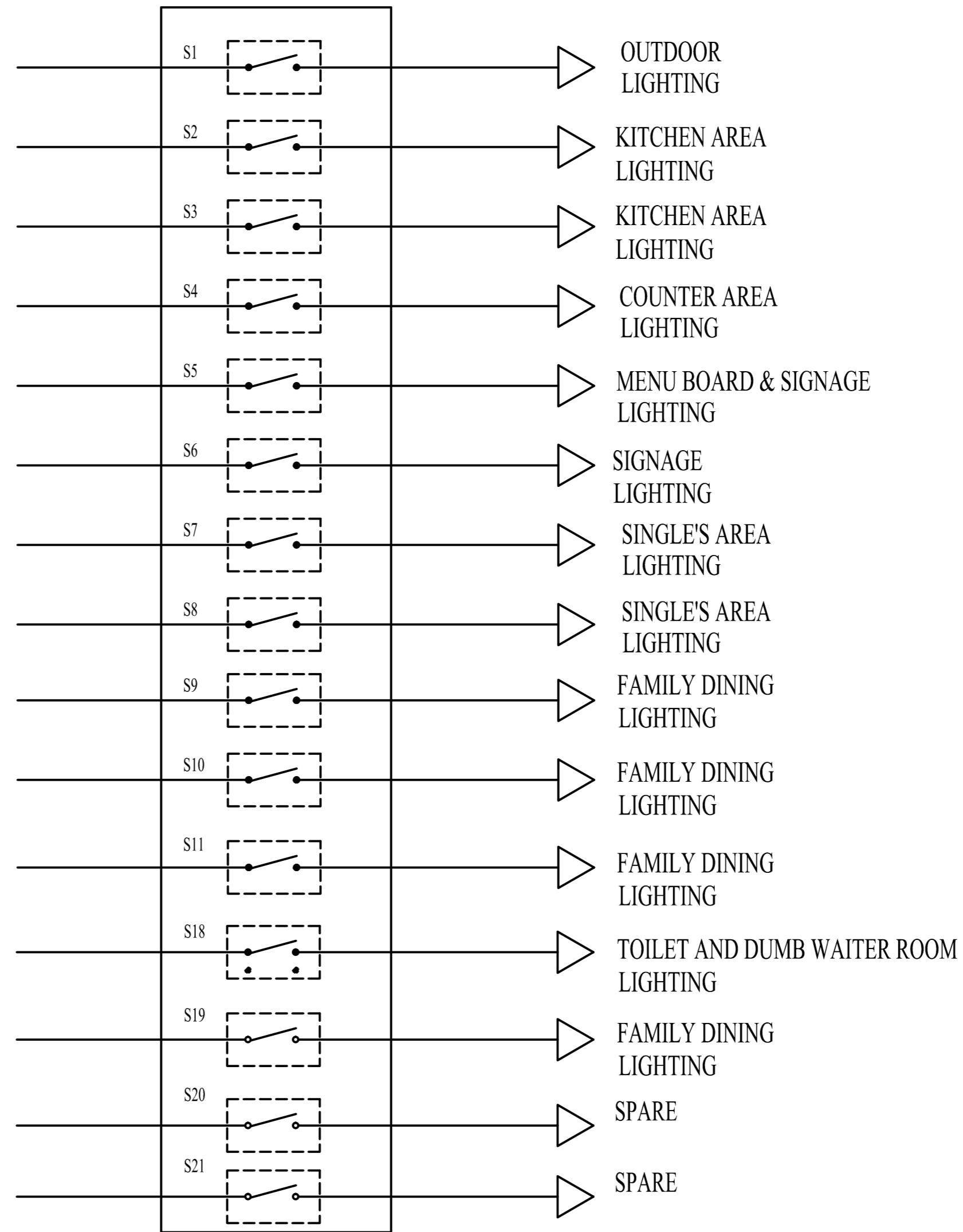
PBM CKT.# 03

PBM CKT.# 04

PBG CKT.# 32

25 DIA STUP-UP

25 DIA STUP-UP



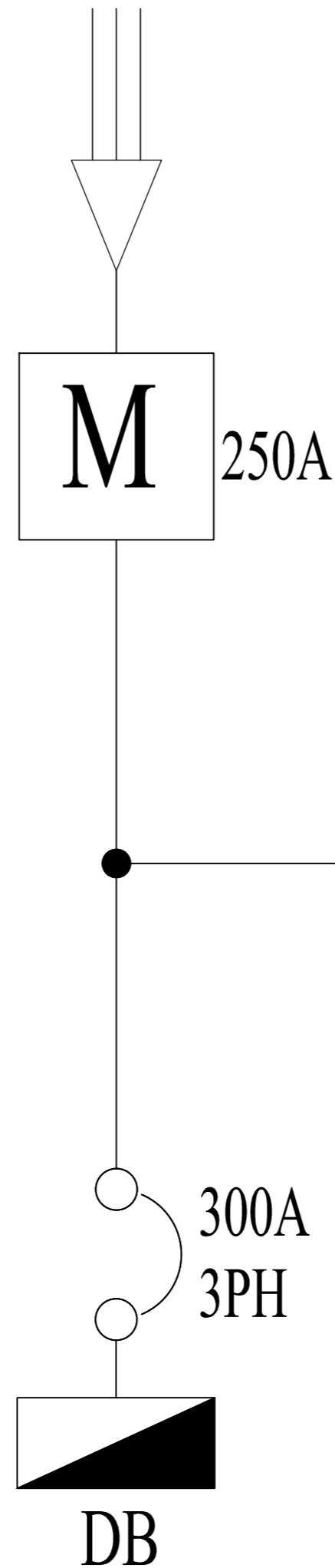
SBG

SWITCH BANK "SBG" DIAGRAM FOR GROUND AND MEZZANINE FLR.

[ALL WIRING ARE COLOUR CODED]
[EACH SWITCHES HAVE SEPARATOR]

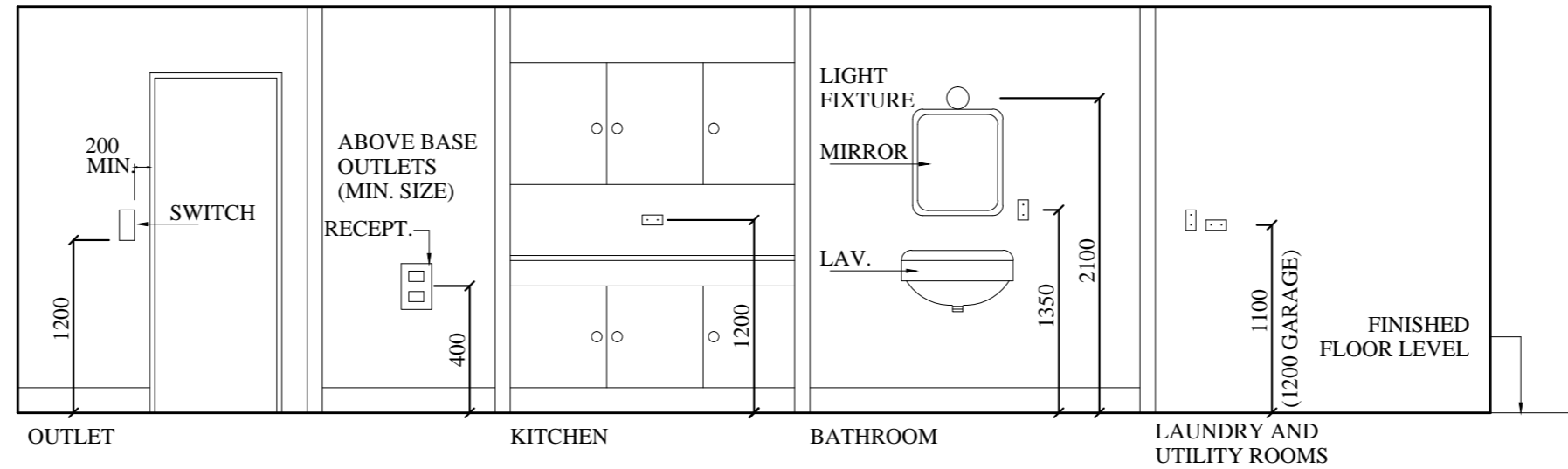
1 SWITCH BANK "SBG" DIAGRAM
- NTS.

400V / 230V, 3PH, 60Hz



4X185mm² + 35mm² CU/PVC/XLPE

1 POWER SINGLE LINE DIAGRAM
- NTS.



MOUNTING HEIGHT

- TELEPHONE OUTLET: 0.40 m. FROM CENTER OF DEVICE TO FINISH FLOOR LEVEL.
- TV ANTENNA OUTLET: 0.40 m. FROM CENTER OF DEVICE TO FINISH FLOOR LEVEL.
- WALL BRACKET LIGHT: 2.10 m. FROM BOTTOM OF DEVICE TO FINISH FLOOR LEVEL.
- WALL SWITCHES: 1.20 m. FROM BOTTOM OF DEVICE TO FINISH FLOOR LEVEL.
: 0.20 m. BESIDE THE DOORS.
- RECEPTACLES: 0.40 m. FROM CENTER OF DEVICE TO FINISH FLOOR LEVEL.
- PANEL BOARDS: 2.00 m. FROM TOP OF PANEL TO FINISH FLOOR LEVEL.
- TELEPHONE TERMINAL CABINET: 1.60m. FROM TOP OF PANEL TO FINISH FLOOR LEVEL
- FIRE ALARM CONTROL PANEL: 1.40M. FROM BOTTOM OF THE BOX TO FINISH FLOOR LEVEL.
- FIRE ALARM BELL: 2.30 m. FROM BOTTOM OF DEVICE TO FINISH FLOOR LEVEL.
- MANUAL BREAKGLASS STATION: 2.0M. FROM BOTTOM OF THE BOX TO FINISH FLOOR LEVEL.
- REMOTE ALARM LAMP: 0.20M. ABOVE THE DOOR.
- EXIT, EMERGENCY LIGHTING UNIT: 2.30M. FROM BOTTOM OF UNIT TO FINISH FLOOR LEVEL.
- THERMOSTAT: 1.40M. FROM BOTTOM OF BOX TO FINISH FLOOR LEVEL.

THE FOLLOWING ARE THE RECOMMENDED COLOR CODE IDENTIFICATION OF PHASE, NEUTRAL AND GROUND WIRES.

A - LIGHTING AND POWER OUTLET CIRCUITS

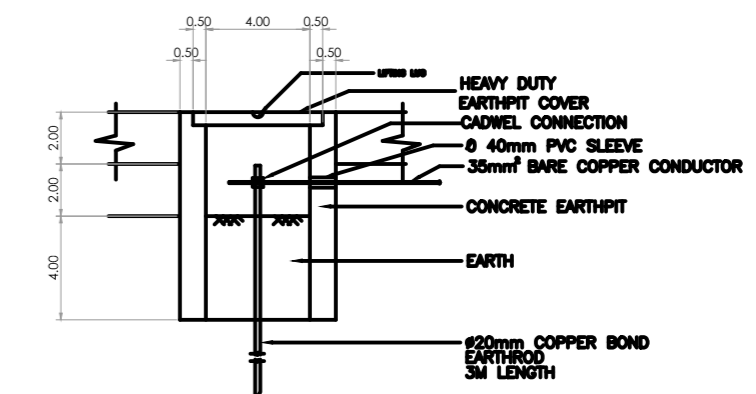
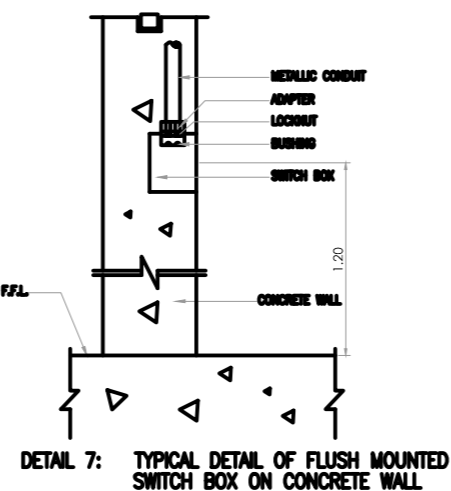
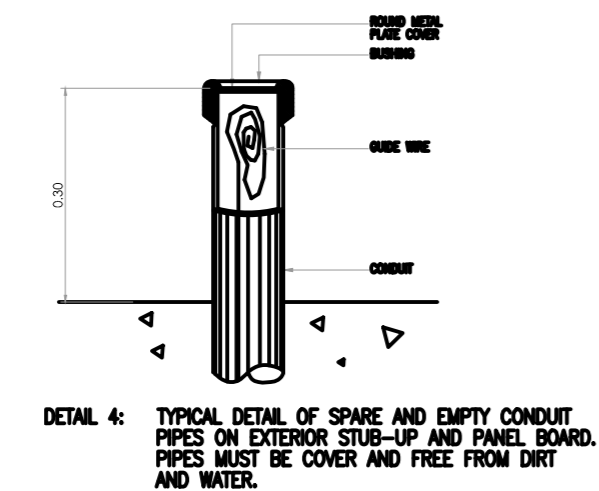
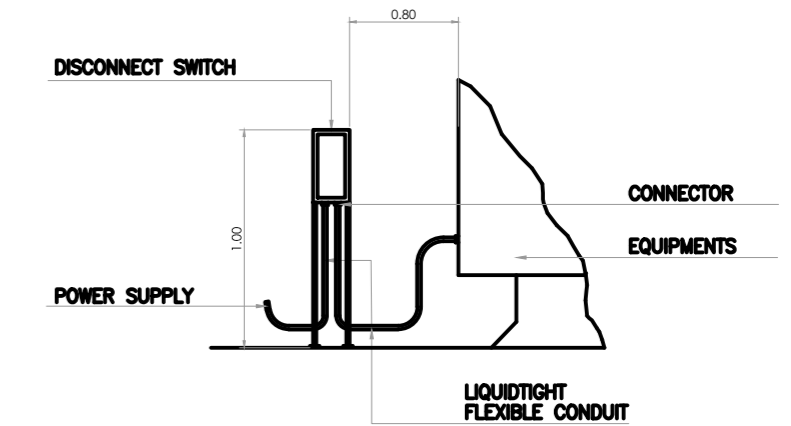
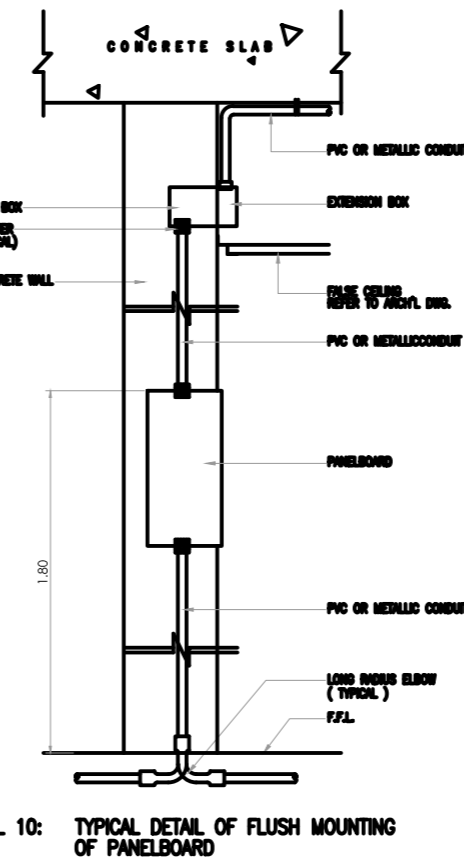
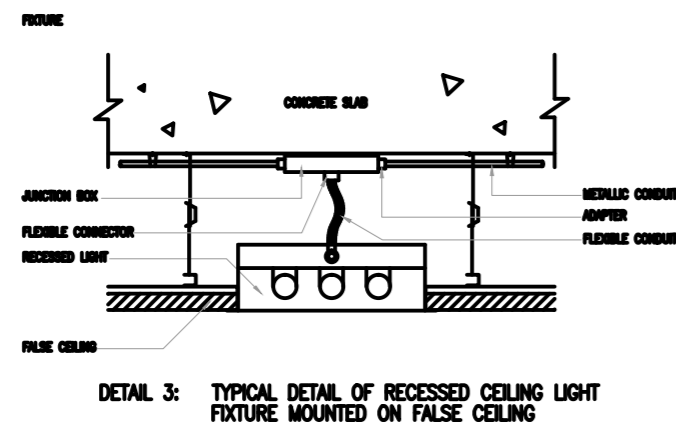
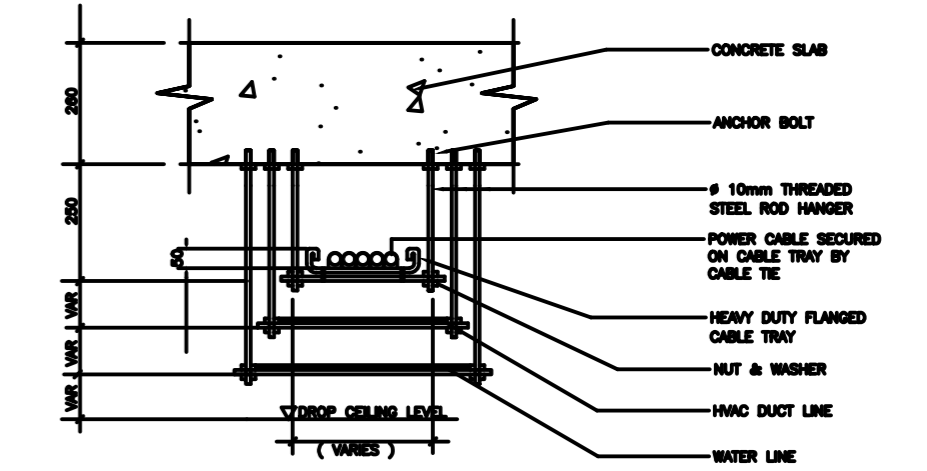
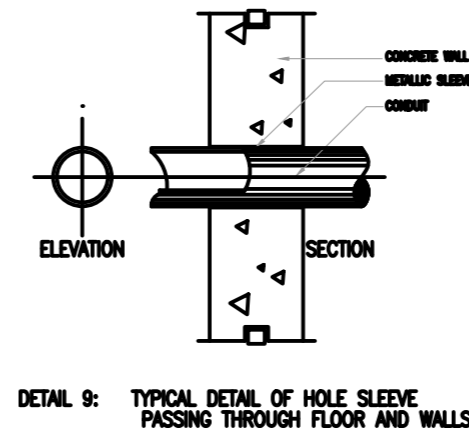
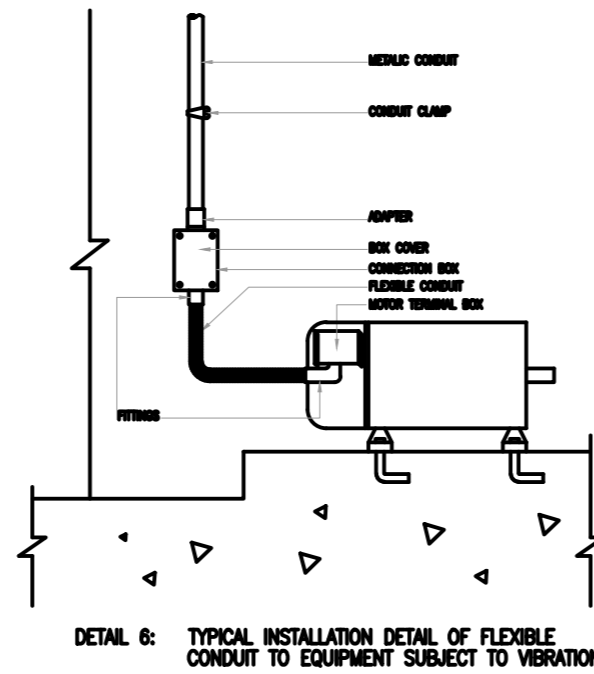
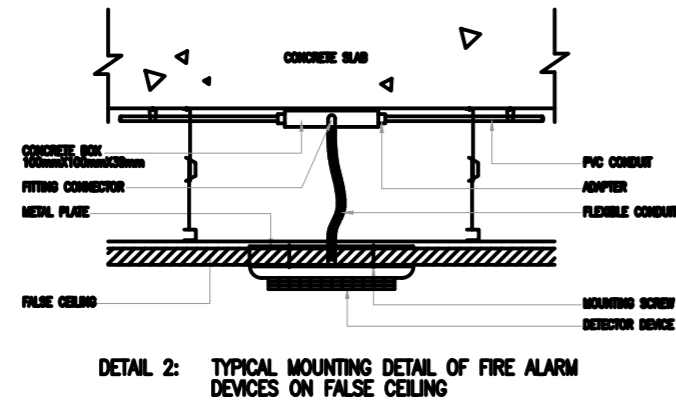
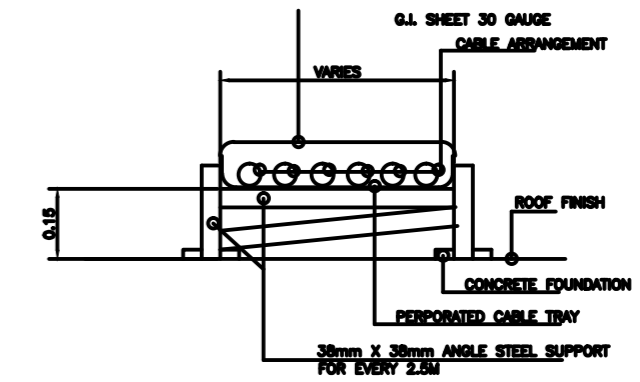
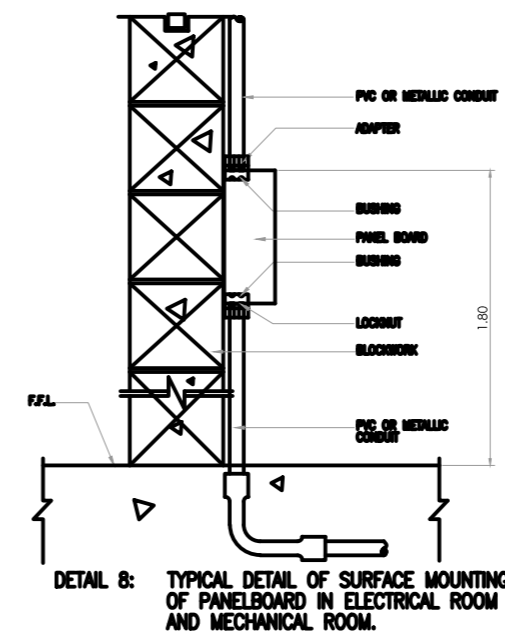
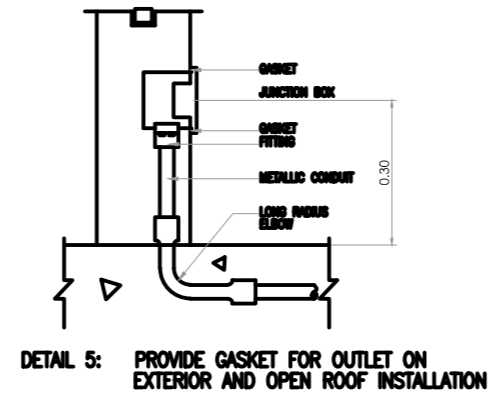
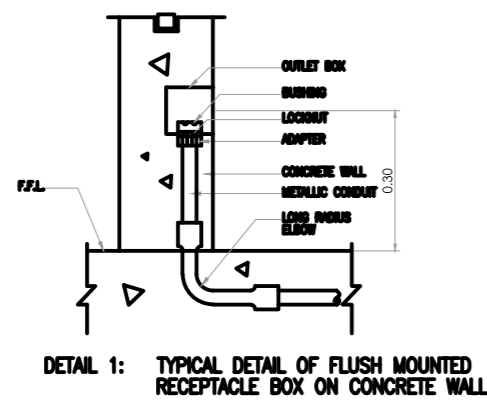
LIVE LINE	RED, YELLOW, BLUE
NEUTRAL LINE	BLACK
GROUND	GREEN
RETURN LINE	WHITE FOR LIGHTING

B- THREE PHASE

A	RED
B	YELLOW
C	BLUE
N	BLACK
G	GREEN

C - FOR FIRE ALARM SYSTEM USE WIRE RED(+Ve) , BLACK(-Ve)

THE MAXIMUM NUMBER OF THHN/THWN CONDUCTORS IN E.M.T., RIGID PVC CONDUIT
SCHEDULE 40 REFER TO NEC 1999:





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القطري للإستشارات الهندسية
AL QATARI ENGINEERING CONSULTANTS



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ظفون/ ٨٠٤٣٦-٨٠٤٣٦
فاكس/ ٨٠٤٣٦-٨٠٤٣٦

رقم الورقة SHEET NO. E-16
رقم المشروع PROJECT NO. 17-102

اسم المشروع PROJECT TITLE
PROPOSED SENDEBAD RESTAURANT

مقترح مطعم سندباد

الموقع LOCATION
AZIZIA-AL KHOBAR, KSA.
العزيرية الخبر

المالك OWNER
KINGDOM RESOURCES TRADING CO.
شركة مصادر المملكة التجارية

مهندس انشائي STRL. ENGR. AQEEL
معماري ARCHITECT JUBEN

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GENERAL NOTES:

1. THE ELECTRICAL INSTALLATION HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, THE EXISTING LOCAL ORDINANCES AND REQUIREMENTS OF SCECO.
2. THE ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS, ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS.
3. THE TYPE OF POWER SERVICE TO BE SUPPLIED SHALL BE 380/220V, 3 PHASE 4 WIRE 60 HZ.
4. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO POWER SUPPLY AND THE ACTUAL LOCATION OF TELEPHONE SYSTEM SERVICE ENTRANCE FOR CONNECTION TO MTTC.
5. THE CONTRACTOR SHALL COORDINATE LOCATION OF LIGHTING FIXTURE WITH MECHANICAL DEVICES TO BE INSTALLED IN THE CEILING.
6. UNLESS OTHERWISE SPECIFIED, THE MINIMUM SIZE OF WIRE AND CONDUIT SHALL BE #4mm CU and 20mm dia., RESPECTIVELY. PVC/GALVANIZED RIGID STEEL CONDUITS SHALL BE USED WHERE THEY ARE CONCEALED/EXPOSED, RESPECTIVELY. PVC CONDUITS SHALL BE SCHEDULE 40 CARLON TYPE OR APPROVED EQUAL.
7. ALL SERVICE ENTRANCE EQUIPMENT SUCH AS TRANSFORMER FRAMES OF PRIMARY SWITCHES, SECONDARY BREAKERS, DISTRIBUTION PANELS, POWER PANELS, APPLIANCE PANELS AND LIGHTING PANELS SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.
8. ALL MATERIAL SHALL BE NEW AND OF THE APPROVED TYPE.
9. STANDARD TYPES OF ACCESSORIES, SPLICING DEVICES, TERMINATION AND APPURTENANCES OF THE ENTIRE ELECTRICAL INSTALLATION SHALL BE USED.
10. ALL CONVENIENCE OUTLETS INSTALLED ABOVE FLOOR AND CABINET SHALL BE MOUNTED 0.40M FROM CENTER OF OUTLET TO FINISH SURFACE LINE OF FLOOR OR CABINET OR UNLESS OTHERWISE SPECIFIED.
11. ALL LIGHT SWITCHES SHALL BE MOUNTED 120 CM FROM FINISHED FLOOR LEVEL AND ALL RECEPTACLES. TELEPHONE AND TV OUTLET SHALL BE MOUNTED 40 CM FROM FINISHED FLOOR LEVEL UNLESS OTHERWISE INDICATED.
12. ALL CONDUITS AND WIREWAYS LOCATED AND/OR INDICATED IS DIAGRAMMATIC EXACT LOCATION IN ROOMS, WALL PENETRATION,ETC., SHALL BE DETERMINED BY THE ENGINEER.
13. ALL CONDUITS AND WIREWAYS PASSING FROM ROOM TO ROOM SHALL BE SEALED TO PREVENT PASSAGE OF AIR AND MOISTURE.
14. ALL FLUORESCENT LIGHTING FIXTURES SHALL BE PROVIDED WITH A HIGH POWER FACTOR THERMAL PROJECTOR (CLASS P) AND RAPID START BALLAST.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSULT AND COORDINATE POWER SERVICE CONNECTION REQUIREMENTS OF THE PROJECT.
16. PROVIDE 25MM DIAMETER EMPTY CONDUIT STUB-UPS WITH CAPS INSIDE CEILING FROM ALL FLUSH MOUNTED PANELS AND CORRESPONDING TO THE NUMBER 20 AMP.SPARE BRANCH CIRCUIT.
17. THE ENTIRE EQUIPMENT AND INSTALLATION MUST BE SUITABLE TO WITHSTAND THE ADVERSE ATMOSPHERIC CONDITION IN SAUDI ARABIA SUCH AS TEMPERATURE, HIGH HUMIDITY BLOWING SAND HIGHLY CORROSIVE ATMOSPHERE AND HIGH FINE DUST SUSPENSION IN ATMOSPHERE.
18. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY GOVERNMENT PERMITS TO COMMENCING WITH ALL EXPENSES AND FEES REQUIRED OF THESE PERMITS SHALL BE TO THE CONTRACTOR'S ACCOUNT.
19. THE EQUIPMENT LAYOUT, PANEL BOARDS, RACEWAYS, SWITCHES, RECEPTACLES, BOXES, ETC. SHOWN ARE DIAGRAMMATIC. THEIR EXACT LOCATION SHOULD BE CHECKED ON SITE TO ENSURE THAT THE INSTALLED DEVICES DO NOT INTERFERE WITH THE OTHER FACILITIES AND THE BUILDING ARCHITECTURE.
20. MANUFACTURER OF LIGHTING FIXTURE IS NOT MANDATORY.CONTRACTOR SHOULD PROVIDE THE SAME RECOMMENDED MANUFACTURER MENTIONED ON DRAWINGS OR APPROVED EQUAL FOR FINAL EVALUATION APPROVAL.
21. THE CONTRACTOR MUST BE CHECK FROM THE RATING OF C.B BEFORE MANUFACTURE OF DISTRIBUTION BOARD THUS AFTER THE CONFIRMATION OF ALL MACHINE & FREEZERS RATING FROM THE OWNER & CATALOGUE
22. ALL THE CABLES FEEDING THE KITCHEN OUTLETS MUST RUN INSIDE ELECTRICAL CHASSIS
23. ALL THE TELEPHONE OUTLETS WILL BE CONNECTED TO THE TELEPHONE TERMINAL BOX (T.T.B) IN THE MANAGER ROOM BY 2 PAIR CABLES
24. THE DATA OUTLETS IN THE MANAGER ROOM AND CREW ROOM WILL BE CONNECTED BY DATA CABLES

1 GENERAL NOTES
- NTS.

المهندس/ وليد عبدالله القطري
ENGINEER: WALEED A. M. AL QATARI