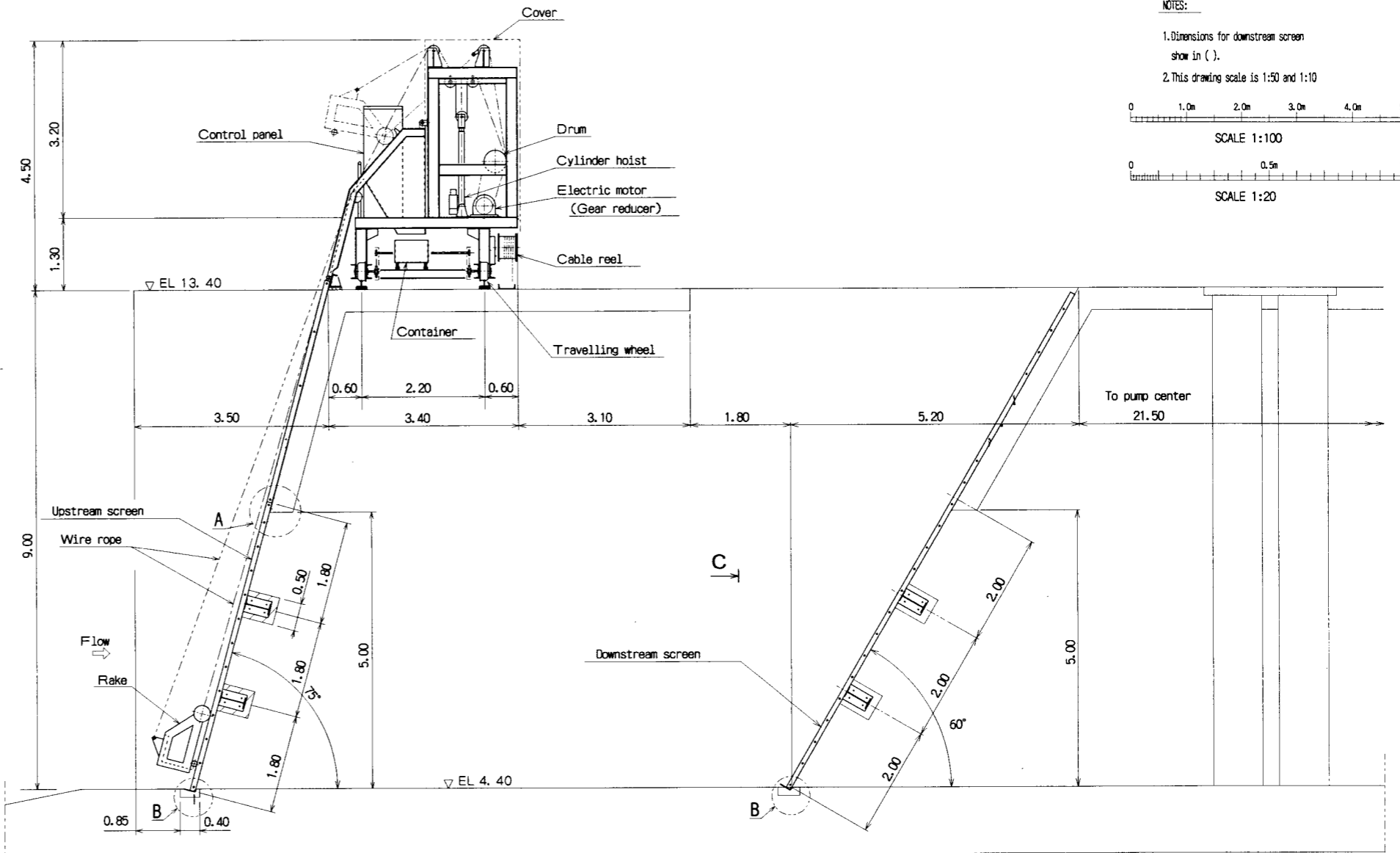
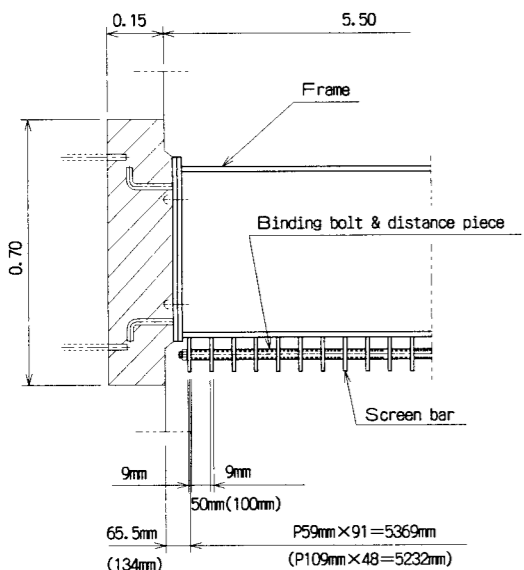


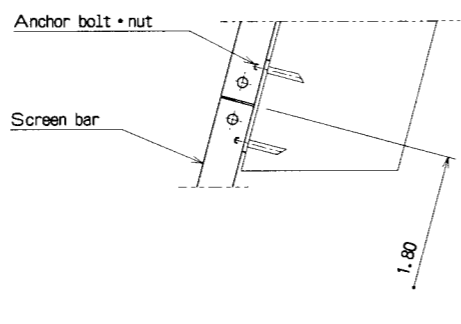
ELEVATION
SCALE 1:100



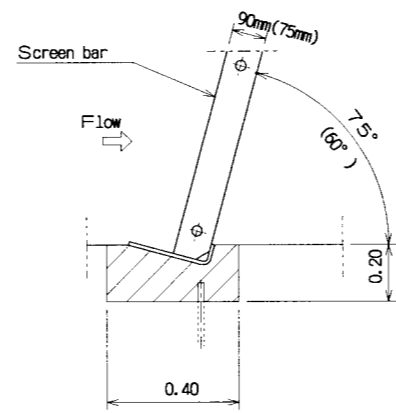
PROFILE
SCALE 1:100



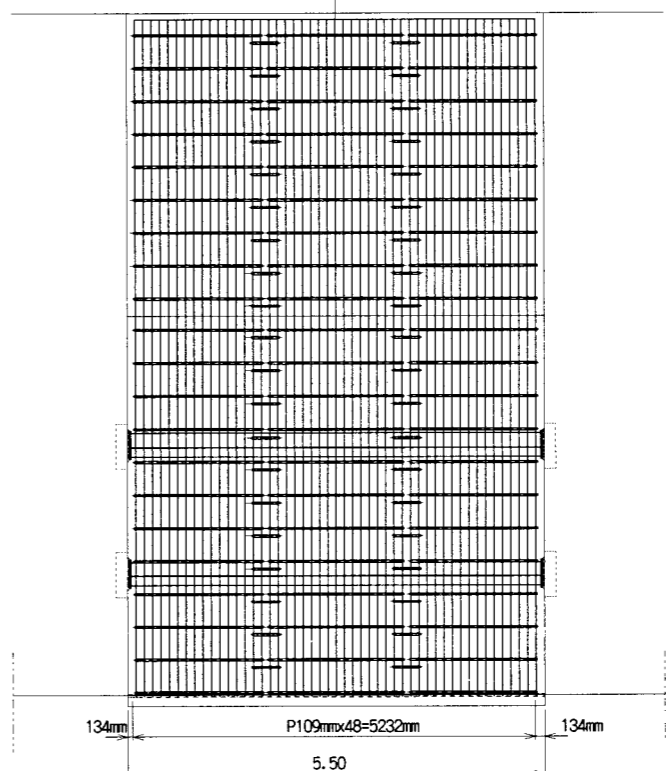
DETAIL OF SCREEN
SCALE 1:20



DETAIL OF A
SCALE 1:20



DETAIL OF B
SCALE 1:20



VIEW C
SCALE 1:100

NOTES:

- Dimensions for downstream screen show in ().
- This drawing scale is 1:50 and 1:10

0 1.0m 2.0m 3.0m 4.0m 5.0m
SCALE 1:100

0 0.5m 1.0m
SCALE 1:20

THE ARAB REPUBLIC OF EGYPT
MINISTRY OF WATER RESOURCES AND IRRIGATION
NORTH SINAI DEVELOPMENT ORGANIZATION

THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
BETWEEN KM 108.466 AND KM 118.560
EL SALAAM NO. 7 (BIR EL ABD) PUMPING STATION

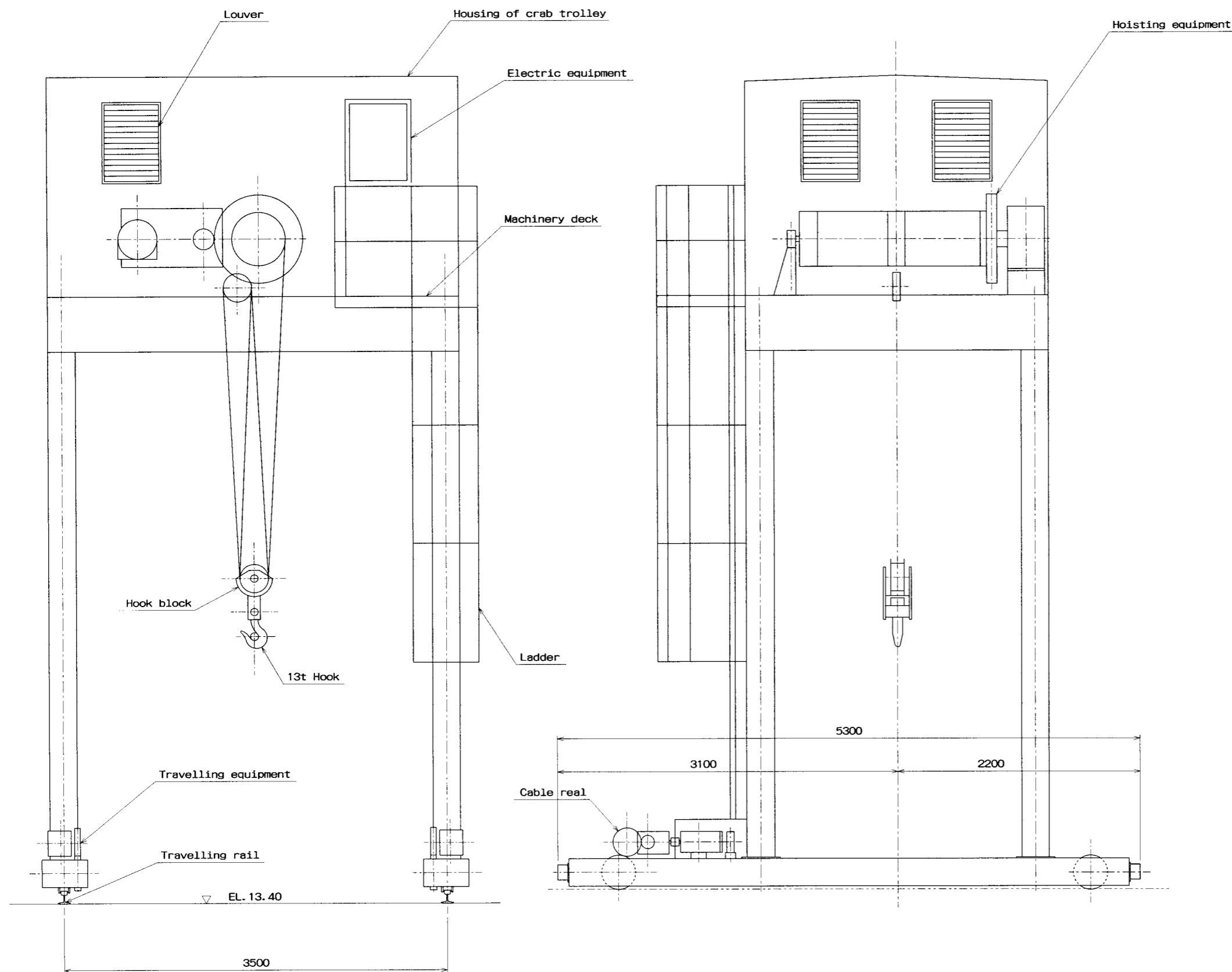
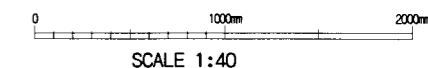
MECHANICAL EQUIPMENT
GENERAL ARRANGEMENT OF FIXED TRASH SCREEN AND TRASH CAR

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	PSM-210

NOTES:

1. This drawing scale is 1:40



SPECIFICATION

Hoisting capacity	13 tons
Lifting speed	2 m/min.
Travel speed	20 m/min.
Power source	⊘3 AC380V 50Hz

THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION

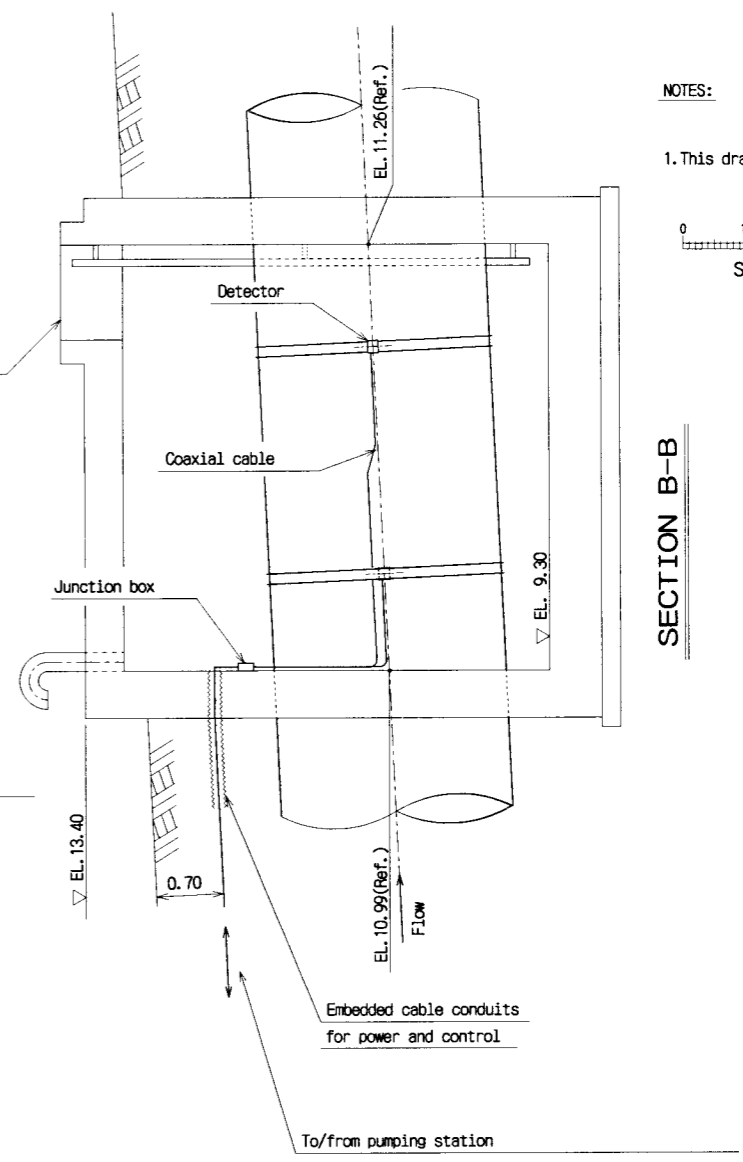
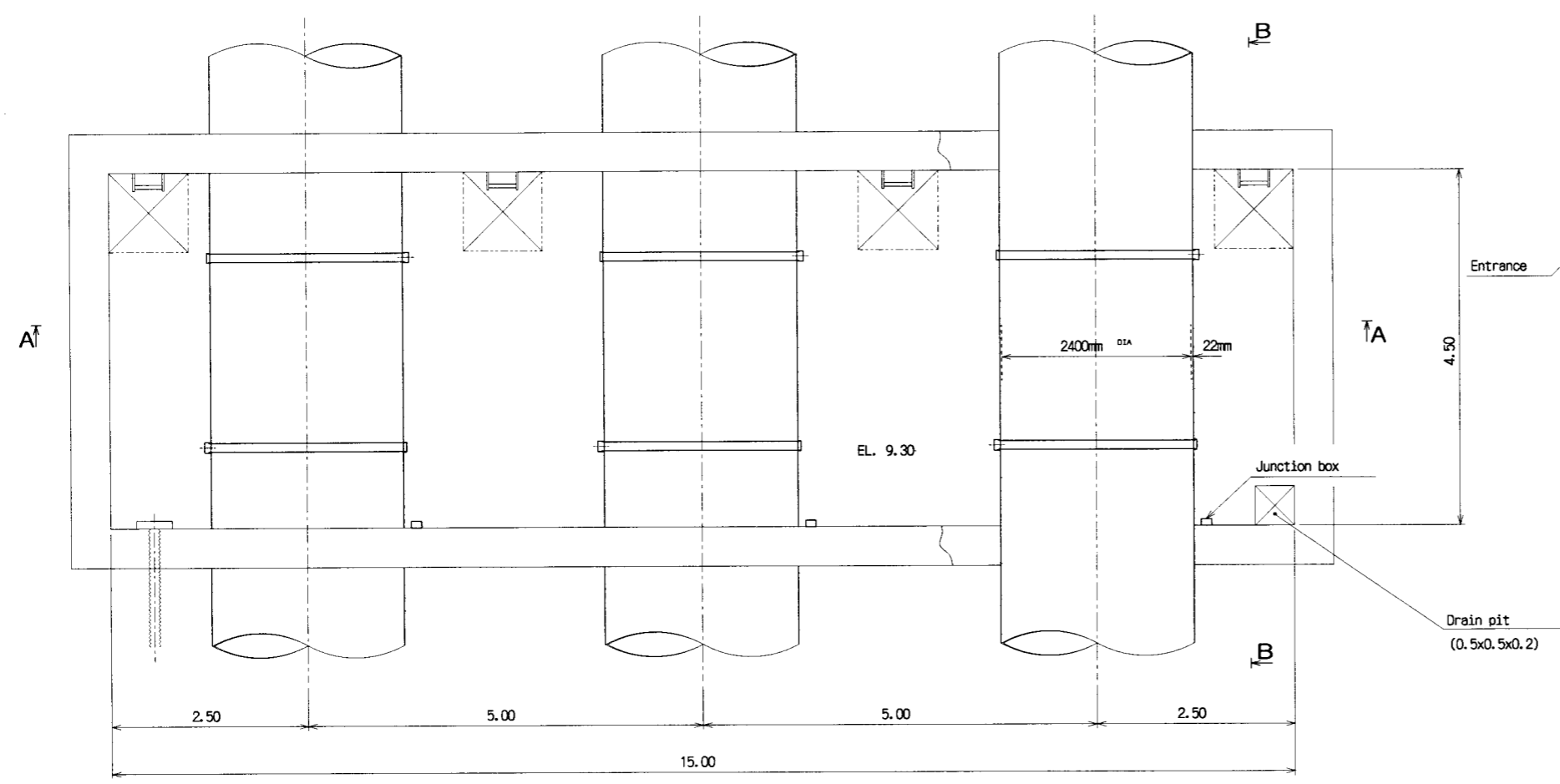
THE NORTH SINAI INTEGRATED RURAL
 DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
 BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION

MECHANICAL EQUIPMENT
 GENERAL ARRANGEMENT
 OF GANTRY CRANE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

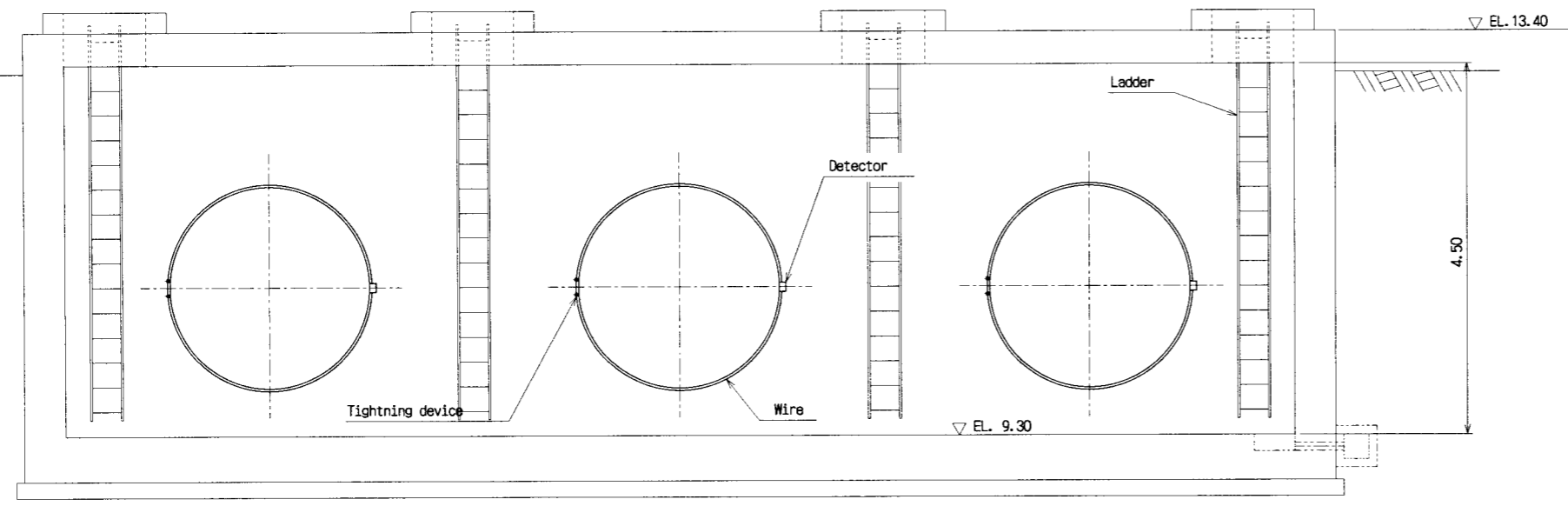
DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	PSM-211



NOTES:
 1. This drawing scale is 1:80

SCALE 1:80

SECTION B-B



SECTION A-A

DESIGN DATA

- Voltage AC110V ±10%
- Frequency 50 Hz
- Pipe inside dia 2400mm
- Pipe thickness 22mm
- Lining thickness -
- Pipe material Carbon steel
- Lining material Tar-epoxy
- Measurable capacity
 Max. 13.50m³ /sec.
 Rated 10.827m³ /sec.
- Flow meter
 Accuracy ±1.0% FS
 Working temp. -10~+60°C

THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION	
THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAAH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION	
MECHANICAL EQUIPMENT GENERAL ARRANGEMENT OF FLOW METER	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC., PACIFIC CONSULTANTS INTERNATIONAL	
DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	PSM-212

1. DESIGN STANDARD

THE FOLLOWING SPECIFIC STANDARDS SHALL BE USED FOR THE DESIGN,
MANUFACTURE AND TESTING OF ALL ELECTRICAL EQUIPMENT.
















(a) MAIN PUMP MOTOR

- IEC-34 ROTATING ELECTRICAL MACHINE.
IEC-72/72A DIMENSIONS AND OUTPUT RATINGS.
IEC-85 RECOMMENDATIONS FOR THE CLASSIFICATION OF INSULATING
MATERIALS IN RELATION TO THEIR THERMAL STABILITY IN SERVICE.

(b) POWER SUPPLY EQUIPMENT

- IEC-76 SPECIFICATIONS FOR TRANSFORMERS AND REACTORS.
IEC-298 A.C. METAL-ENCLOSED SWITCHGEAR AND CONTROLGEAR
FOR RATED VOLTAGES ABOVE 1KV.
IEC-439 LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES.
IEC-470 HIGH-VOLTAGE ALTERNATING CURRENT CONTACTORS.
IEC-632 HIGH-VOLTAGE MOTOR STARTERS.
IEC-694 SPECIFICATION FOR A.C. SWITCHGEAR FOR VOLTAGE ABOVE 1KV.
IEC-947 LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR.

2. SYMBOLS AND ABBREVIATIONS

	: VACUUM CIRCUIT BREAKER (VCB) DRAWOUT TYPE		: CURRENT TRANSFORMER (CT)
	: AIR CIRCUIT BREAKER (ACB) DRAWOUT TYPE	ϕ	: CURRENT TRANSFORMER (CT)
	: MOLDED CASE CIRCUIT BREAKER (MCCB)		: ZERO-PHASE CURRENT TRANSFORMER (ZCT)
	: MAGNETIC CONTACTOR (MC)		: POTENTIAL TRANSFORMER
	: CHANGE OVER SWITCH (C.O.S)		: OVER CURRENT RELAY WITH INSTANTANEOUS TRIP ELEMENTS
			: OPEN PHASE/REVERSE PHASE
			: POWER FACTOR RELAY
			: OUT OF STEP DETECTING RELAY
			: DIFFERENTIAL RELAY
			: UNDER FIELD CURRENT RELAY
			: OVER CURRENT GROUND RELAY

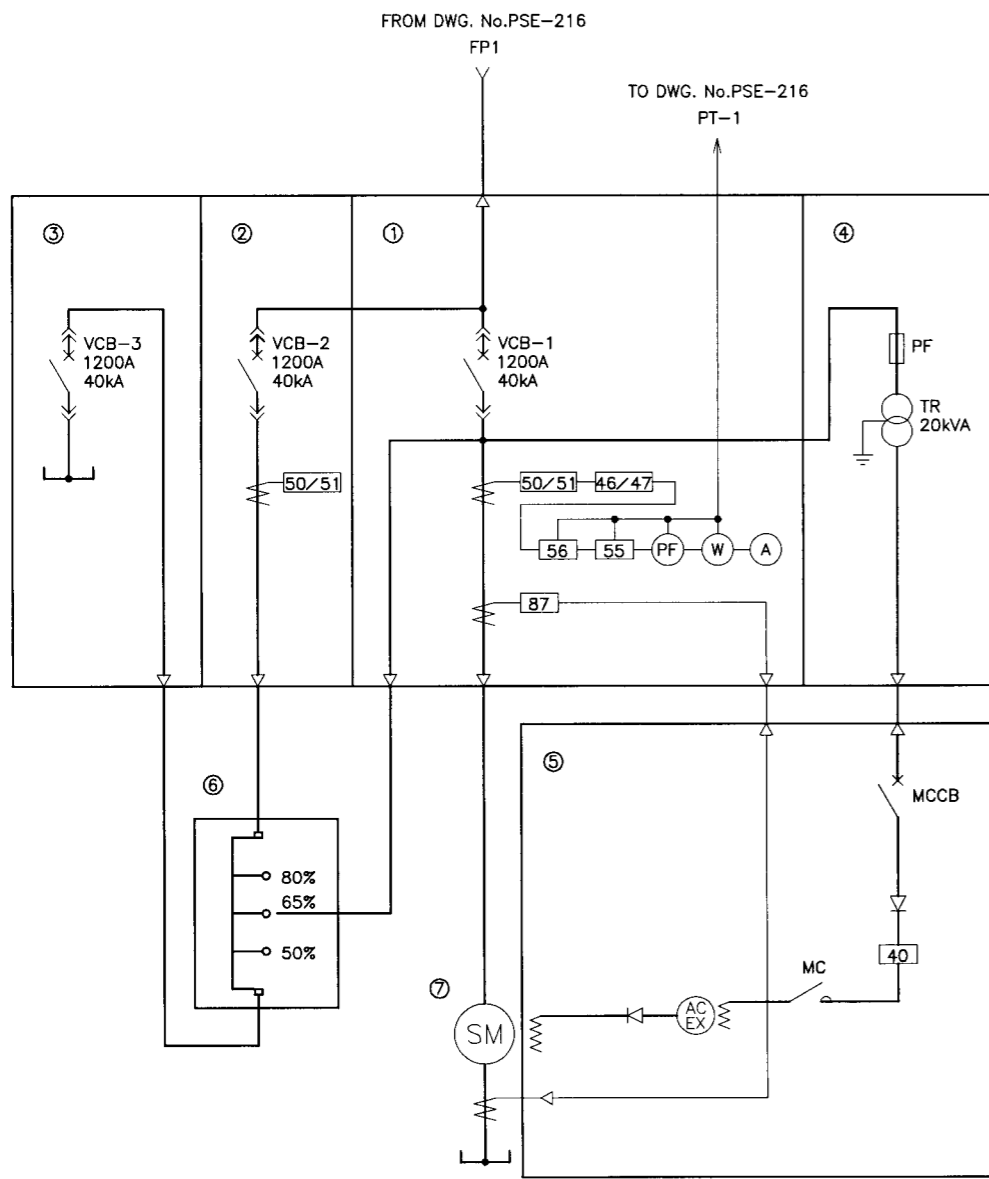
3. MAJOR EQUIPMENT / QUANTITY

<u>EQUIPMENT</u>	<u>SPECIFICATION</u>	<u>PER PUMP UNIT</u>	<u>TOTAL</u>
(a) MAIN PUMP MOTOR	13MW, 11KV, 375RPM, 50Hz	1	4
(b) MAIN MOTOR STARTING PANEL	VACUUM CIRCUIT BREAKER (VCB)	3	12
	• VCB-1, 11KV, 1200A	(1)	(4)
	• VCB-2, 11KV, 1200A	(1)	(4)
	• VCB-3, 11KV, 1200A	(1)	(4)
(c) EXCITER TRANSFORMER PANEL	20KVA, 11KV/380V, SINGLE PHASE.	1	4
(d) EXCITER PANEL	AC EXCITER	1	4
(e) MAIN PUMP UNIT CONTROL PANEL		2	8
	• PROGRAMABLE CONTROLLER PANEL	(1)	(4)
	• RELAY PANEL	(1)	(4)
(f) AUTO-TRANSFORMER	11KV, 3MIN. RATING	1	4
(g) D.C POWER SOURCE		-	1
	• BATTERY AND CHARGER NICKEL-CADMIUM ALKALINE BATTERIES		
(h) LOAD CENTRE	380/220V, 3PHASE, 4WIRE	-	1
(i) MOTOR CONTROL CENTRE (MCC)	FOR MAIN PUMP	1	4
(j) MCC	FOR COMMON A	-	1
(k) MCC	FOR COMMON B	-	1
(l) OPERATOR CONSOLE	DESK TYPE	-	1
(m) PRINTER DESK		-	1
(n) UNINTERRUPTIBLE POWER SUPPLY UNIT (UPS)	5KVA, 220V, SINGLE PHASE	-	1
(o) EMERGENCY DIESEL GENERATOR SET	100KVA, 380/220V, 1500RPM, 50Hz	-	1

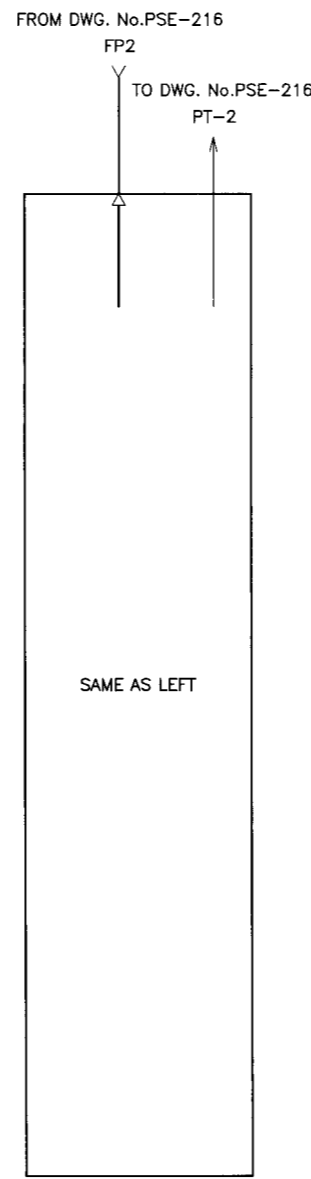
4. GENERAL NOTES

- (a) THE WORK SHALL BE EXECUTED IN CLOSE COORDINATION WITH ALL TRADES.
- (b) DIMENSIONS AND NOS. OF SOME POWER SUPPLY EQUIPMENT MAY BE ADJUSTED SUBJECT TO EQUIPMENT SUPPLIER.
- (c) ALL ELECTRICAL EQUIPMENT AND ASSOCIATED METALLIC PARTS SHALL BE CONNECTED TO STATION EARTHING SYSTEM AS REQUIRED.

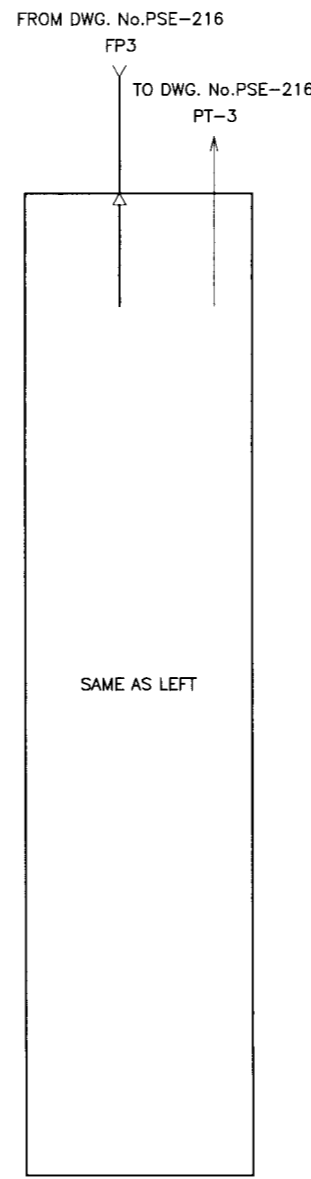
THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAH No. 7 (BIR EL ABD) PUMPING STATION PUMP HOUSE GENERAL NOTES	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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TRACED	
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APPROVED	
DRAWING NO.	PSE-201



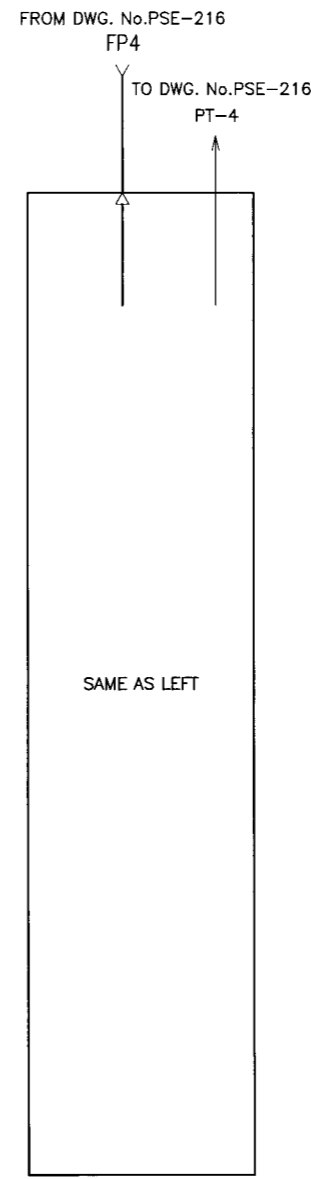
MAIN PUMP-1



MAIN PUMP-2



MAIN PUMP-3



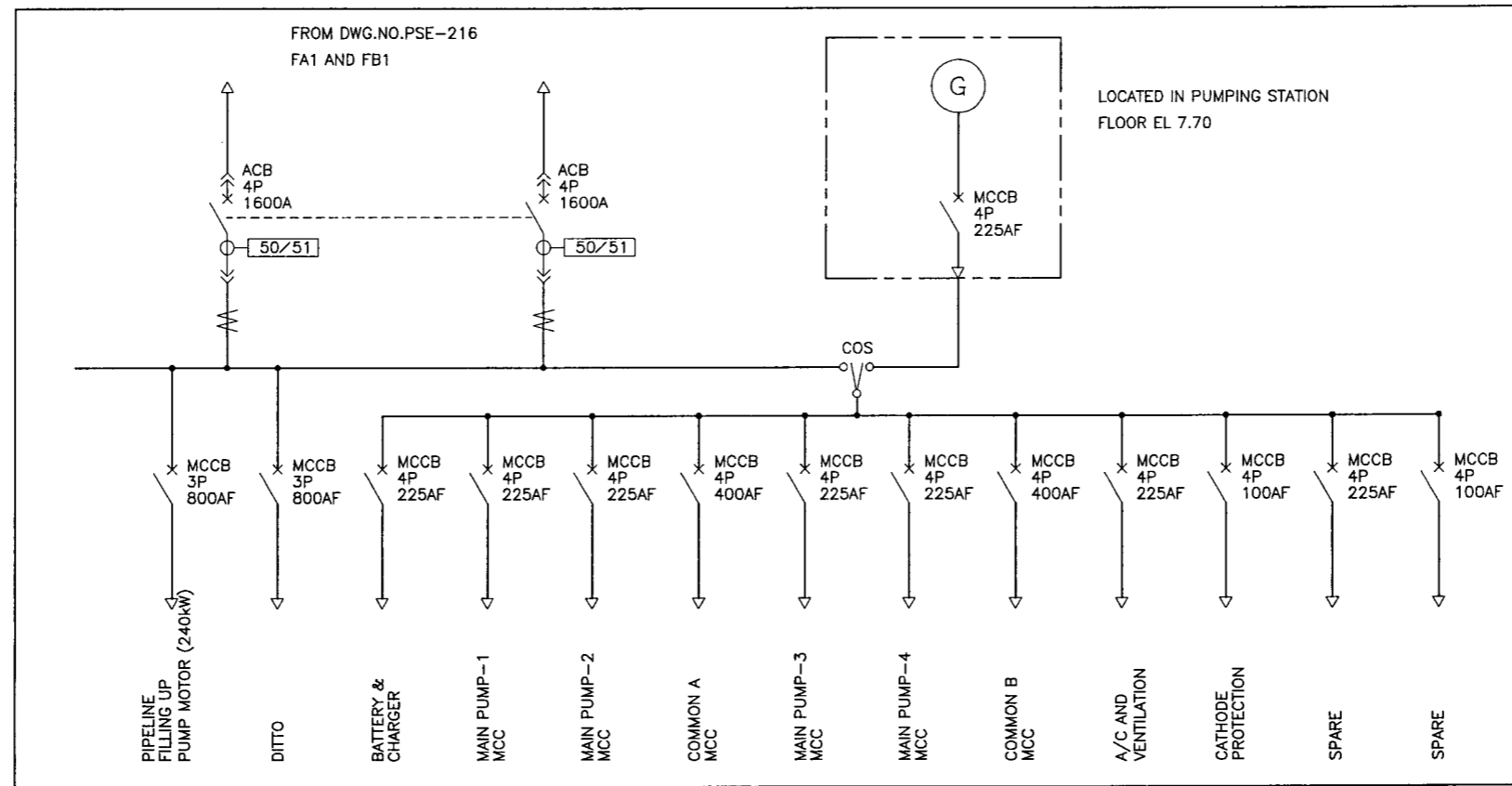
MAIN PUMP-4

No.	PANEL NAME
①	MAIN PUMP STARTING PANEL (VCB-1)
②	MAIN PUMP STARTING PANEL (VCB-2)
③	MAIN PUMP STARTING PANEL (VCB-3)
④	EXCITER TRANSFORMER PANEL
⑤	EXCITER PANEL
⑥	AUTO TRANSFORMER
⑦	13,000kW SYNCHRONOUS MOTOR

LEGENDS	
50/51	: OVER CURRENT RELAY WITH INSTANTANEOUS TRIP ELEMENTS
46/47	: OPEN PHASE/REVERSE PHASE
55	: POWER FACTOR RELAY
56	: OUT OF STEP DETECTING RELAY
87	: DIFFERENTIAL RELAY
40	: UNDER FIELD CURRENT RELAY
VCB1~3	: VACUUM CIRCUIT BREAKER
PF	: POWER FUSE
PF	: POWER FACTOR METER
W	: WATTMETER
A	: AC AMMETER
AC EX	: AC EXCITER
MCCB	: MOLDED CASE CIRCUIT BREAKER
MC	: MAGNETIC CONTACTOR

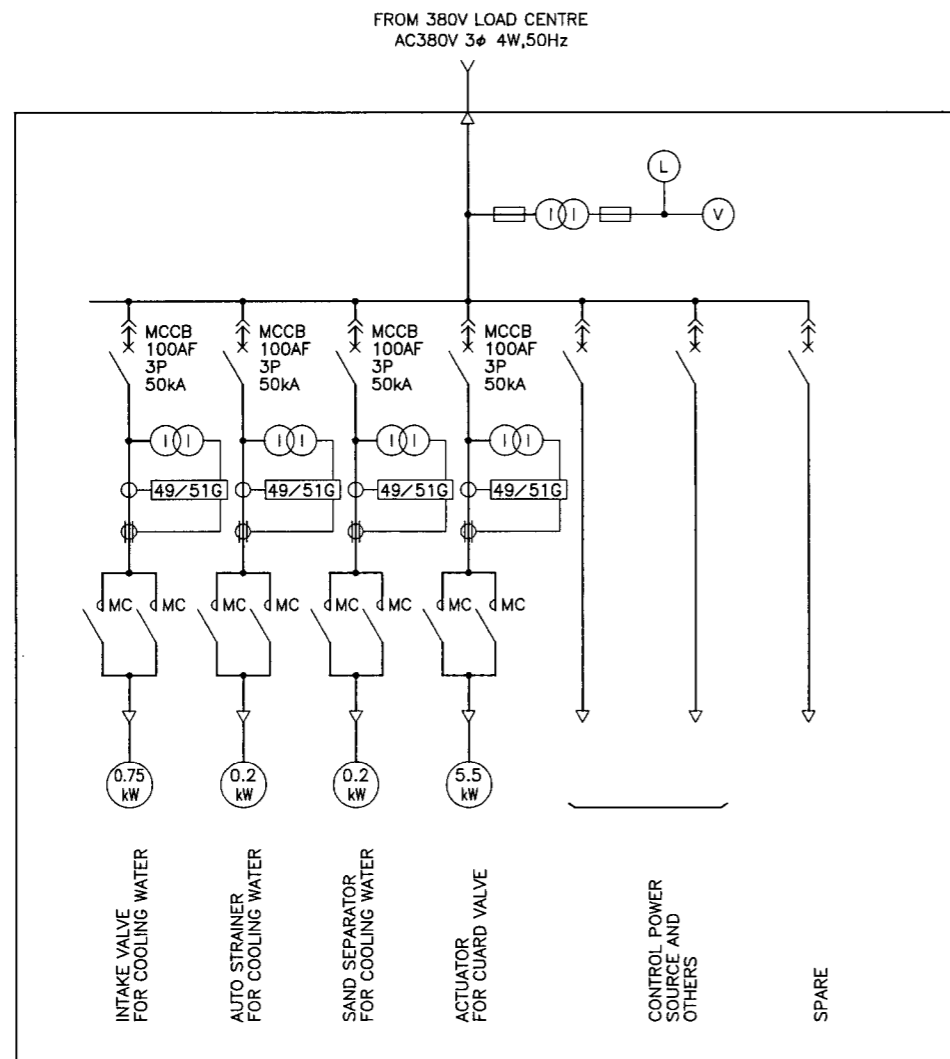
THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION
THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)
 CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
 BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No.7 (BIR EL ABO) PUMPING STATION
PUMP HOUSE
 PUMP UNIT POWER SUPPLY SINGLE LINE DIAGRAM
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	PSE-202

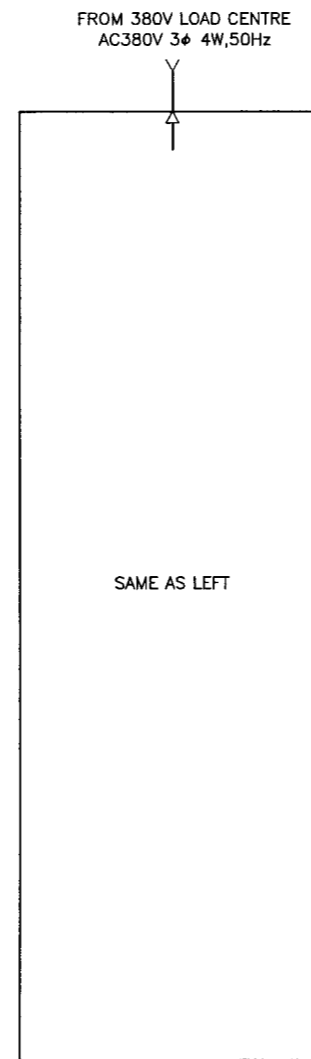


380V LOAD CENTRE

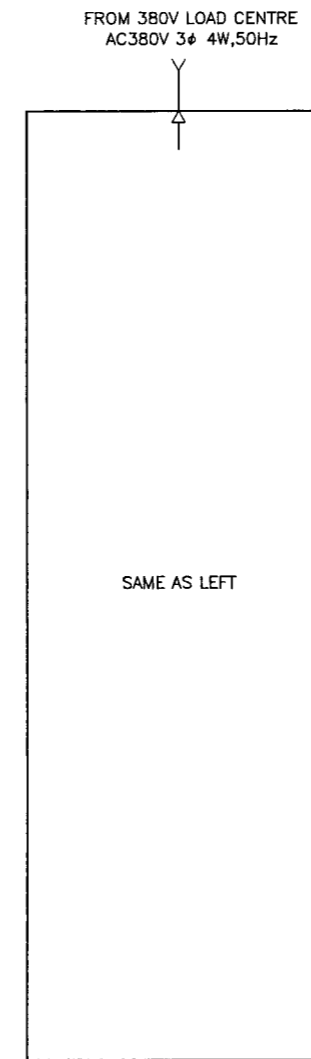
LEGENDS	
(G)	: AC GENERATOR 100KVA 380/220V 3φ 4W Pf 0.8 1500rpm
ACB	: AIR CIRCUIT BREAKER
MCCB	: MOLDED CASE CIRCUIT BREAKER
COS	: CHANGE-OVER SWITCH 3P+N 500V,400A DOUBLE THROW TYPE
MC	: MAGNETIC CONTACTOR
⊞	: POWER FUSE
(II)	: CONTROL TRANSFORMER
(L)	: SIGNAL LAMP
(V)	: AC VOLTMETER
50/51	: OVER CURRENT RELAY WITH INSTANTANEOUS TRIP TYPE
49/51G	: OVER CURRENT GROUND RELAY



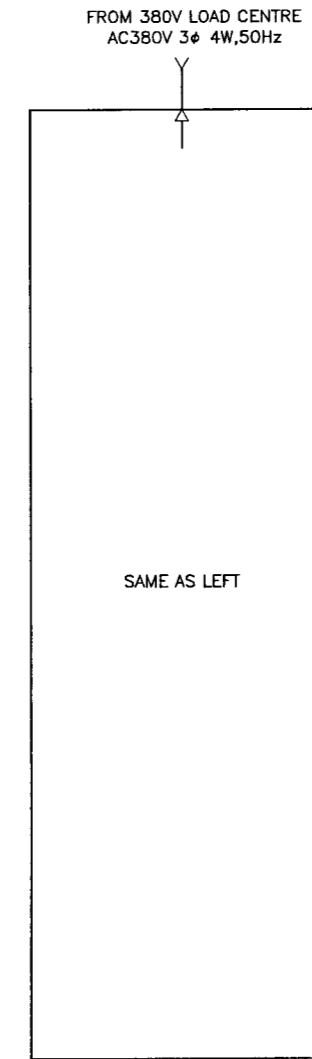
MAIN PUMP-1 MCC



MAIN PUMP-2 MCC



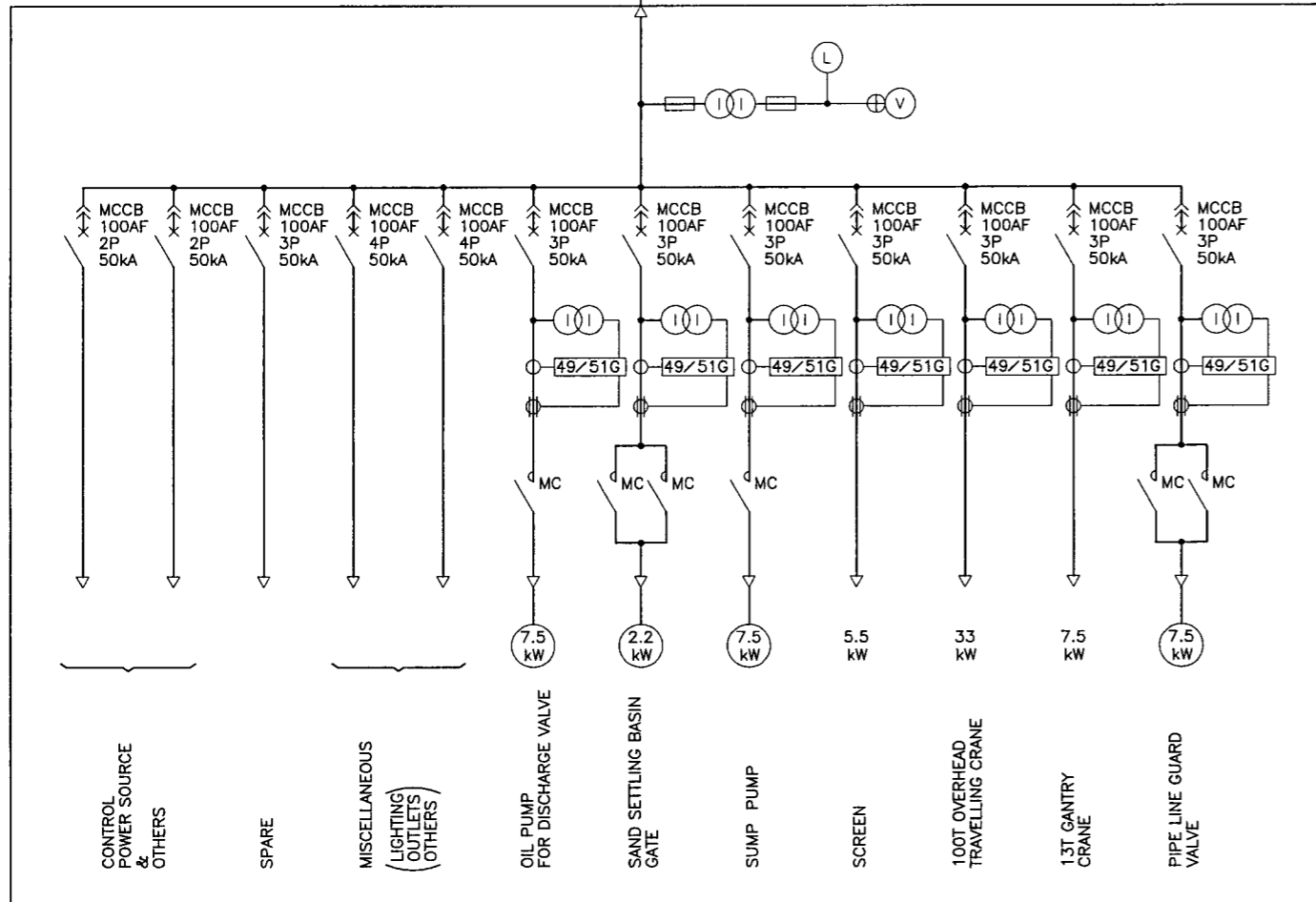
MAIN PUMP-3 MCC



MAIN PUMP-4 MCC

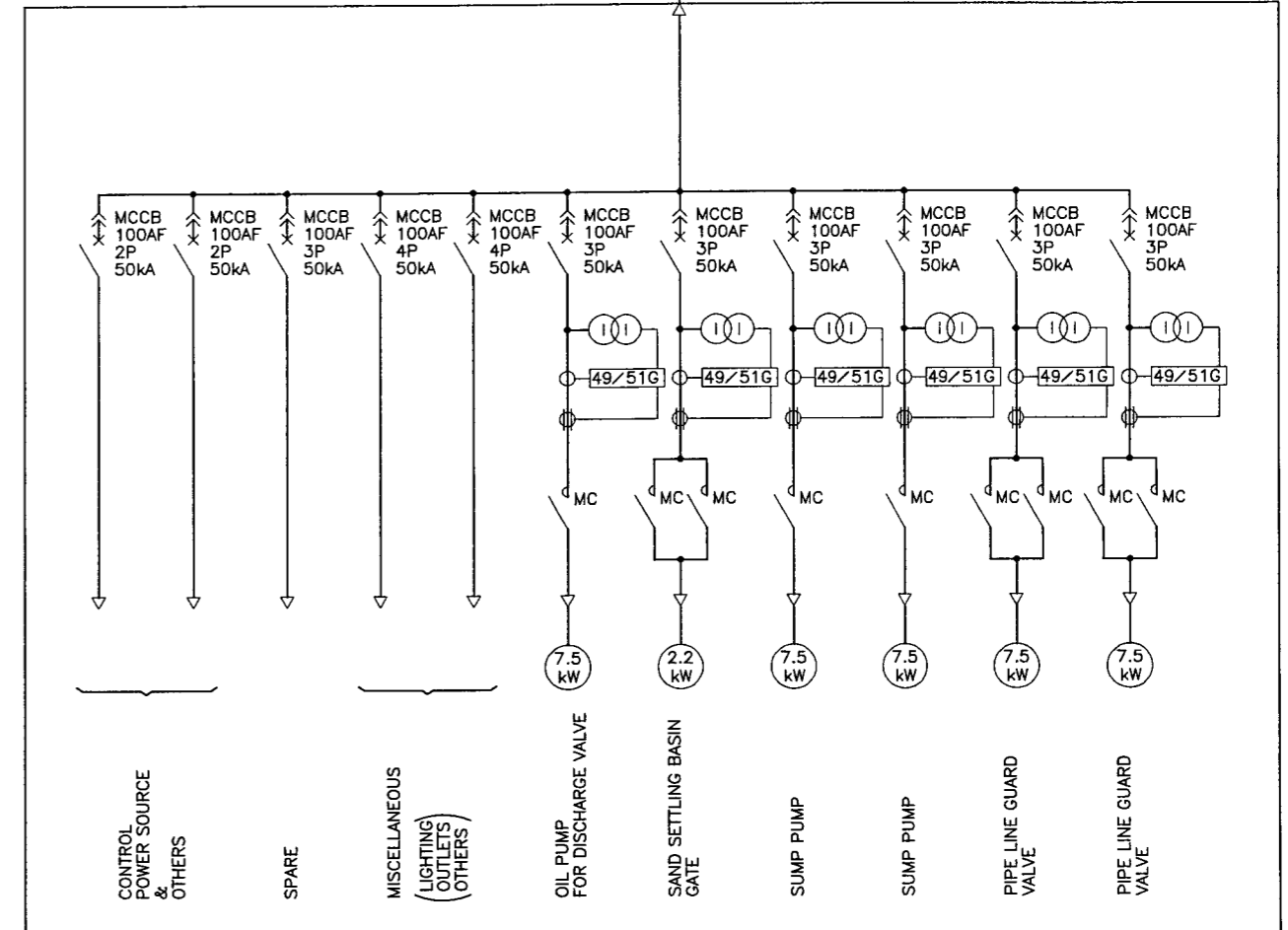
THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No.7 (BIR EL ABD) PUMPING STATION PUMP HOUSE 380V LOAD CENTRE AND MAIN PUMP AUX. MOTOR CONTROL CENTRE(MCC) SINGLE LINE DIAGRAM	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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APPROVED	
DRAWING NO.	PSE-203

FROM DWG. No.PSE-203 380V LOAD CENTRE
AC380V 3 ϕ 4W,50Hz



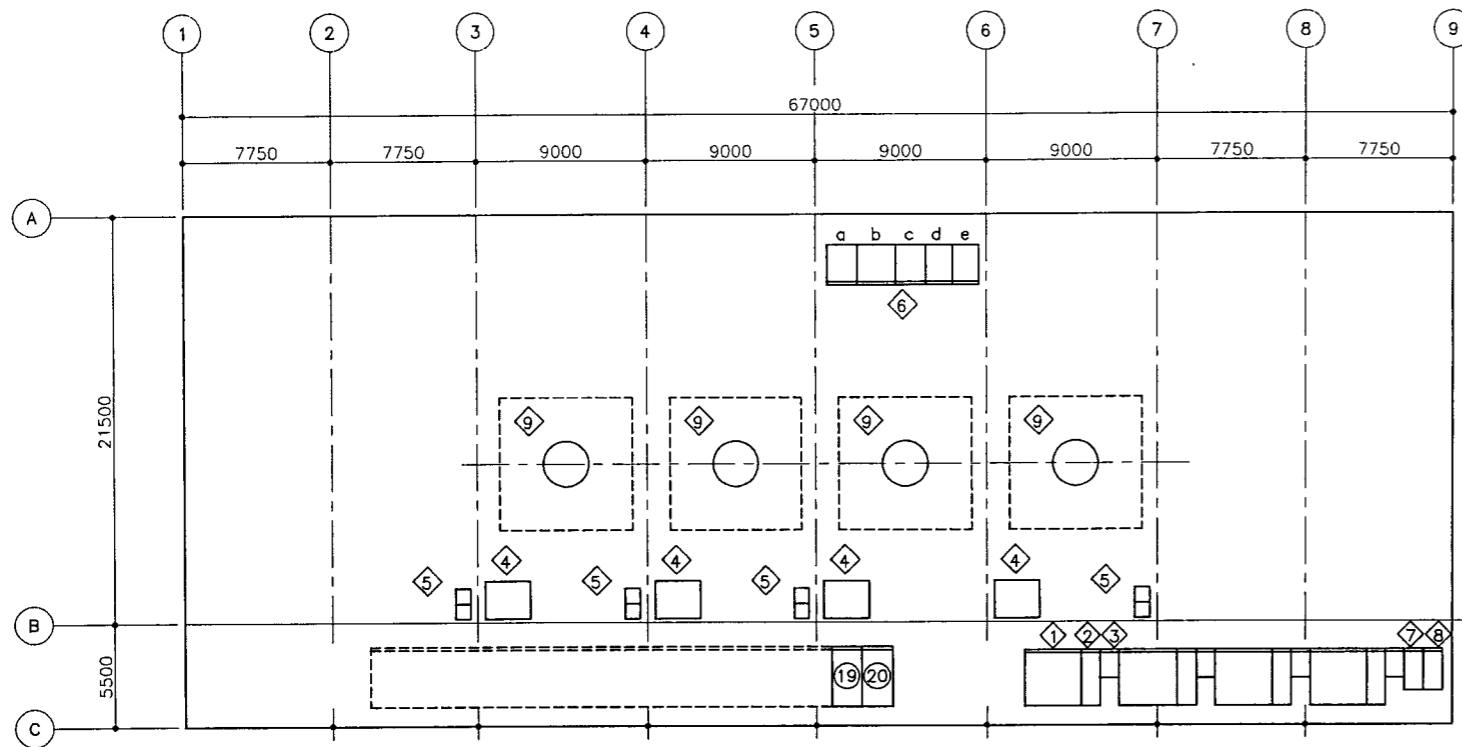
COMMON A MCC

FROM DWG. No.PSE-203 380V LOAD CENTRE
AC380V 3 ϕ 4W,50Hz

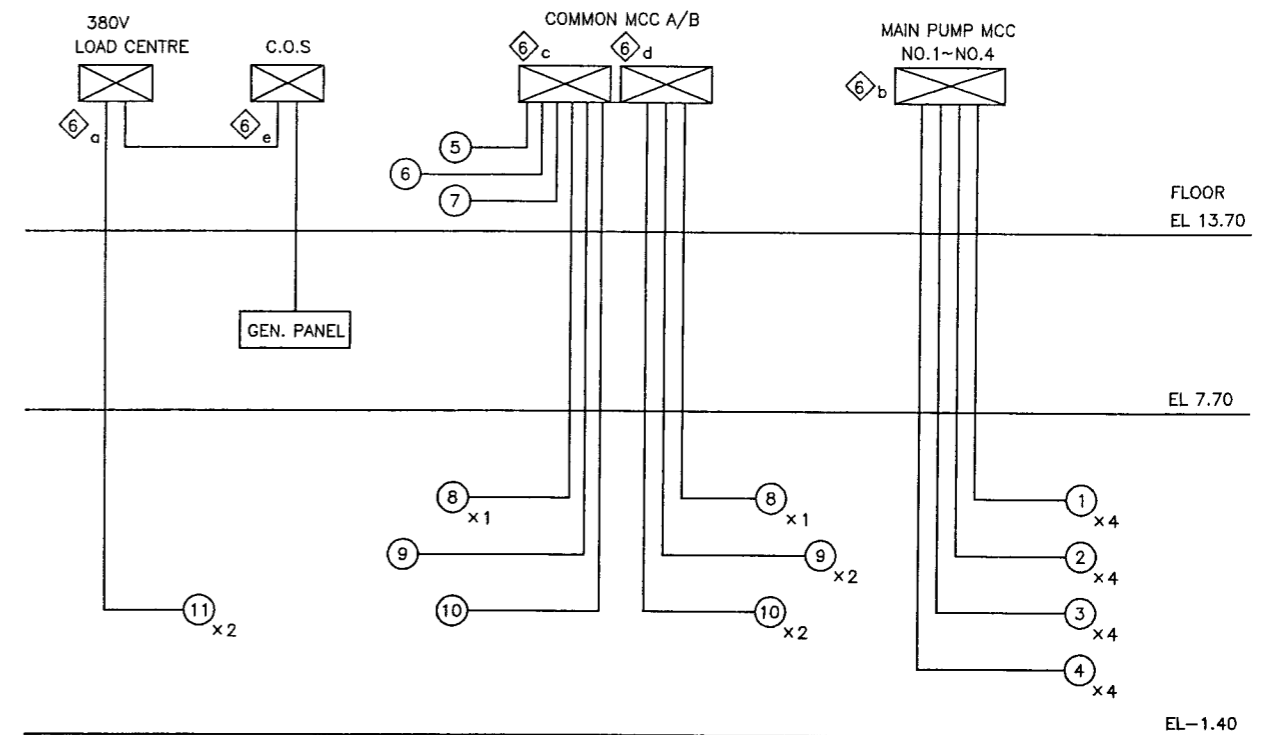


COMMON B MCC

THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION PUMP HOUSE MAIN PUMP COMMON AUX. MOTOR CONTROL CENTRE SINGLE LINE DIAGRAM	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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GROUND FLOOR CABLING PLAN (EL.+13.70)



ELEVATION POWER CABLING PLAN

NO.	EQUIPMENT NAME
①	MAIN MOTOR STARTING PANEL
②	EXCITER TRANSFORMER PANEL
③	EXCITER PANEL
④	AUTO-TRANSFORMER
⑤	MAIN PUMP UNIT CONTROL PANEL
⑥	a. 380V LOAD CENTRE
	b. MAIN PUMP MOTOR CONTROL CENTRE
	c. COMMON A MOTOR CONTROL CENTRE
	d. COMMON B MOTOR CONTROL CENTRE
	e. CHANGE-OVER SWITCH PANEL(C.O.S)
⑦	D.C POWER SOURCE PANEL
⑧	GENERATOR CONTROL PANEL
⑨	MAIN MOTOR
⑲	STATION TRANSFORMER PANEL A
⑳	STATION TRANSFORMER PANEL B

MAIN POWER CABLE	
① - ⑨	11kV XLPE (1C-400mm ² x 6) x 4
① - ④	11kV XLPE (1C-400mm ² x 6) x 4
⑲ ⑥ a	600V XLPE 1C-800mm ² x 4
⑳ ⑥ a	600V XLPE 1C-800mm ² x 4
⑥ a- ⑥ e	600V XLPE 1C-150mm ² x 4

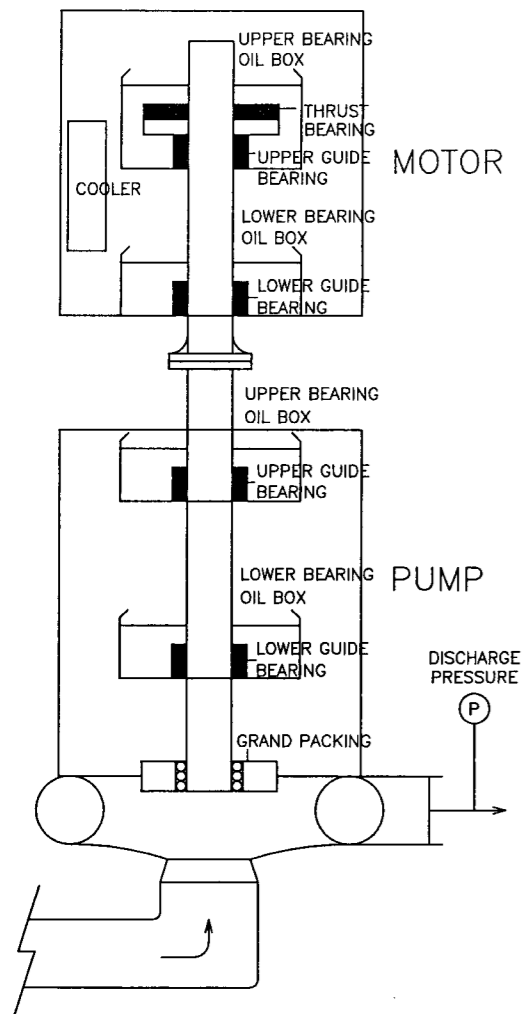
NO.	EQUIPMENT NAME	MAIN POWER CABLE
①	INTAKE VALVE FOR COOLING WATER 0.75kW x 4	⑥ b - ① 600V XLPE (1C-2.5mm ² x 3) x 4
②	STRAINER FOR COOLING WATER 5.5kW x 4	⑥ b - ② 600V XLPE (1C-6.0mm ² x 3) x 4
③	SAND SEPARATOR FOR COOLING WATER 5.5kW x 4	⑥ b - ③ 600V XLPE (1C-6.0mm ² x 3) x 4
④	ACTUATOR FOR GUARD VALVE 5.5kW x 4	⑥ b - ④ 600V XLPE (1C-6.0mm ² x 3) x 4
⑤	100 ton OVERHEAD TRAVELLING CRANE 33kW	⑥ c - ⑤ 600V XLPE 1C-50mm ² x 3
⑥	13 ton GANTRY CRANE 7.5kW	⑥ c - ⑥ 600V XLPE 1C-10mm ² x 3
⑦	SCREEN 5.5kW	⑥ c - ⑦ 600V XLPE 1C-6.0mm ² x 3
⑧	OIL PUMP FOR DISCHARGE VALVE 7.5kW x 2	⑥ c/d-⑧ 600V XLPE (1C-10mm ² x 3) x 2
⑨	SUMP PUMP 5.5kW x 3	⑥ c/d-⑨ 600V XLPE (1C-6.0mm ² x 3) x 3
⑩	PIPE LINE GUARD VALVE 7.5kW x 3	⑥ c/d-⑩ 600V XLPE (1C-10mm ² x 3) x 3
⑪	PIPELINE FILLING UP PUMP 240kW x 2	⑥ a - ⑪ 600V XLPE (1C-240mm ² x 3) x 2
		⑥ e - GEN. PANEL 600V XLPE 1C-70mm ² x 4

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CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL
 BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION
PUMP HOUSE
EQUIPMENT LAYOUT AND POWER CABLING PLAN

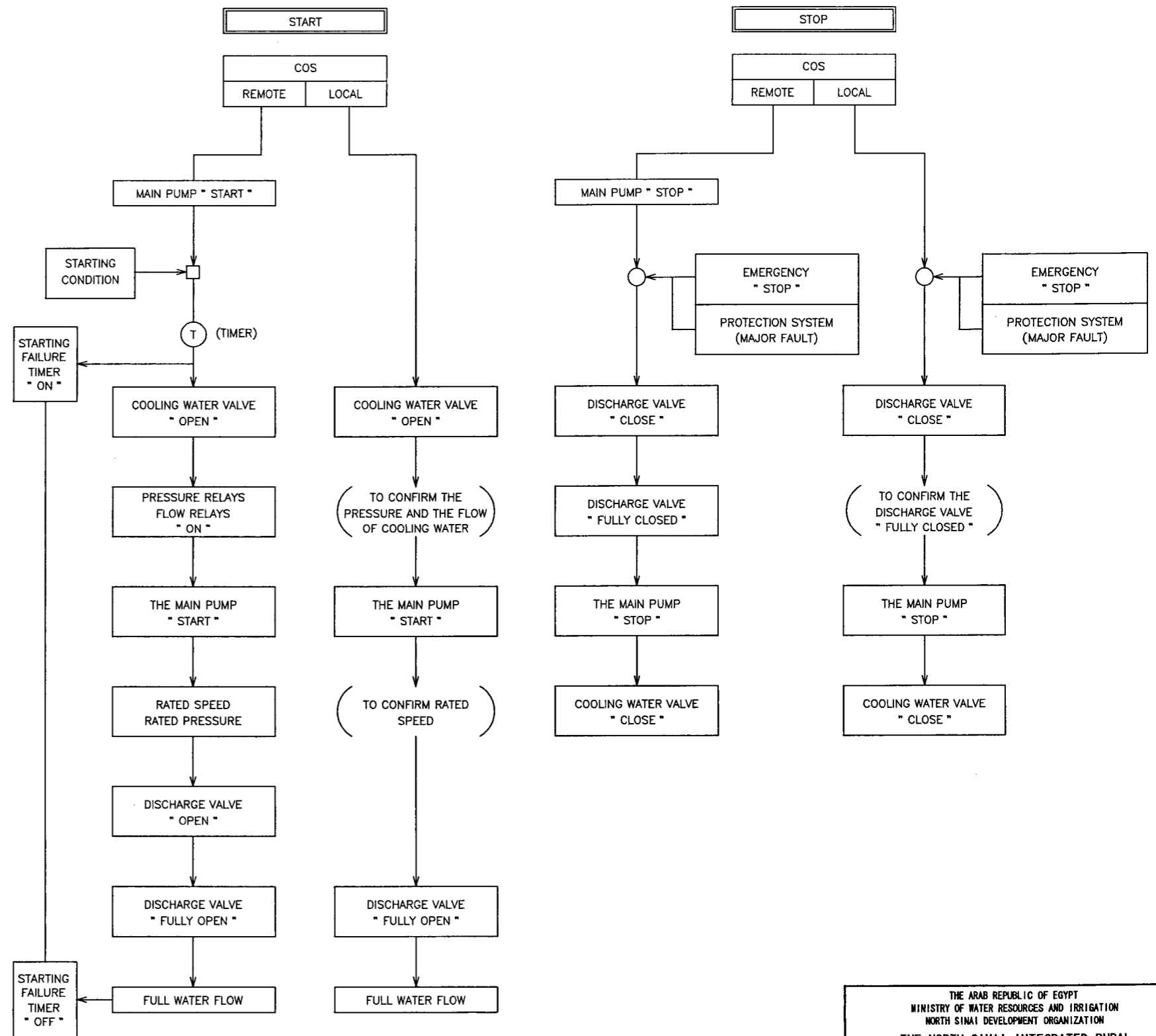
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 SANYU CONSULTANTS INC. PACIFIC CONSULTANTS INTERNATIONAL

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APPROVED	
DRAWING NO.	PSE-205



MOTOR				
MONITORING POINTS		C.B TRIP	ALARM	
SHAFT VIBRATION		-	H	
FRAME VIBRATION		-	H	
TEMP. OF STATOR COIL		-	H	
UPPER BEARING OIL BOX	OIL LEVEL	○	LL	L
	C.W. FLOW RATE	-	L	H
	C.W. INLET TEMP.	-	H	
	C.W. OUTLET TEMP.	-	H	
THRUST BEARING	TEMP.	○	H	
UPPER GUIDE BEARING	TEMP.	○	H	
LOWER BEARING OIL BOX	OIL LEVEL	○	LL	L
	C.W. FLOW RATE	-	L	H
	C.W. INLET TEMP.	-	H	
	C.W. OUTLET TEMP.	-	H	
LOWER GUIDE BEARING	TEMP.	○	H	
HEAT EXCHANGER (COOLER)	C.W. FLOW RATE	-	L	H
	C.W. INLET TEMP.	-	H	
	C.W. OUTLET TEMP.	-	H	

PUMP				
MONITORING POINTS		STOP	ALARM	
SHAFT VIBRATION		-	H	
FRAME VIBRATION		-	H	
UPPER BEARING OIL BOX	OIL LEVEL	○	LL	L
	C.W. FLOW RATE	-	L	H
	C.W. INLET TEMP.	-	H	
	C.W. OUTLET TEMP.	-	H	
GUIDE BEARING	TEMP.	○	H	
LOWER BEARING OIL BOX	OIL LEVEL	○	LL	L
	C.W. FLOW RATE	-	L	H
	C.W. INLET TEMP.	-	H	
	C.W. OUTLET TEMP.	-	H	
GUIDE BEARING	TEMP.	○	H	
GRAND PACKING	C.W. FLOW RATE	-	L	H
	C.W. PRESSURE	-	L	H
DISCHARGE PRESSURE		-	L	

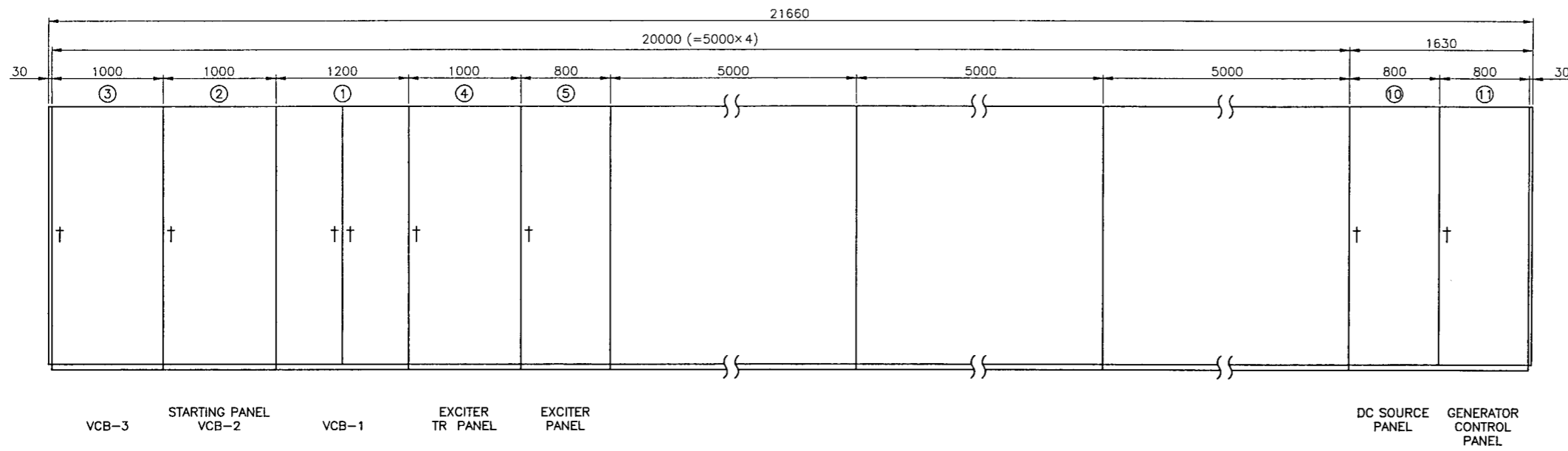


THE ARAB REPUBLIC OF EGYPT
 MINISTRY OF WATER RESOURCES AND IRRIGATION
 NORTH SINAI DEVELOPMENT ORGANIZATION
THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)

CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAB CANAL
 BETWEEN KM 108.466 AND KM 118.560
 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION
PUMP HOUSE
MAIN PUMP UNIT PROTECTION SYSTEM AND OPERATION BLOCK DIAGRAM

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL

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CHECKED	
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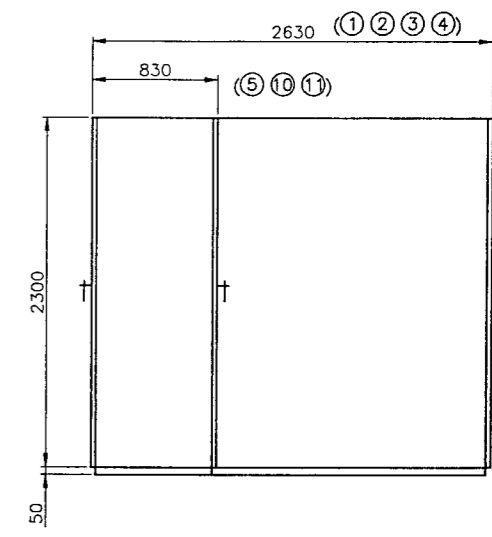
MAIN PUMP-1

MAIN PUMP-2

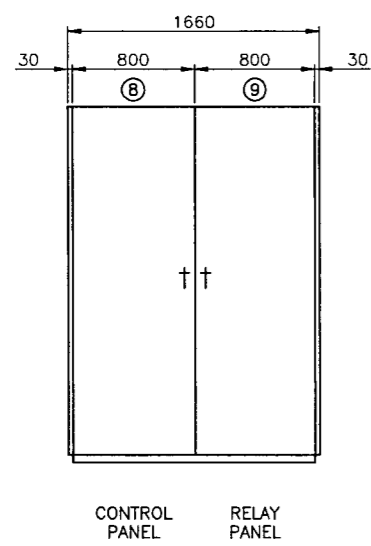
MAIN PUMP-3

MAIN PUMP-4

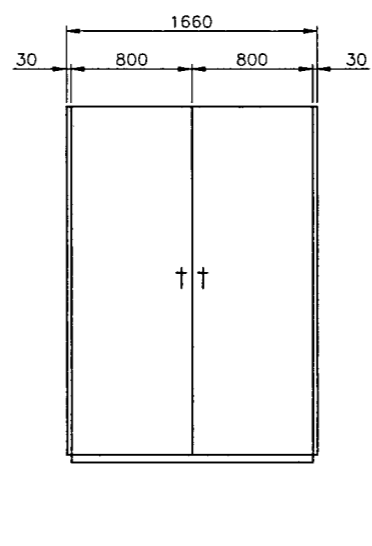
FRONT VIEW



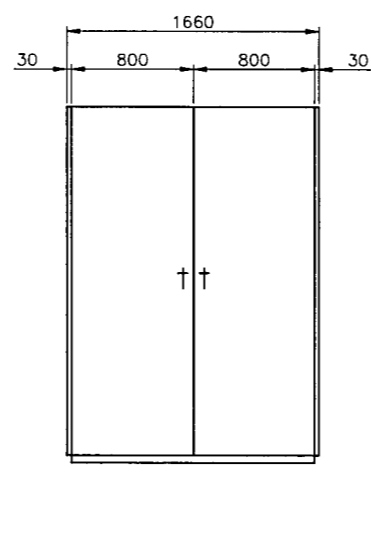
SIDE VIEW



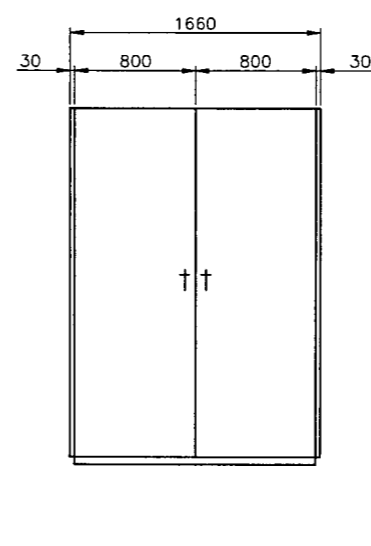
MAIN PUMP-1



MAIN PUMP-2

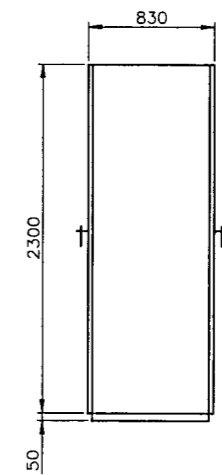


MAIN PUMP-3



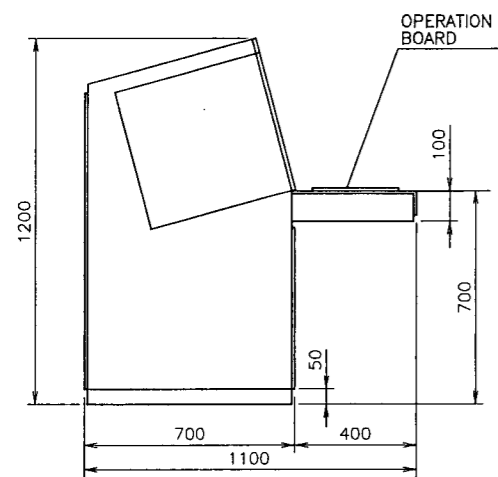
MAIN PUMP-4

FRONT VIEW

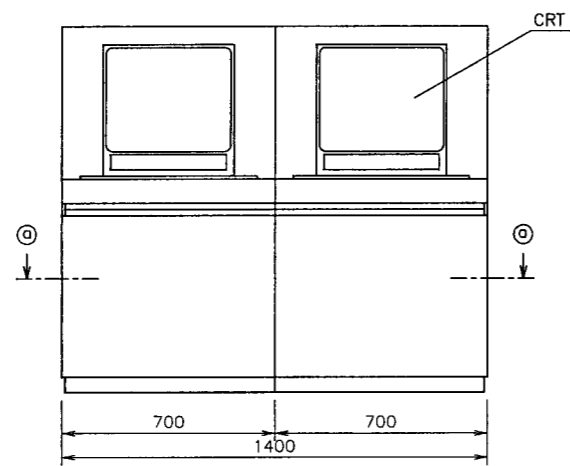


SIDE VIEW

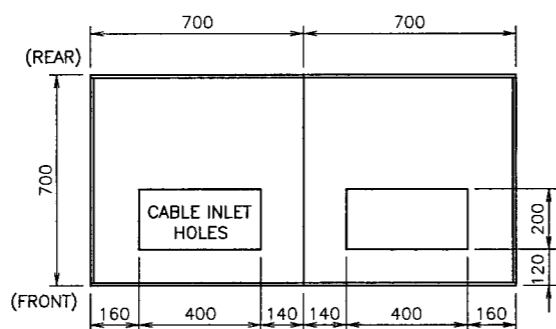
THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No. 7 (B1R EL ABD) PUMPING STATION PUMP HOUSE MAIN MOTOR , MAIN MOTOR CONTROL , DC SOURCE , GENERATOR CONTROL PANEL OUTLINE	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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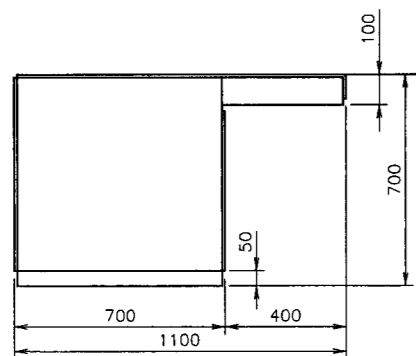
SIDE VIEW



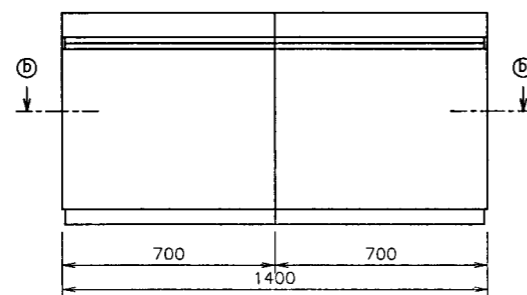
FRONT VIEW



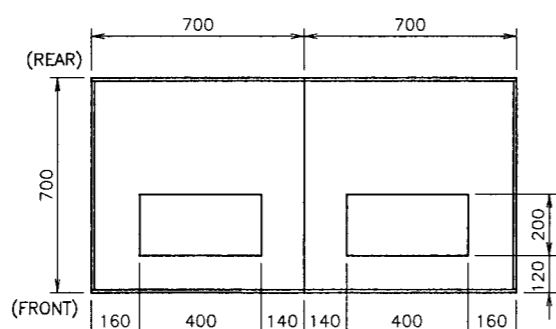
SECTION A-A



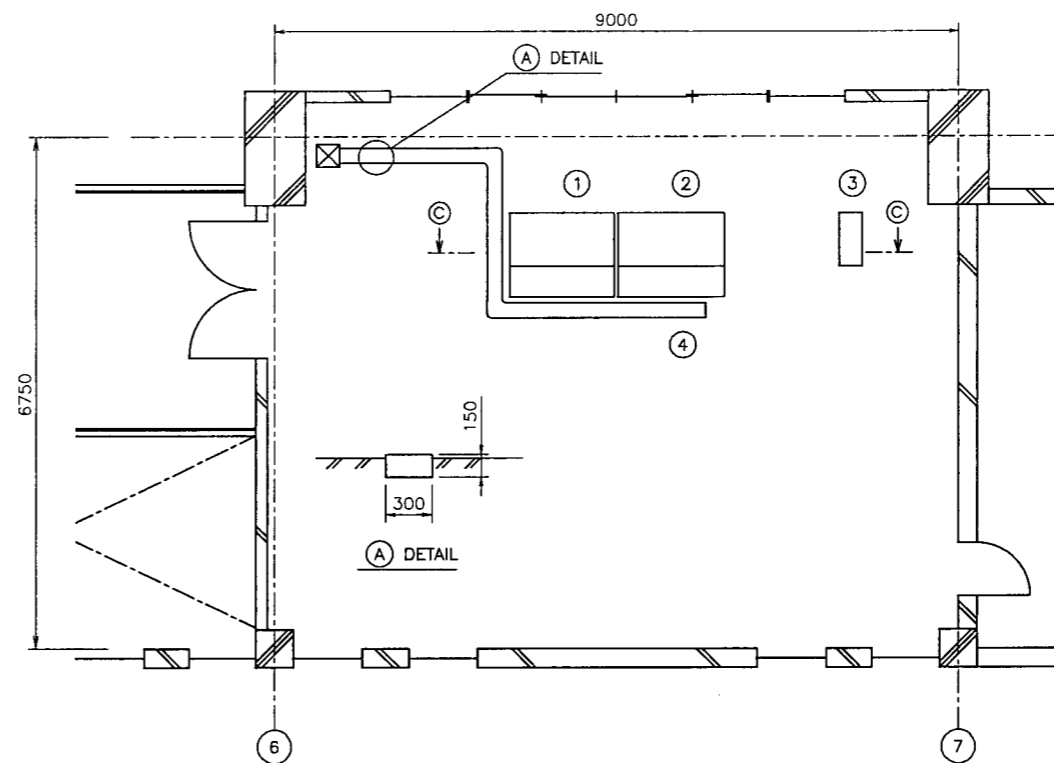
SIDE VIEW



FRONT VIEW

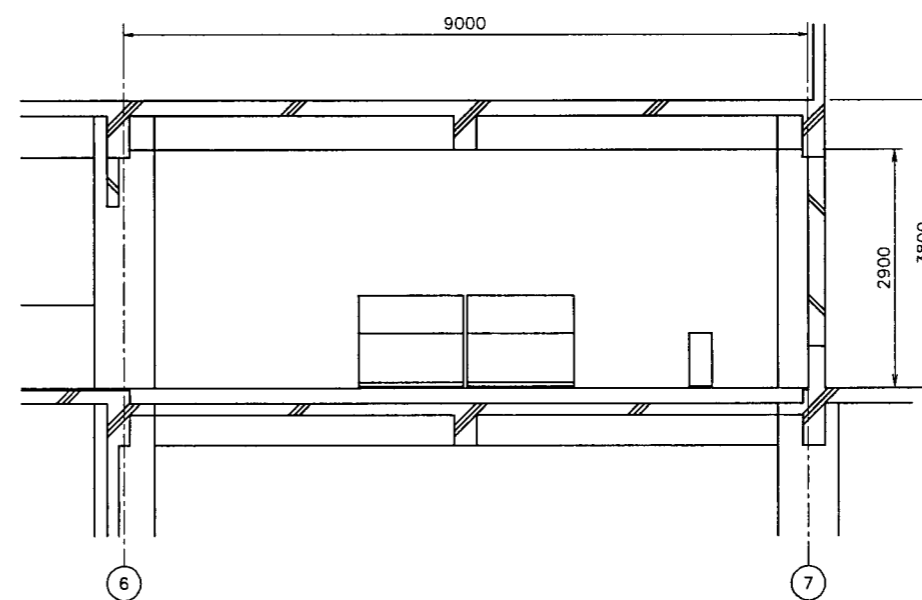


SECTION B-B



EQUIPMENT LAYOUT PLAN

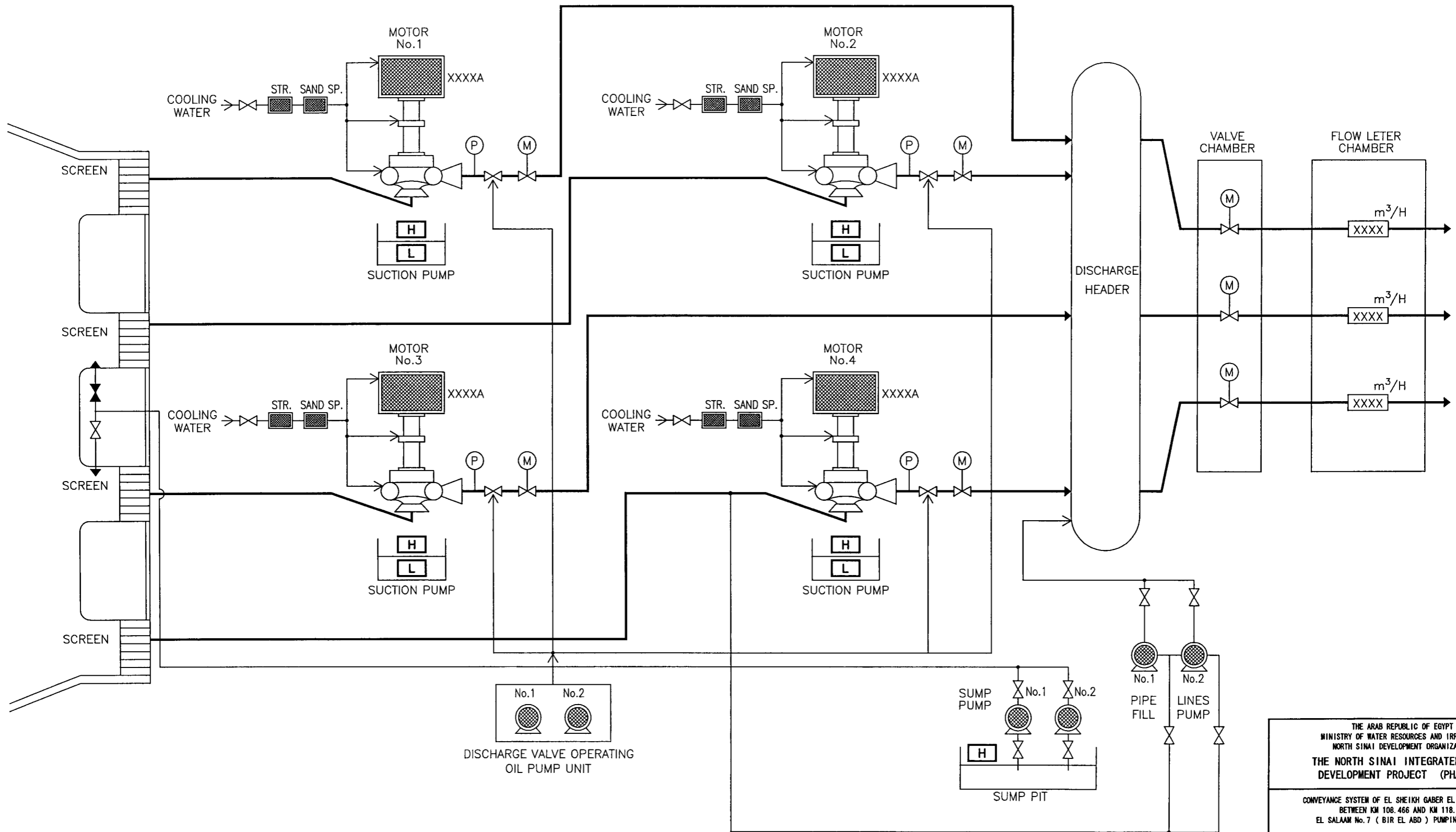
No.	EQUIPMENT SCHEDULE
①	OPERATOR CONSOLE
②	PRINTER DESK
③	UPS (SEE DWG.NO.PSE-210)
④	FLOOR DUCT WITH COVER



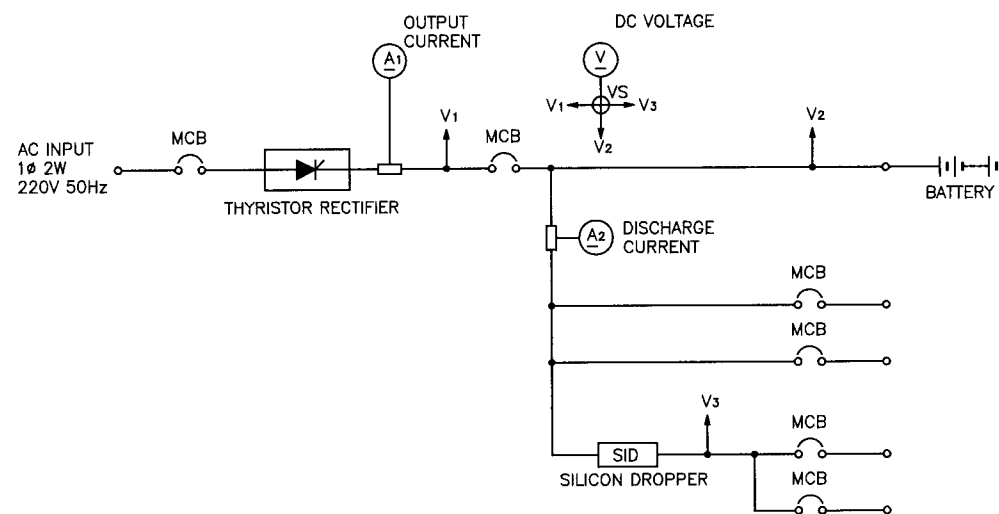
SECTION C-C

THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBABH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION PUMP HOUSE CENTRAL CONTROL ROOM EQUIPMENT LAYOUT PLAN	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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CHECKED	
APPROVED	
DRAWING NO.	PSE-208

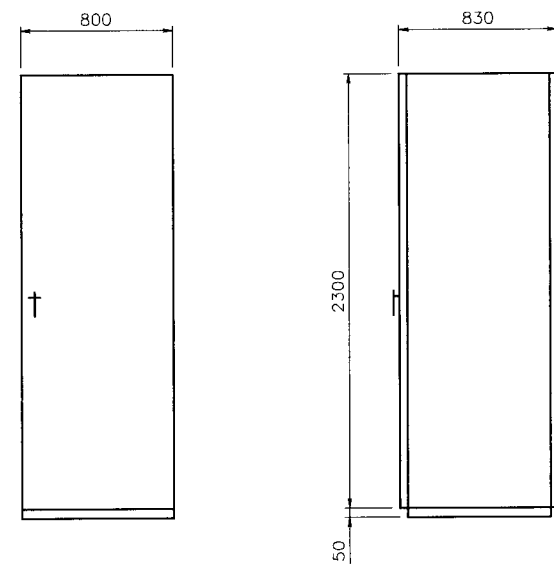
MAIN PUMP SYSTEM



THE ARAB REPUBLIC OF EGYPT MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH SINAI DEVELOPMENT ORGANIZATION THE NORTH SINAI INTEGRATED RURAL DEVELOPMENT PROJECT (PHASE III)	
CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAH CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAAM No. 7 (BIR EL ABD) PUMPING STATION	
PUMP HOUSE MAIN PUMP SYSTEM CRT DISPLAY AND DATA ACQUISITION PLAN	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SARYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
DESIGNED	
TRACED	
CHECKED	
APPROVED	
DRAWING NO.	PSE-209



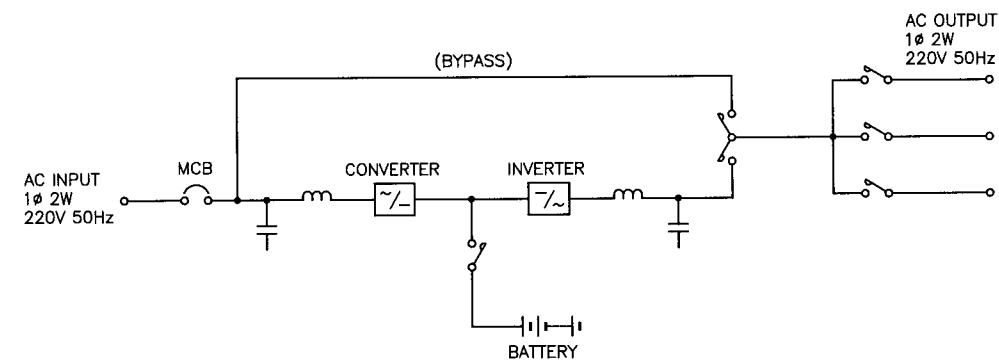
DC POWER SOURCE MAIN CIRCUIT



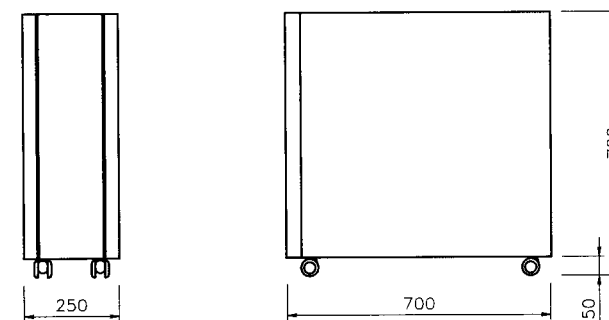
FRONT VIEW

SIDE VIEW

PANEL OUTLINE



UPS MAIN CIRCUIT



FRONT VIEW

SIDE VIEW

UPS OUTLINE

MAIN TECHNICAL DATA

(1) D.C POWER SOURCE

1) BATTERY

- 1 TYPE : Ni-Cd ALKALINE/SINTERED PLATE
- 2 RATED CAPACITY (Ah) : 200Ah AT RATED DISCHARGE RATE 1 Hr.
- 3 VOLTAGE (V/CELL)
 - NORMAL : 1.20
 - FLOATING : 1.35
 - EQUALIZING : 1.47

2) BATTERY CHARGER

- 1 A.C INPUT VOLTAGE : 1-PHASE, 220V, 50Hz
- 2 CHARGER INPUT CAPACITY : 20kVA
- 3 LOAD VOLTAGE COMPENSATOR : 100A
- 4 D.C OUTPUT VOLTAGE : 110V

(2) UPS

1) A.C INPUT

- 1 ELECTRIC SYSTEM : 1-PHASE, 2-WIRE
- 2 RATED VOLTAGE : 220V
- 3 RATED FREQUENCY : 50Hz
- 4 PERMISSIBLE VOLTAGE : RATED VOLTAGE ±10%
DEVIATION RANGE
- 5 PERMISSIBLE FREQUENCY : RATED VOLTAGE ± 5%
DEVIATION RANGE

2) A.C OUTPUT

- 1 RATED OUTPUT : 5kVA
- 2 ELECTRIC SYSTEM : 1-PHASE, 2-WIRE
- 3 RATED VOLTAGE : 220V
- 4 VOLTAGE REGULATION RANGE : RATED VOLTAGE ± 5%
- 5 RATED FREQUENCY : 50Hz
- 6 RATED POWER FACTOR : 0.85 LAG
- 7 VOLTAGE ACCURACY
 - NORMAL DEVIATION : RATED VOLTAGE ± 2%
 - TRANSIENT DEVIATION : RATED VOLTAGE ±10%
 - SETTING TIME : 0.1 SEC
- 8 FREQUENCY ACCURACY : RATED FREQUENCY ±0.5%
- 9 WAVE FROM PISTORTION FACTOR : 5% OR LESS

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CONVEYANCE SYSTEM OF EL SHEIKH GABER EL SABBAB CANAL BETWEEN KM 108.466 AND KM 118.560 EL SALAM No. 7 (BIR EL ABD) PUMPING STATION PUMP HOUSE DC POWER SOURCE AND UPS SINGLE LINE DIAGRAM	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) SANYU CONSULTANTS INC, PACIFIC CONSULTANTS INTERNATIONAL	
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DRAWING NO.	PSE-210