

- ### GENERAL NOTES

- |        |  |
|--------|--|
| CB     | INCOUL BREAKER                                 |
| LA     | 12 KV LIGHTING ARRESTER                        |
| WL     | WATT-HOUR METER                                |
| VARH   | VAR-HOUR METER                                 |
| AW     | RECORDING WATT METER                           |
| VARV   | RECORDING VAR METER                            |
| W      | WATT METER                                     |
| VAR    | VAR METER                                      |
| PF     | POWER FACTOR METER                             |
| OCR    | OVER CURRENT RELAY                             |
| OCG    | OVER CURRENT GROUND RELAY                      |
| A      | AC AM METER                                    |
| V      | AC VOLT METER                                  |
| AS     | CHANGE-OVER SWITCH FOR AM METER                |
| VS     | CHANGE-OVER SWITCH FOR VOLT METER              |
| FHS    | FUSE   |
| PI     | POTENTIAL TRANSFORMER                          |
| CT     | CURRENT TRANSFORMER                            |
| CH     | CABLE HEAD                                     |
| ZCT    | ZERO SEQUENCE CURRENT TRANSFORMER              |
| D      | MAXIMUM DEMAND METER                           |
| PVC    | GOODY VINYL INSULATED NON-ARMOURD CABLE        |
| SNAPVC | GOODY VINYL INSULATED STEEL WIRE ARMOURD CABLE |
| CV     | 11 KV VINYL INSULATED STEEL WIRE ARMOURD CABLE |

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
POWER SUPPLY			
SUB STATION &			
SCHEMATIC DIAGRAM OF			
POWER SUPPLY SYSTEM			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
	SCALE	H. Kuma	S. Kato
1: 200		REV. NO.	
DATE DEC -- 1975		DWG. NO. E-101	

**PORT MUHAMMAD-BIN-QASIM PROJECT**  
**PAKISTAN**

**PANISTA**

POWER SUPPLY  
SUB STATION &  
SCHEMATIC DIAGRAM OF  
POWER SUPPLY SYSTEM

SUB STATION &  
SCHEMATIC DIAGRAM OF  
POWER SUPPLY SYSTEM

## POWER SUPPLY SYSTEM

[illegible]

**FROM INFORMATIONAL**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING

1. What is the purpose of the study?  
The purpose of the study is to determine the effect of the use of a computer program on the learning of the English language.

2. What is the research question?  
The research question is: Does the use of a computer program improve the learning of the English language?

3. What is the hypothesis?  
The hypothesis is: The use of a computer program will improve the learning of the English language.

4. What is the independent variable?  
The independent variable is the use of a computer program.

5. What is the dependent variable?  
The dependent variable is the learning of the English language.

6. What is the control group?  
The control group is the group of students who did not use the computer program.

7. What is the experimental group?  
The experimental group is the group of students who used the computer program.

8. What is the sample size?  
The sample size is 30 students.

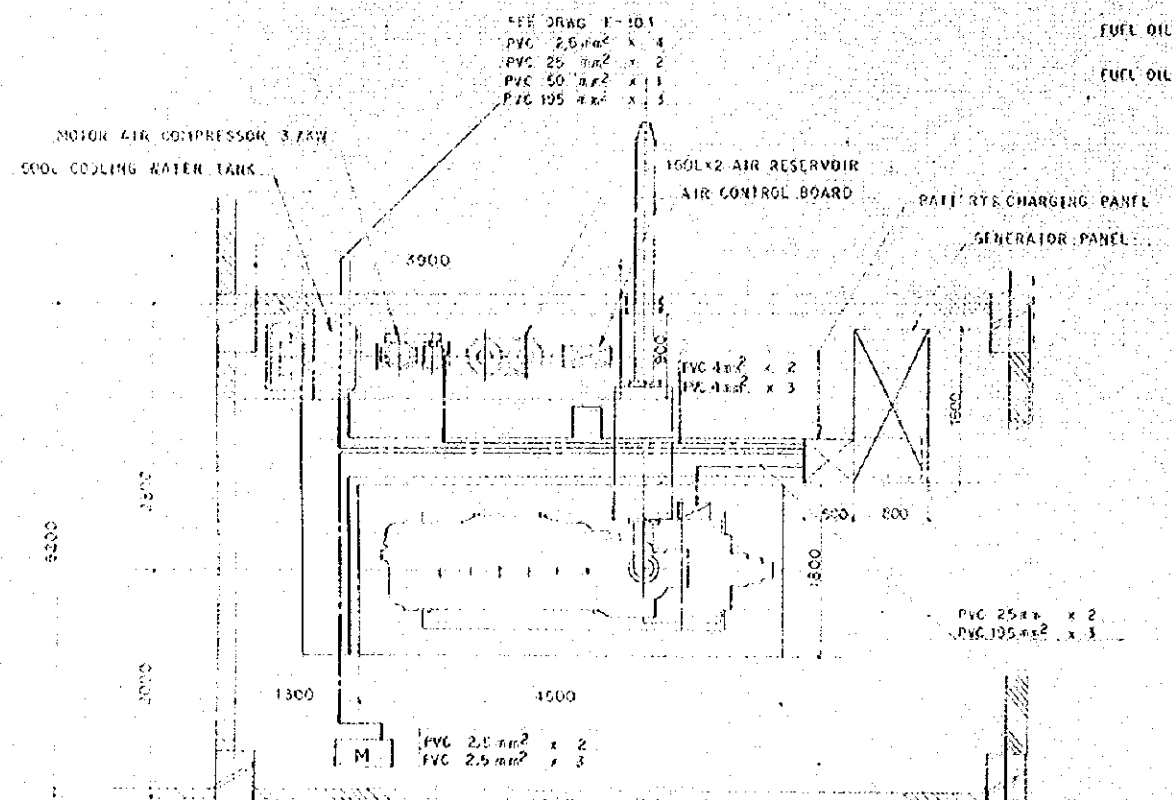
9. What is the data collection method?  
The data collection method is a pre-test and post-test design.

10. What is the data analysis method?  
The data analysis method is a t-test.

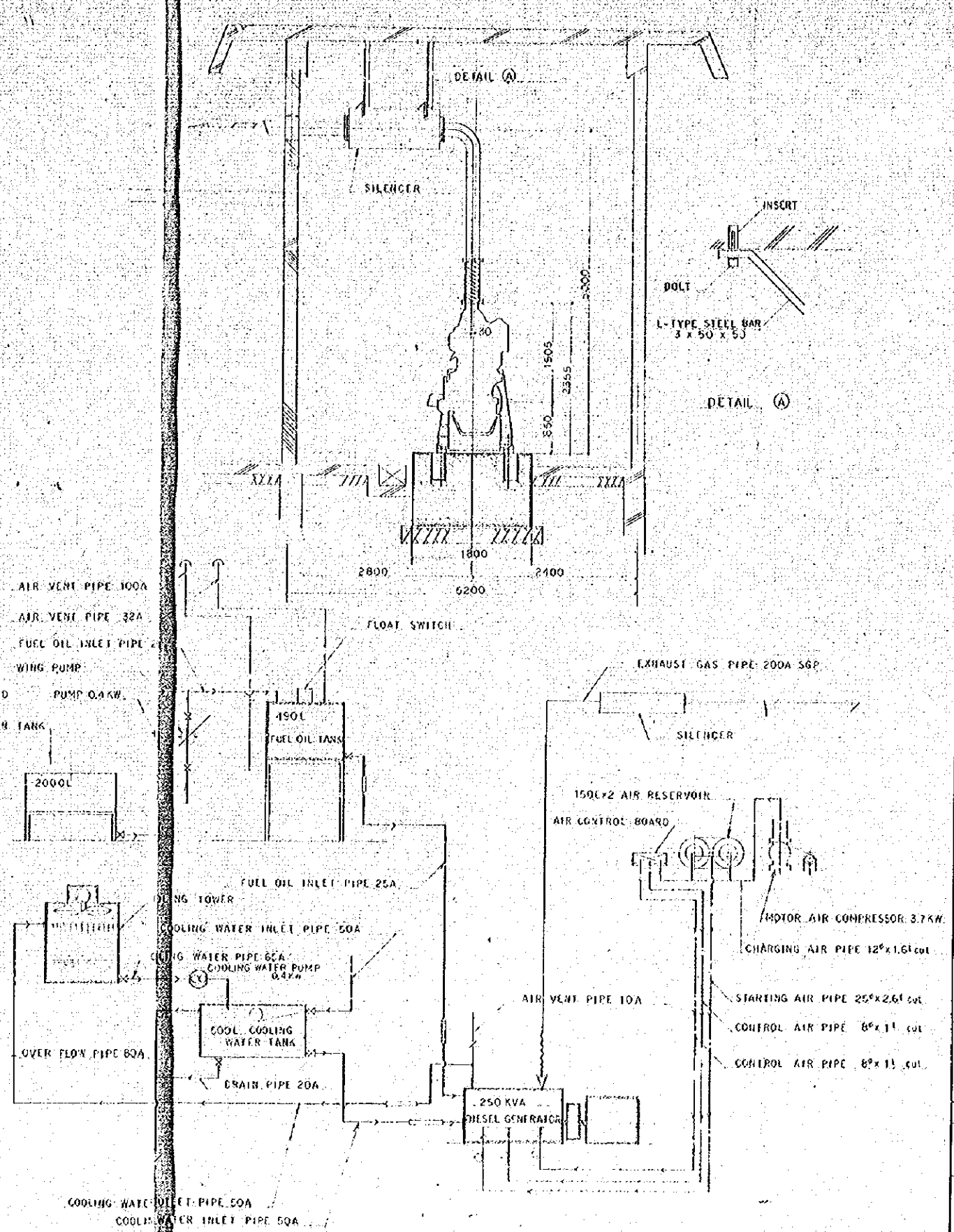
SCALE

1:40 1:100

1.40, 1.100



## WIRING PLAN

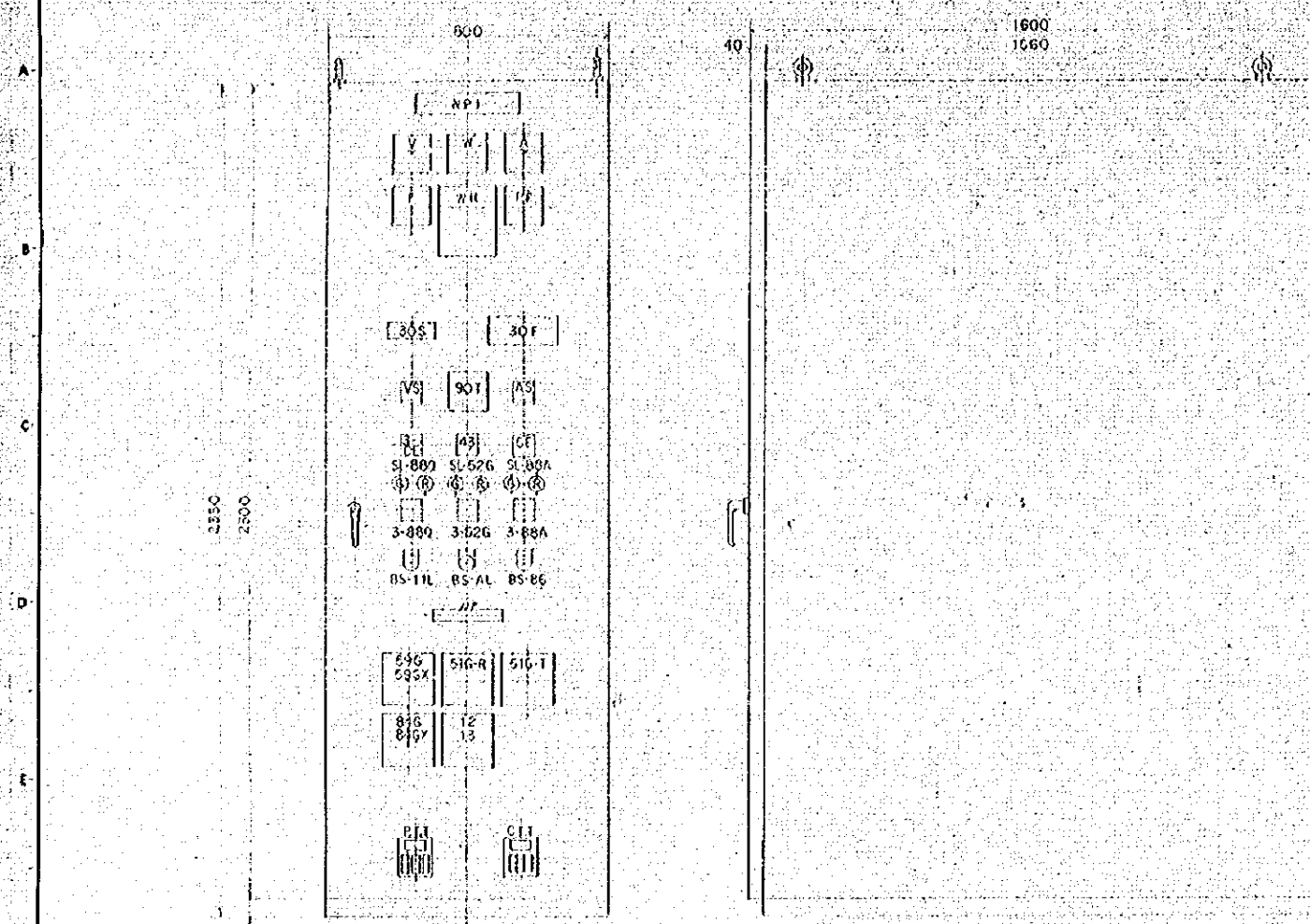


FLOW SHEET OF PIPING

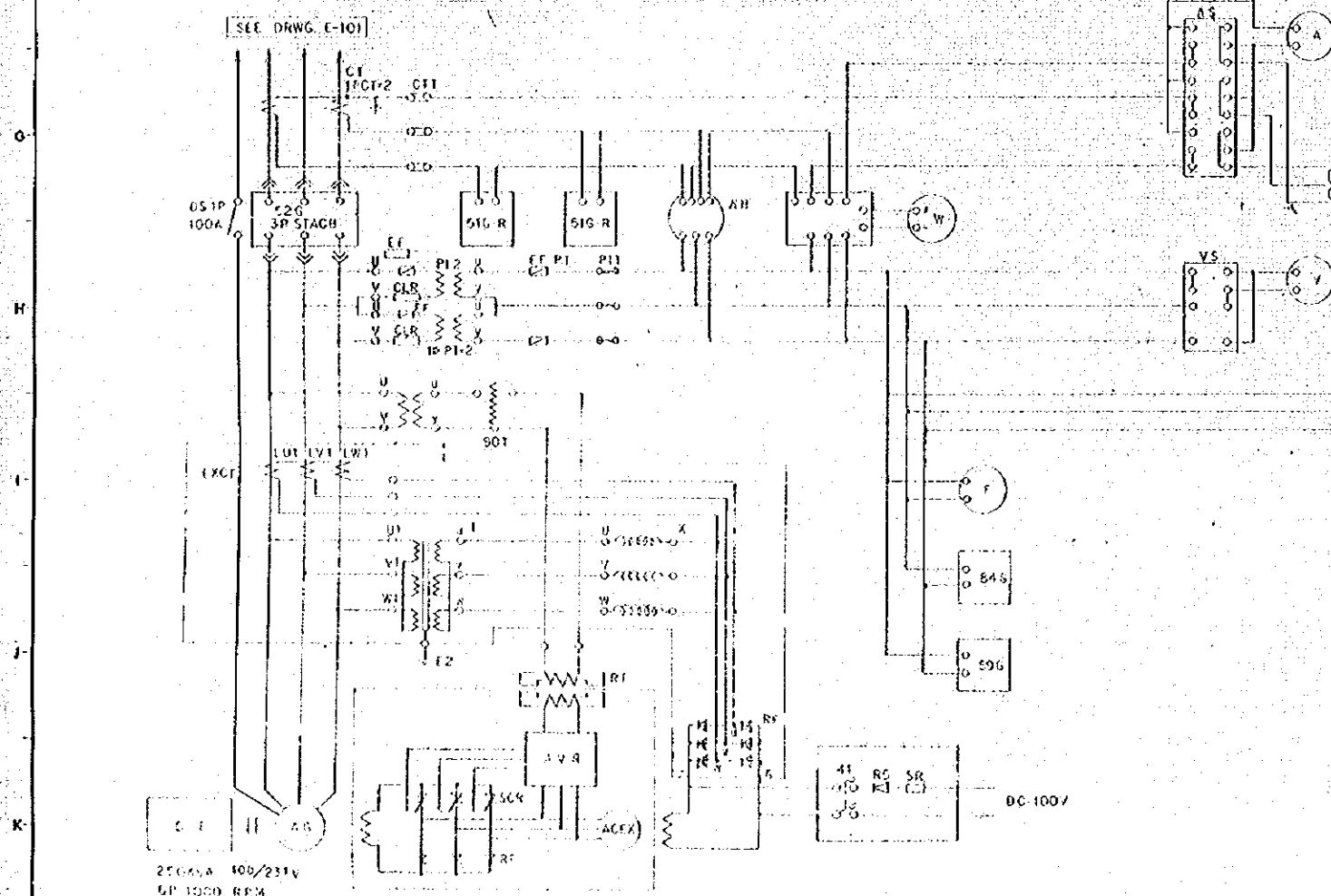
### GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
<b>PORT MUMAMMAD-BIN-QASIM PROJECT</b> <b>PAKISTAN</b>			
<u>POWER SUPPLY</u> POWER STATION & FLOW SHEET OF PIPING			
<b>JAPAN INTERNATIONAL COOPERATION AGENCY</b> CONSULTEANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
	SCALE	H. KUMAR	S. KALRA
	1:40	REV. NO.	
DATE	DEC - 1975	DWG. NO.	E-102

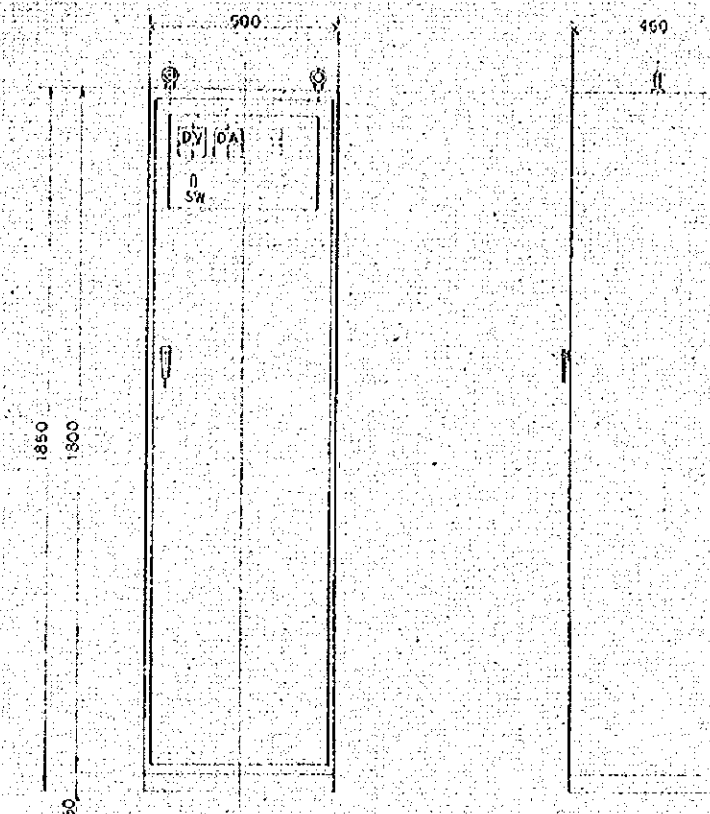




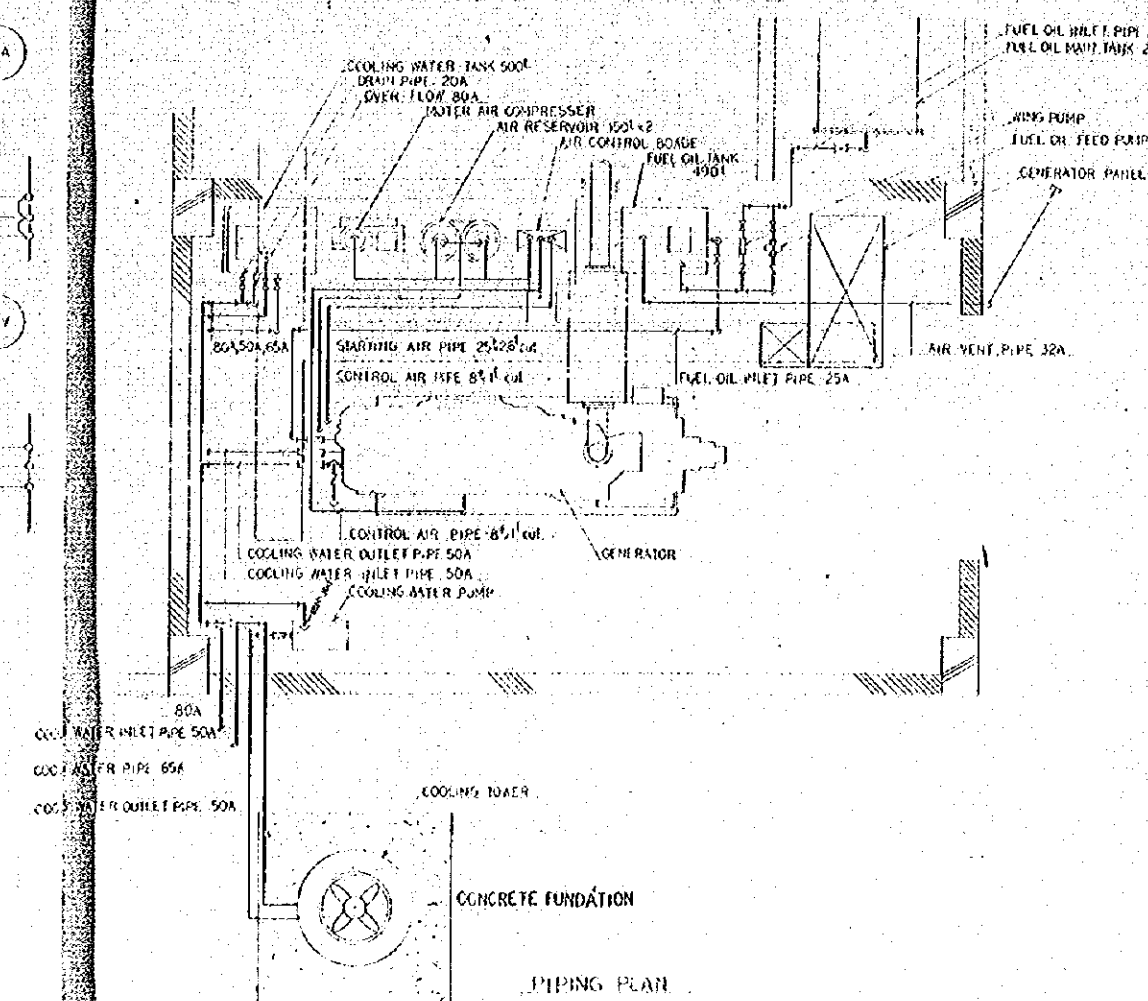
GENERATOR PANEL OUT LINE



## MAIN AND EXCITING CIRCUITS



### BATTERY & CHARGING PANEL

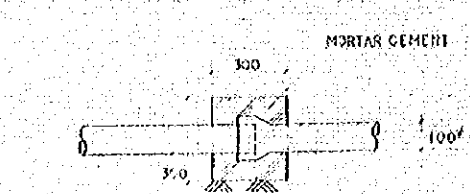
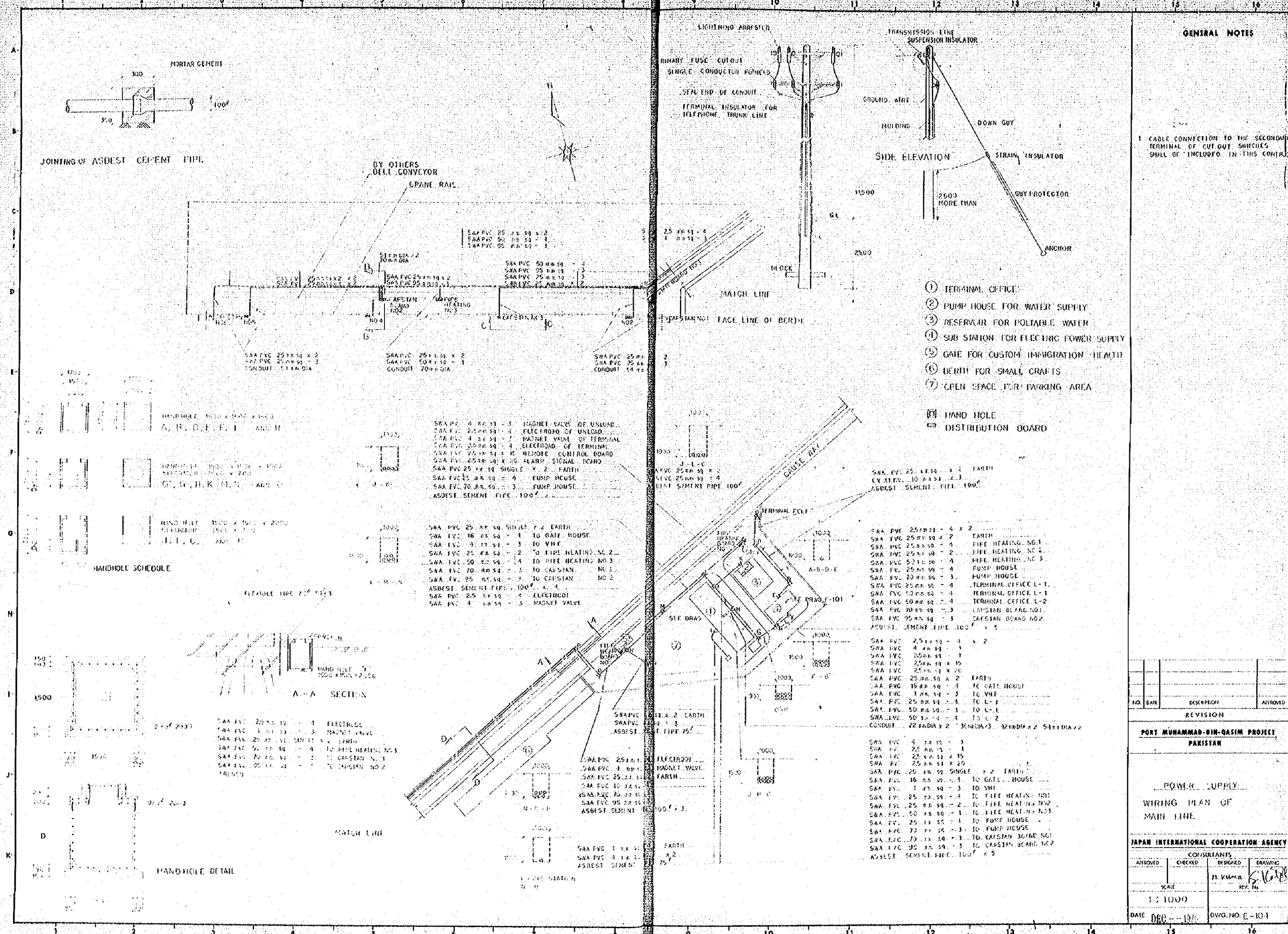


PIPING PLAN

### GENERAL NOTES

A	AM-METER
V	VOLT METER
W	WATT METER
PE	POWER FACTOR METER
WH	WATT HOUR METER
F	FREQUENCY METER
OA	D.C. AM-METER
OV	D.C. VOLT-METER
SW	D.C. MAIN SWITCH
AS	AM-METER SWITCH
VS	VOLT METER SWITCH
1-38A	SWITCH FOR AIR COMPRESSOR
3A-38A	SIGNAL LAMP FOR AIR COMPRESSOR
1-38B	SWITCH FOR FUEL PUMP
3A-38B	SIGNAL LAMP FOR FUEL PUMP
1-38C	SWITCH FOR CIRCUIT BREAKER
3A-38C	SIGNAL LAMP FOR CIRCUIT BREAKER
DOZ, SOXZ	OVER VOLTAGE RELAY
51G	OVER CURRENT RELAY
8AG, 21GZ	VOLTAGE RELAY
5E	EMERGENCY STOP SWITCH
31E	ENGINE START/STOP SWITCH
43	CHANGE-OVER SWITCH (MANUAL/AUTO)
85-11L	TEST LAMP
85-14L	ALARM BELL RESETTING SWITCH
85-16B	ALARM SIGNAL RESETING SWITCH
D-13	SPEED RELAY
20S, 30F	SIGNAL
H.T.L.	WATER TEST TERMINAL
C.T.L.	OIL TEST TERMINAL
AVH	AUTOMATIC VOLTAGE REGULATOR
ACEX	AC EXITER
SCR	SILICON RECTIFIER
90 I	VOLTAGE REGULATOR
RF	RECTIFIER
RT	RECTIFYING TRANSFORMER

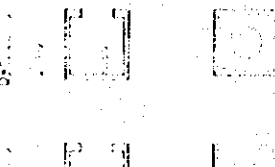
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
<u>POWER SUPPLY</u> CONTROL SYSTEM OF GENERATOR			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KUMAHARA	<i>[Signature]</i>
	SCALE	REV. 1/85	
1:10			
DATE DEC. 1975		DWG. NO. [103	



JOINTING OF ASBEST CEMENT PIPE

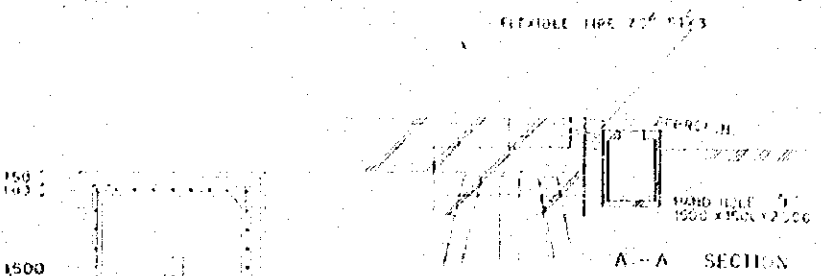


HANDHOLE

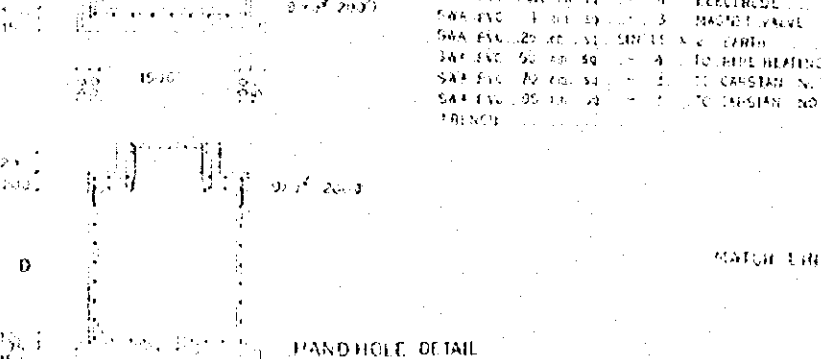


HANDHOLE

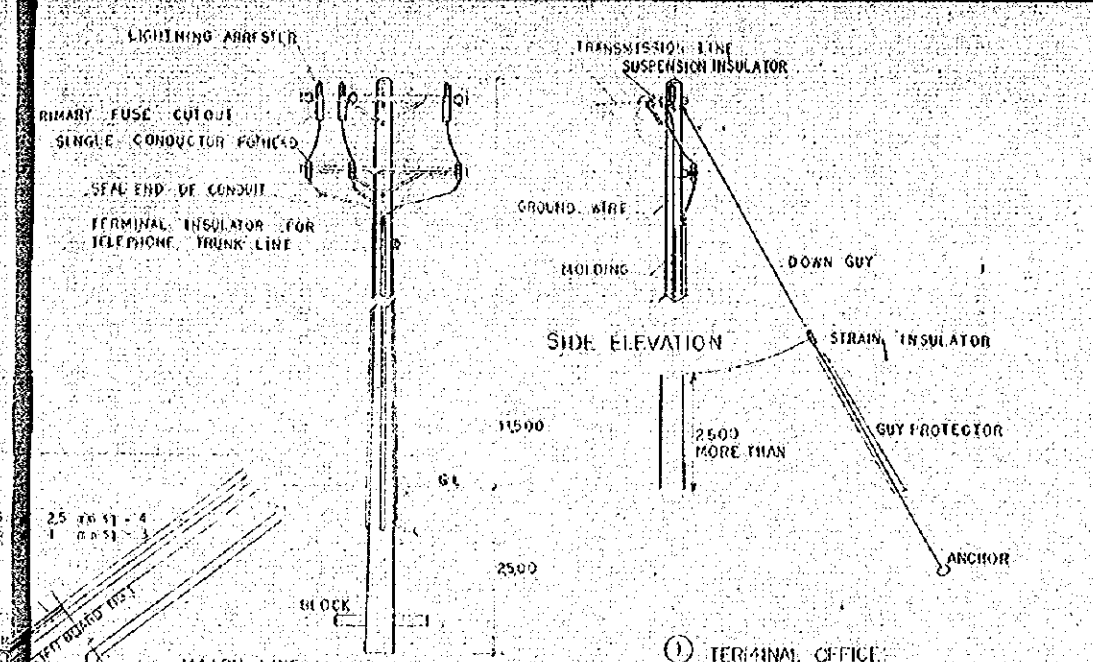
HANDHOLE SCHEDULE



A-A SECTION



HANDHOLE DETAIL



SIDE ELEVATION

- ① TERMINAL OFFICE
  - ② PUMP HOUSE FOR WATER SUPPLY
  - ③ RESERVOIR FOR POTABLE WATER
  - ④ SUB STATION FOR ELECTRIC POWER SUPPLY
  - ⑤ GATE FOR CUSTOM IMMIGRATION HEALTH
  - ⑥ BERTH FOR SMALL CRAFTS
  - ⑦ OPEN SPACE FOR PARKING AREA
- HAND HOLE  
□ DISTRIBUTION BOARD

GENERAL NOTES

1. CABLE CONNECTION TO THE SECONDARY TERMINAL OF CUT OUT SWITCHES SHALL BE INCLUDED IN THIS CONTRACT.

NO.	DATE	DESCRIPTION	APPROVED

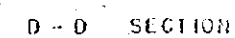
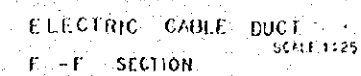
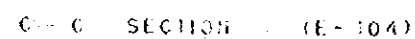
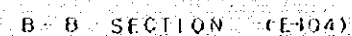
PORT MUHAMMAD-BIN-QASIM PROJECT  
PAKISTAN

POWER SUPPLY  
WIRING PLAN OF  
MAIN LINE

JAPAN INTERNATIONAL COOPERATION AGENCY

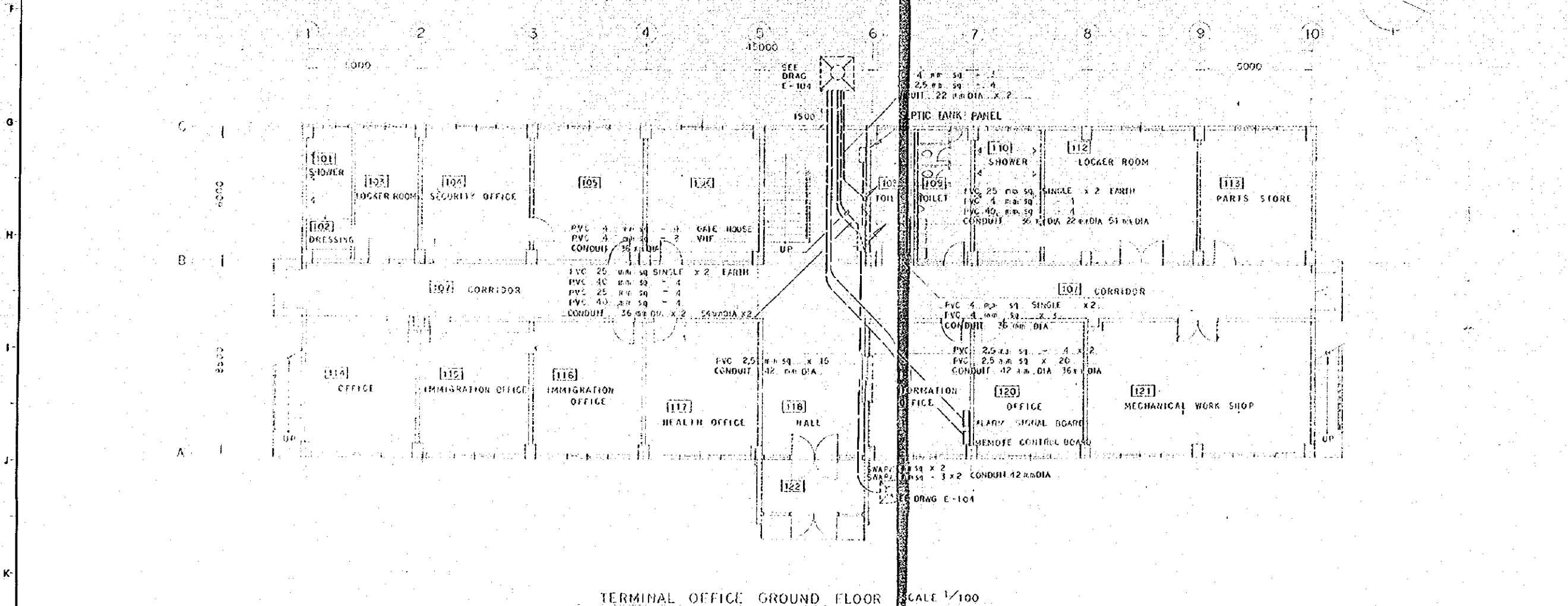
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		21. KUMA	
1 : 1000		REV. TO	
DATE DEC 1971		DWG. NO. E-104	





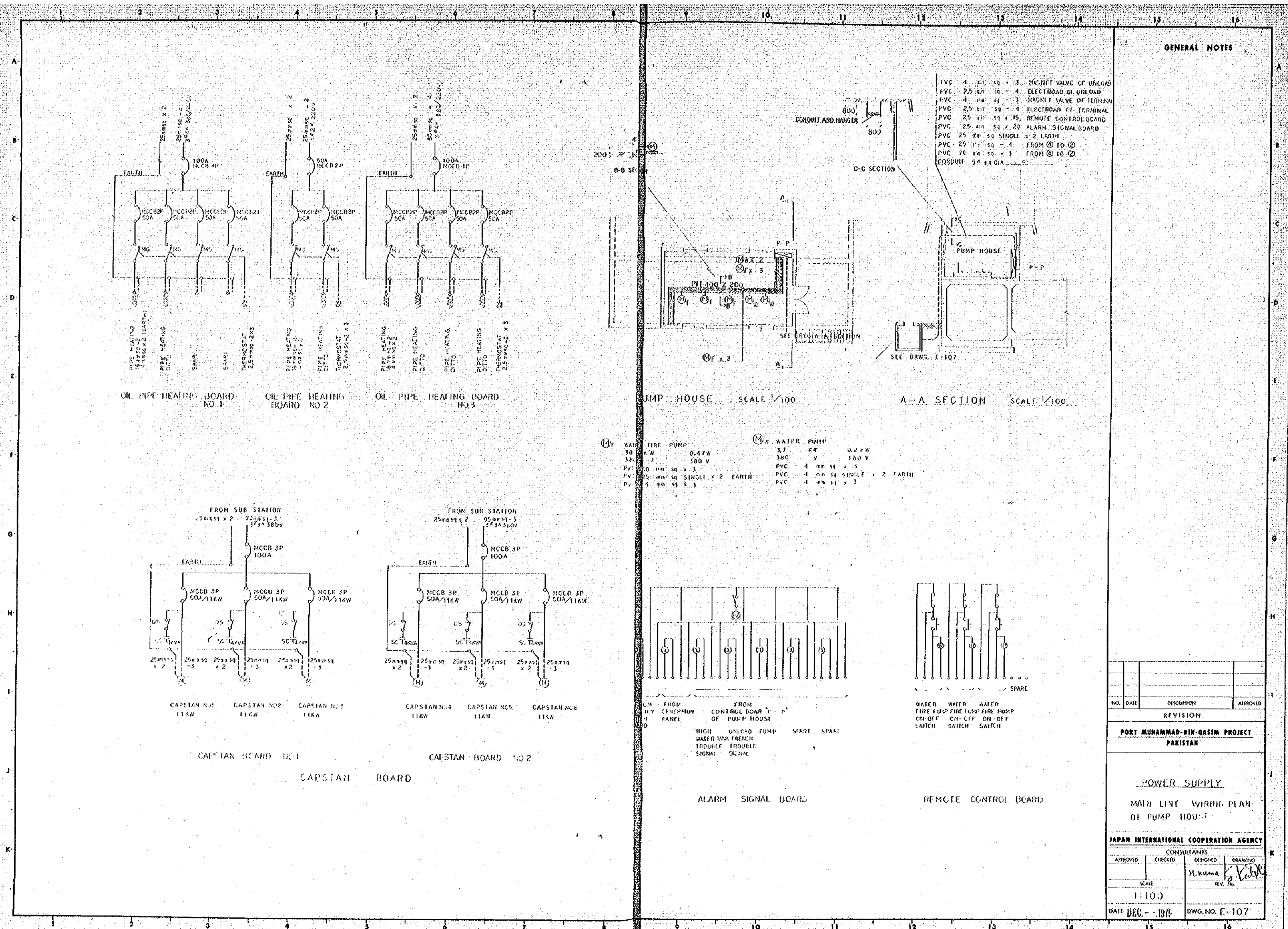
## GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
<b>PORT MUHAMMAD-RIM-QASIM PROJECT</b> <b>PAKISTAN</b>			
POWER SUPPLY SECTION 'OF WIRING PLAN OF MAIN LINE			
<b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>			
APPROVED _____ SCALE		CONSULTANTS CHECKED _____ DESIGNED J.L. KUMAR A REV. 16	
DATE REC. 1974		DWG. NO. E-105	



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
<u>POWER SUPPLY</u>			
MAIN LINE WIRING PLAN OF TERMINAL OFFICE			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
	SCALE	H. KUMAKURA	S. KATAYAMA
	1:100		REV. 1/84
DATE DEC. --- 1975		OWO. NO. E-106	





NO.	DATE	DESCRIPTION	APPROVED

**PORT MUHAMMAD-BIN-QASIM PROJECT**

**PAKISTAN**

**POWER SUPPLY**

**MAIN LINE WIRING PLAN**

**OF PUMP HOUSE**

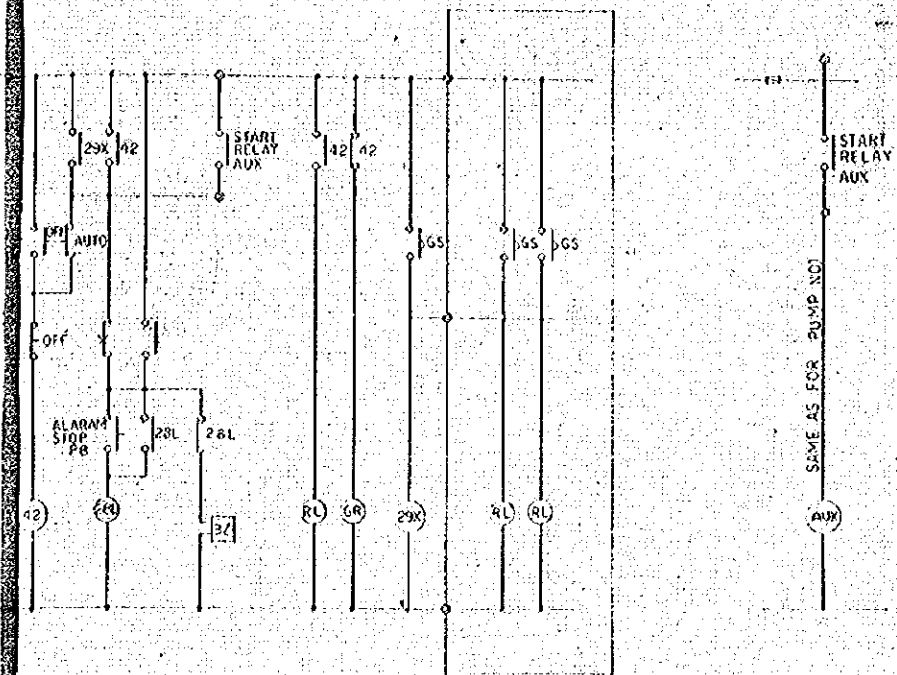
**JAPAN INTERNATIONAL COOPERATION AGENCY**

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING

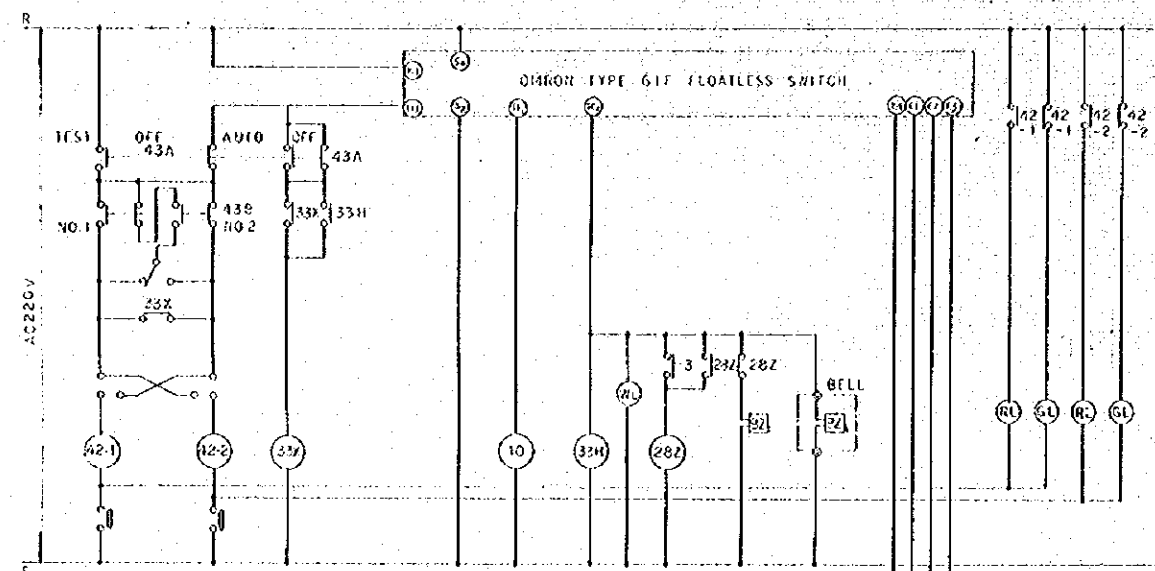
SCALE 1:100

DATE DEC - 1975

DWG. NO. E-107



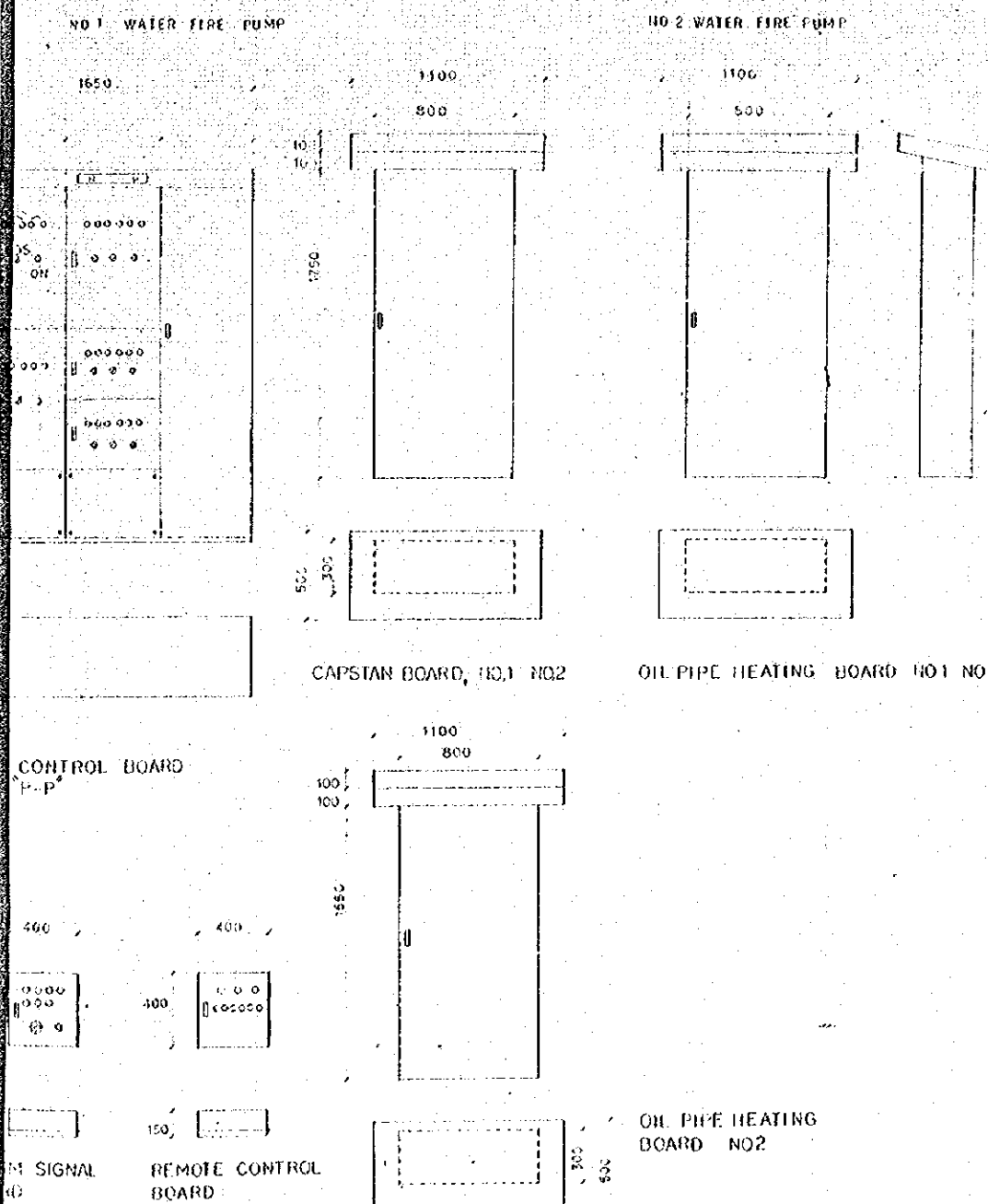
92	MURZER
96	RED LAMP
96	WHITE LAMP
9	MANUAL COMPACT SWITCH
10	SEQUENTIAL SWITCH
28	ALARM DEVICE
29	FIRE EXTINGUISHING DEVICE
33	LEVEL SWITCH
42	MAGNETIC CONTACTOR
43	CONTROL CIRCUIT SWITCH
MOCD	MOULD CASE CIRCUIT BREAKER
MB	MOTOR BREAKER
DS	ISOLATOR
56	STATIC CONDENSER
R	RED LAMP
G	GREEN LAMP
PB	START/STOP SWITCH
NT	NEUTRAL TERMINAL



MAXIMUM LEVEL  
STAIR LEVEL  
STOP LEVEL

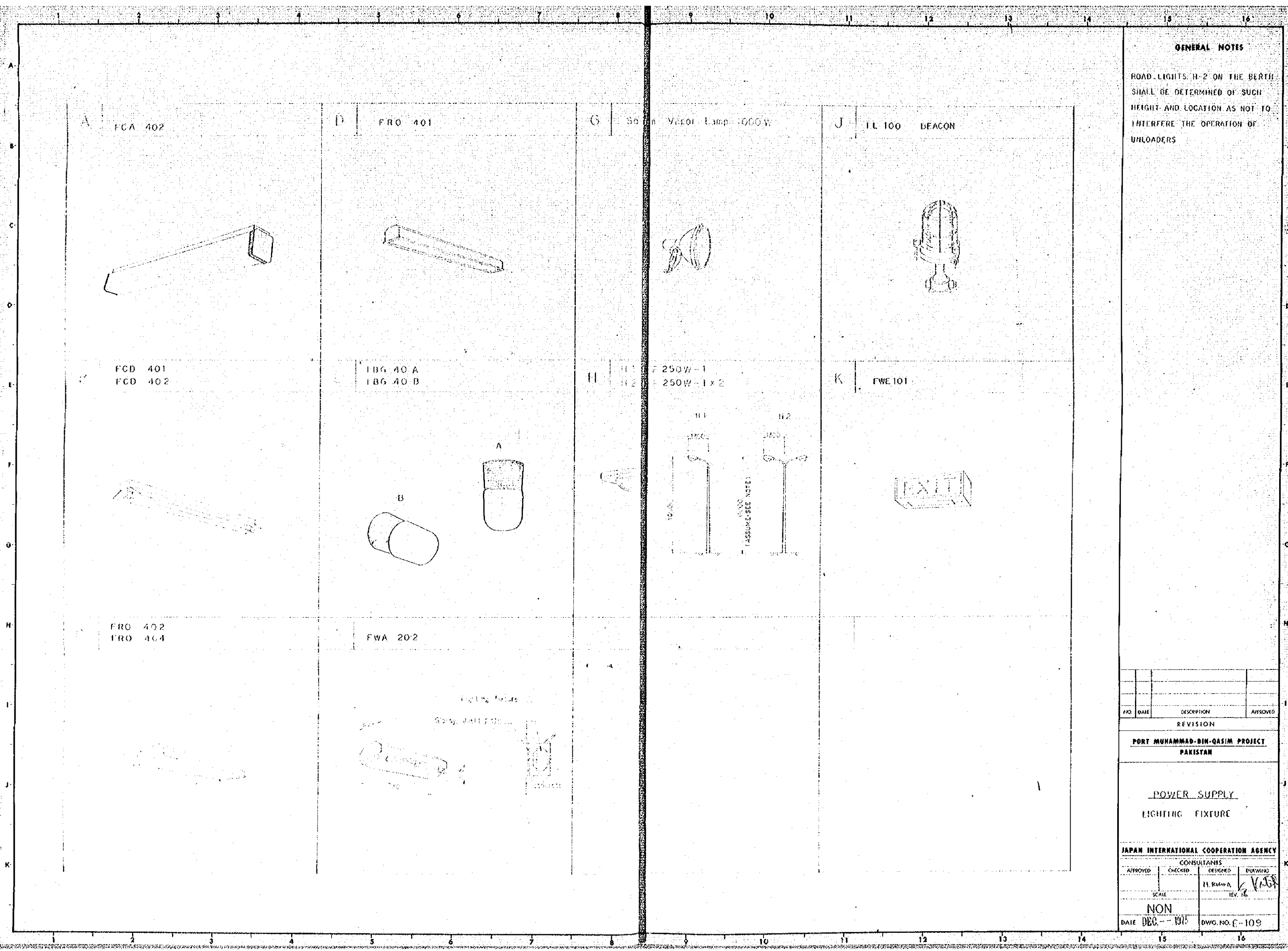
F1  
F2  
F3 x2

WATER TANK OF TERMINAL OFFICE  
UNLOAD OF BERTH



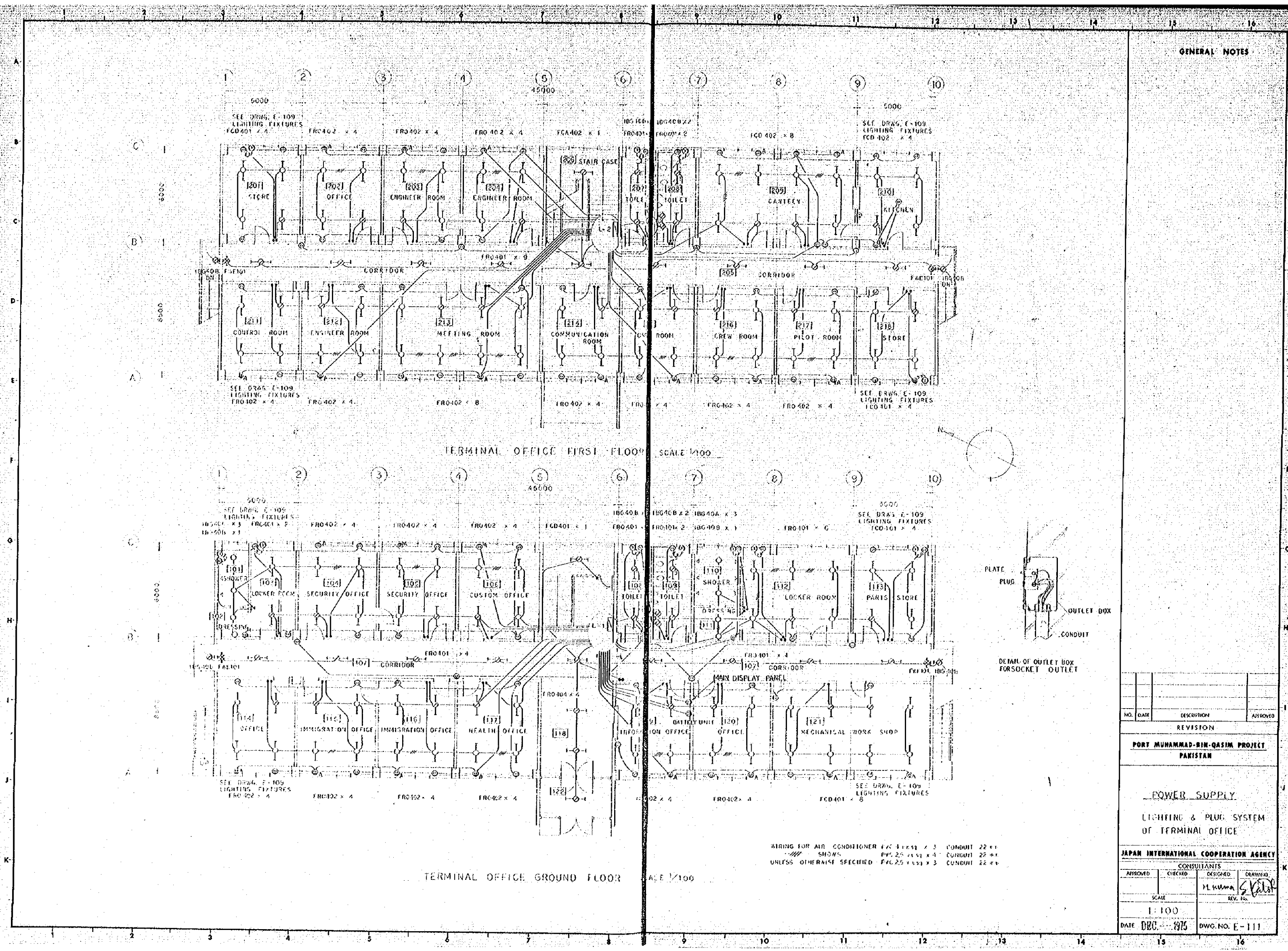
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
POWER SUPPLY			
CONTROL SYSTEM OF PUMPS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		11. KUMAR	BY 20
SCALE		STV. No.	
NON			
DATE DEC - 1976		DWG. NO. E-108	





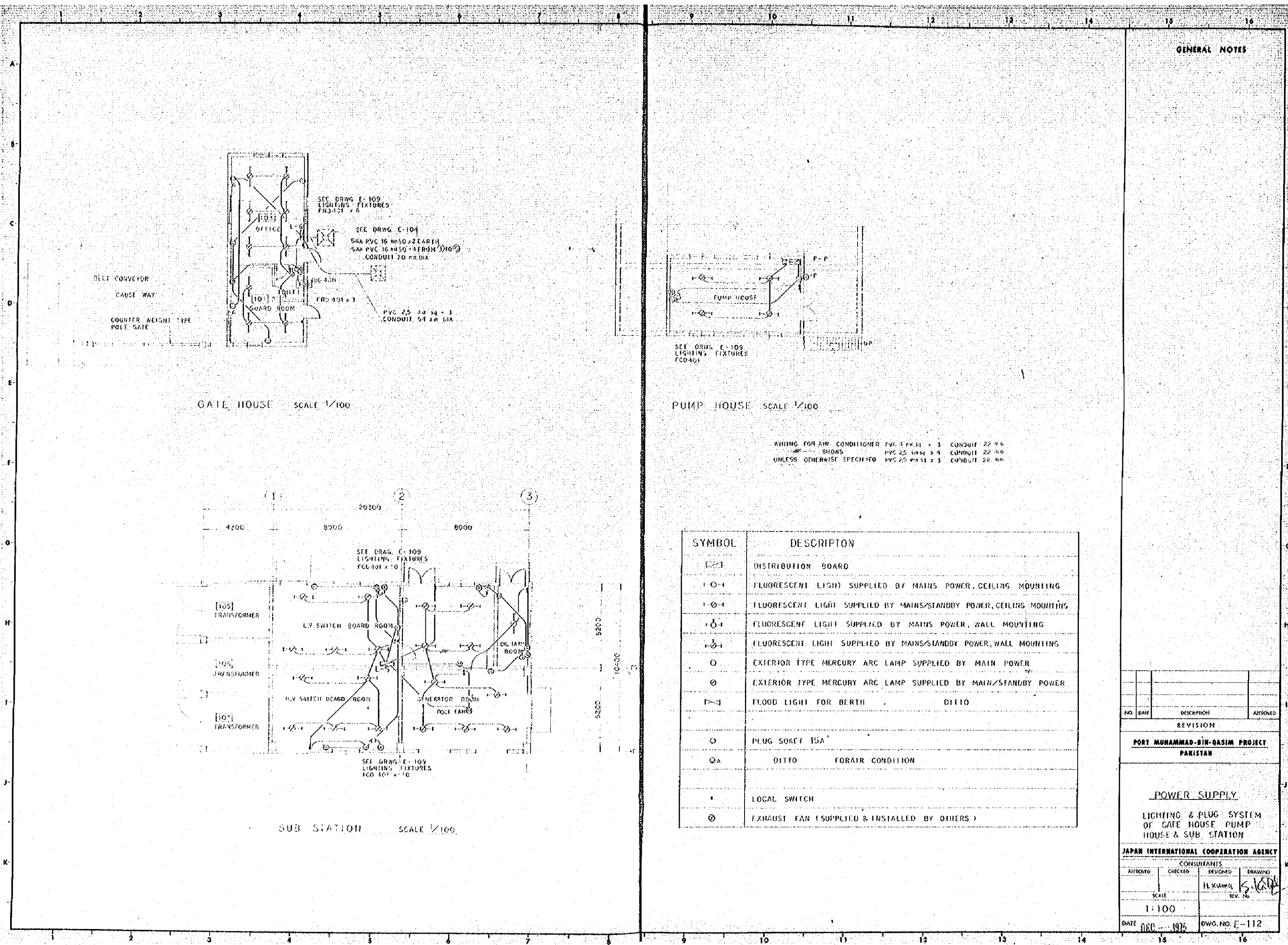






GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
POWER SUPPLY			
LIGHTING & PLUG SYSTEM			
OF TERMINAL OFFICE			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
		M. KUMAR	
SCALE		REV. NO.	
1:100			
DATE DEC. 1975		DWG. NO. E-111	



GENERAL NOTES

WIRING FOR AIR CONDITIONER PVC 4 mm x 3 CONDUIT 22 mm  
SHOWS PVC 25 mm x 4 CONDUIT 22 mm  
UNLESS OTHERWISE SPECIFIED PVC 25 mm x 3 CONDUIT 22 mm

SYMBOL	DESCRIPTION
[Symbol]	DISTRIBUTION BOARD
[Symbol]	FLUORESCENT LIGHT SUPPLIED BY MAINS POWER, CEILING MOUNTING
[Symbol]	FLUORESCENT LIGHT SUPPLIED BY MAINS/STANDBY POWER, CEILING MOUNTING
[Symbol]	FLUORESCENT LIGHT SUPPLIED BY MAINS POWER, WALL MOUNTING
[Symbol]	FLUORESCENT LIGHT SUPPLIED BY MAINS/STANDBY POWER, WALL MOUNTING
[Symbol]	EXTERIOR TYPE MERCURY ARC LAMP SUPPLIED BY MAIN POWER
[Symbol]	EXTERIOR TYPE MERCURY ARC LAMP SUPPLIED BY MAIN/STANDBY POWER
[Symbol]	FLOOD LIGHT FOR BERTH DITTO
[Symbol]	PLUG SOCKET 15A
[Symbol]	DITTO FOR AIR CONDITION
[Symbol]	LOCAL SWITCH
[Symbol]	EXHAUST FAN (SUPPLIED & INSTALLED BY OTHERS)

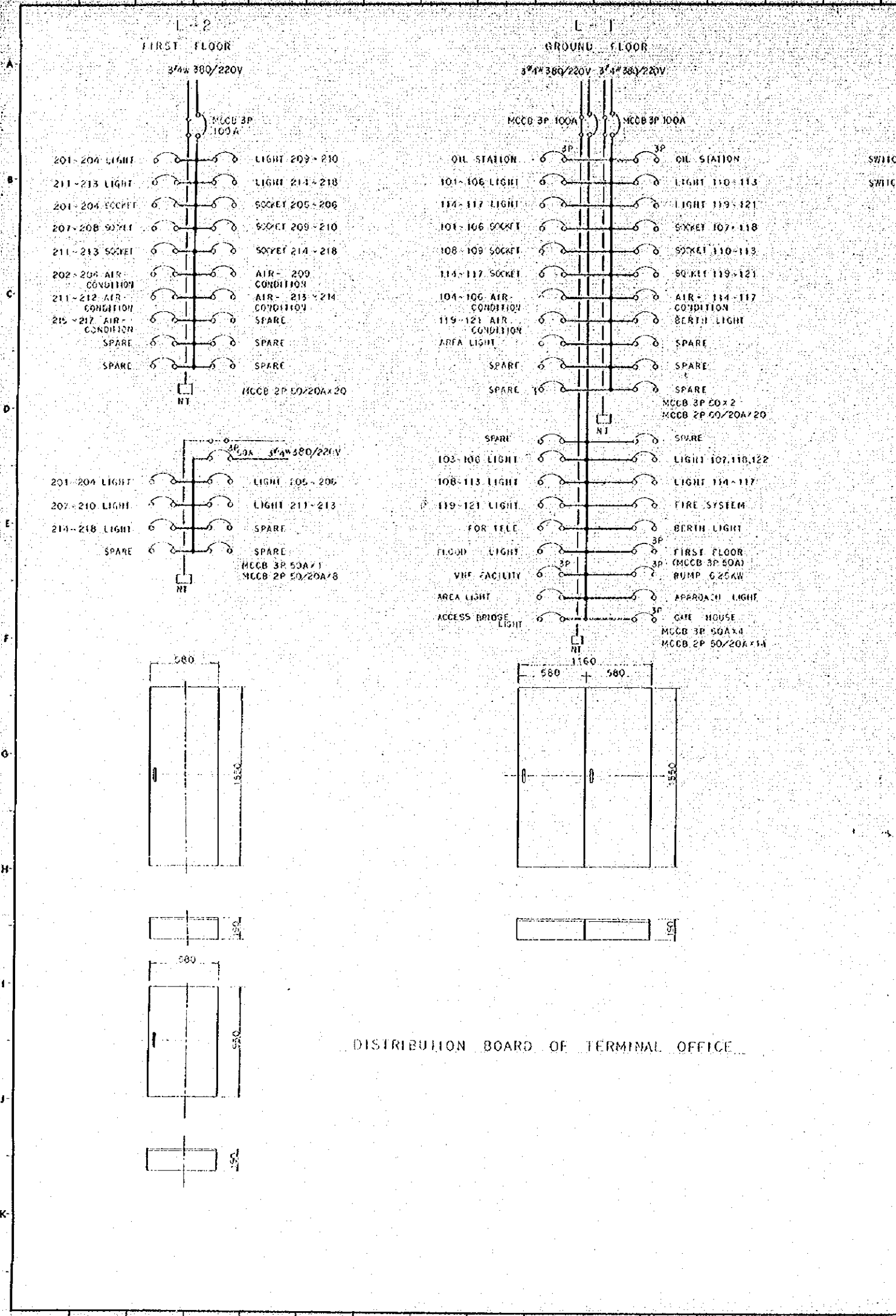
NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT  
PAKISTAN

POWER SUPPLY  
LIGHTING & PLUG SYSTEM  
OF GATE HOUSE PUMP  
HOUSE & SUB. STATION

JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KAMAR	S. KAMAR
SCALE			
1:100			
DATE			
18/01/1975			
DWG. NO. E-112			

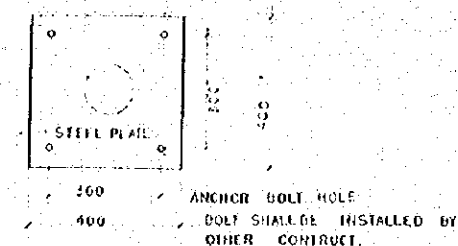
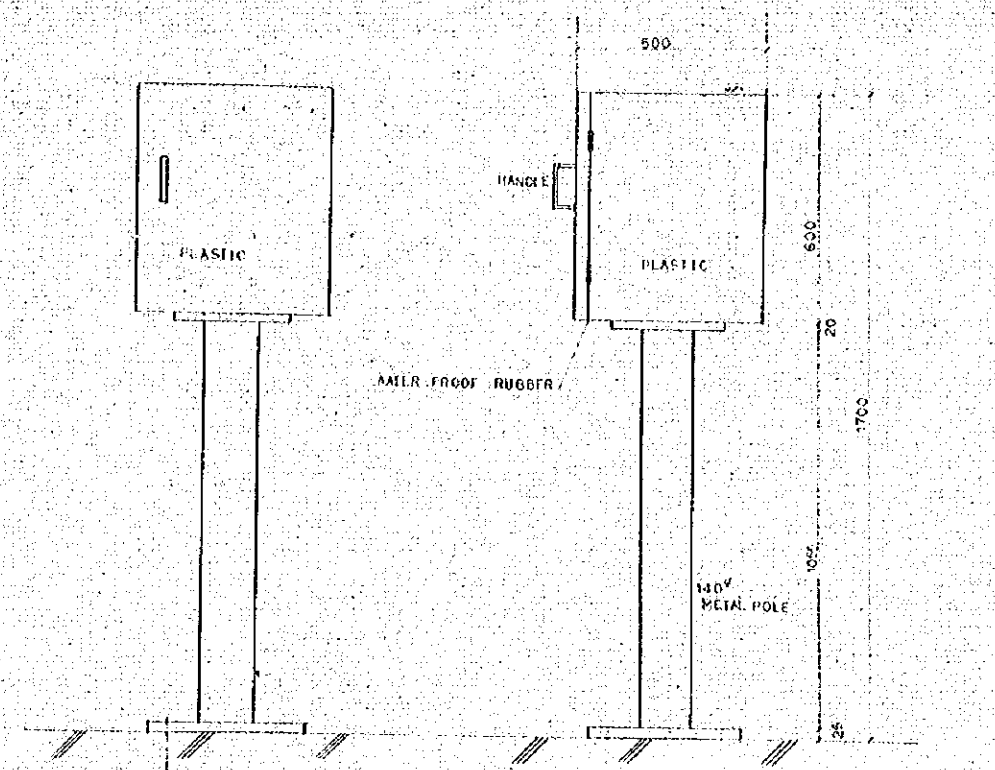
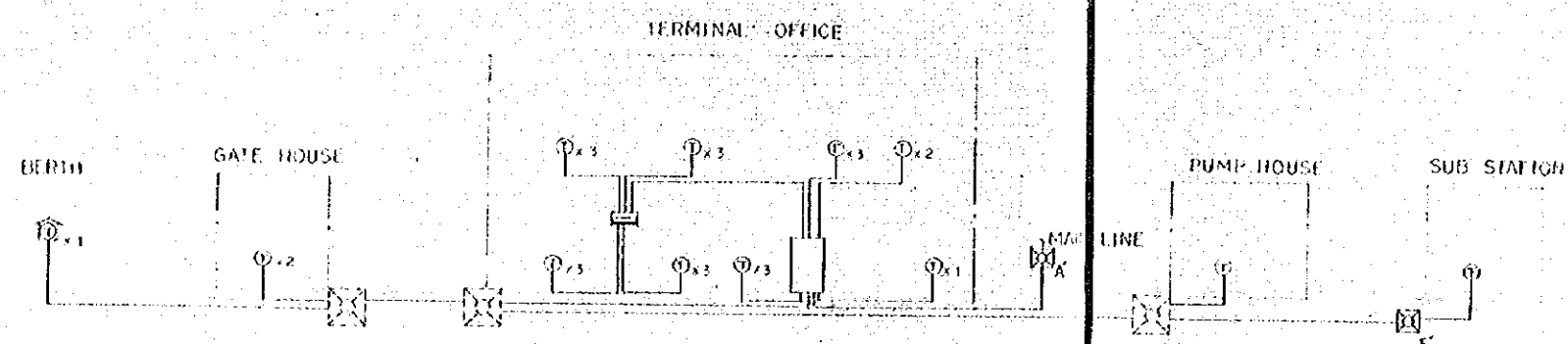




GENERAL NOTES		
NO.	DATE	DESCRIPTION
REVISION		
PORT MUHAMMAD-SIN-QASIM PROJECT PAKISTAN		
POWER SUPPLY DISTRIBUTION BOARD		
JAPAN INTERNATIONAL COOPERATION AGENCY		
CONSULTANTS		
APPROVED	CHECKED	DESIGNED
SCALE		REV. NO.
1:20		
DATE	08.01.1975	DWG. NO. E-113



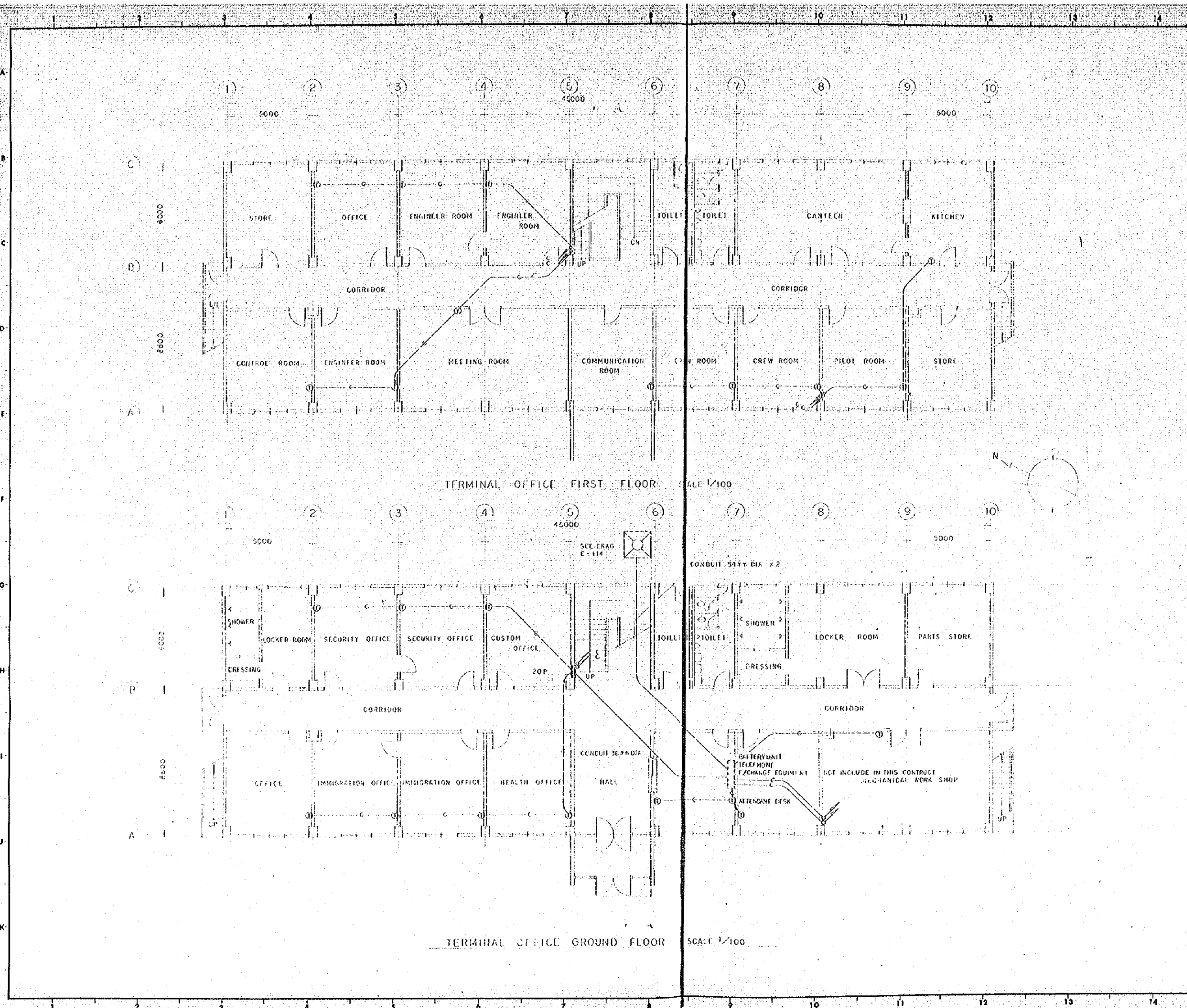
SYMBOL	DESCRIPTION
[Symbol]	MAIN DISTRIBUTION FRAME
[Symbol]	TELEPHONE EXCHANGE
[Symbol]	BATTERY UNIT
[Symbol]	20 P. TERMINAL BOARD
[Symbol]	TELEPHONE OUTLET
[Symbol]	TELEPHONE BOX (WATER PROOF TYPE)
[Symbol]	TELEPHONE CONDUIT PIPE
[Symbol]	600x600x600mm HANDHOLE DETAILS SHALL BE SAME AS DWG. E-104
[Symbol]	HAND HOLE (SHALL BE USED POWER LINE IN COMMON)
[Symbol]	RISE UP
[Symbol]	DOWN



# GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
POWER SUPPLY SCHEMATIC DIAGRAM OF TELEPHONE SYSTEM			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. Kuma	S. V. De
SCALE		REV. No.	
DATE DEC. 1975		DWG. NO. E-1115	

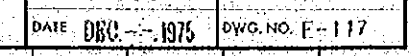


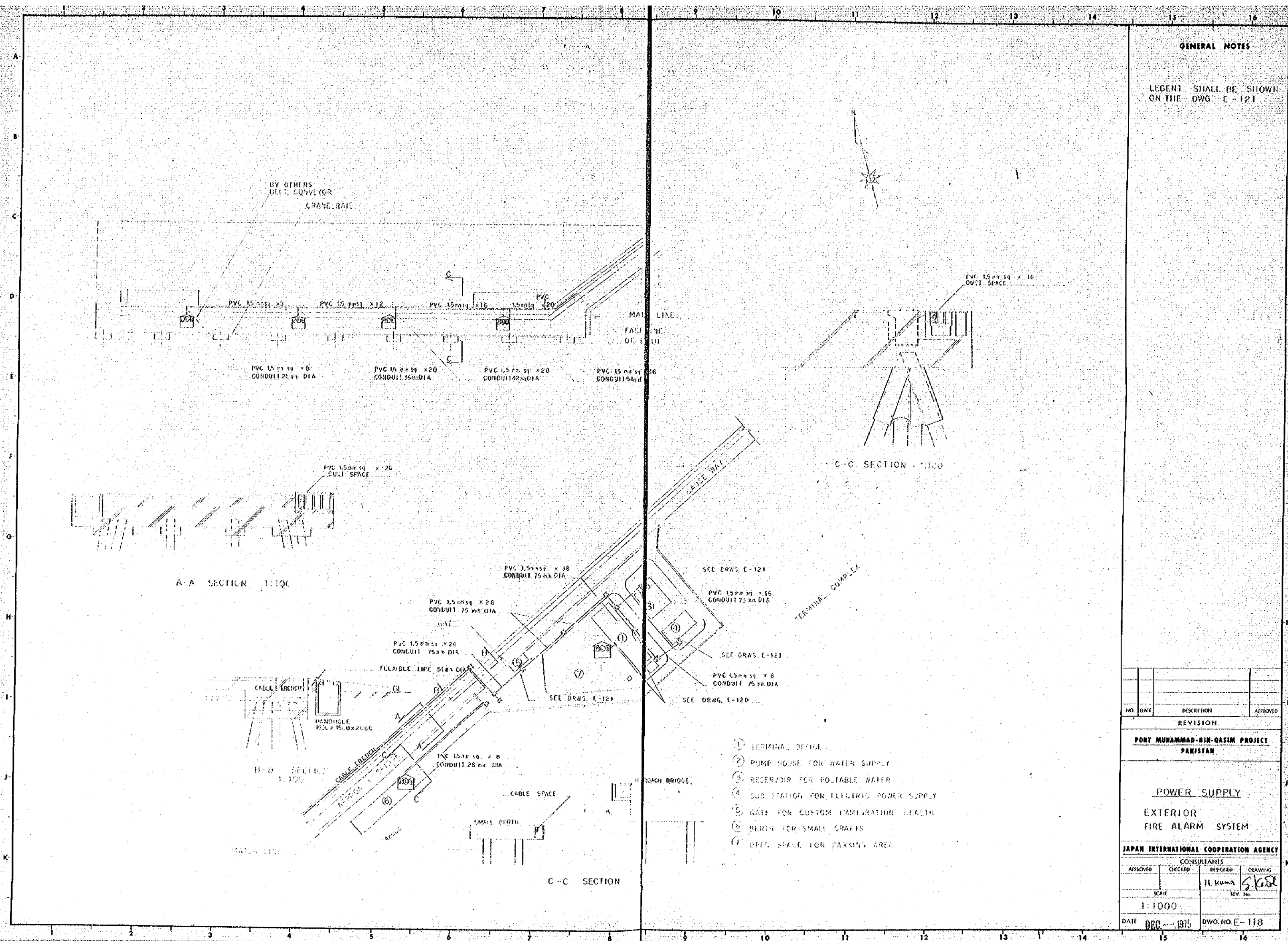


# GENERAL NOTES:

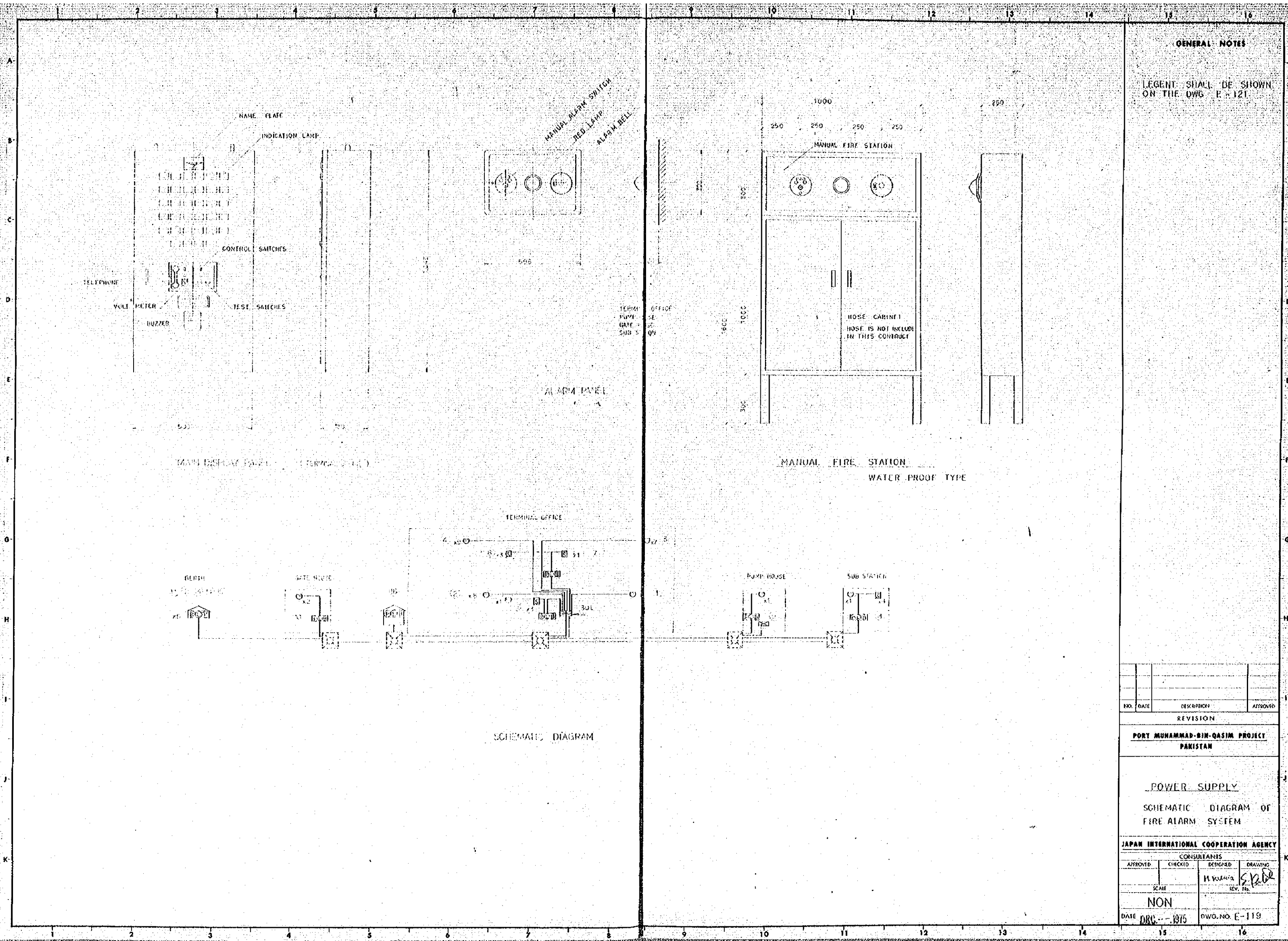
UNLESS OTHERWISE SPECIFIED  
CONDIT. PIPE SHALL BE OF  
28mm VINYL CONDUIT

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
POWER SUPPLY TELEPHONE SYSTEM OF TERMINAL OFFICE			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KAWA	K. KAWA
SCALE		REV. NO.	
1:100			
DATE 08C-1-1975		DWG. NO. E-116	



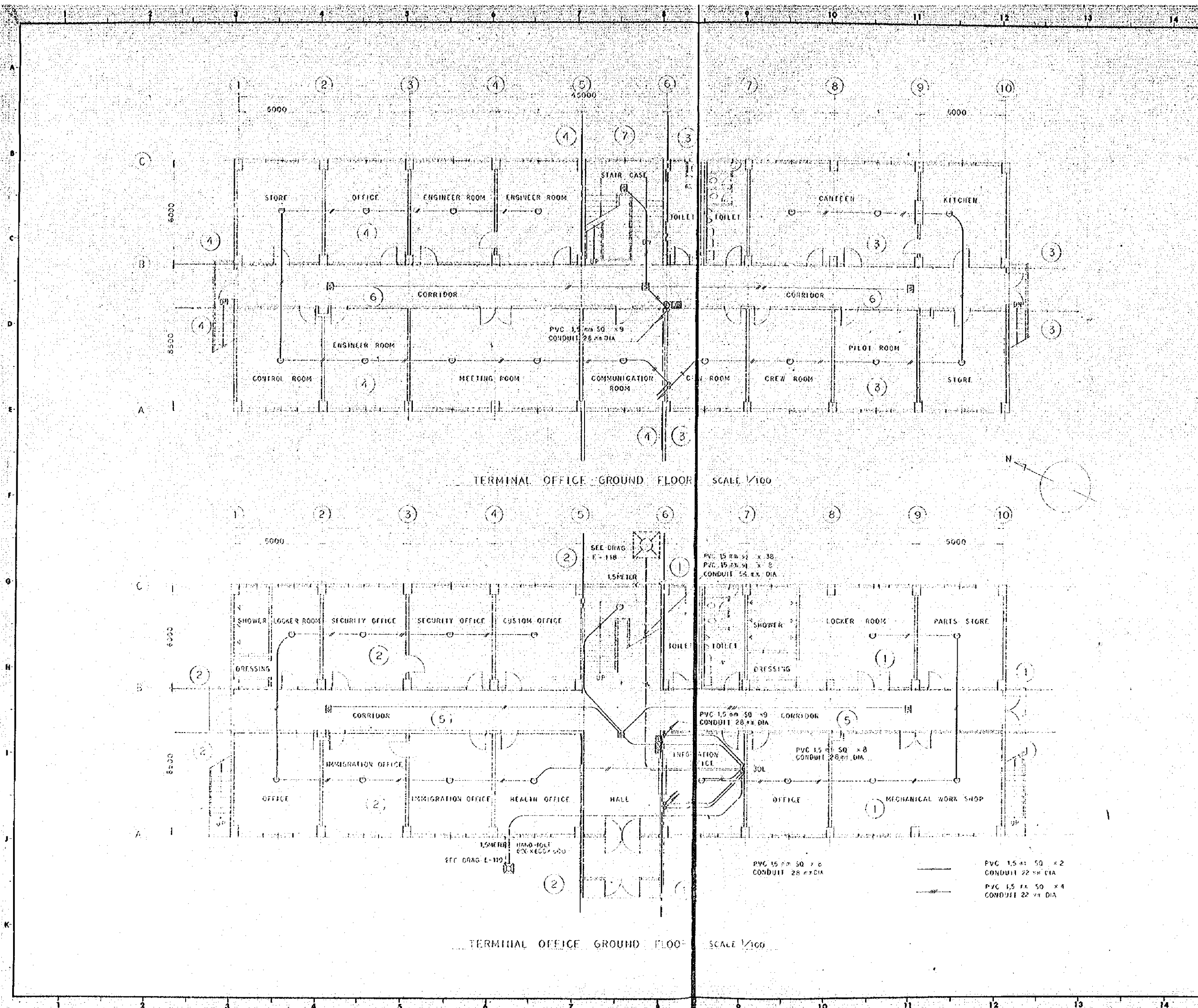






GENERAL NOTES  
LEGENT: SHALL BE SHOWN  
ON THE DWG. E-121

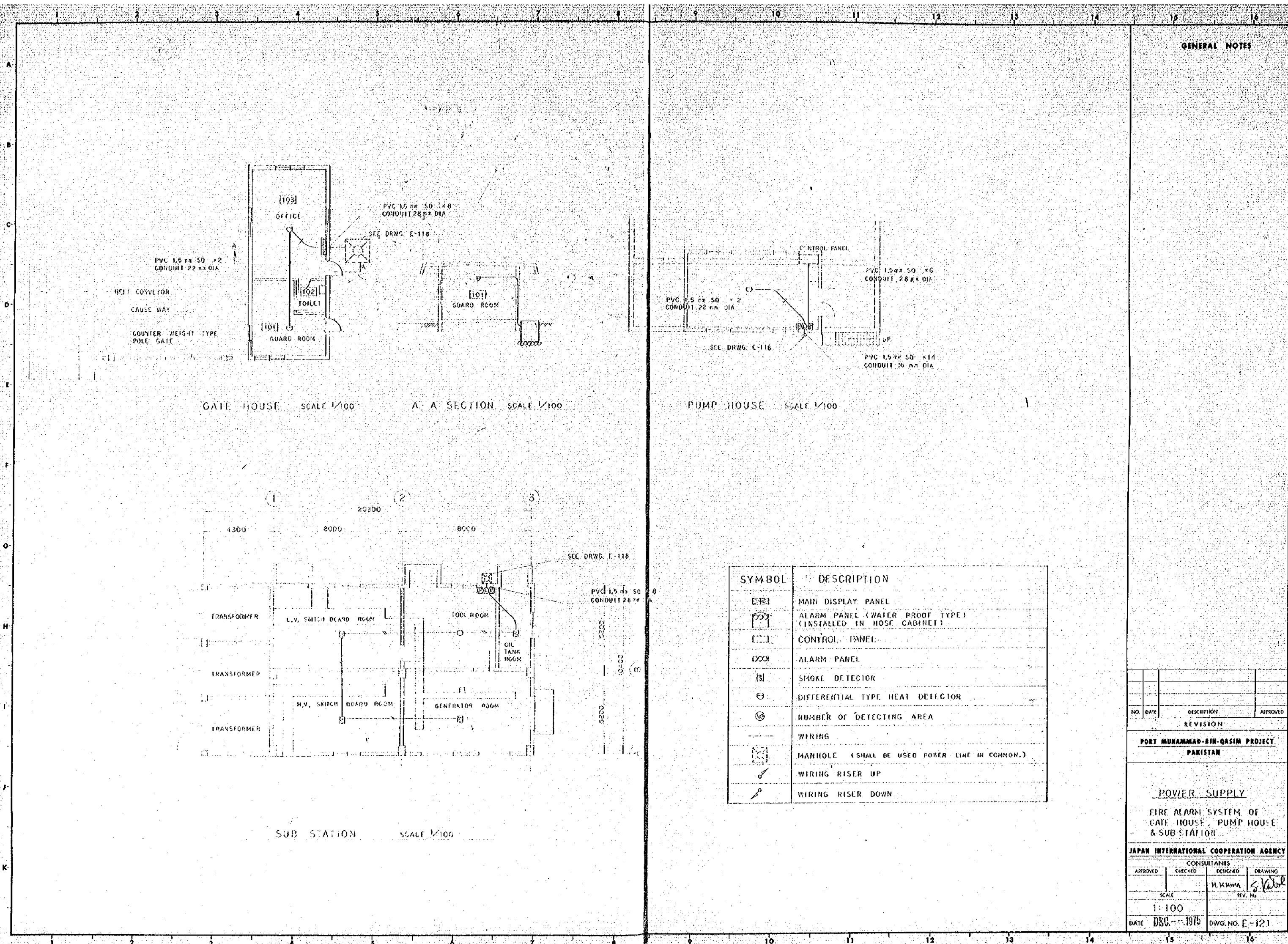
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
POWER SUPPLY			
SCHEMATIC DIAGRAM OF FIRE ALARM SYSTEM			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KUMAR	S. K. SINGH
SCALE		REV. NO.	
NON			
DATE 08/01/75		DWG. NO. E-119	



GENERAL NOTES

LEGENT SHALL BE SHOWN ON THE DWG. E-121

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
POWER SUPPLY FIRE ALARM SYSTEM OF TERMINAL OFFICE			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		IL. KUMAR	S. VALLABH
SCALE		REV. NO.	
1:100			
DATE DEC 1971		DWG. NO. E-120	

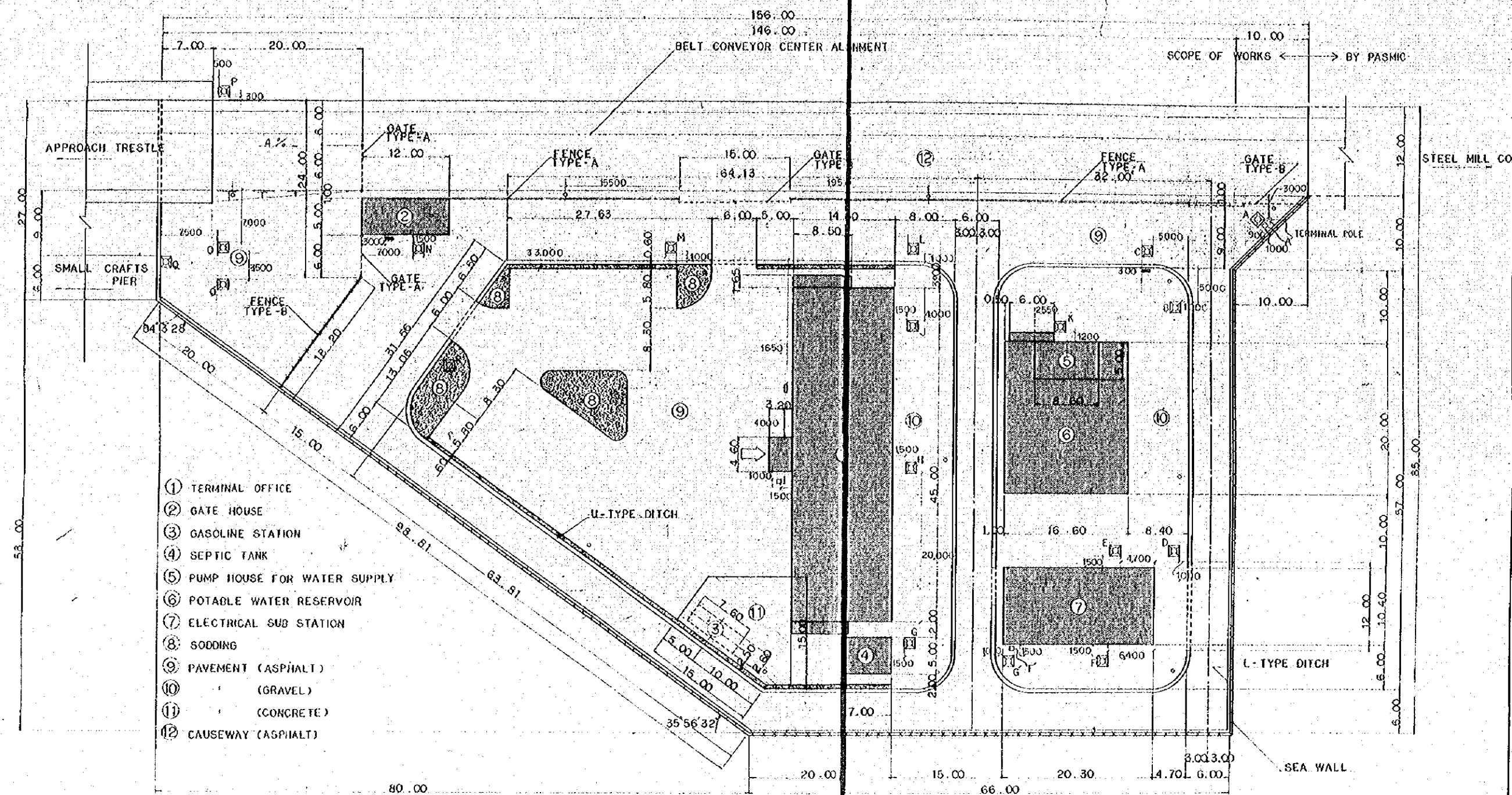




# GENERAL PLAN

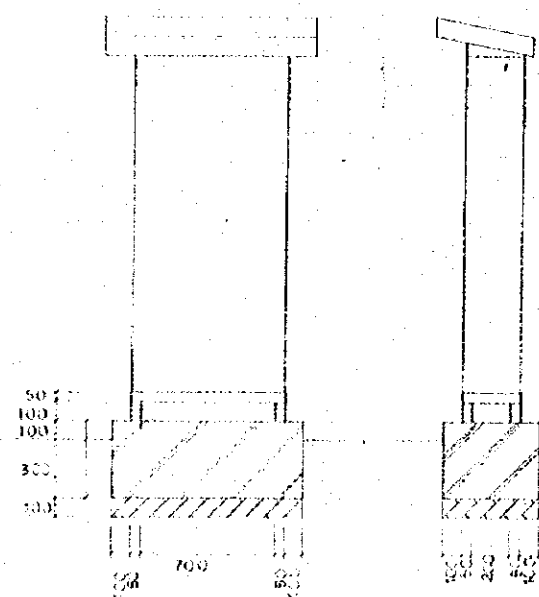
SCALE 1:300

## GENERAL NOTES



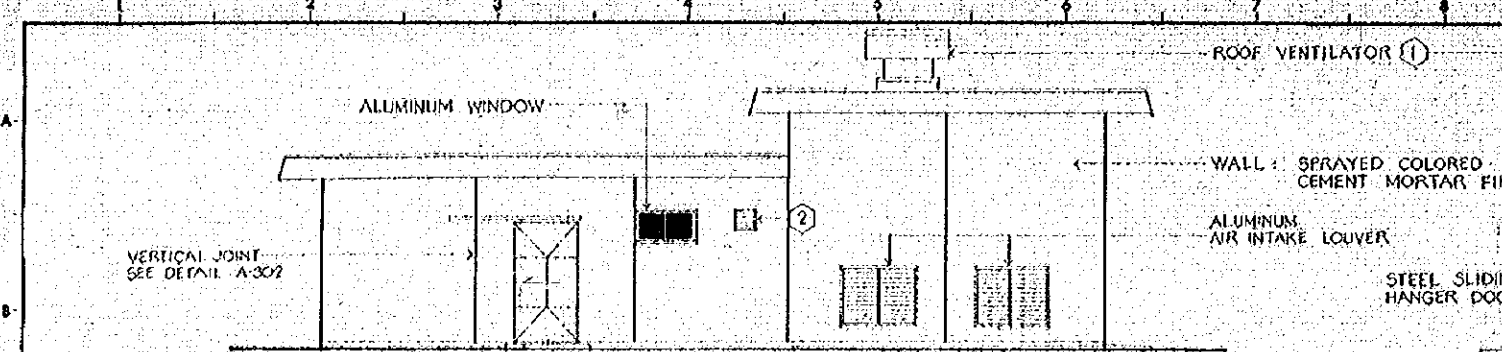
- ① TERMINAL OFFICE
- ② GATE HOUSE
- ③ GASOLINE STATION
- ④ SEPTIC TANK
- ⑤ PUMP HOUSE FOR WATER SUPPLY
- ⑥ POTABLE WATER RESERVOIR
- ⑦ ELECTRICAL SUB STATION
- ⑧ SODDING
- ⑨ PAVEMENT (ASPHALT)
- ⑩ (GRAVEL)
- ⑪ (CONCRETE)
- ⑫ CAUSEWAY (ASPHALT)

- ⊠ HANDHOLE 1500 x 1500
- ⊠ HANDHOLE 600 x 600
- MERCURY ARC LAMP
- OIL PIPE HEATING BOARD
- MANUAL FIRE STATION

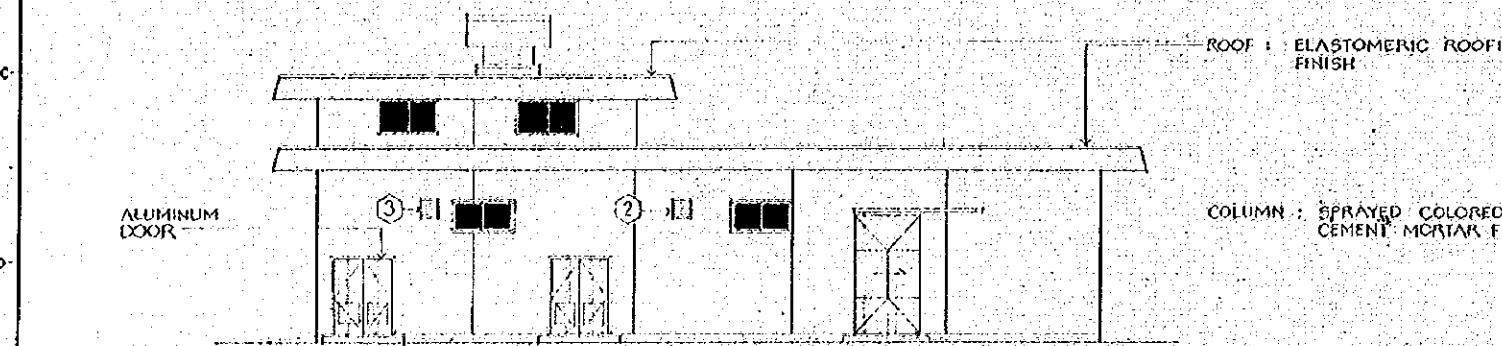


OIL PIPE HEATING BOARD

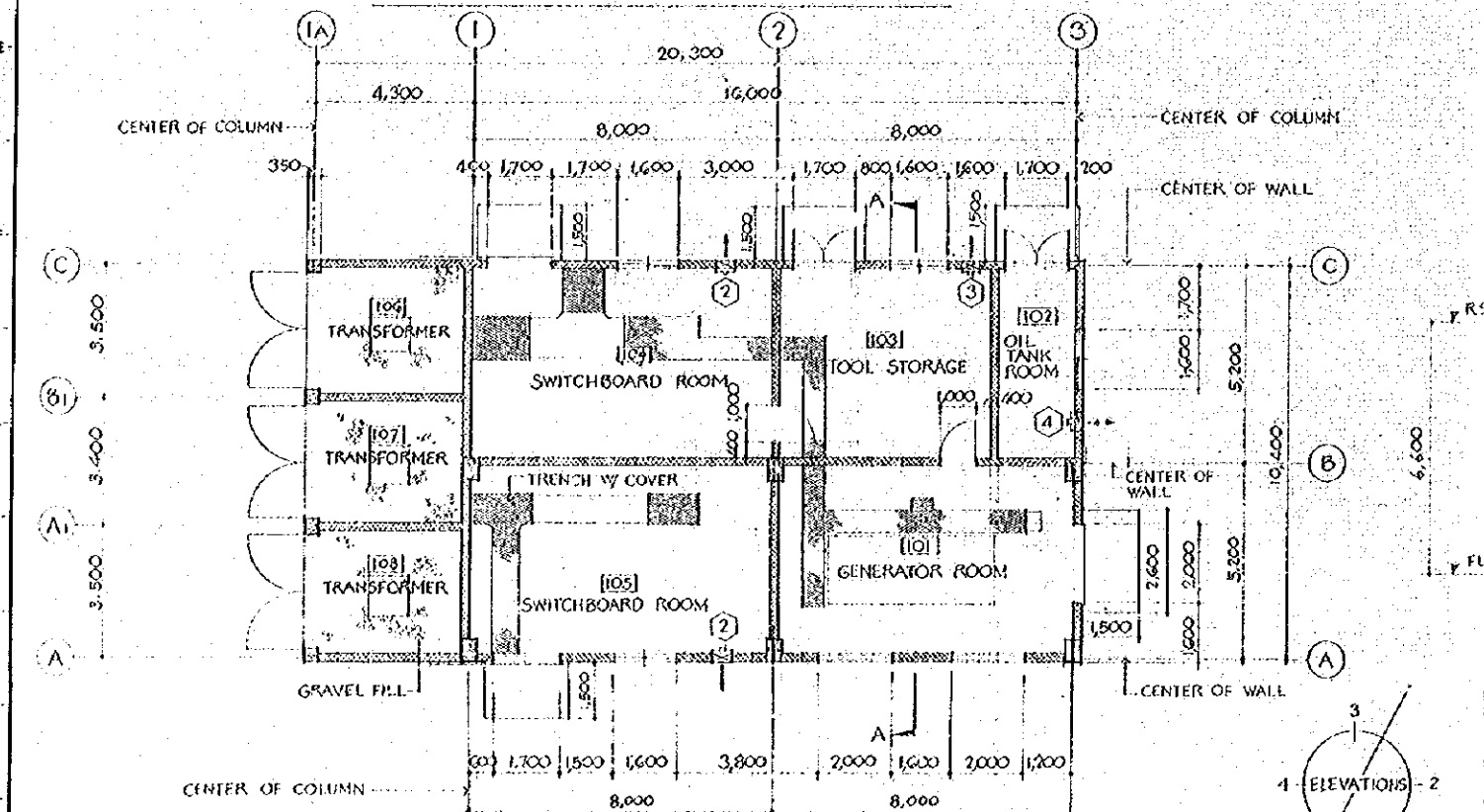
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
POWER SUPPLY			
GENERAL LAYOUT			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
KAH		H. KAWA	SV. IN
1:300		DWG. NO. E-122	
DATE 1/1/71			



1 SIDE ELEVATION SCALE 1/100

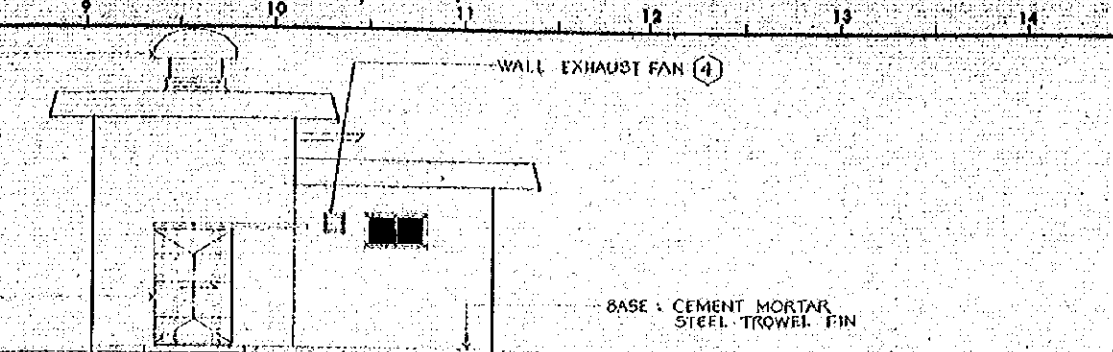


3 SIDE ELEVATION SCALE 1/100

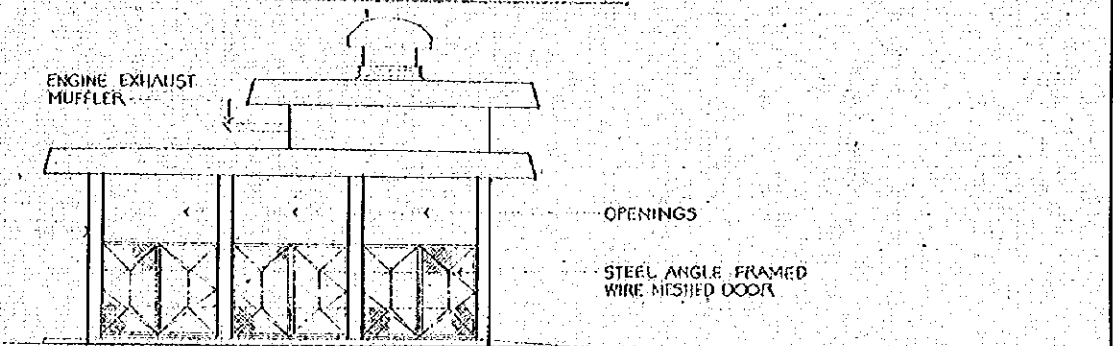


FLOOR PLAN SCALE 1/100

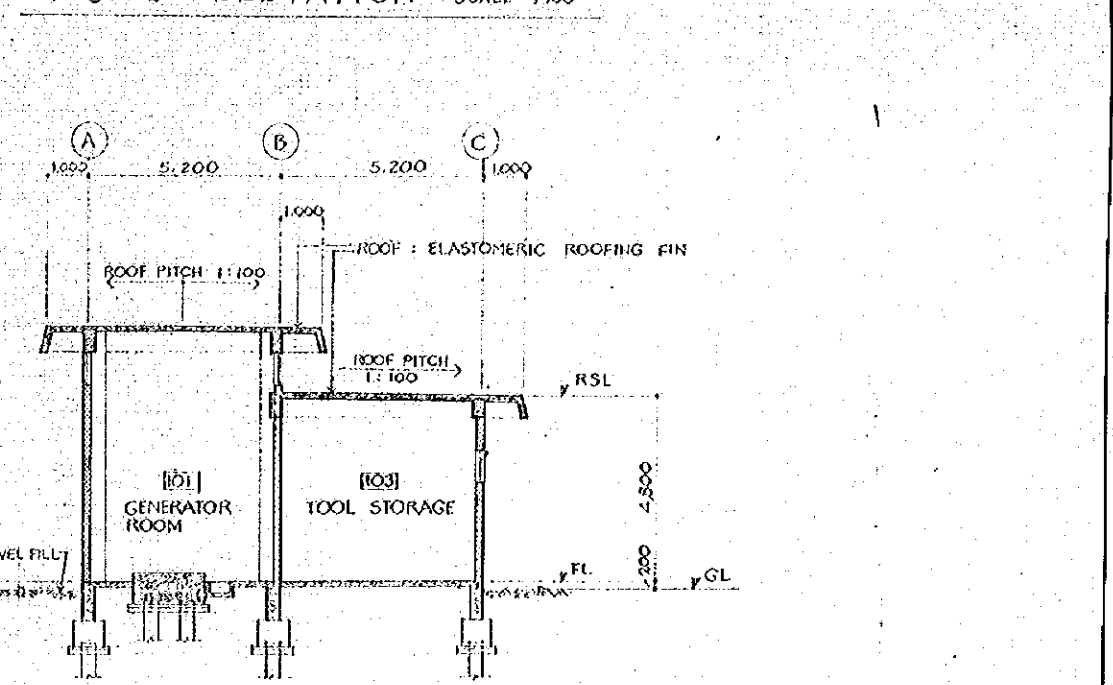
INTERIOR FINISH SCHEDULE											
RM NO	ROOM NAME	FLOOR		BASE		WAINSCOT		WALL		CEILING	
		MATERIAL	FINISH	MATERIAL	FINISH	HGT		MATERIAL	FINISH	MATERIAL	FINISH
101	GENERATOR RM	CEMENT MORTAR	STEEL TROWEL	EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
102	OIL TANK RM	CEMENT MORTAR	STEEL TROWEL	EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
103	TOOL STORAGE	CEMENT MORTAR	STEEL TROWEL	EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
104	SWITCHBOARD ROOM	CEMENT MORTAR	STEEL TROWEL	EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
105	SWITCHBOARD ROOM	CEMENT MORTAR	STEEL TROWEL	EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
106	TRANSFORMER	GRAVEL FILL		EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
107	TRANSFORMER	GRAVEL FILL		EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.
108	TRANSFORMER	GRAVEL FILL		EXP. CONC. & CONC. BLOCK	V.P.	100		EXP. CONC. & CONC. BLOCK	V.P.	EXP. CONC.	V.P.



2 SIDE ELEVATION SCALE 1/100



4 SIDE ELEVATION SCALE 1/100



A-A SECTION SCALE 1/100

EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
ROOF	CONCRETE	ELASTOMERIC ROOFING FINISH	
WALL	CONCRETE & CONC. BLOCK	SPRAYED COLORED CEMENT MORTAR	
BASE	CONCRETE	CEMENT MORTAR STEEL TROWEL	
SOFFIT	CONCRETE	SPRAYED COLORED CEMENT MORTAR	
DOOR & FRAME	STEEL & ALUMINUM	OIL PAINT & MANUFACTURE FIN.	
WINDOW & FRAME	ALUMINUM	MANUFACTURE FIN.	
LOUVER & FRAME	ALUMINUM	MANUFACTURE FIN.	
STOOP	CONCRETE	BROOMED FINISH	

# GENERAL NOTES

- ROOF VENTILATOR: ROOF MOUNTED, DIRECT-DRIVEN PROPELLER FAN, COMPLETE WITH WEATHER-PROOF HOUSING & BASE. GRAVITY OPERATED BACK-DRAUGHT DAMPER & DISCONNECTING SWITCH. CAPACITY 490 CMH AT 12MM S.P. 37KW 3Φ-380V-50 HZ.
- WALL EXHAUST FAN: WALL MOUNTED, DIRECT-DRIVEN, PROPELLER FAN WITH AUTOMATIC SHUTTER. CAPACITY 85 CMH AT 6MM S.P. 400 WATTS, 1Φ-220V-50 HZ.
- WALL EXHAUST FAN: WALL MOUNTED, DIRECT-DRIVEN, PROPELLER FAN WITH AUTOMATIC SHUTTER. CAPACITY 34 CMH AT 6MM S.P. 80 WATTS, 1Φ-220V-50 HZ.
- WALL EXHAUST FAN: WALL MOUNTED, DIRECT-DRIVEN, PROPELLER FAN WITH AUTOMATIC SHUTTER, EXPLOSION-PROOF TYPE. CAPACITY 18 CMH AT 6MM S.P. 50 WATTS, 1Φ-220V-50 HZ.

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE & COORDINATE WORK OF ALL DIVISIONS. VERIFY SHOP DRAWINGS AND REQUIREMENT BEFORE PERFORMING ANY WORK. THAT MIGHT VARY DEPENDING ON THE MATERIALS SUPPLIED FURNISHED.

2. DIMENSION SHALL TAKE PRECEDENCE OVER SCALE

LEGEND		
[Pattern]	EARTH	
[Pattern]	GRAVEL FILL	
[Pattern]	CRUSHED ROCK	
[Pattern]	CONCRETE	
[Pattern]	CONCRETE	
[Pattern]	HOLLOW CORE CONC. BLOCK	
[Pattern]	CEMENT MORTAR	
[Pattern]	METAL	
[Pattern]	ROOM NUMBER	
[Pattern]	ORDINATE	

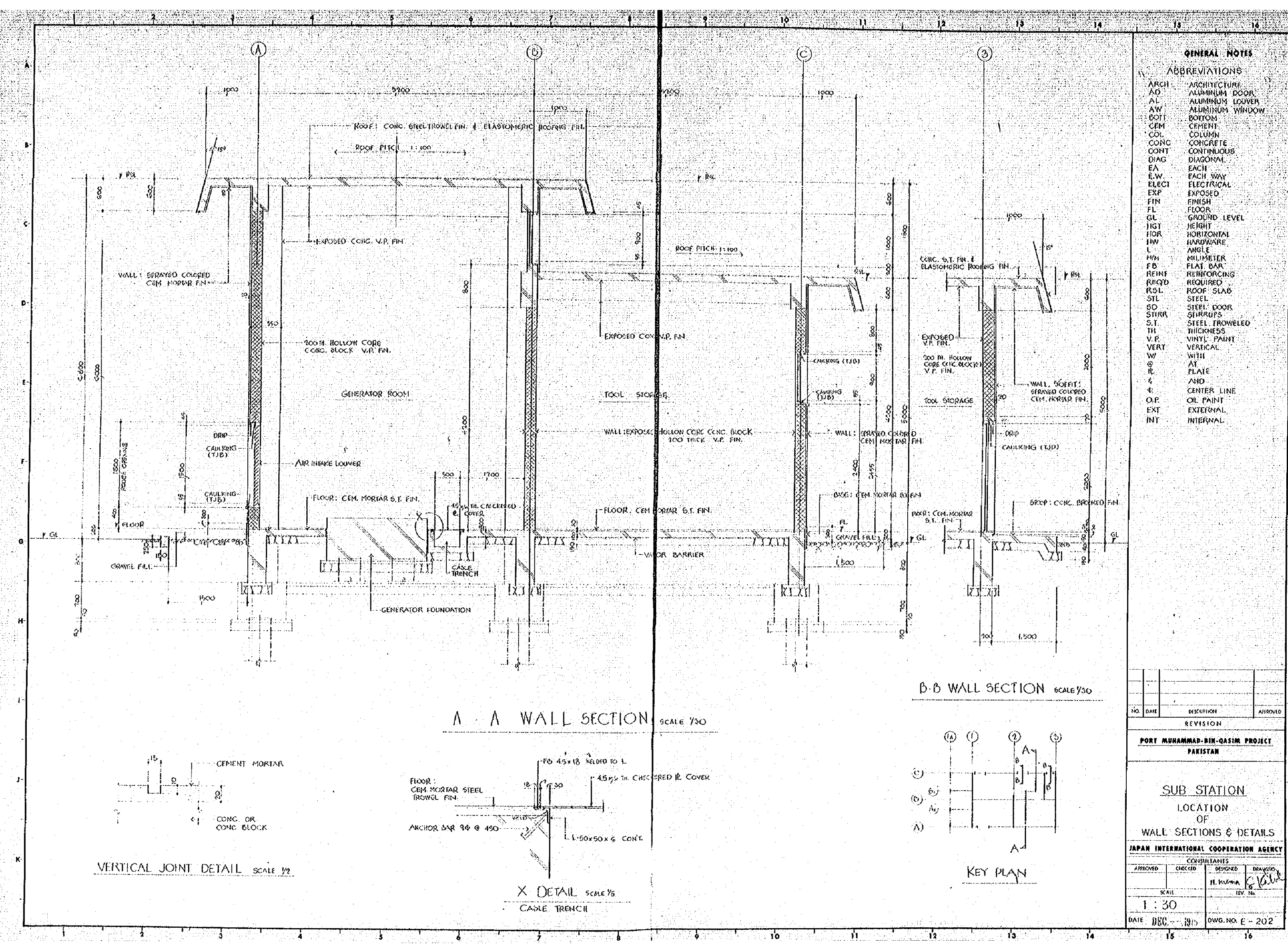
NO.	DATE	DESCRIPTION	APPROVED

REVISION  
PORT MUHAMMAD-BIN-QASIM PROJECT  
PAKISTAN

SUB STATION  
LOCATION  
OF  
FLOOR PLAN, ELEVATIONS,  
SECTION & FINISH SCHEDULES

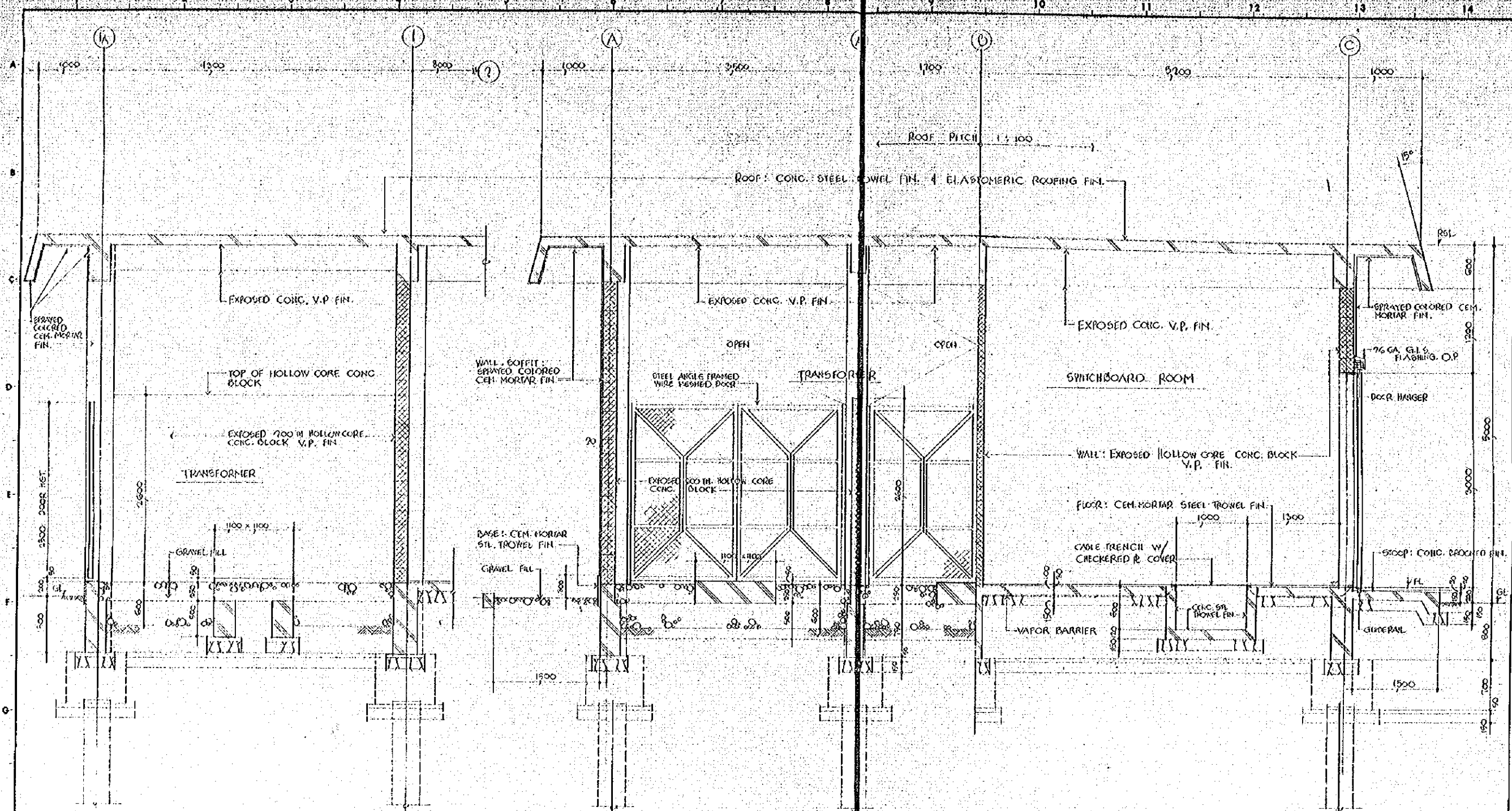
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE			
1:100			
DATE 08.06.2015			DWG. NO. E-201



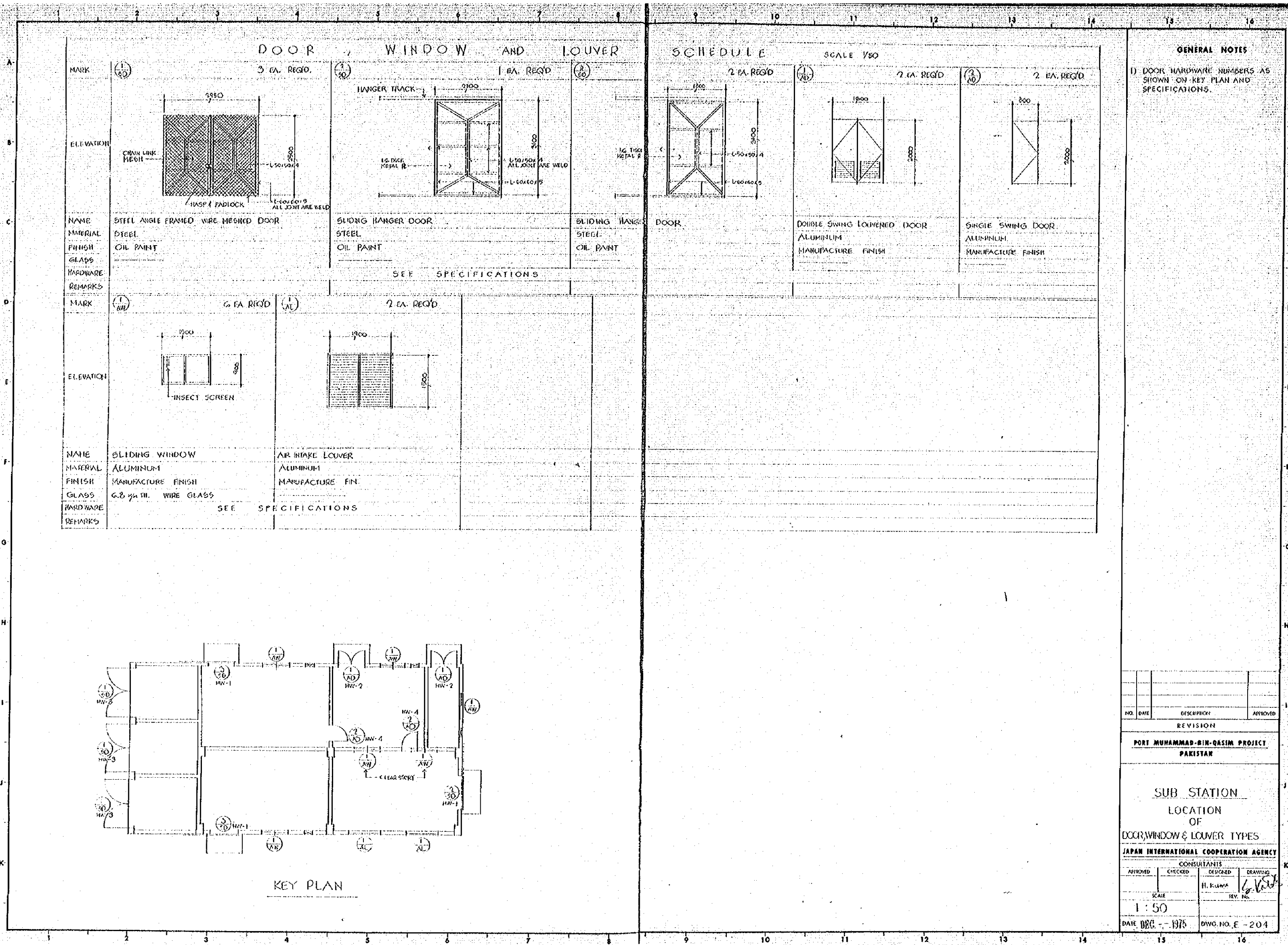
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
SUB STATION			
LOCATION OF			
WALL SECTIONS & DETAILS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS		DESIGNED	DRAWN
APPROVED	CHECKED	H. KASAMA	F. KASAMA
SCALE		REV. NO.	
1 : 30			
DATE DEC-1975		DWG. NO. E-202	





# GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIK-QASIM PROJECT PAKISTAN			
SUB STATION LOCATION OF WALL SECTIONS & PARTIAL PLAN			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KUMAR	S. VALLI
SCALE		REV. NO.	
1 : 30			
DATE DEC. 1975		DWG. NO. E-203	



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
SUB STATION LOCATION OF DOOR, WINDOW & LOUVER TYPES			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KAWA	6. V. K.
SCALE		REV. NO.	
1 : 50			
DATE DEC - 1975		DWG. NO. E - 204	

# REINFORCING DETAILS

## GENERAL

- ALL REINFORCING BARS FOR USE IN CONC TO COMPLY WITH THIS SCHEDULE, UNLESS OTHERWISE ELSEWHERE.
- CONCRETE COVER OVER REINFORCEMENT IN (mm).

PART OF MEMBERS	DETAIL	DETAIL
SLABS	DETAIL - A	DETAIL - A
WALLS	DETAIL - A	DETAIL - A
COLUMNS	DETAIL - B1C	DETAIL - B1C
GIRDERS BEAMS	DETAIL - B1C	DETAIL - B1C
FOUNDATIONS	DETAIL - D	DETAIL - D
TIE BEAMS	DETAIL - E	DETAIL - E

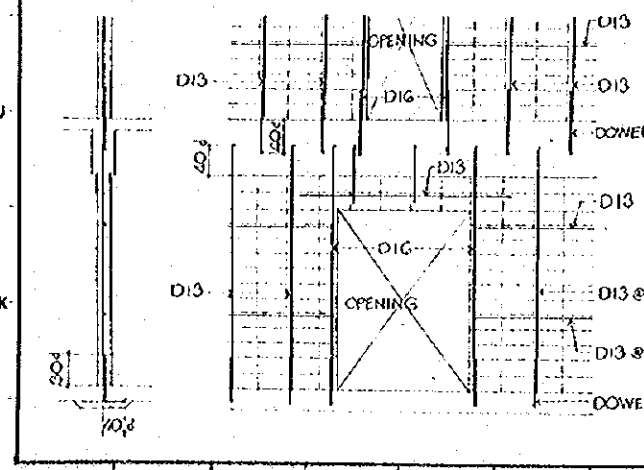
- CLEARANCE BETWEEN LONGITUDINAL BARS  
 DEFORMED BARS  
 NOTES:  
 C: NOT LESS THAN 25mm OR NOT LESS THAN 1.5d, WHICHEVER GREATER.  
 d: DIAMETER OF BARS.

- BENDING DETAIL  
 1) HOOKS  
 STIRRUP & HOOK  
 SLAB & WALL  
 $r = 1.5d$

- CURVATURE RADIUS  
 A TYPE  
 $r = 8d$

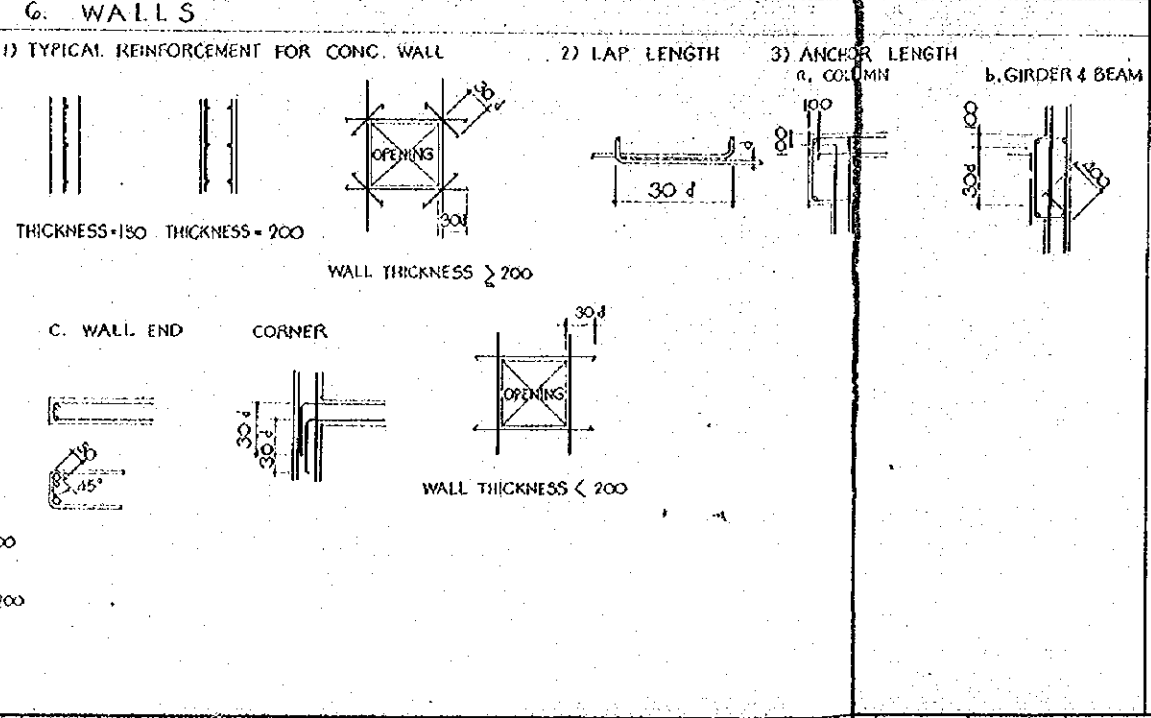
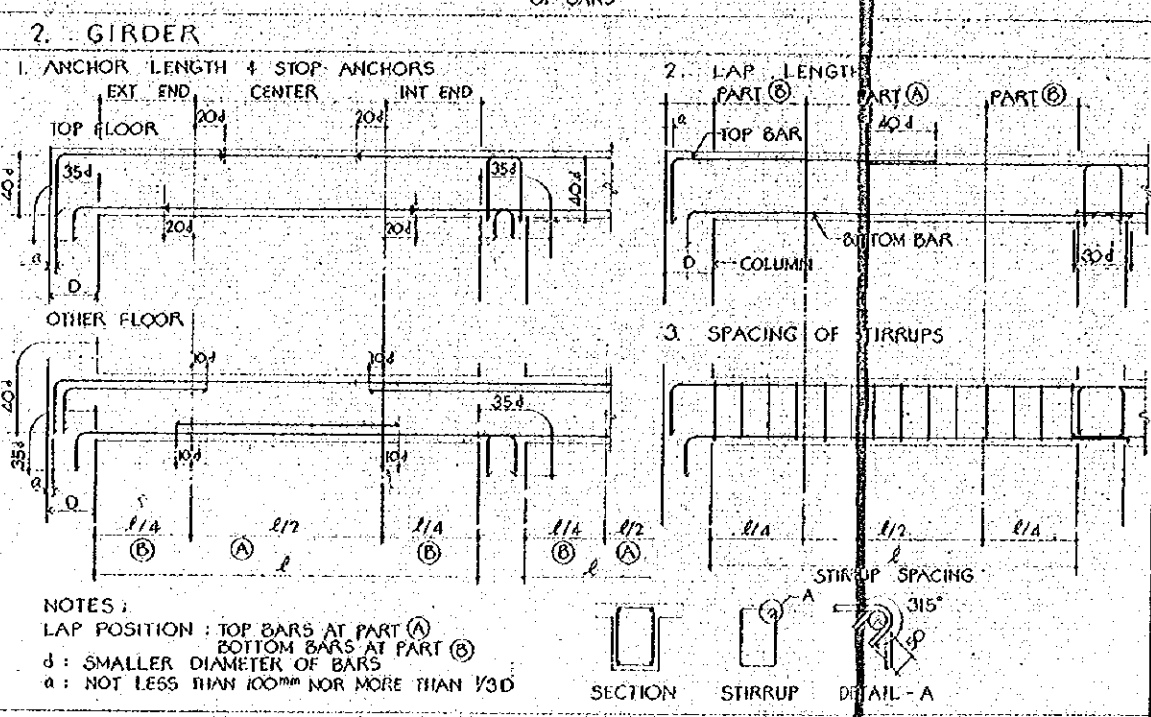
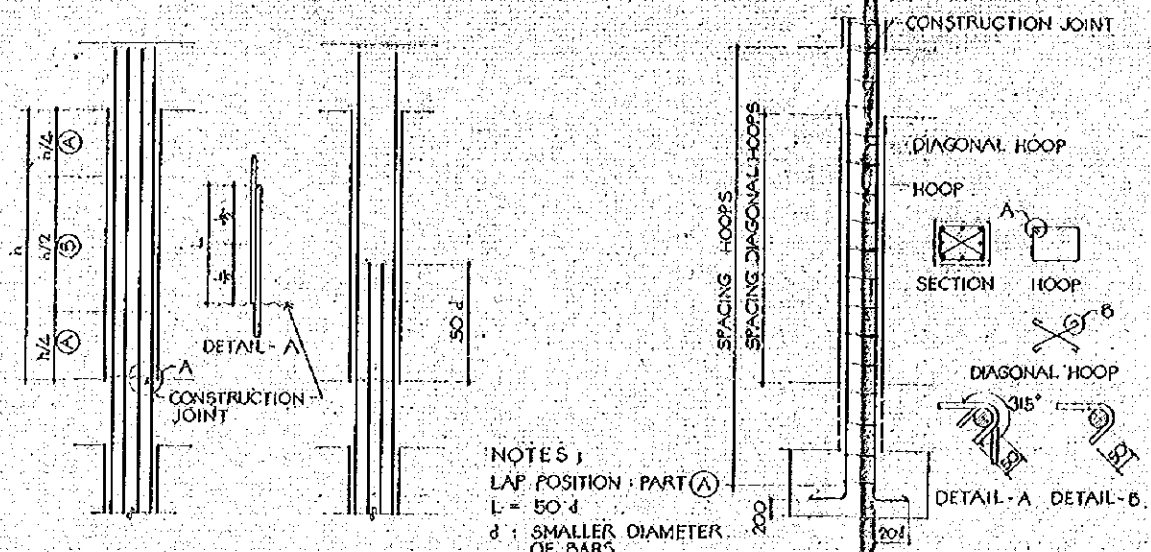
- LAP LENGTH  
 NOTE  
 L: n TIMES SMALLER DIAMETER  
 n = 50d, 40d, 30d, 25d AS INDICATED HERE IN AFTER  
 NO HOOKED BAR (DEFORMED BARS ONLY)

- MARK - INDICATES STOP END OF DEFORMED BARS.

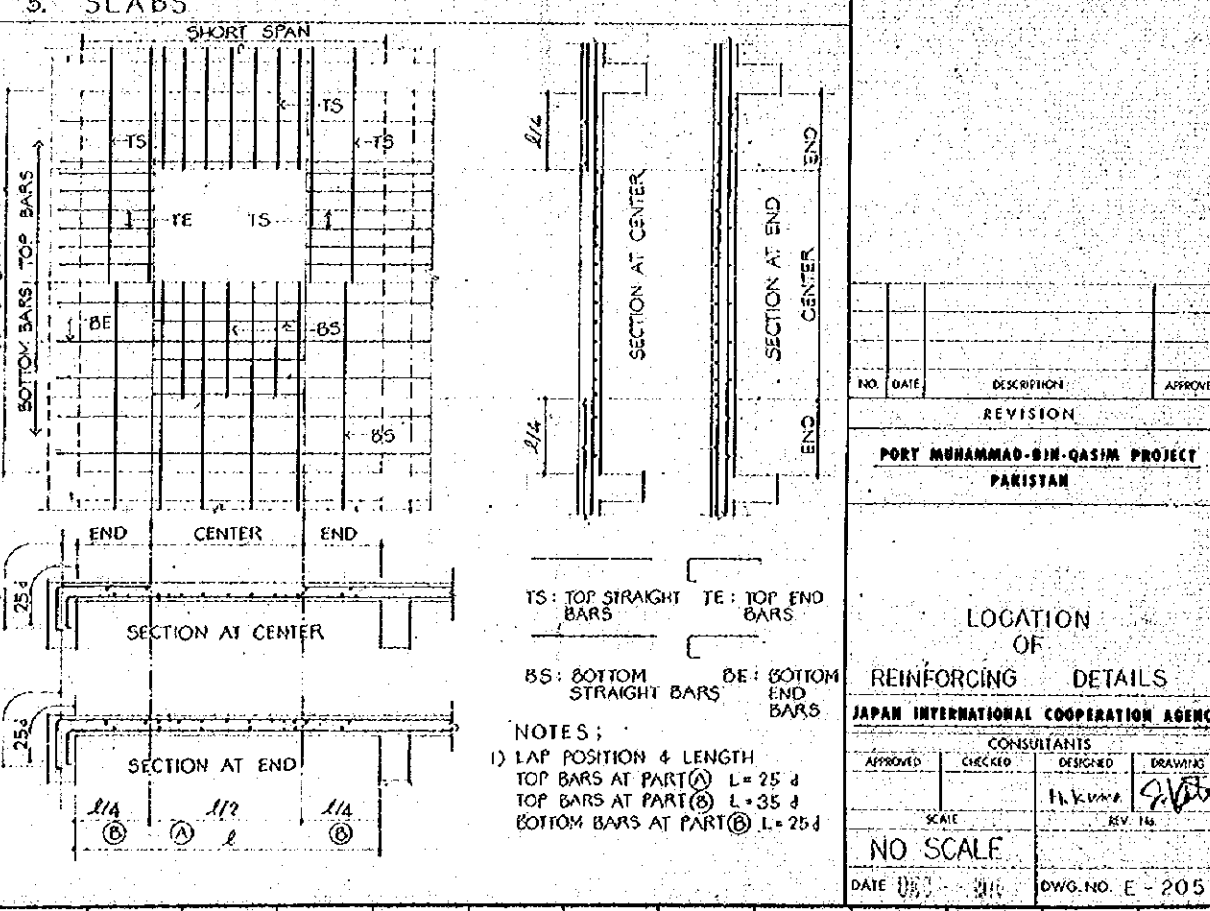
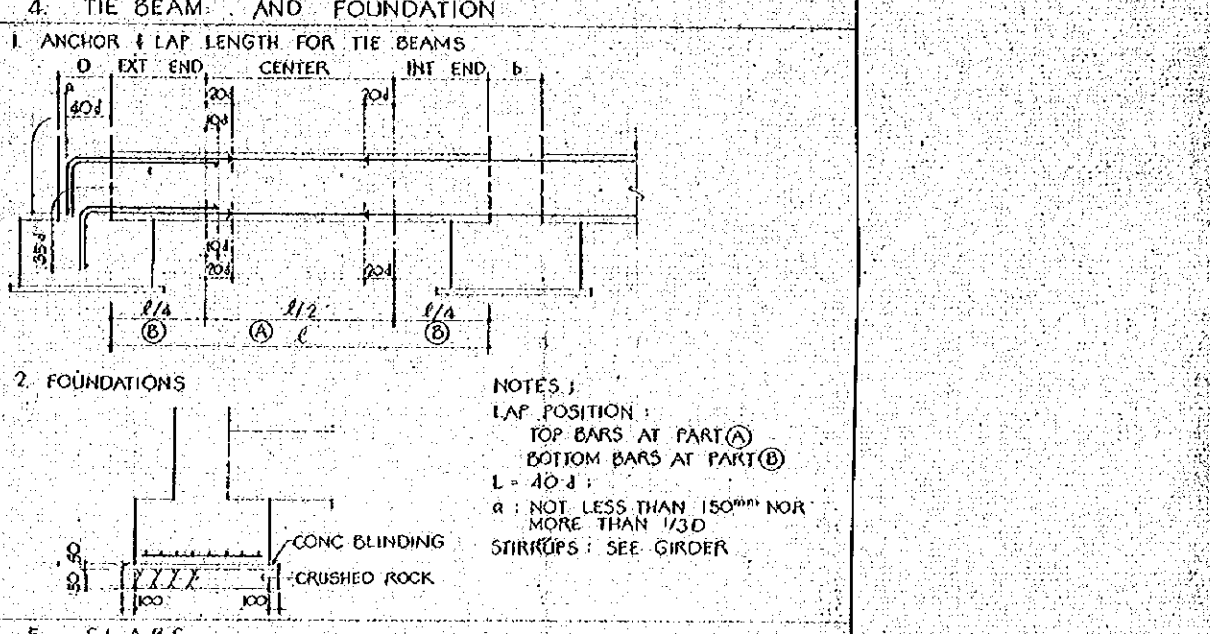
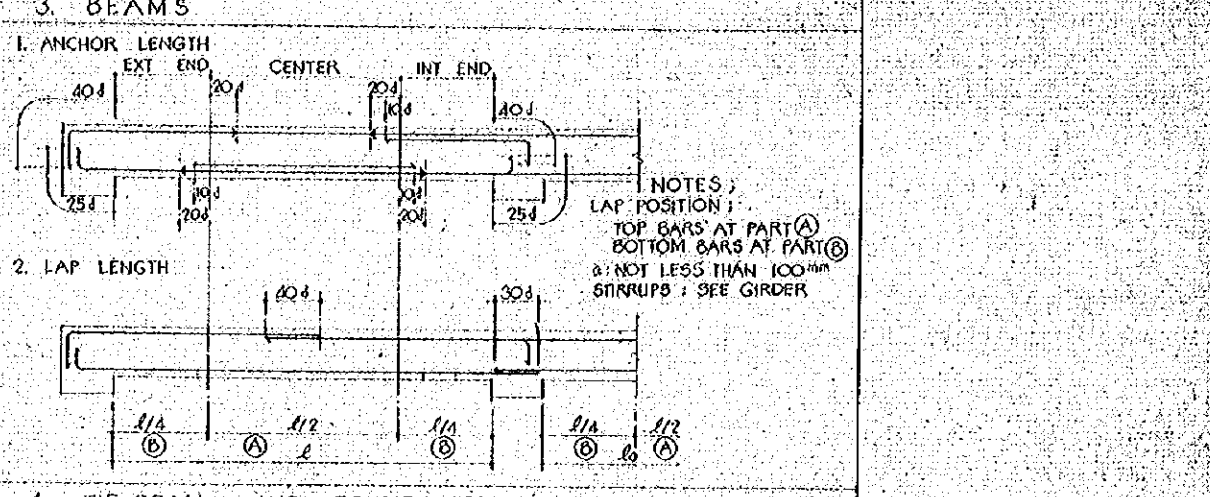


## JOINTS AND ANCHORAGE

- COLUMN
- GIRDER
- BEAMS
- TIE BEAM AND FOUNDATION
- SLABS
- WALLS

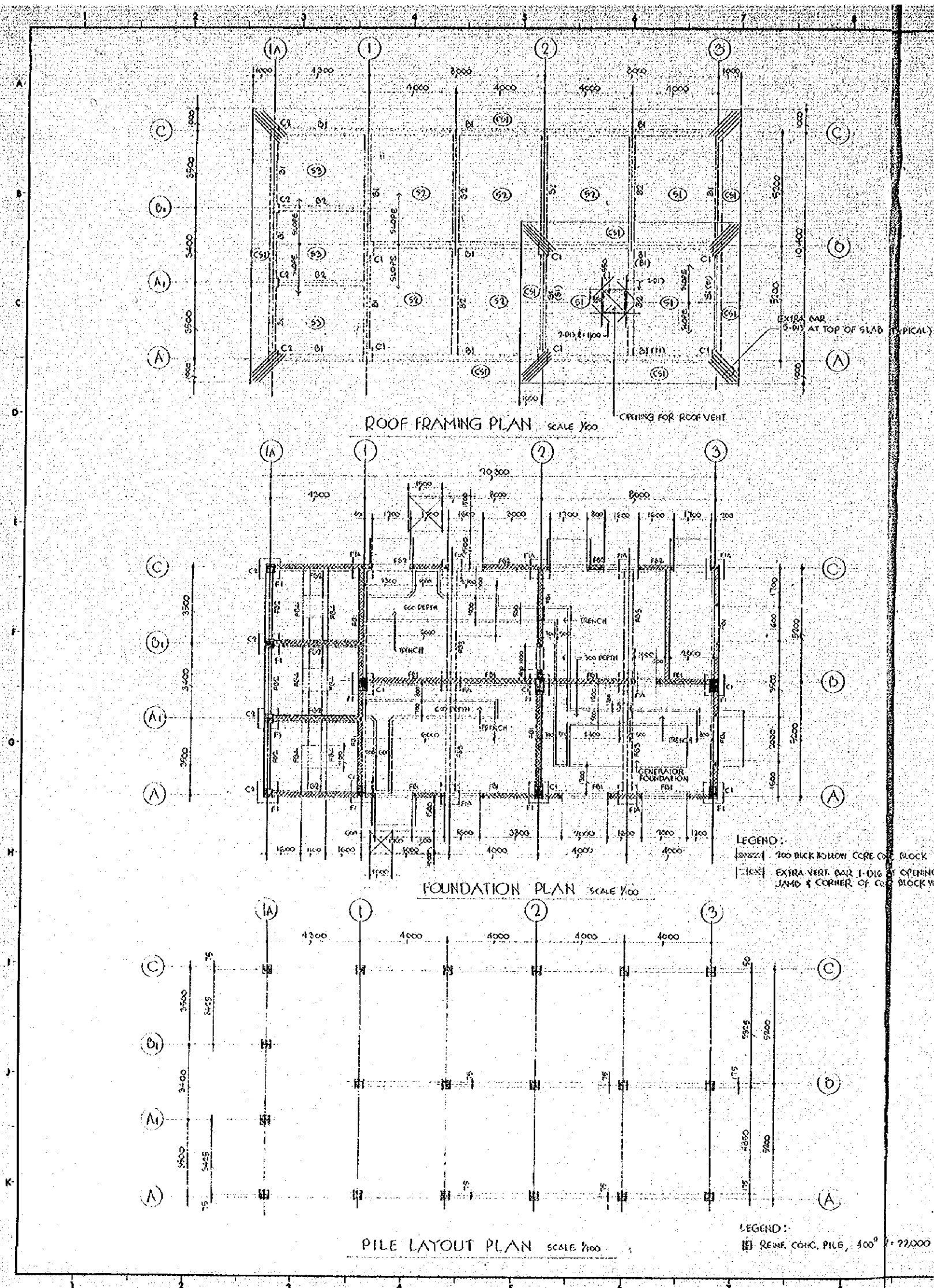


## GENERAL NOTES



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
LOCATION OF			
REINFORCING DETAILS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. Kuma	S. Kuma
SCALE		REV. 14	
NO SCALE			
DATE 03.11.88		DWG. NO. E-205	





**BEAM LIST** SCALE 1/500

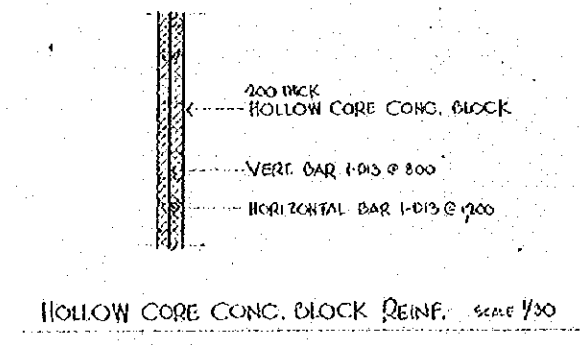
MARK	D1	D2
SITE	100 x 600 (b.b.)	150 x 500
PART	CONT.	END
SECTION		
TOP BAR	3-D17	3-D19
MIDDLE BAR	2-D10	2-D19
BOTTOM BAR	3-D19	3-D19
STIRRUP	D10 @ 200	D10 @ 200

**GRADE BEAM LIST** SCALE 1/500

MARK	FB1	FB2	FB3	FB4
SITE	350 x 150	300 x 150	400 x 400	300 x 500
PART	CONT.	CONT.	CONT.	CONT.
SECTION				
TOP BAR	4-D22	3-D22	3-D22	3-D19
MIDDLE BAR	2-D10	1-D10	2-D22	3-D19
BOTTOM BAR	4-D22	3-D22	3-D22	3-D19
STIRRUP	D10 @ 200	D10 @ 200	D10 @ 200	D10 @ 200

**COLUMN LIST** SCALE 1/500

MARK	C1	C2
PART	CONT.	CONT.
SECTION		
VERT. BAR	6-D22	6-D22
HOOPS	D10 @ 200	D10 @ 200
DIAG. BAR	D10 @ 900	D10 @ 900



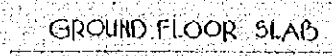
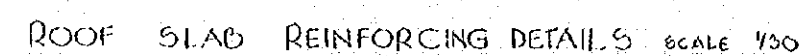
**GENERAL NOTES**

1) BEFORE POURING CONCRETE, CHECK ARCH, MECH AND ELEC. DRAWINGS FOR BOLTS, INSERTS, PIPE, SLEEVES, CONDUIT ETC. TO BE EMBEDDED IN THE CONCRETE.

**REIN. BAR SYMBOL**

- D10  
 x D13  
 + D16  
 o D19  
 # D20

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
SUB STATION LOCATION OF PILE LAYOUT, FOUNDATION & ROOF PLAN AND BEAM, COLUMN LISTS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		M. K. K. M. A.	S. K. K. M. A.
SCALE		REV. NO.	
AS NOTED			
DATE: DEC. 1975		DWG. NO. E-206	



### GENERAL NOTES

REF. DAR SYMBOL

- 010
- x 013
- 016
- o 019

NO.	DATE	DESCRIPTION	APPROVED
ADMISSION			

PORT MUHAMMAD-RIN-QASIM PROJECT  
PAKISTAN

SUB STATION

LOCATION  
OF

## SLAB & FOUNDATION REINFORCING

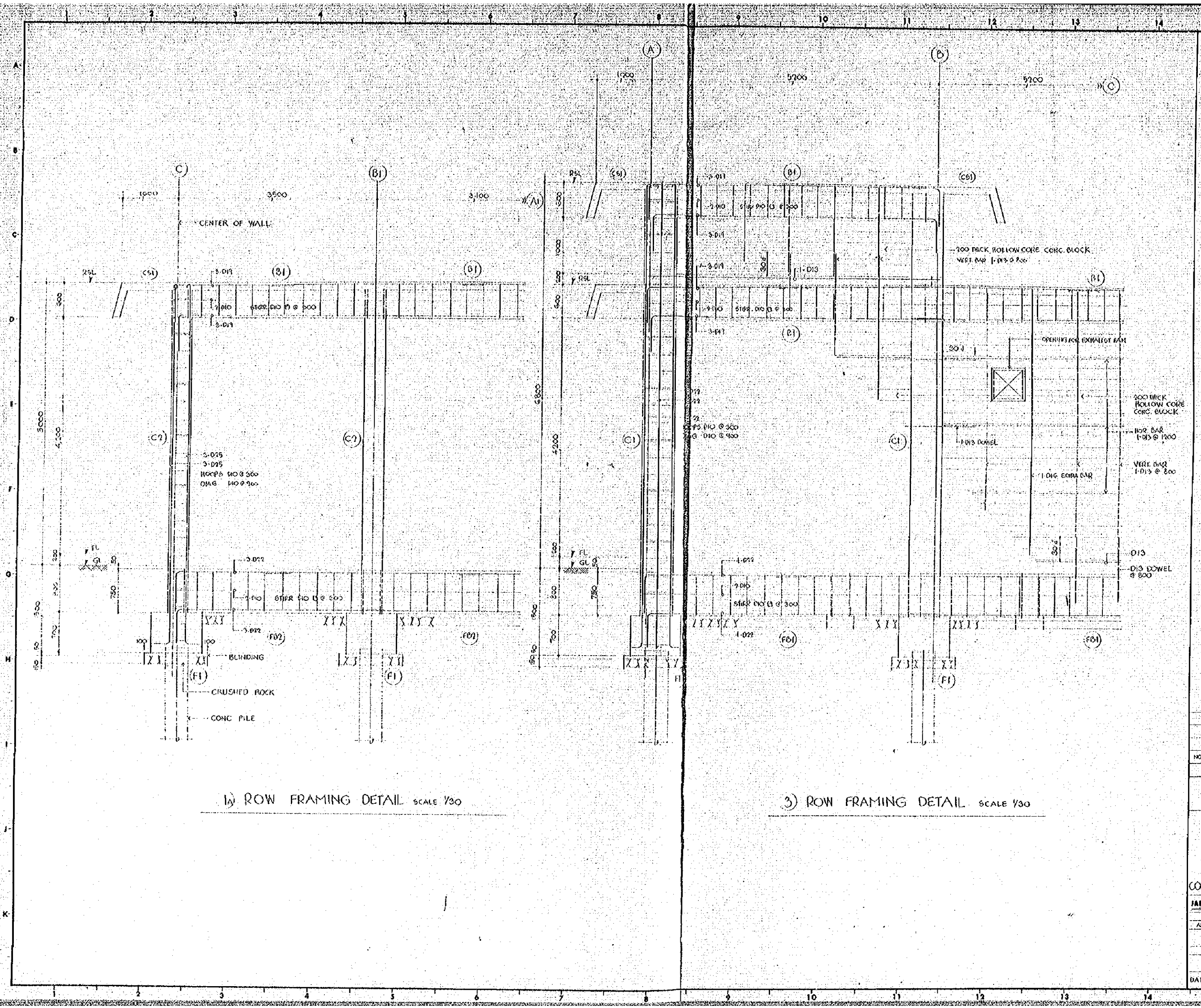
**JAPAN INTERNATIONAL COOPERATION AGENCY**

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. Kuma	G. Kuma
SCALE	REV. No		

1:30

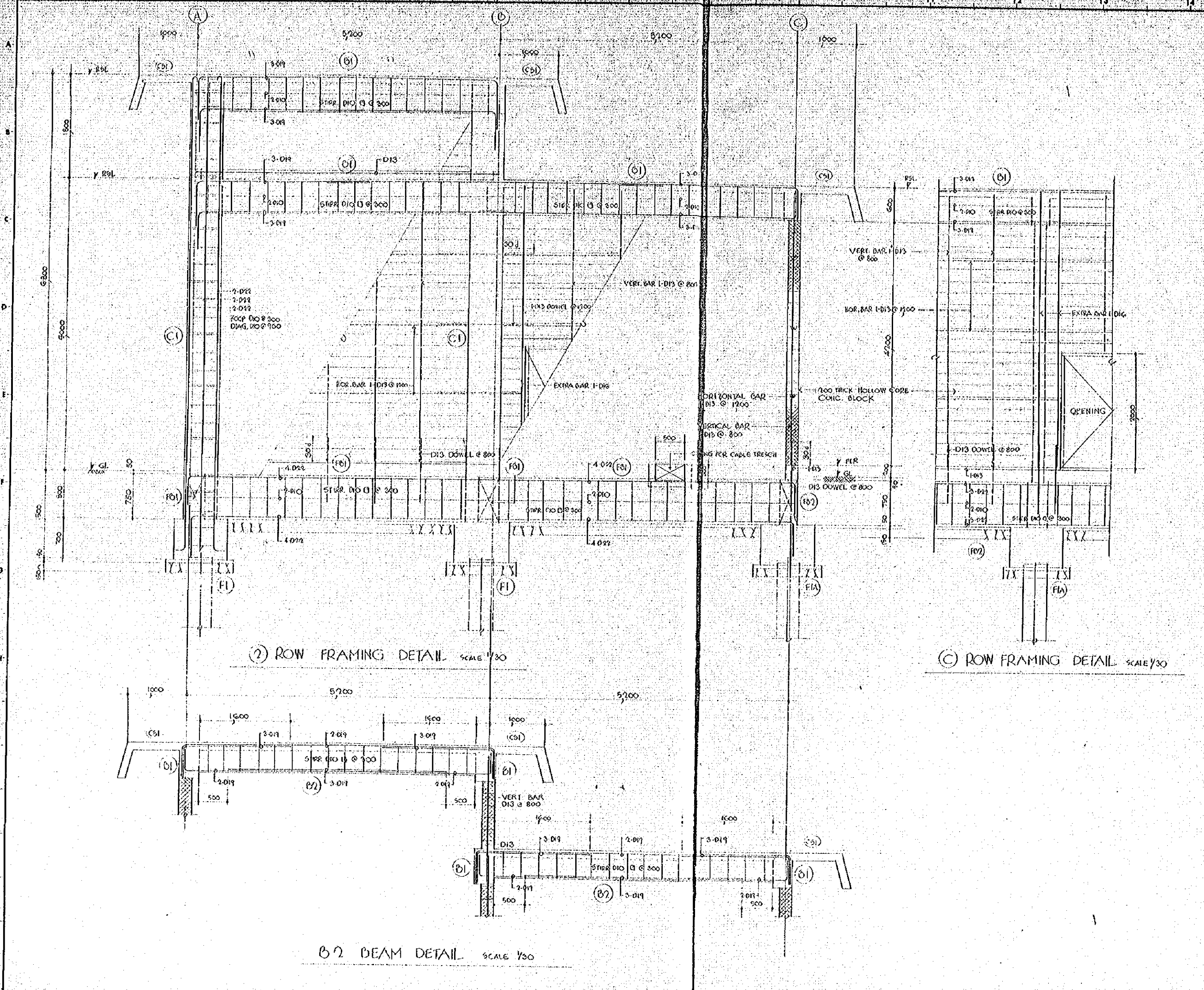
DATE DEC. - - 1975 DWG. NO. E - 207



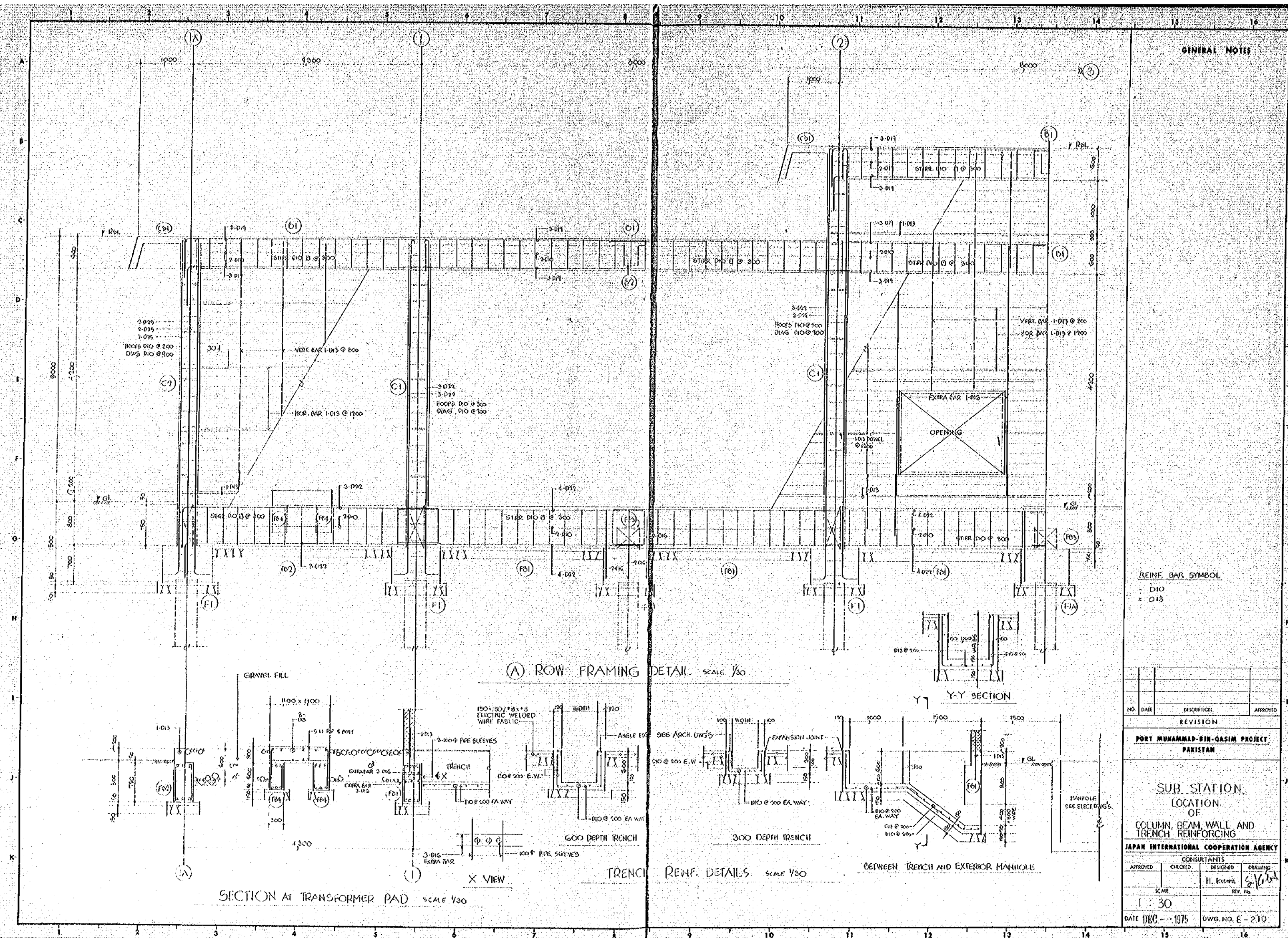




GENERAL NOTES



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
SUB STATION			
LOCATION			
OF			
COLUMN, BEAM AND WALL REINFORCING			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. KUMA	
SCALE			
1 : 30			
DATE 08.01.1974			
DWG. NO. E-209			





Hand-drawn diagram of a rectangular structure, possibly a wall or foundation, with dimensions and calculations:

- Top horizontal dimension:  $1. R. 400 \times 12 = 4800$
- Left vertical dimension:  $400$
- Right vertical dimension:  $297$
- Bottom horizontal dimension:  $2. 150 \times R \times 1493$

[illegible]

Diagram of a circular anchor bar with diameter 25. The bar is shown in cross-section, with a vertical line indicating its position. Dimensions 2 and 10 are marked, and a 45-degree angle is indicated.

NO.	DATE	DESCRIPTION		APPROVED	
REVISION					
PORT MUHAMMAD-BIN-QASIM PROJECT					
PAKISTAN					
SUB STATION					
LOCATION					
OF					
PILE DETAILS					
JAPAN INTERNATIONAL COOPERATION AGENCY					
CONSULTANTS					
APPROVED	CHECKED	DESIGNED	DRAWING		
		IIKAWA	Saito		
SCALE		REV. NO.			
1:10					
DATE	2001	DWG. NO.		211	



BAR ARRANGEMENT OF

7

UPPER PILE SCALE =  $\frac{1}{20}$

11.400  
11.4 @ 100 = 11.400  
2.700 6.000 2.700

(P) 6-#16  
(F) #25 (F) #25 (B) 10#-#9

(P) 6-#16 / 12.450  
7.500  
L = 7.650  
1.650 750 4.650  
L = 4.800 L = 7.650  
(P) 6-#16 / 12.450 7.500

LOWER PILE SCALE =  $\frac{1}{20}$

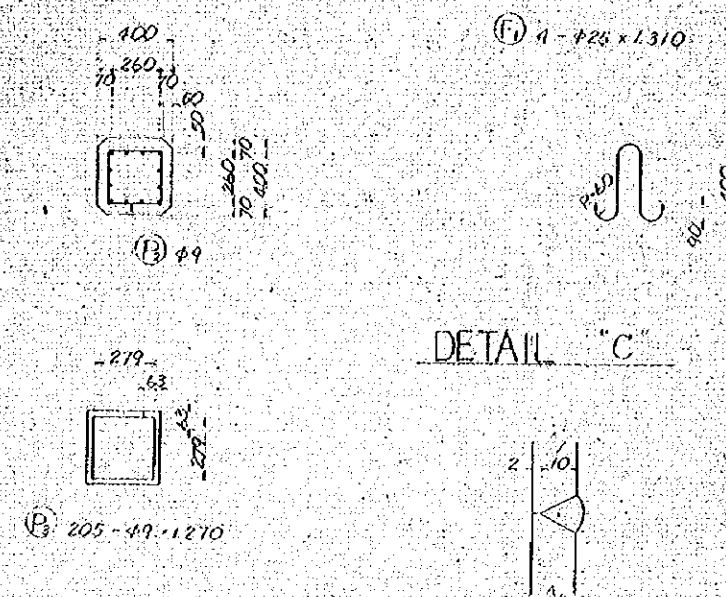
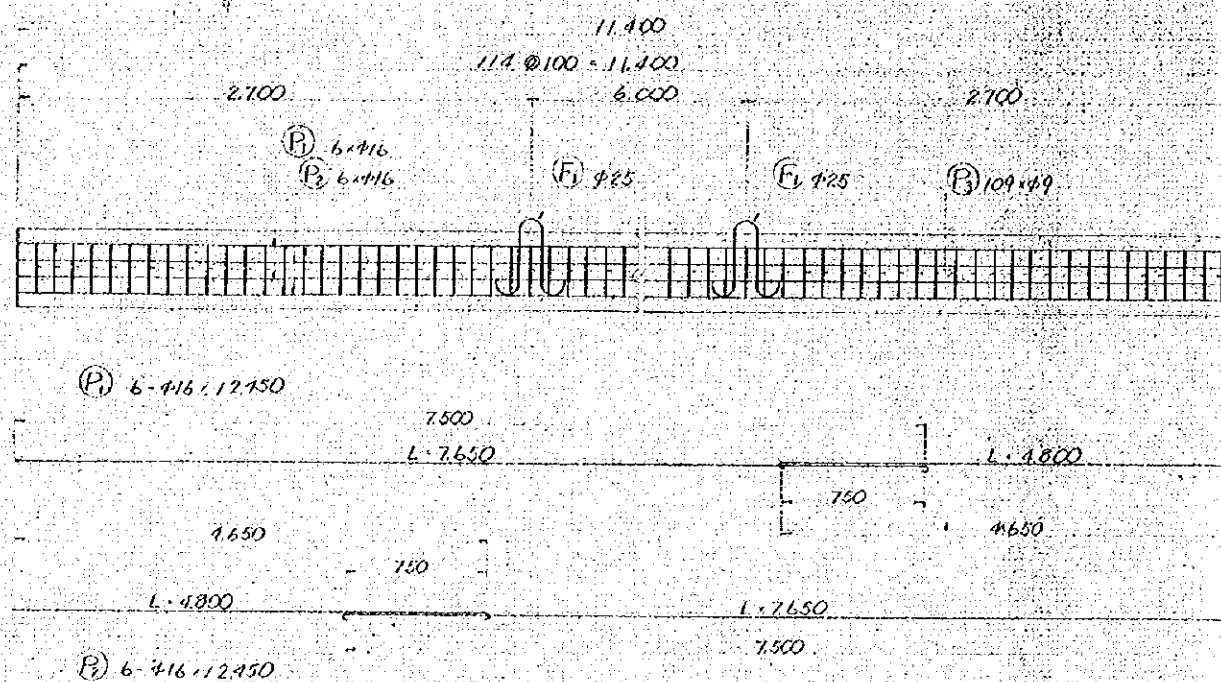
11.400  
11.4 @ 100 = 11.400  
2.700 6.000 2.700

(P) 2-#16  
(P) 2-#16 (P) 2-#16 (B) 10#-#9

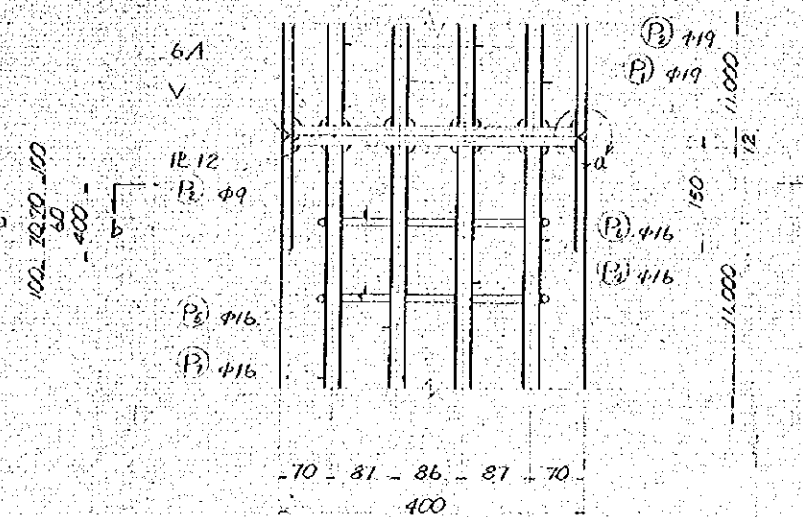
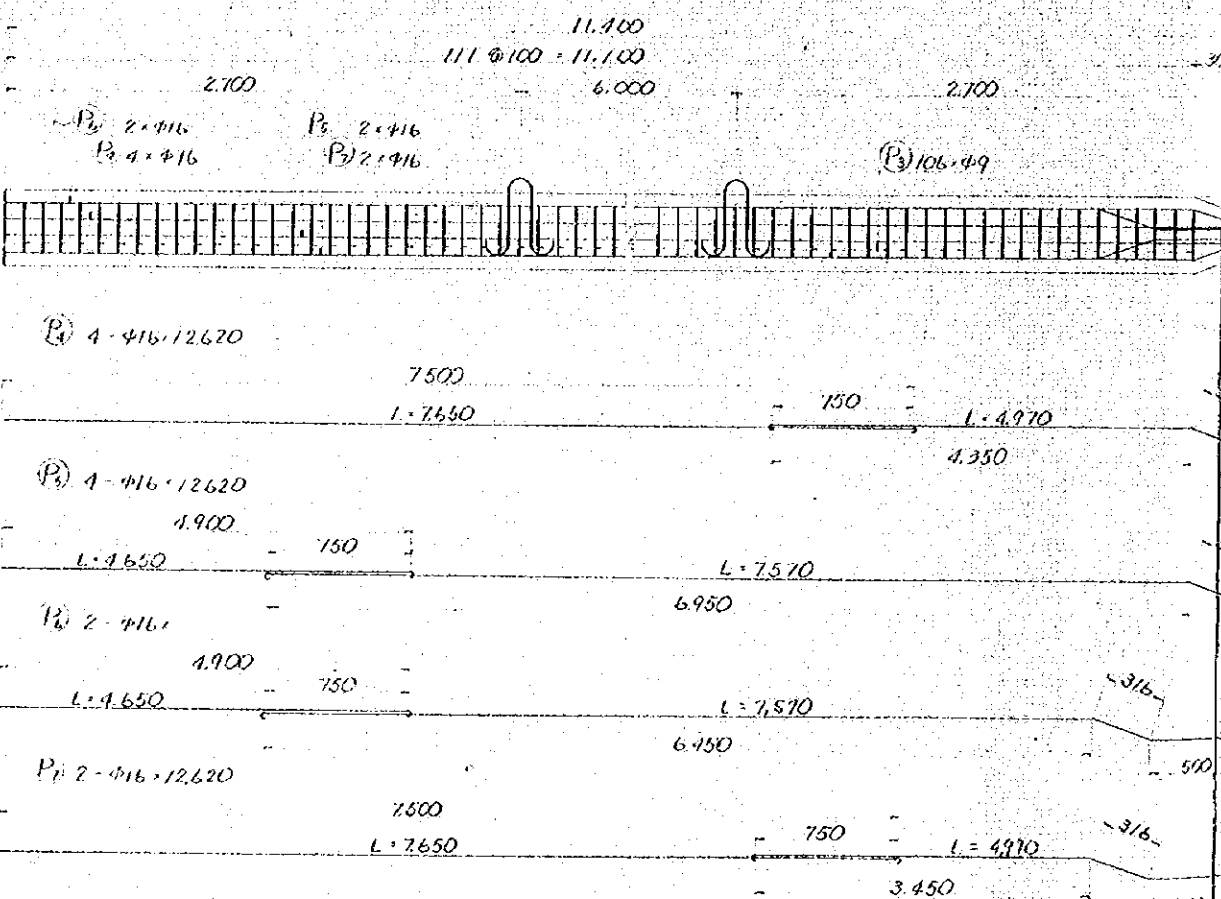
(P) 4-#16 / 12.620  
7.500  
L = 7.650 150 L = 4.970  
(P) 4-#16 / 12.620 4.900 4.350  
L = 4.650 L = 7.570  
(P) 2-#16 6.950  
L = 4.650 L = 7.570 6.950  
(P) 2-#16 / 12.620  
7.500  
L = 7.650 750 L = 4.970  
3.450 500 500

400  
70 87 52 70  
8 3/4

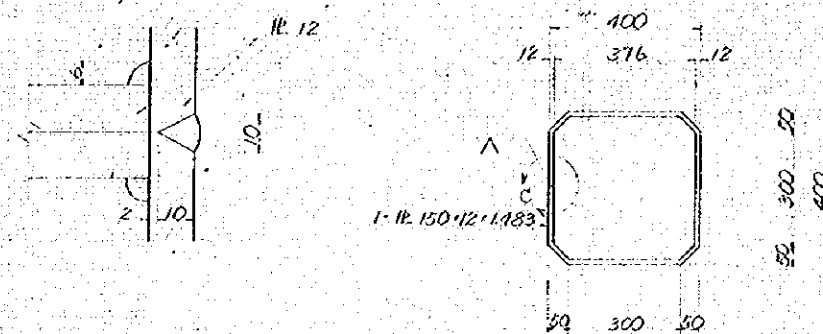
TYPICAL SECTION SCALE = 1/20



DETAIL OF PILE CONNECTION SCALE = 1/3"



SECTION b-b SCALE = 1/10



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
SUB STATION			
LOCATION			
OF			
PILE DETAILS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. Kuma	G. Karthi
SCALE		REV. No.	
1:20			
DATE	APR 1978	DWG. NO. E-212	

SUB STATION  
LOCATION  
OF  
PILE DETAILS

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		H. K. Wong	<i>[Signature]</i>
SCALE		REV. No.	
1:20			
DATE DEC. 1985		DWG. NO. E-212	

