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GOVERNMENT OF PAKISTAN
PORT QASIM AUTHORITY

TENDER AND CONTRACT DOCUMENTS
LIGHT HOUSES

VOL IV : DRAWINGS

DECEMBER 1975

JAPAN INTERNATIONAL COOPERATION AGENCY

J.R.

LIGHT-HOUSE EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
POACH	CONCRETE	MARBLE	SLIP-PROOF HT: 150
BERM			
WINDOW APPENTICE			
VERANDA			
EXTERNAL WALL	CONCRETE	WHITE-MARBLE	
ROOF	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING
R.O.F- DRAIN	CAST IRON LEADER		100
CONDUCTOR	HARD POLYVINYL		
STAGE	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING
PLANCEER		WHITE-MARBLE	
WATER TANK	CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	
WINDOW DOOR	STAINLESS		
COPING	CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	
LADDER			STAINLESS

LEADING-LIGHT EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
EXT. WALL	CONCRETE	WHITE-MARBLE	
POACH	CONCRETE	WHITE-MARBLE	
ROOF	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING ROOF-HATCH (WATER-PROOFED)
STAIR			
HAND-RAIL			STAINLESS

LIGHT-BEACON EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
EXT. WALL	REINFORCEMENT CONCRETE	V.P.	
LADDER	STAINLESS		
STAGE	CONCRETE	MORTAR	

LIGHT-HOUSE INTERIOR FINISH SCHEDULE											
R.M. NO.	ROOM-NAME	FLOOR		BASE			WAINSCOT			REMARKS	
		MATERIAL	FIN.	MAT.	FIN.	HT.	MAT.	FIN.	HT.		
	ENTR. HALL	MORTAR	STEEL-TROWEL	MORTAR	STEEL-TROWEL	V.P.				MORTAR	COAT-HOOK
	OFFICE-R.M.									MORTAR	
	DINING-R.M.									MORTAR	
	REST-R.M.									MORTAR	
	BATTERY-R.M.									MORTAR	
	STORAGE-R.M.									MORTAR	
	GALE-R.M.									MORTAR	
	STAIRS									MORTAR	HAND-RAIL: STEEL O.P.
	STAIR-LANDING	STEEL	FLAME O.P.							MORTAR	LADDER: STEEL O.P.
	WATER TANK	MORTAR	STEEL-TROWEL	MORTAR	STEEL-TROWEL	CO				MORTAR	WATER-PROOF SHEETING

LEADING-LIGHT INTERIOR FINISH SCHEDULE											
R.M. NO.	ROOM-NAME	FLOOR		BASE			WAINSCOT			REMARKS	
		MATERIAL	FIN.	MAT.	FIN.	HT.	MAT.	FIN.	HT.		
	BATTERY-R.M.	WATER-PROOF MORTAR	STEEL-TROWEL	WATER-PROOF MORTAR	STEEL-TROWEL	150				MORTAR	LADDER: STEEL O.P.
	BATTERY-R.M.									V.P. SPRAY	
	LADDER		STEEL O.P.							MORTAR	
	STAIR-R.M.	MORTAR	STEEL-TROWEL	WATER-PROOF MORTAR	STEEL-TROWEL	CO				V.P. SPRAY	HAND-RAIL: STEEL O.P.

LIGHT-BEACON INTERIOR FINISH SCHEDULE											
R.M. NO.	ROOM-NAME	FLOOR		BASE			WAINSCOT			REMARKS	
		MATERIAL	FIN.	MAT.	FIN.	HT.	MAT.	FIN.	HT.		

GENERAL NOTES

ROOF-HATCH WATER-PROOFED STAINLESS

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11541191

NO.	DATE	DESCRIPTION	APPROVED

REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-HOUSE
FINISHED-SCHEDULE

JAPAN INTERNATIONAL COOPERATION AGENCY

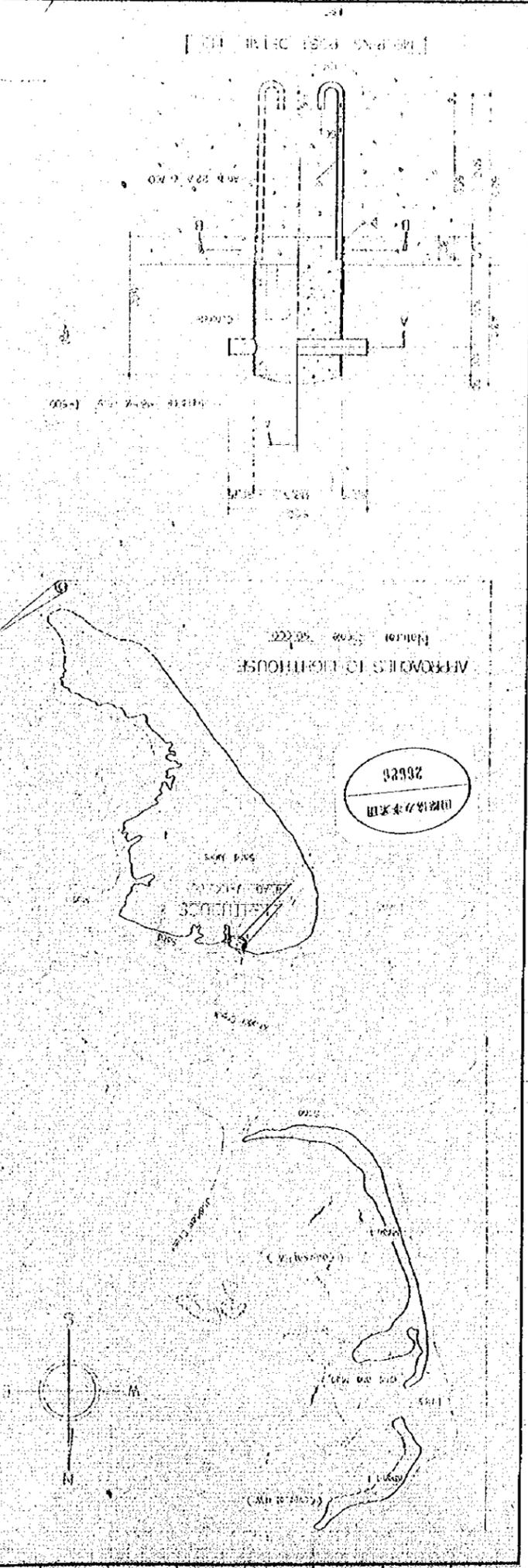
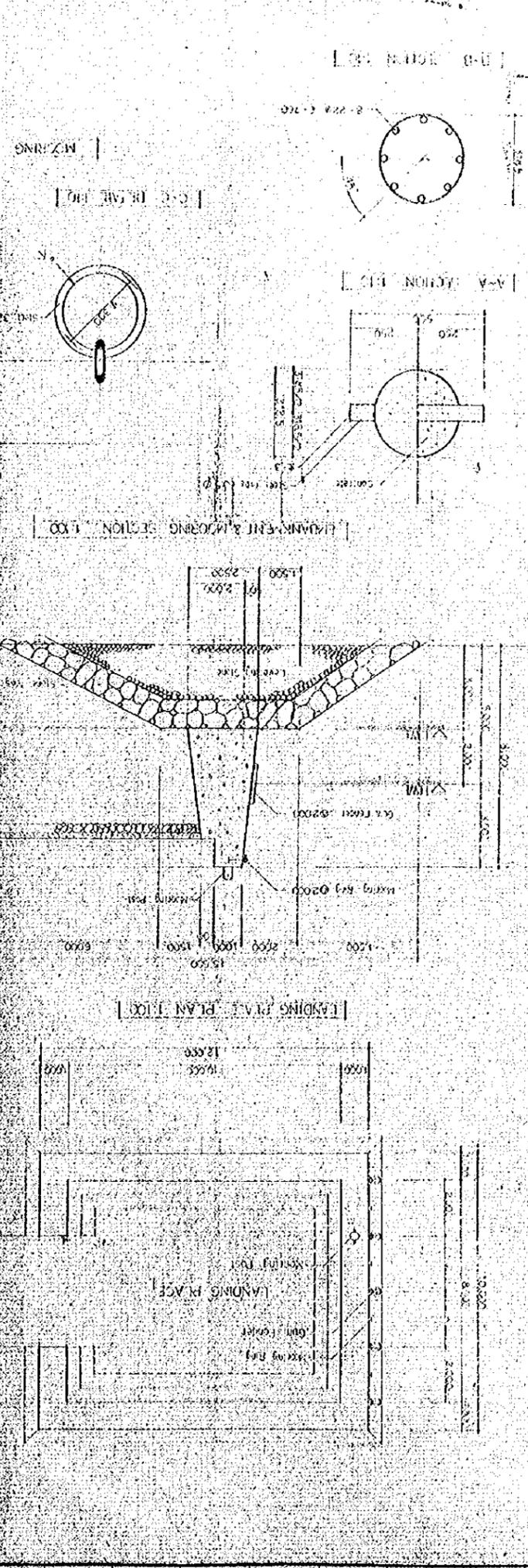
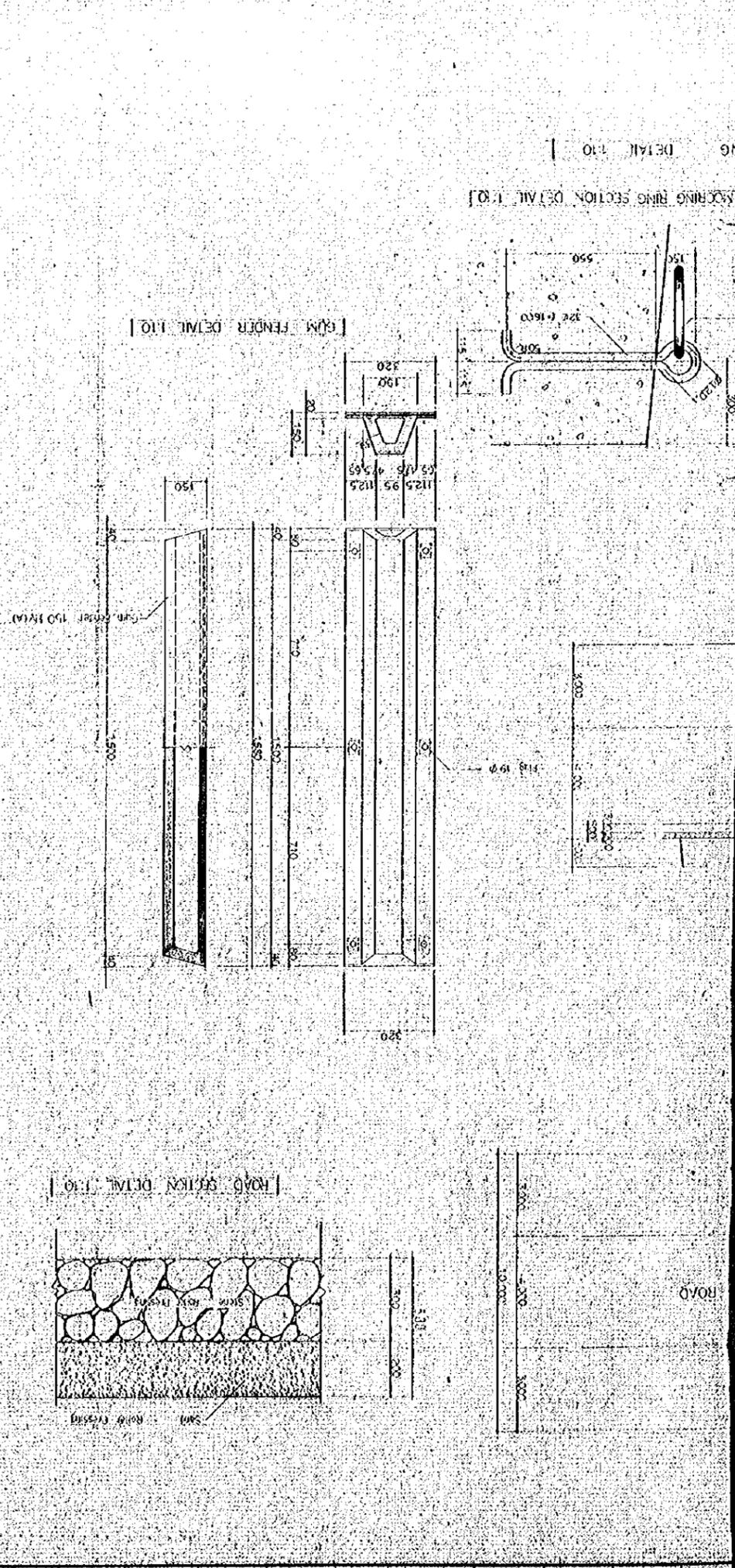
CONSULTANTS

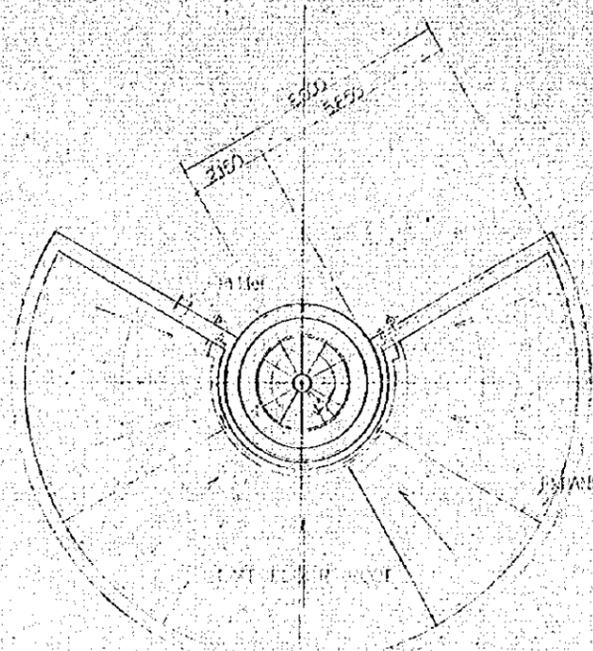
APPROVED	CHECKED	DESIGNED	DRAWING
S. K. M.	M. M.	J. C.	R. N.
SCALE			REV. NO.

DATE: 13.11.1975 DWG. NO.: 1-16

DATE: 10 1975		DWG. NO. 1-7	
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DESIGNED: <i>[Signature]</i>		DRAWING: <i>[Signature]</i>	
CONSULTANTS: <i>[Signature]</i>			
JAPAN INTERNATIONAL COOPERATION AGENCY			
AFFILIATES: <i>[Signature]</i>			
FLIGHT SECTIONS & DETAILS			
NAVIGATION AIDS			
ARRANGEMENT			
PORT MURAMBAR-BIR-GASIM PROJECT			
PARISIAN			
REVISION			
NO.	DATE	DESCRIPTION	APPROVED

GENERAL NOTES





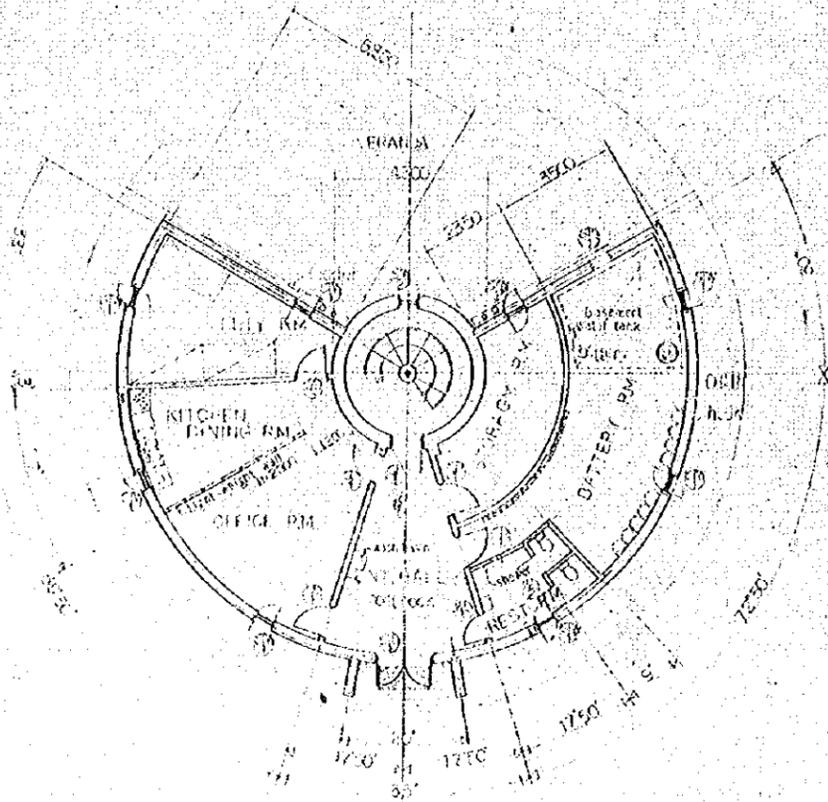
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[E] SECTION (REV)



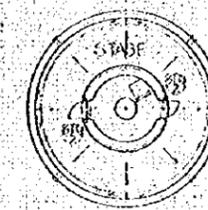
[D] SECTION (REV)



[B] SECTION (REV)



[B] SECTION (REV)



[F] SECTION (REV)

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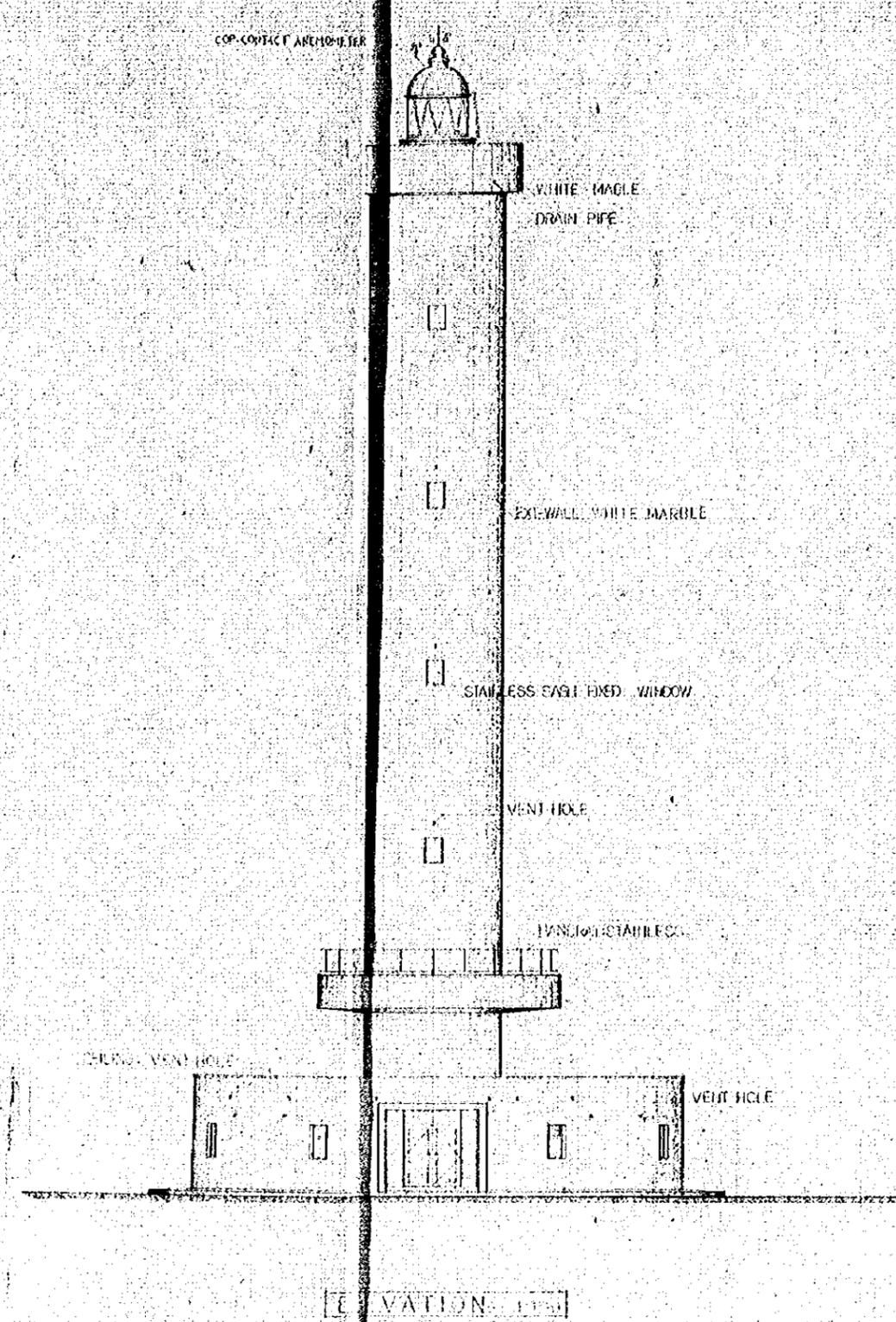
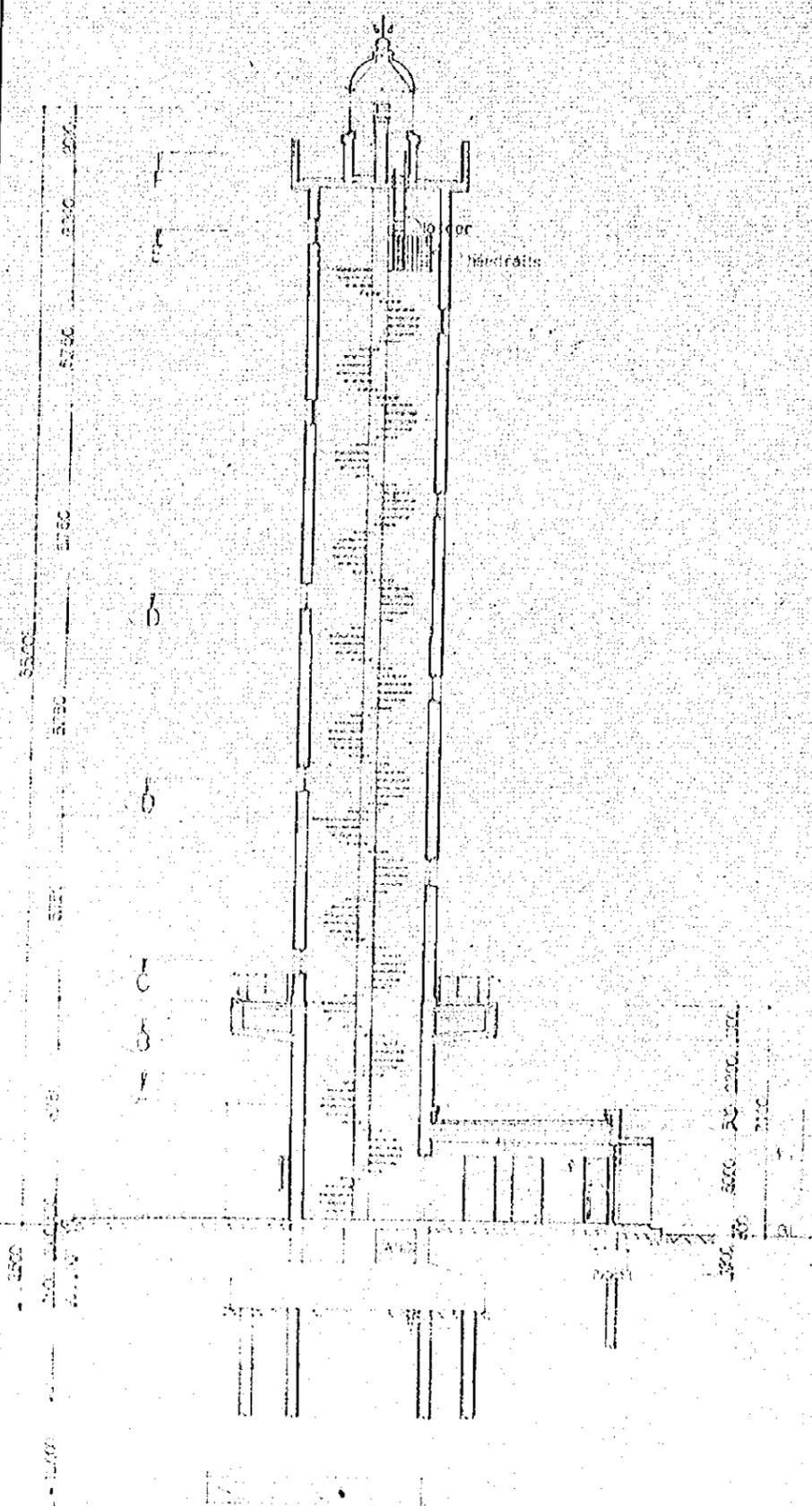
REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHTHOUSE
PLAN & SECTIONS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE			
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DATE: 10-1-75		DWG. NO: 18	



NO.	DATE	DESCRIPTION	APPROVED

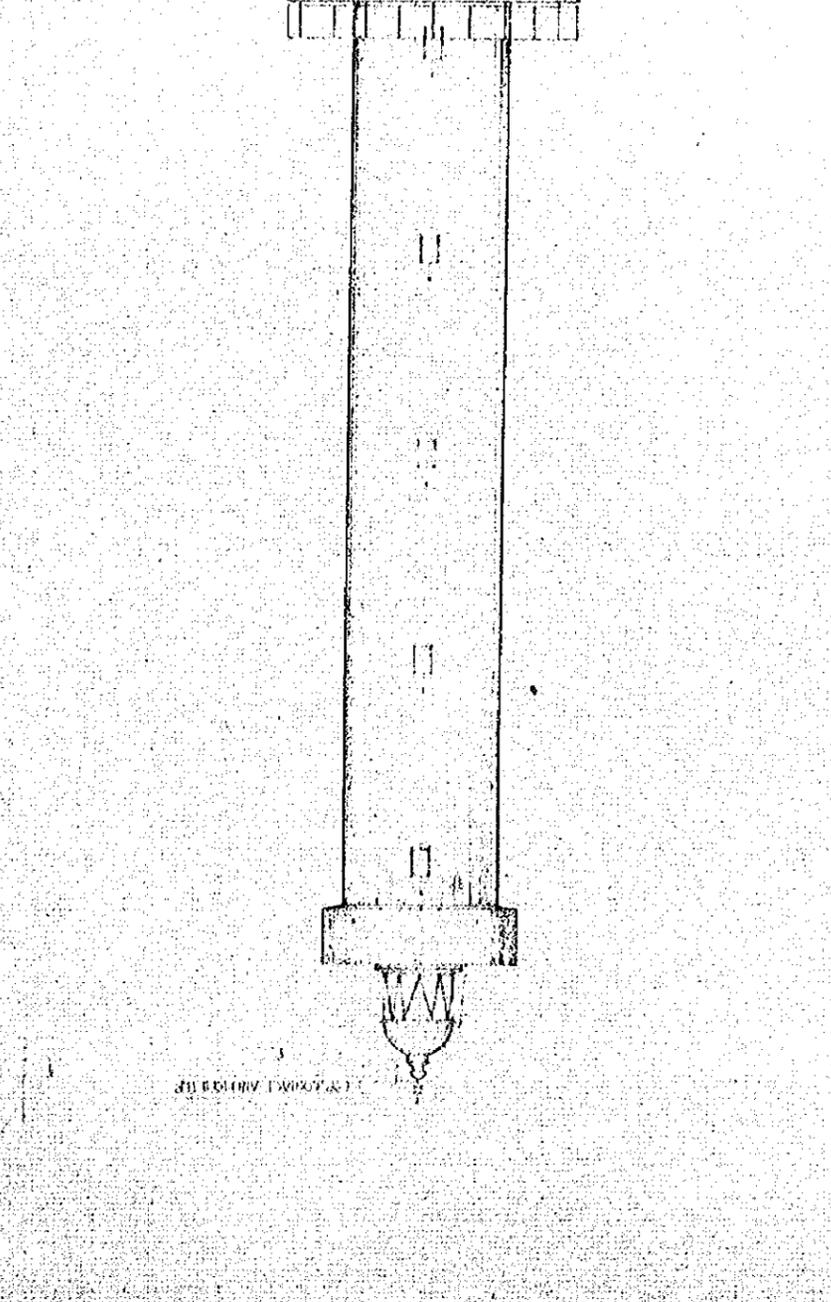
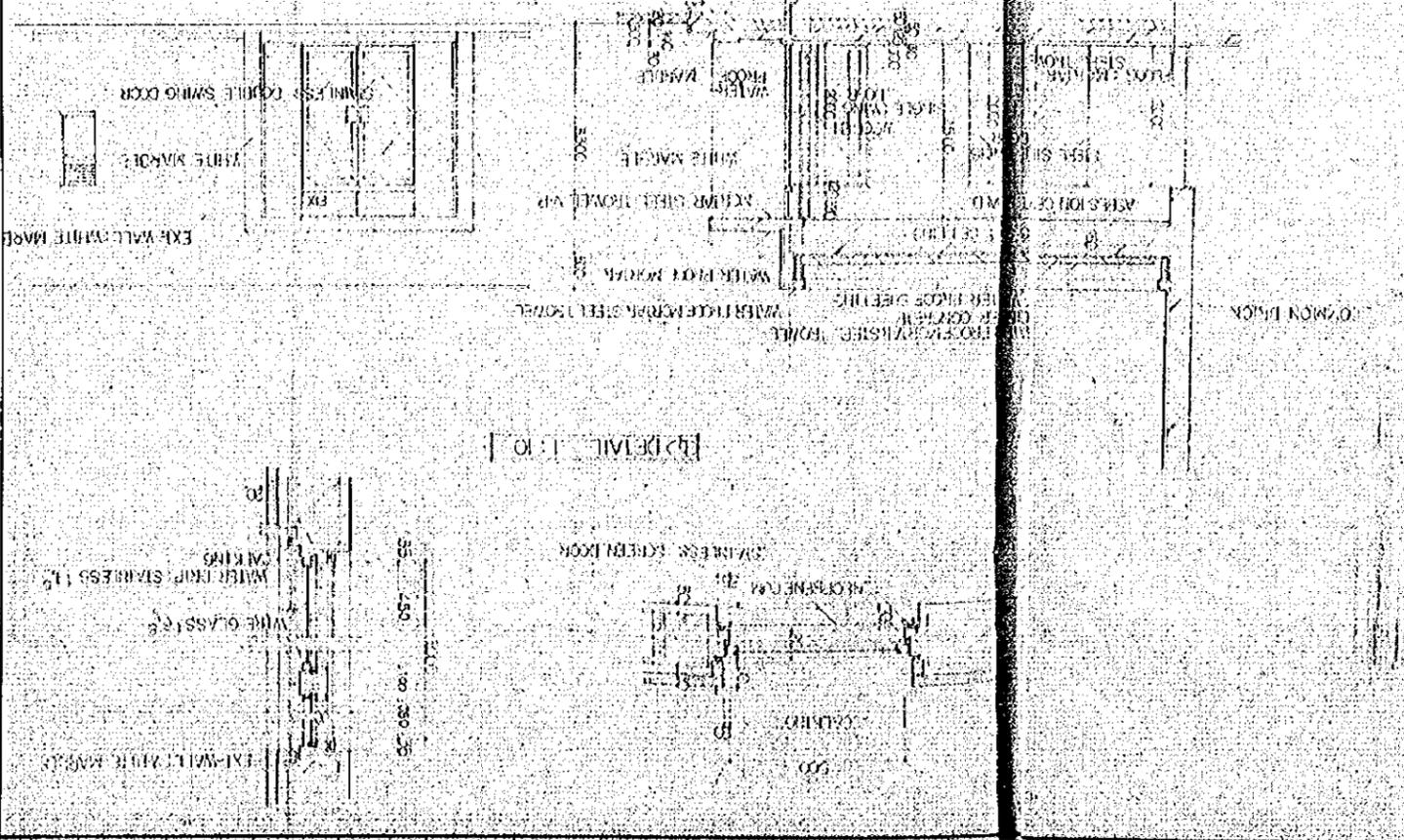
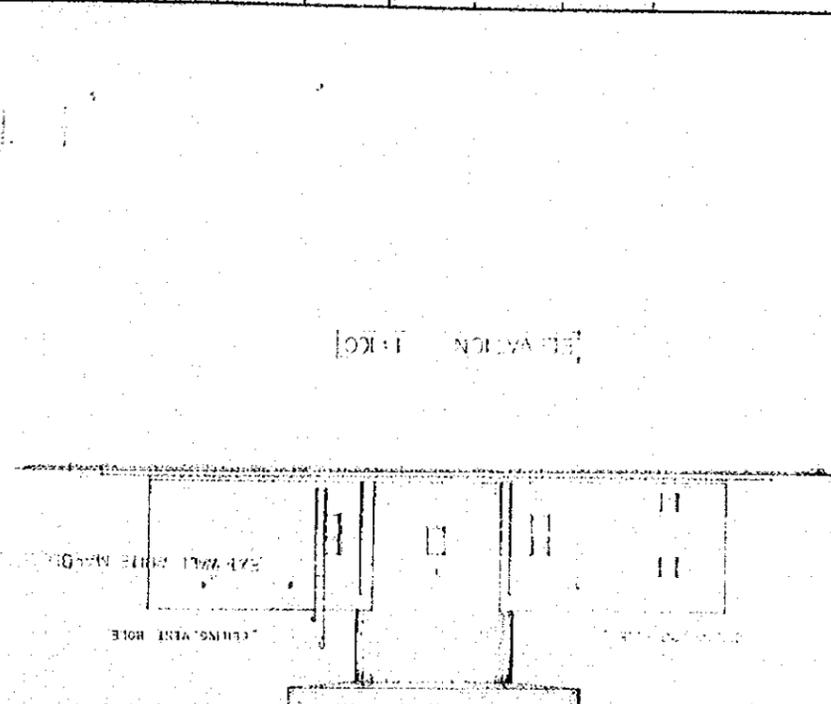
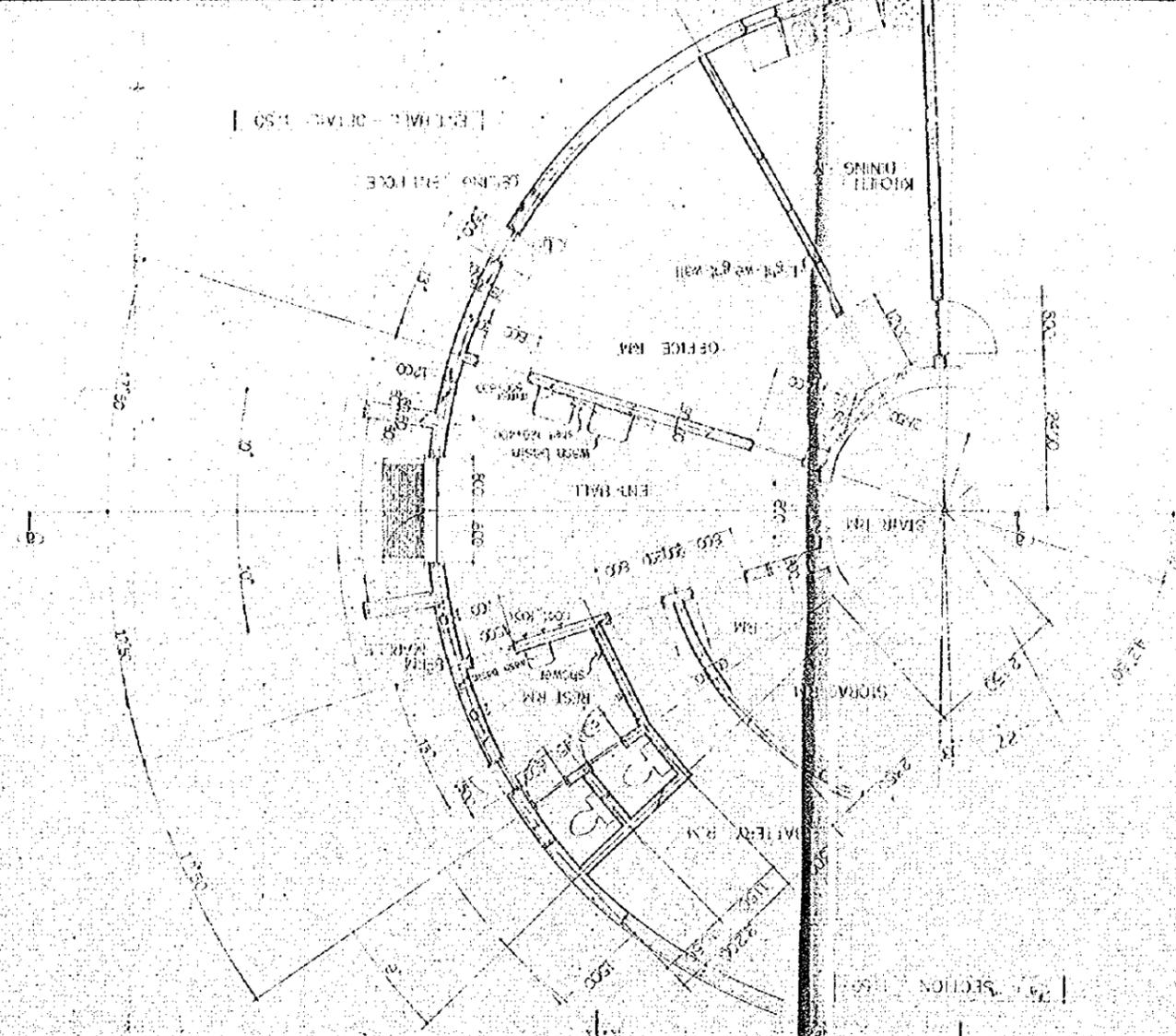
REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-HOUSE
ELEVATION SECTION

JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE	REV. NO.		
1:100			
DATE: 10/1975	DWG. NO: 1-9		

DATE: 10/10/75		SCALE: 1:10	
DRAWING NO: 110-1-50		REV. NO: 1	
PROJECT: PORT MURAHAD-BIN-GASIM PROJECT		CONSULTANT: JAPAN INTERNATIONAL COOPERATION AGENCY	
ARRANGEMENT ELEVATION, SECTION DETAILS			
REVISION			
NO.	DATE	DESCRIPTION	APPROVED

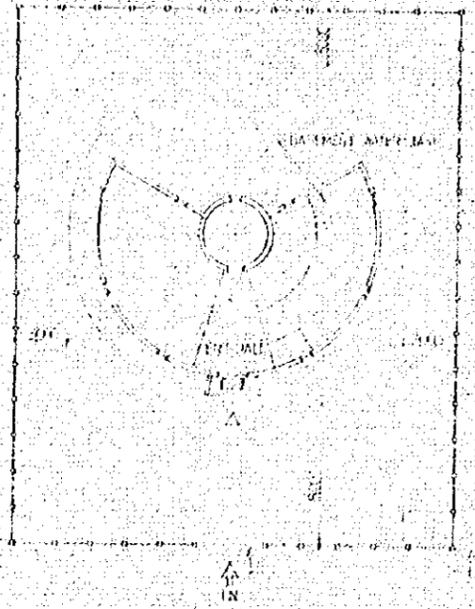


GENERAL NOTES

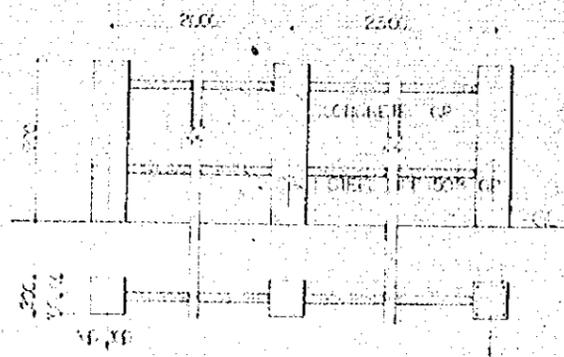
GENERAL NOTES

FRONT OF FIXTURE LIGHT HOUSE							
QTY	NO.	QTY	NO.	QTY	NO.	QTY	NO.
1	100	1	100	1	100	1	100
FORM	100	FORM	100	FORM	100	FORM	100
TYPE	STAINLESS	TYPE	STAINLESS	TYPE	STAINLESS	TYPE	STAINLESS
MATERIALS	STAINLESS	MATERIALS	STAINLESS	MATERIALS	STAINLESS	MATERIALS	STAINLESS
FINISHING	STAINLESS	FINISHING	STAINLESS	FINISHING	STAINLESS	FINISHING	STAINLESS
GLASS	WIRE GLASS						
FIXTURE	STAINLESS	FIXTURE	STAINLESS	FIXTURE	STAINLESS	FIXTURE	STAINLESS
REMARK		REMARK		REMARK		REMARK	

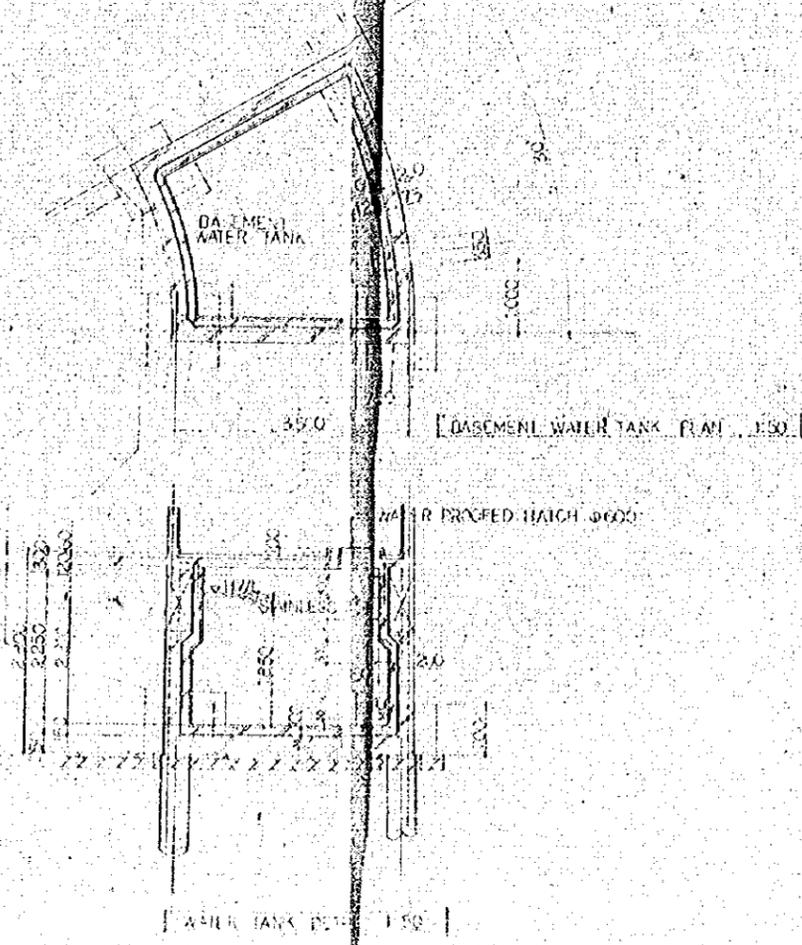
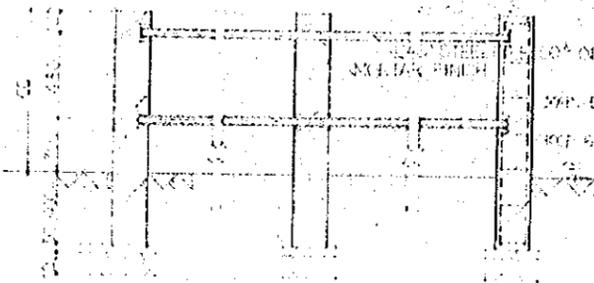
REAR LEADING LIGHTS		REAR LEADING LIGHTS		REAR LEADING LIGHTS	
QTY	NO.	QTY	NO.	QTY	NO.
1	100	1	100	1	100
FORM	100	FORM	100	FORM	100
TYPE	STAINLESS	TYPE	STAINLESS	TYPE	STAINLESS
MATERIALS	STAINLESS	MATERIALS	STAINLESS	MATERIALS	STAINLESS
FINISHING	STAINLESS	FINISHING	STAINLESS	FINISHING	STAINLESS
GLASS	WIRE GLASS	GLASS	WIRE GLASS	GLASS	WIRE GLASS
FIXTURE	STAINLESS	FIXTURE	STAINLESS	FIXTURE	STAINLESS
REMARK		REMARK		REMARK	



PILOT PLAN ELEVATION 1:200



DETAIL 1:100



NO.	DATE	DESCRIPTION	APPROVED

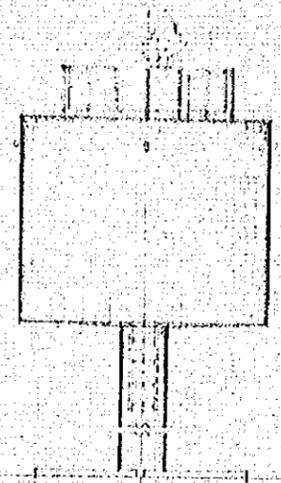
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHTHOUSE
PLOT PLAN ELEVATION &
DETAIL

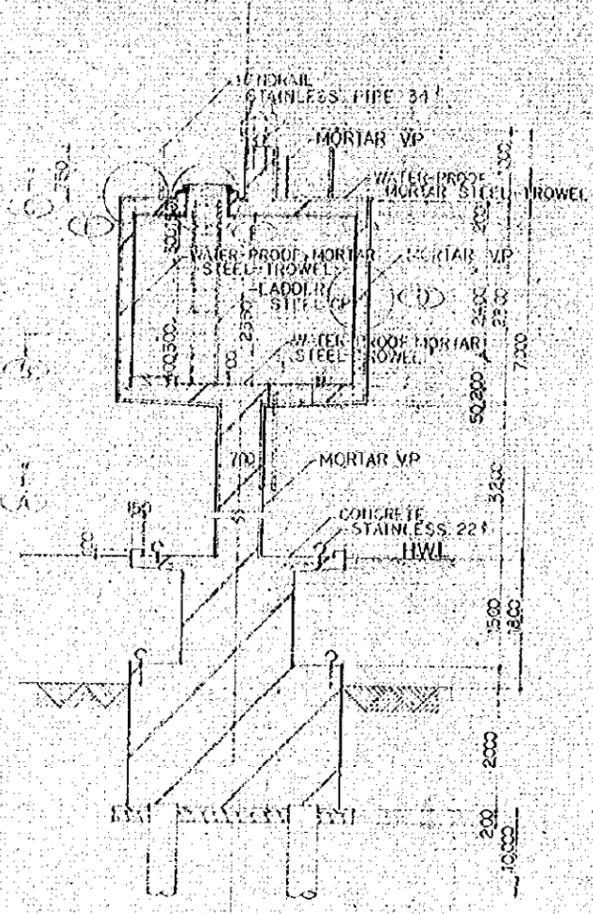
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
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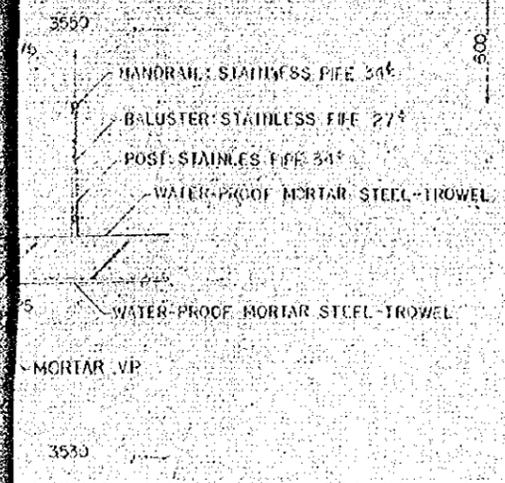
SCALE 1:200 1:50
DATE 10.10.1975 DWG. NO. 11-22



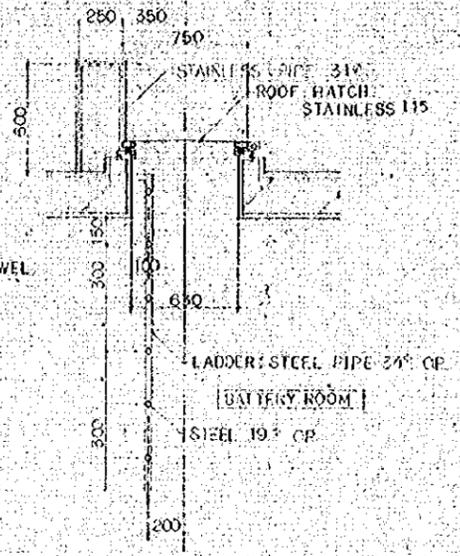
ELEVATION 1:50



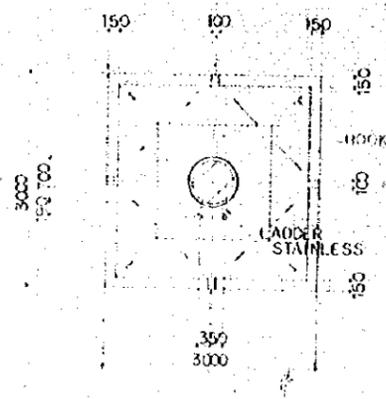
SECTION 1:50



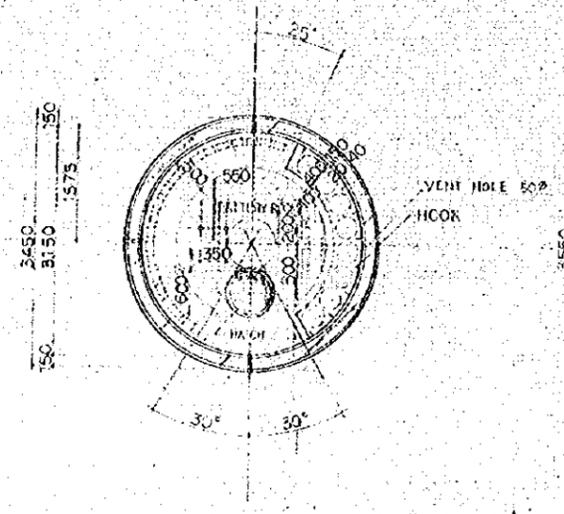
C-TAIL 1:20



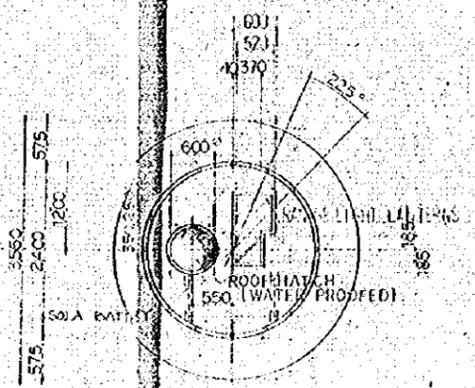
CE DETAIL 1:20



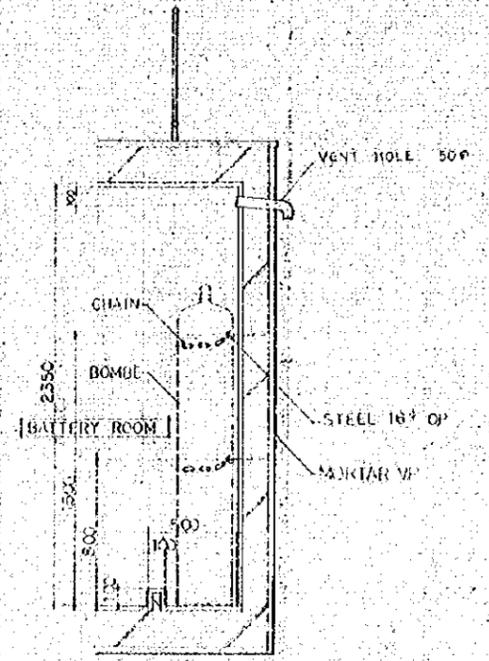
PLAN 1:50



B PLAN 1:50



CC PLAN 1:50



CD DETAIL 1:20

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

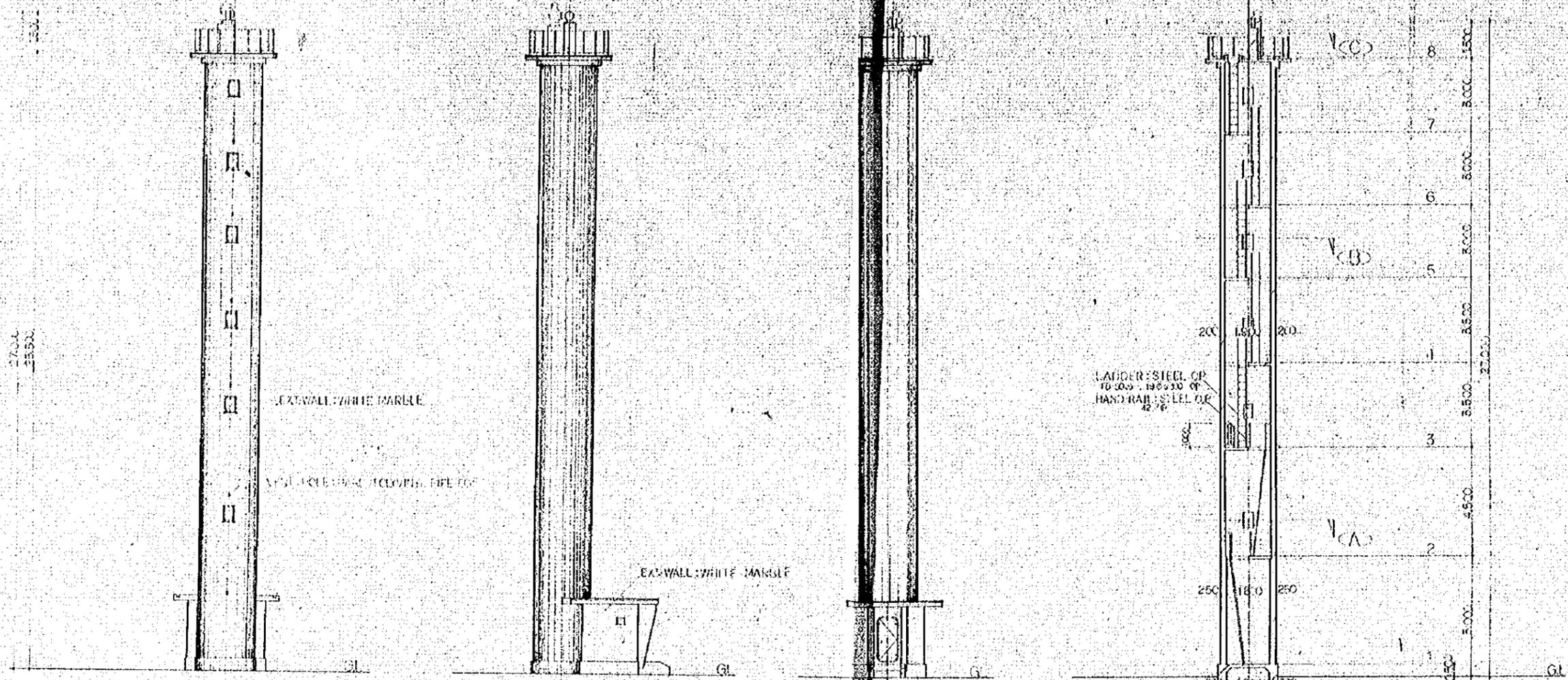
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
FRONT LEADING-LIGHT'S
PLANS, ELEVATION,
SECTION & DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
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SCALE		REV. NO.	

1:20 1:50
DATE: 10/1975 DWG. NO: J-23

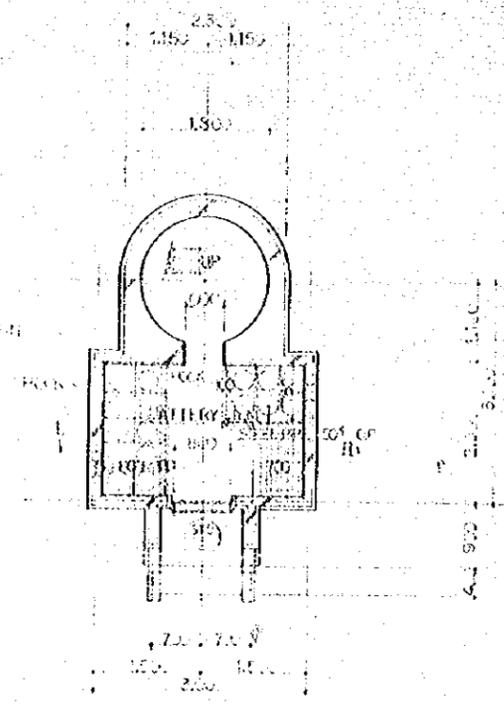


[ELEVATION 1:100]

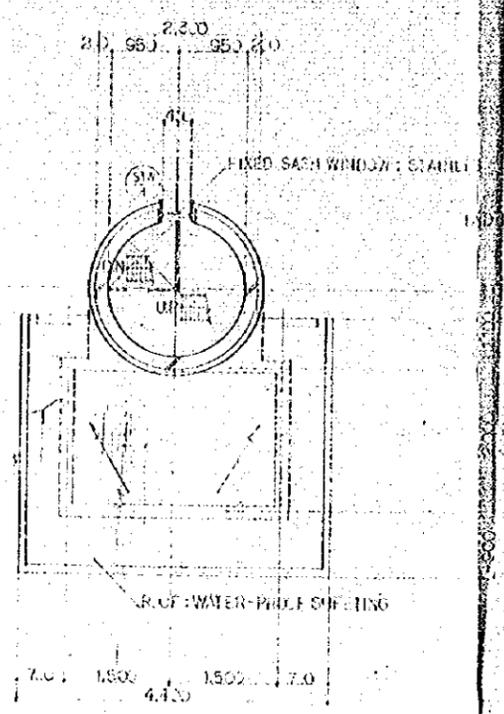
[ELEVATION 1:100]

[ELEVATION 1:100]

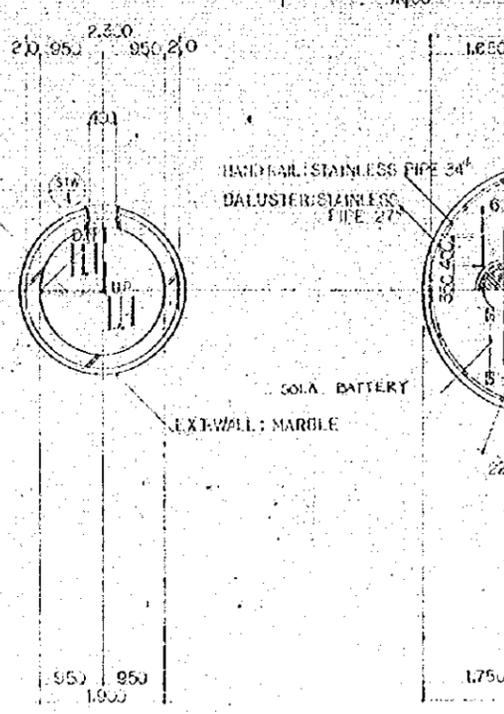
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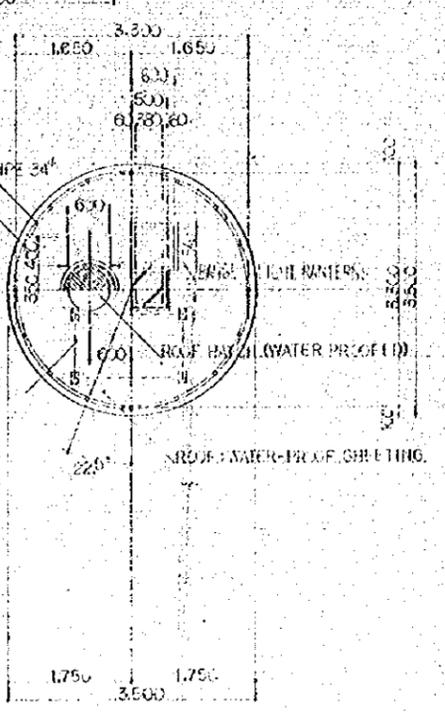
[FLOOR PLAN 1:50]



[V. SECTION 1:50]



[V. SECTION 1:50]



[FLOOR PLAN 1:50]

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
REAR LEADING-LIGHTS
PLANS, SECTIONS & ELEVATIONS

JAPAN INTERNATIONAL COOPERATION AGENCY
CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

1:50 (1:10)
DATE: DEC. 10, 1975
DWG. NO. ||-24

GLASS-FLUOR

STAINLESS MESH

EXT. WALL WHITE MARBLE

MORTAR STEEL TROWEL

SECTION

LOUVER DETAIL 1:10

CALKING

EXT. WALL WHITE MARBLE

(WATER PROOFED) NEOPRENE GUM PACKING

EXT. WALL WHITE MARBLE

CONCRETE V.P.

WATER PROOF MORTAR

EXT. WALL WHITE MARBLE

WATER PROOF MORTAR STEEL TROWEL
CINDER CONCRETE 1:20-1:60
WATER PROOF SHEETING

MORTAR STEEL TROWEL V.P.

MANIFOLD DETAIL 1:20

CONCRETE V.P.

EXT. WALL MARBLE

WATER PROOF MORTAR STEEL TROWEL

ROOF WATER PROOF SHEETING
WATER PROOF MORTAR STEEL TROWEL

MORTAR V.P.

EXT. WALL WHITE MARBLE

EXT. WALL WHITE MARBLE

INT. WALL WHITE MARBLE

ELEVATION 1:50

DETAIL 1:20

SECTION

NEOPRENE GUM PACKING

BRASS CASE

STAINLESS 600

MARBLE

CALKING

DETAIL 1:10

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

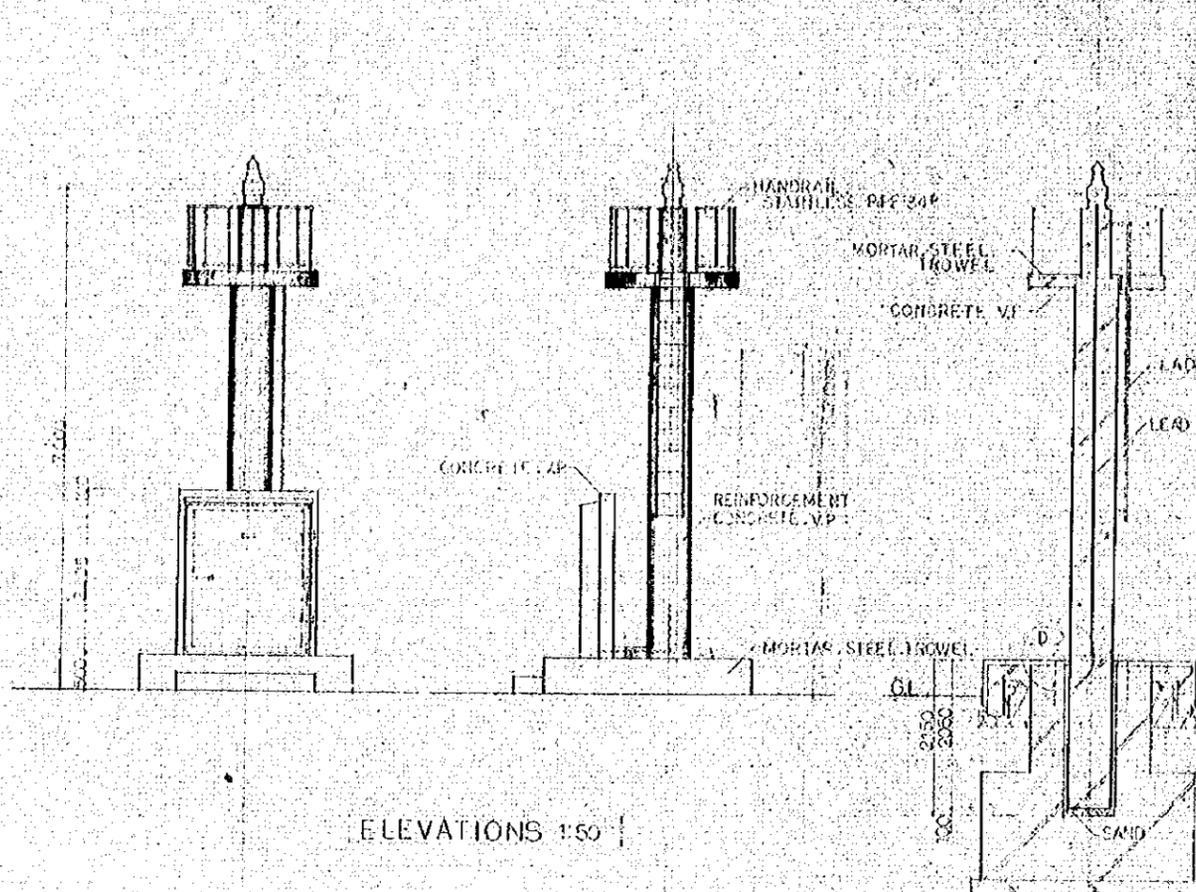
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
REAR LEADING LIGHT
SECTION, ELEVATION & DETAILS

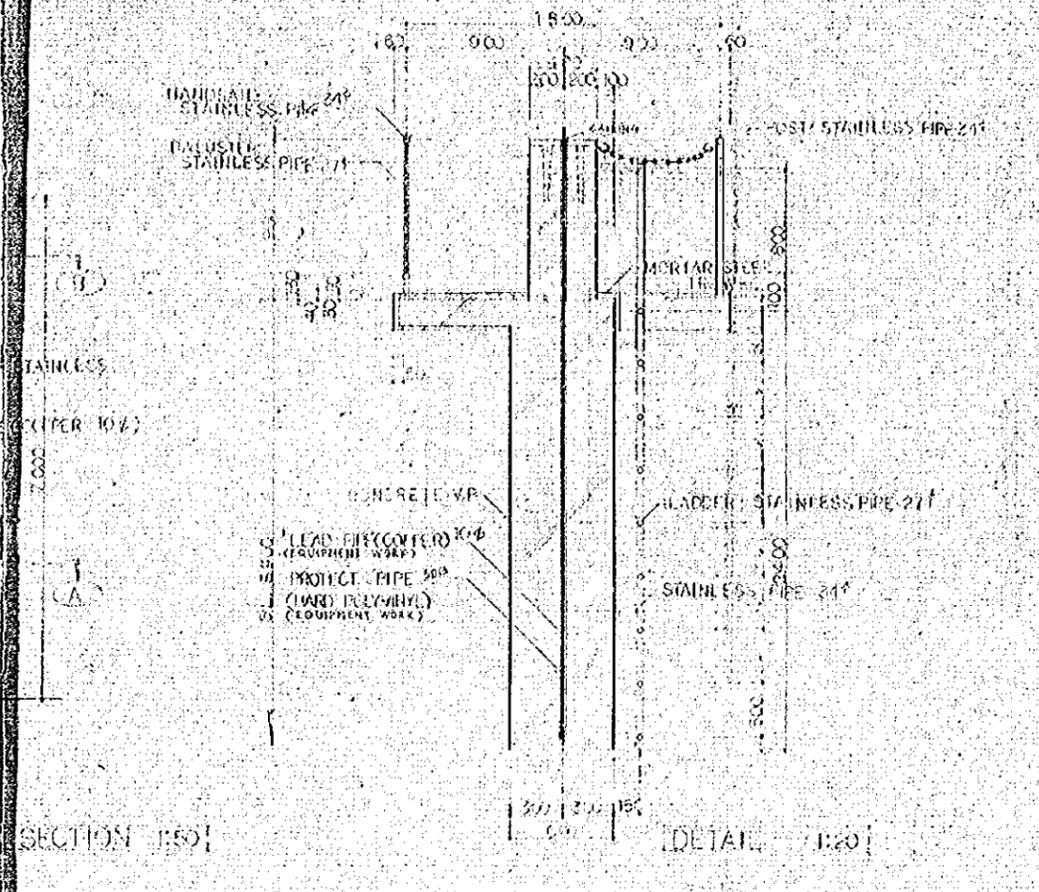
JAPAN INTERNATIONAL COOPERATION AGENCY

APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
SCALE		REV. NO.	

1:10 1:20 1:50
DATE: DEC 10 1975 DWG. NO: 11-25

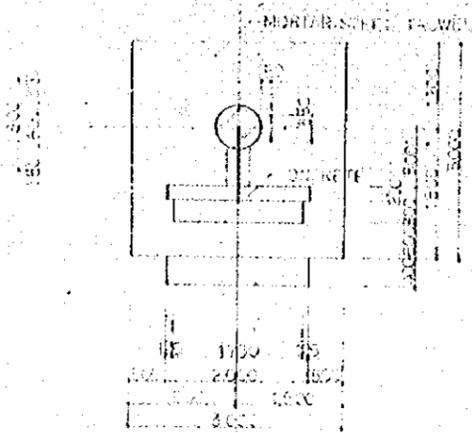


ELEVATIONS 1:50

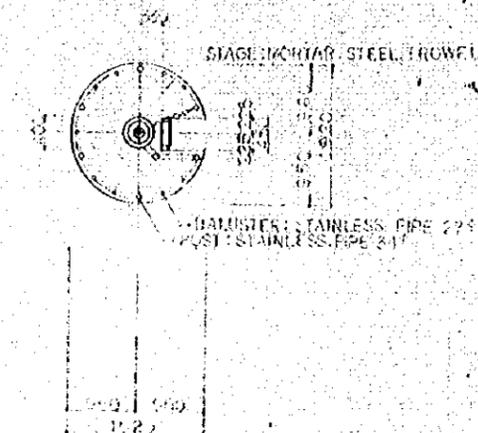


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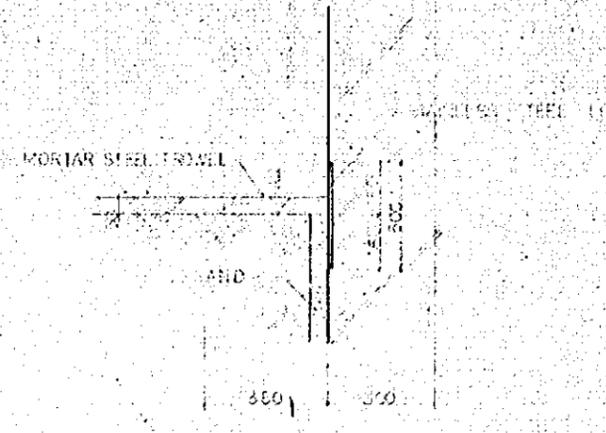
DETAIL 1:20



(A) PLAN 1:50



(B) PLAN 1:50



(C) DETAIL 1:20

NO.	DATE	DESCRIPTION	APPROVED

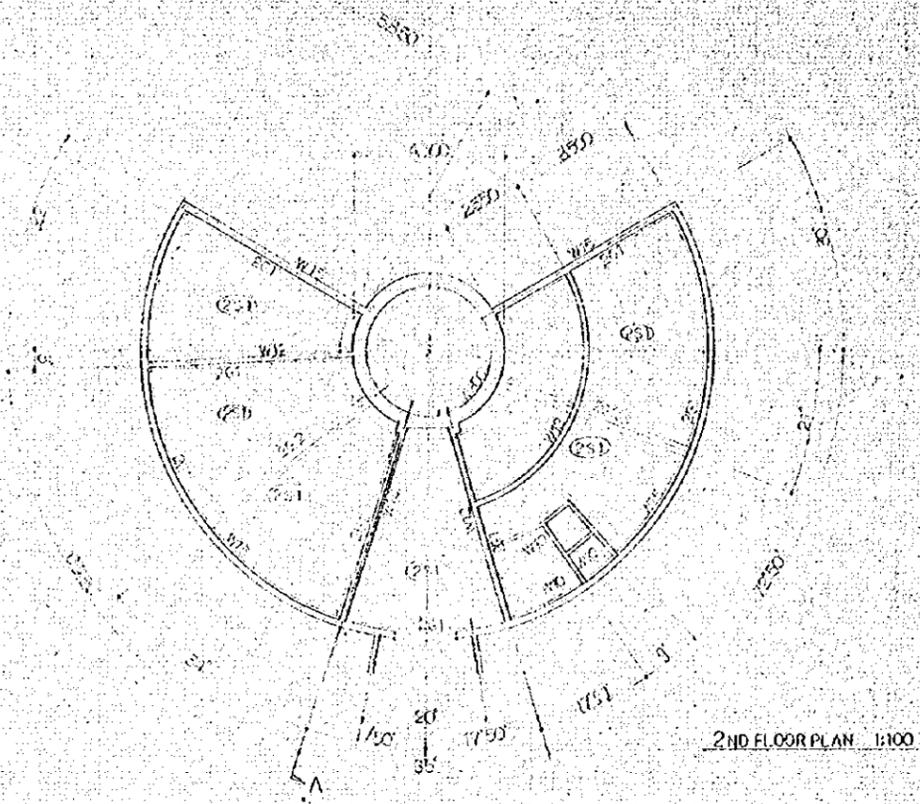
REVISION
 PORT MUHAMMAD-BIN-QASIM PROJECT
 PAKISTAN

NAVIGATION AIDS
 ARRANGEMENT
 LIGHT-BEACON
 PLANS, ELEVATIONS,
 SECTION & DETAILS

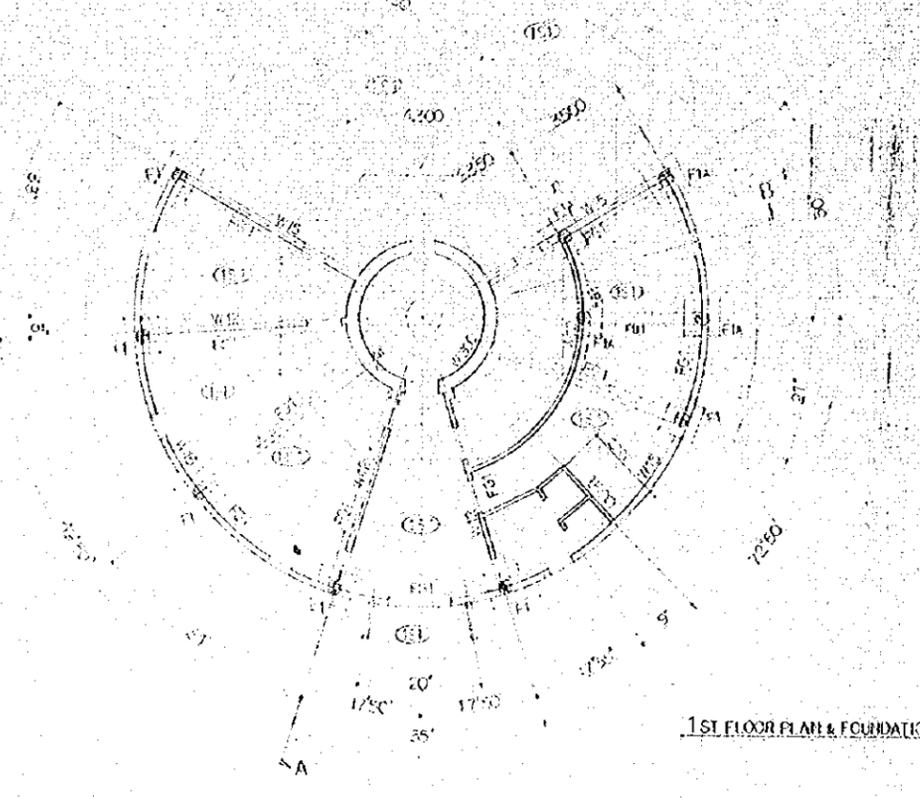
JAPAN INTERNATIONAL COOPERATION AGENCY
 CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING
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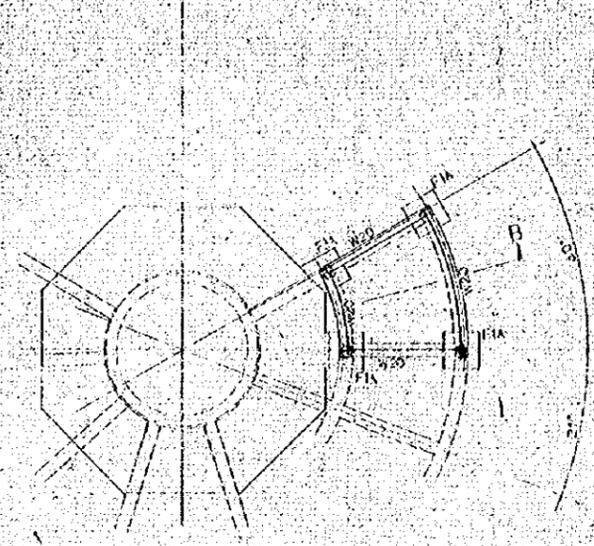
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 DATE: 10/1975 DWG. NO: 2-6



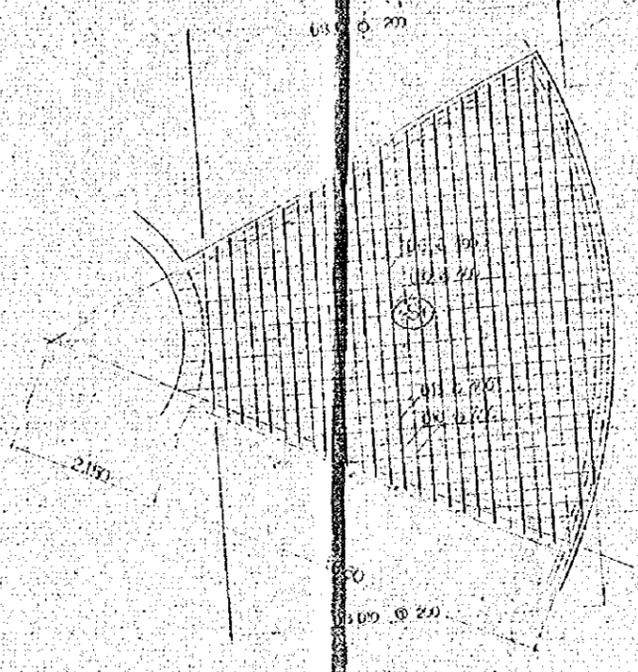
2ND FLOOR PLAN 1:100



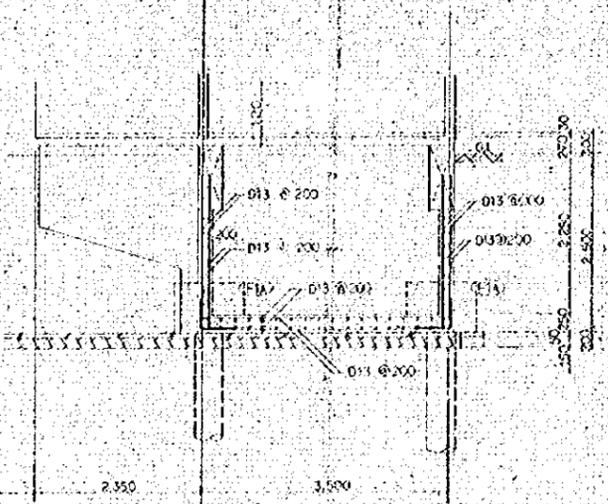
1ST FLOOR PLAN & FOUNDATION PLAN 1:100



BASEMENT PLAN & FOUNDATION PLAN 1:100



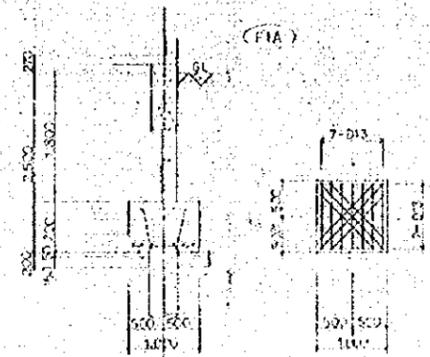
DRAWING OF BAR ARRANGEMENT 1:50



B SECTION 1:50



A SECTION 1:50



LIST OF FOUNDATION 1:50

NO.	DATE	DESCRIPTION	APPROVED

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT HOUSE

STRUCTURAL DRAWINGS

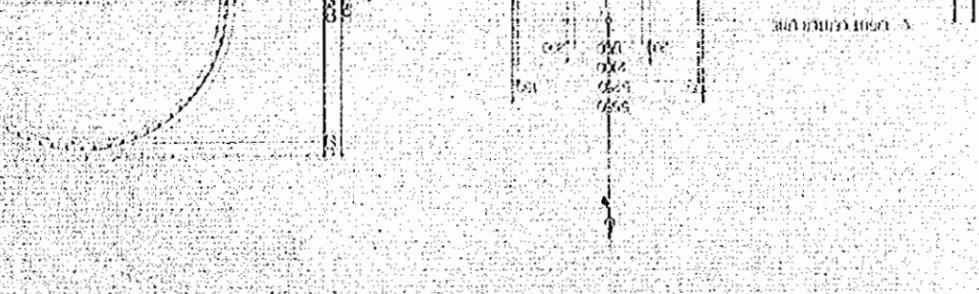
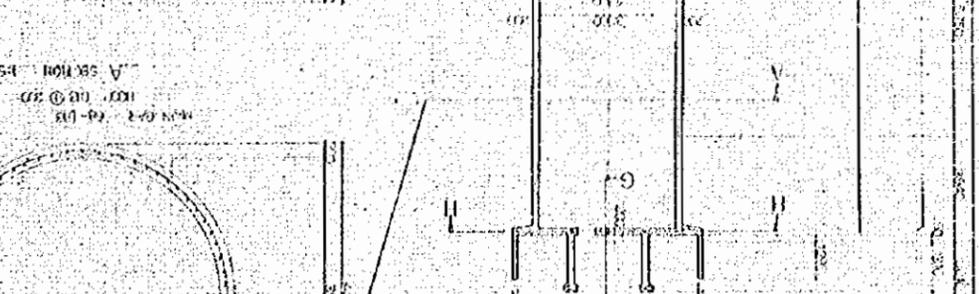
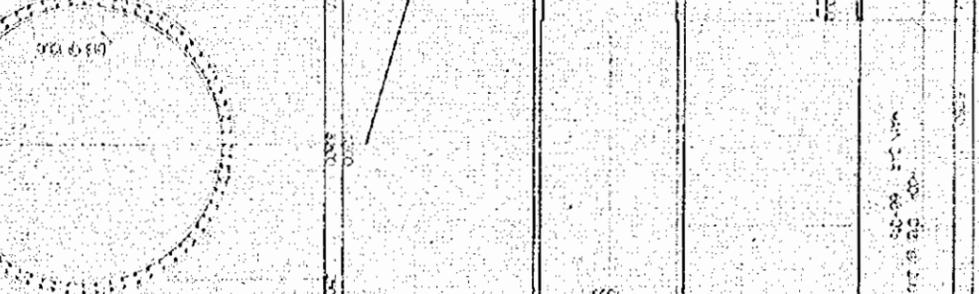
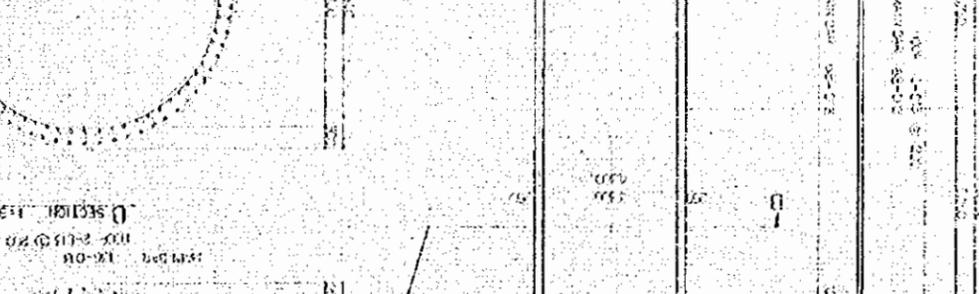
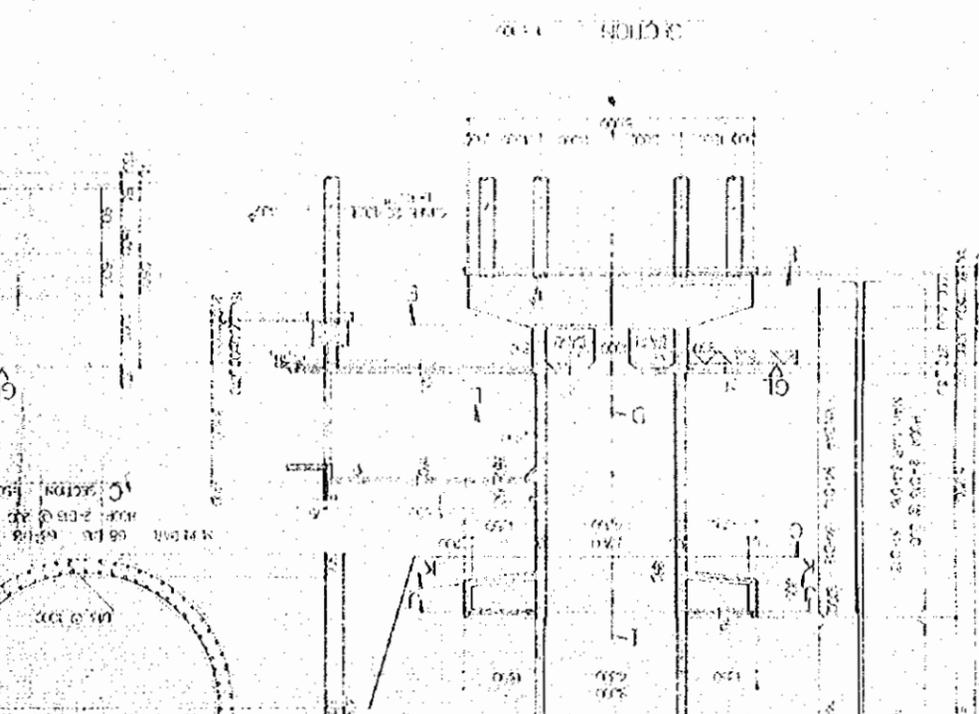
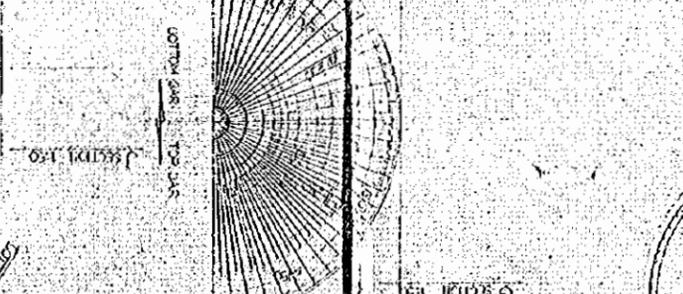
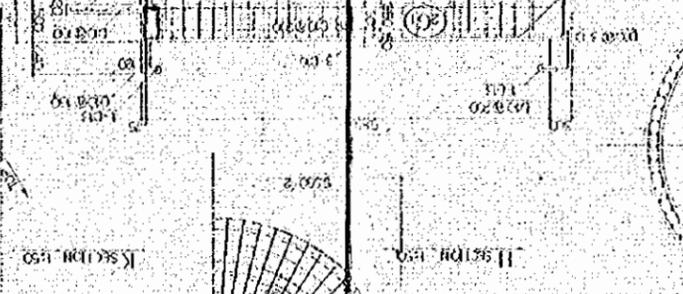
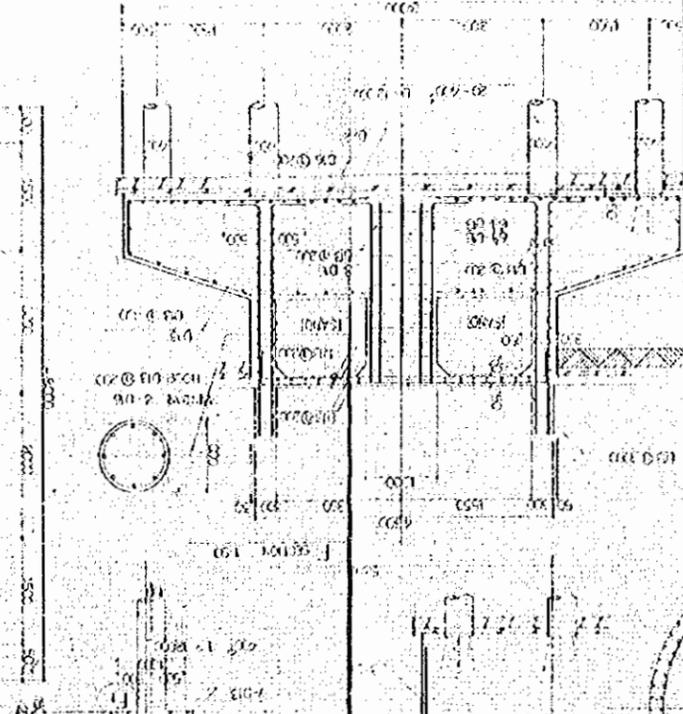
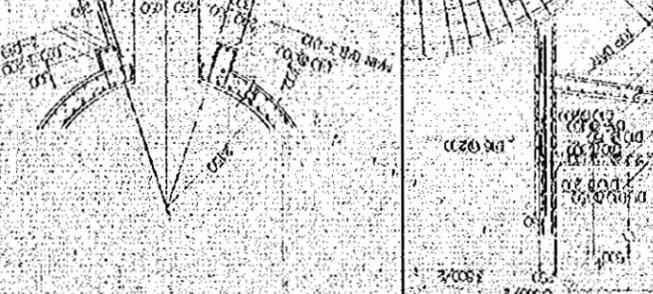
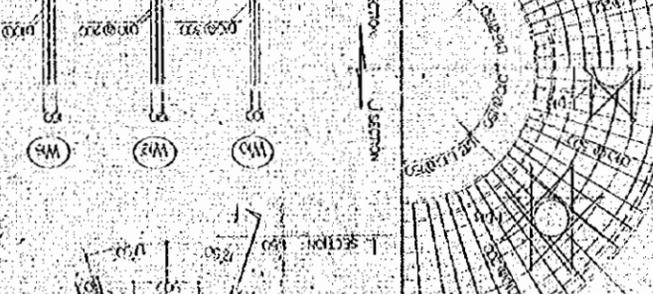
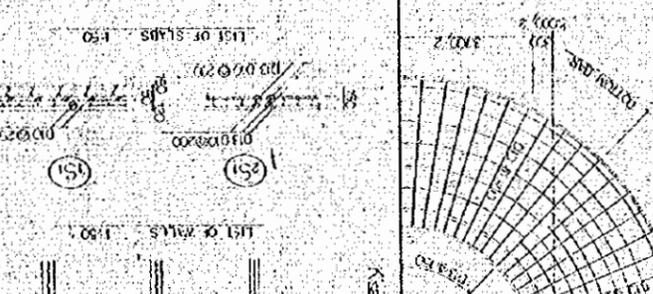
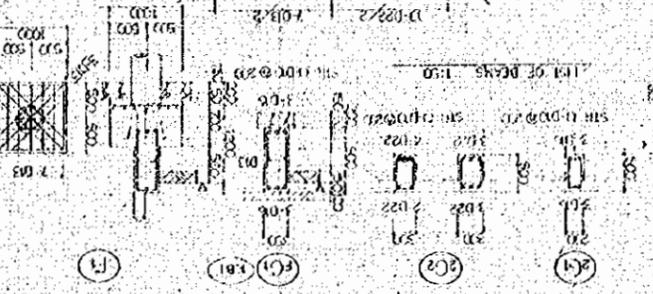
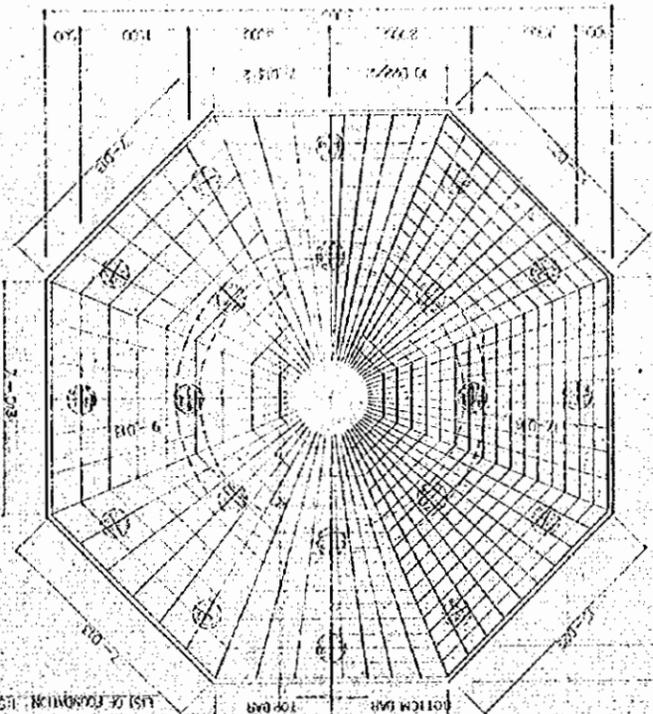
JAPAN INTERNATIONAL COOPERATION AGENCY
CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE 1:50 1:100
DATE 10/10/1975 DWG. NO. 2/1

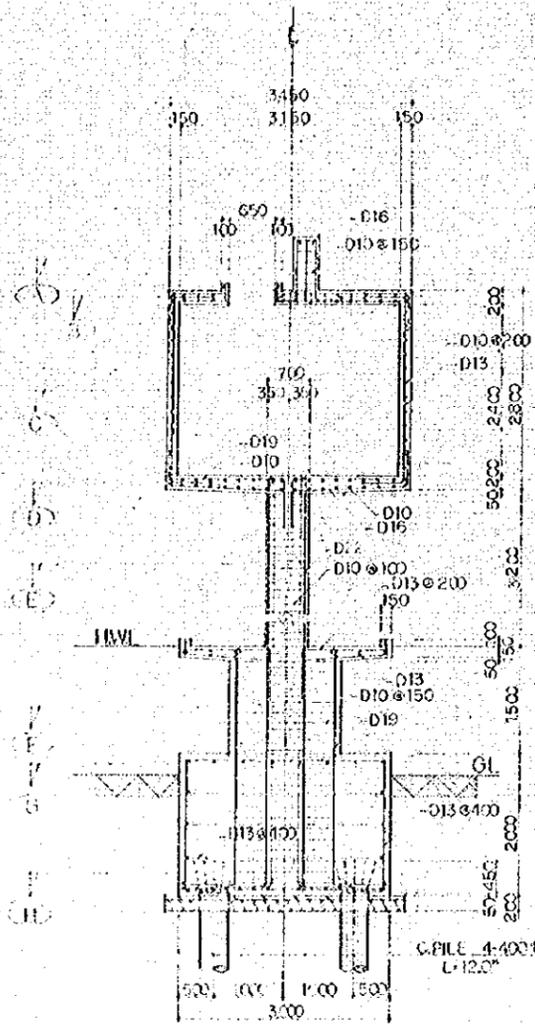
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 CHECKED: []
 DRAWN: []
 CONSULTANTS
JAPAN INTERNATIONAL COOPERATION AGENCY
STRUCTURAL DRAWING
ARRANGEMENT
LIGHT HOUSE
NAVIGATION AIDS
PARISIAN
PORT MUMAHAB-BIN-GASIM PROJECT

NO	DATE	REVISION	APPROVED



GENERAL NOTES

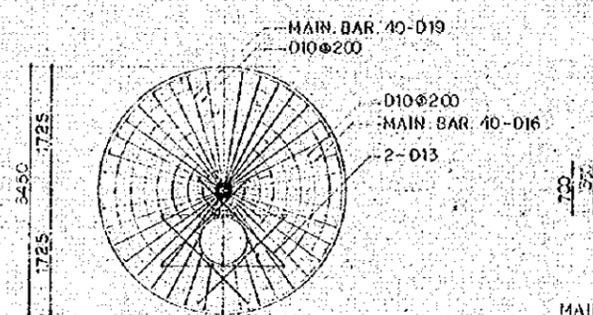
- 1. REINFORCING BAR
- 2. CONCRETE
- 3. PILE
- CONCRETE PILE 400φ (LENGTH=120')
- BEARING CAPACITY PILE
- 1.50 TON/PILE



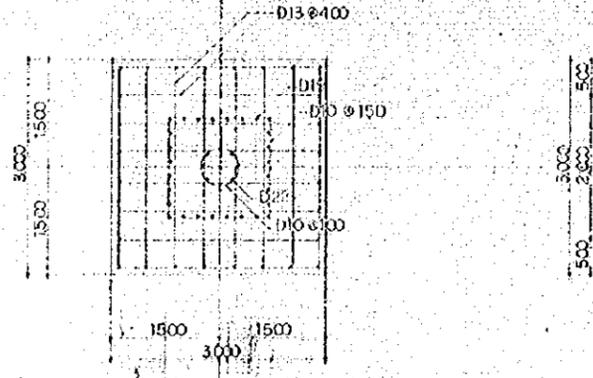
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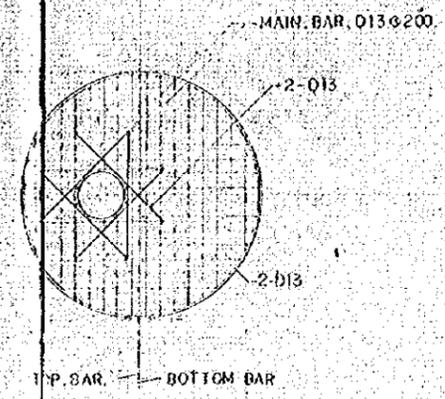
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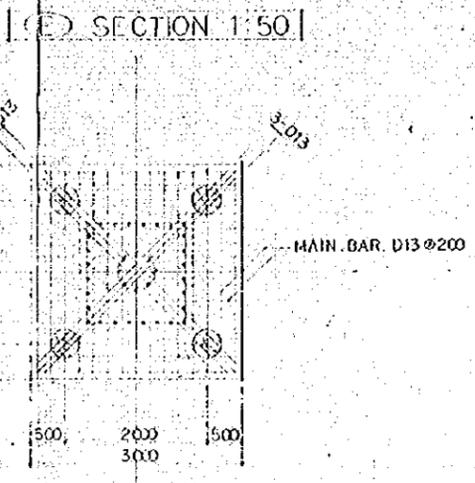


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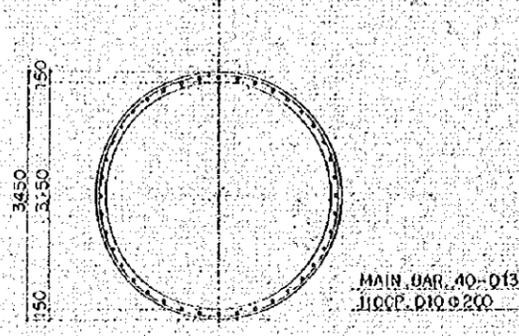


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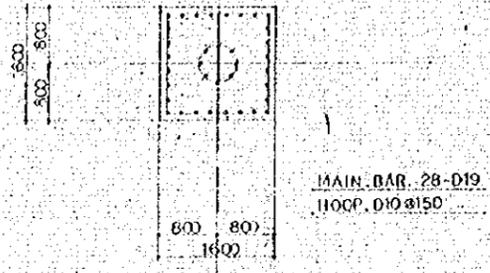
MAIN BAR - 22
HOOP - 10



[E] SECTION 1:50



[F] SECTION 1:50



[G] SECTION 1:50

NO.	DATE	DESCRIPTION	APPROVED

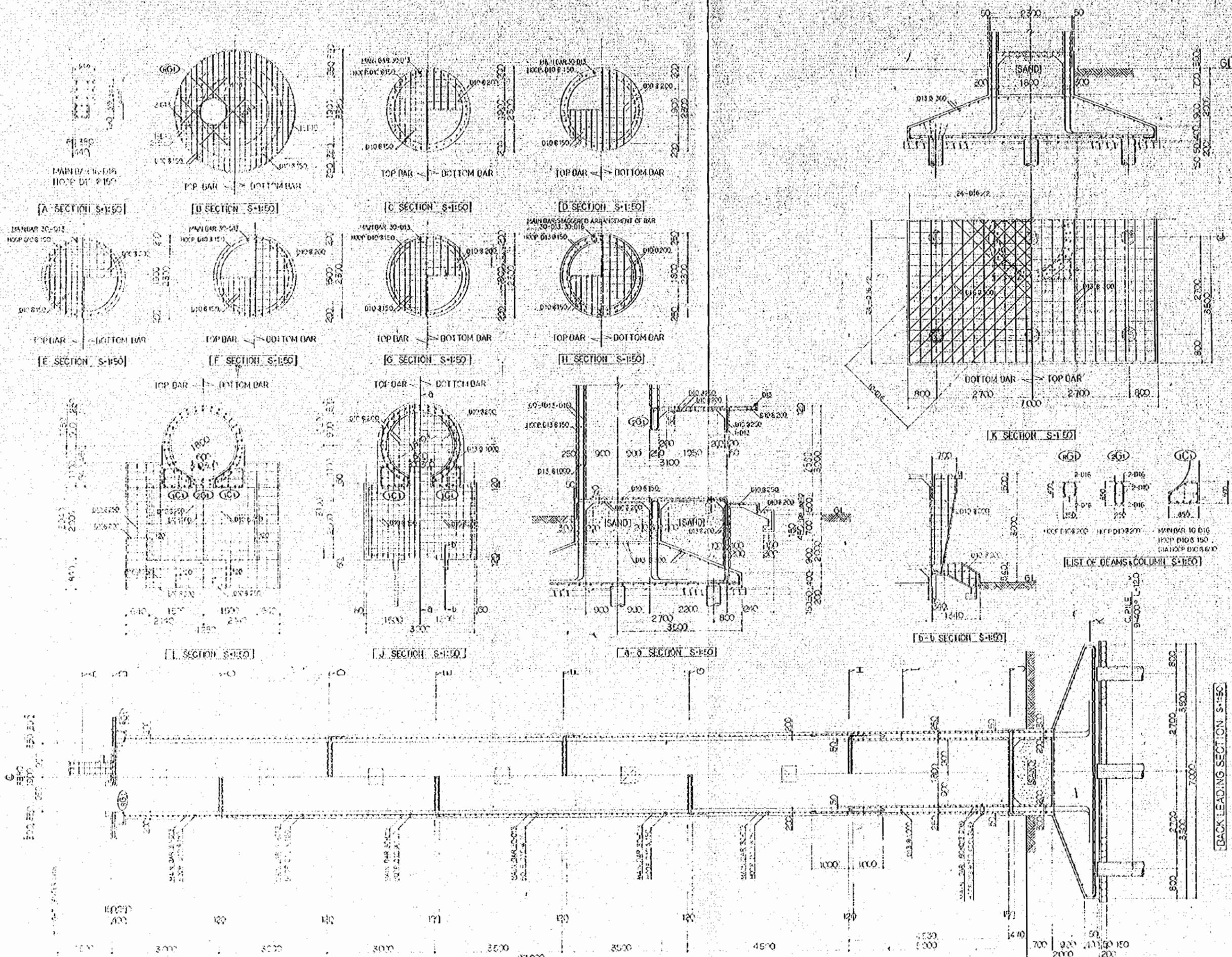
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
FRONT LEADING-LIGHT
STRUCTURAL DRAWINGS

JAPAN INTERNATIONAL COOPERATION AGENCY

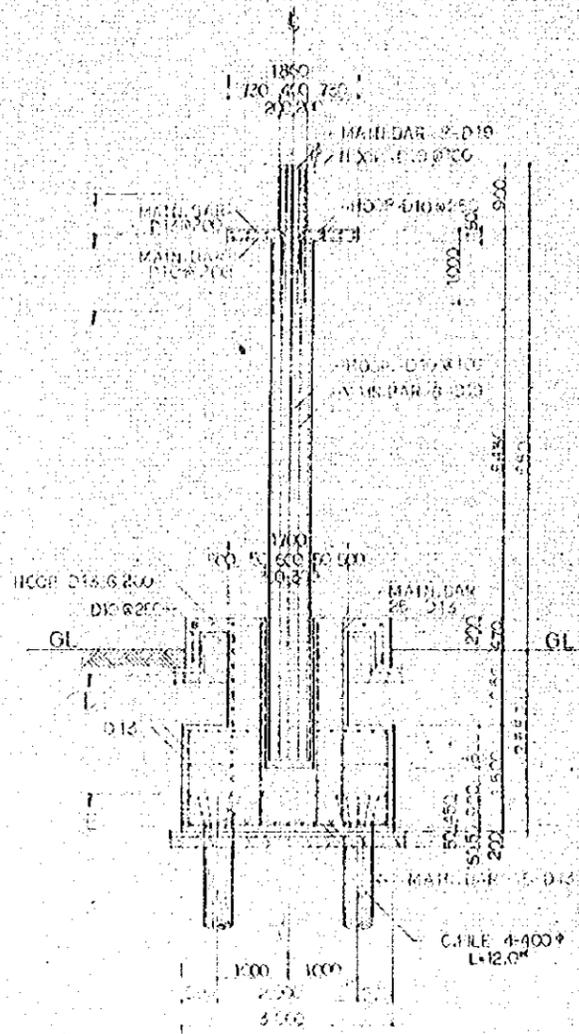
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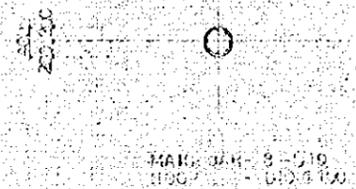


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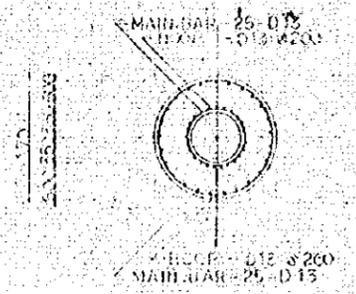
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REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT REAR LEADING-LIGHT STRUCTURAL DRAWINGS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>J. Iqbal</i>	<i>S. M. Khan</i>	<i>M. A. Qureshi</i>	<i>M. Qureshi</i>
SCALE		REV. No.	
1:50			
DATE (X) 10 1975		DWG. NO. II-31	



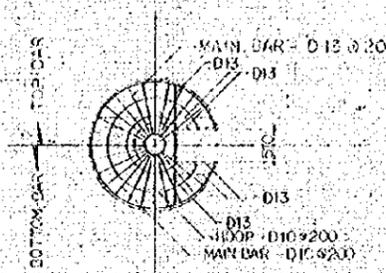
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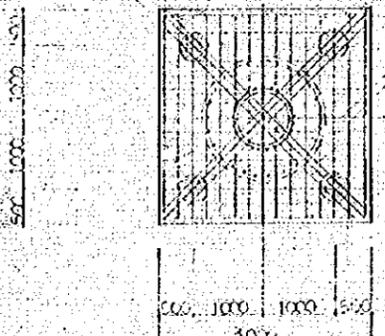
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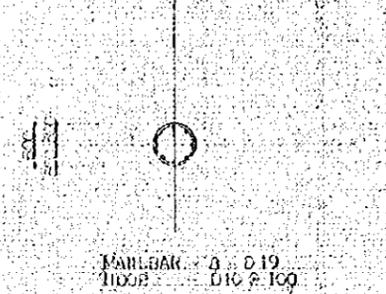
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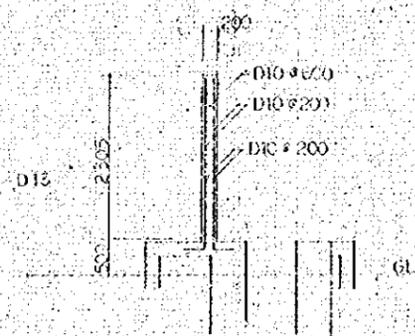
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[CE] SECTION 1:50



[CD] SECTION 1:50



NO.	DATE	DESCRIPTION	APPROVED

REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

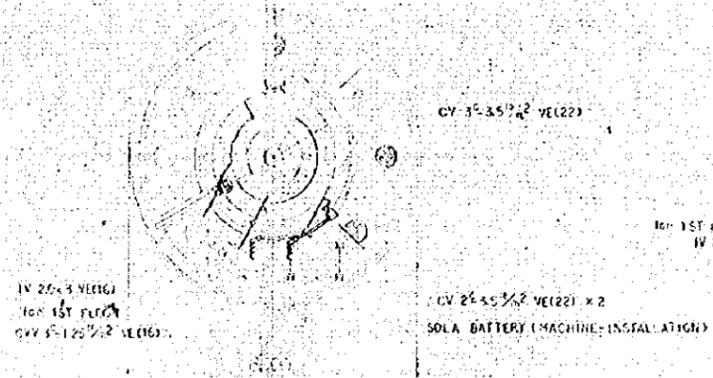
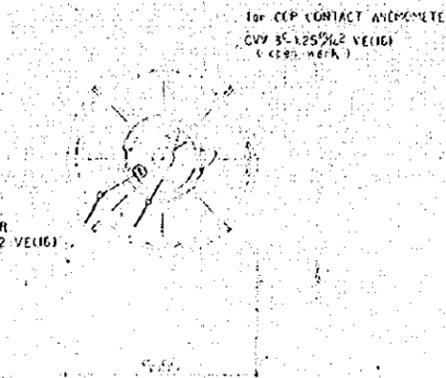
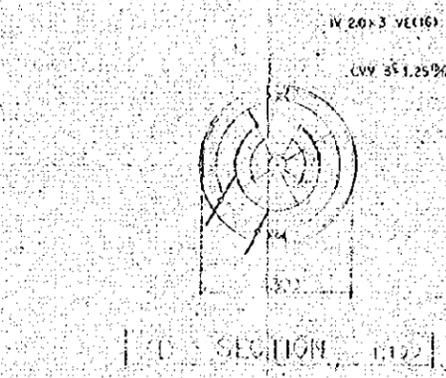
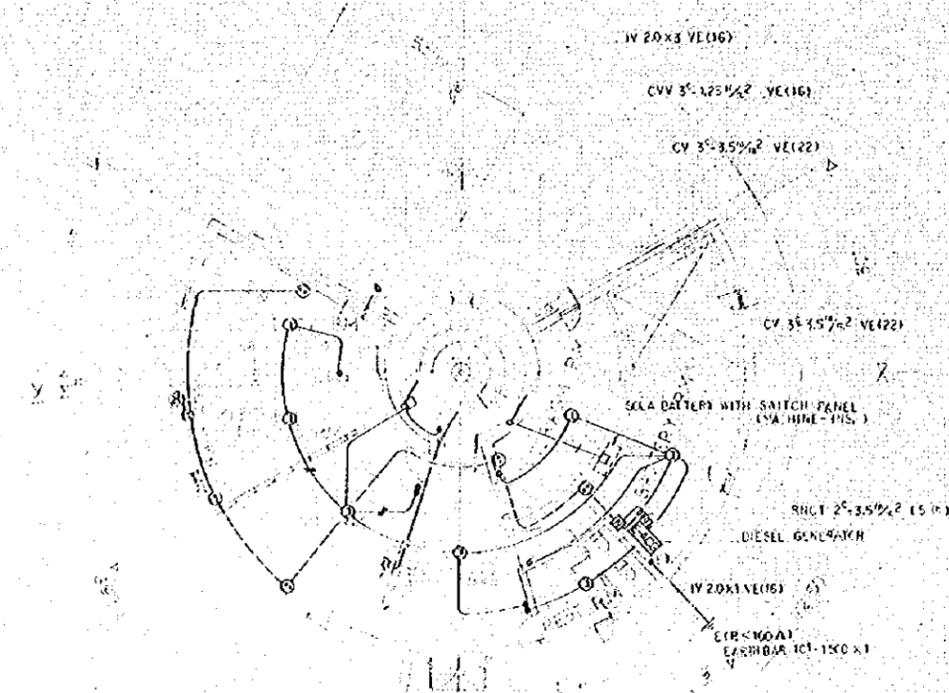
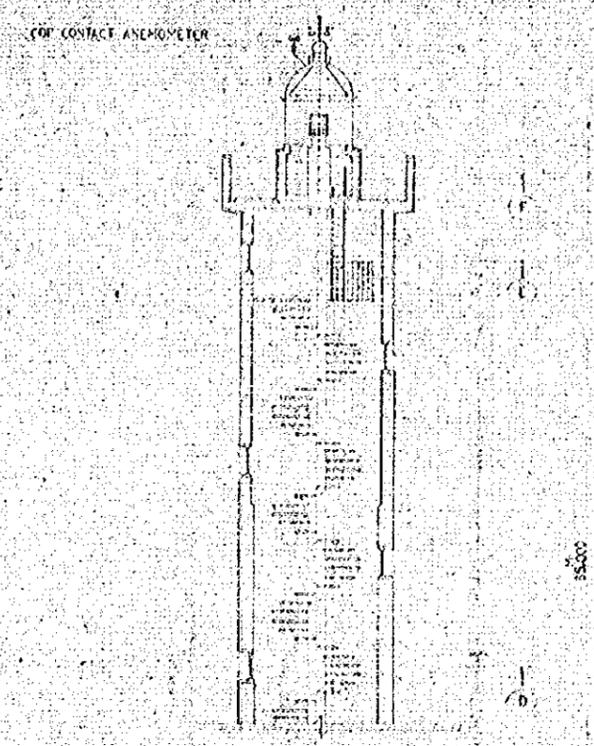
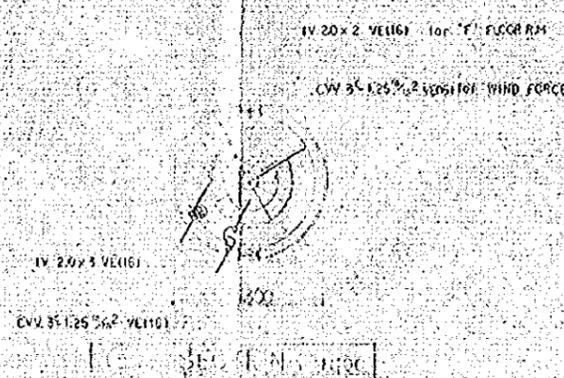
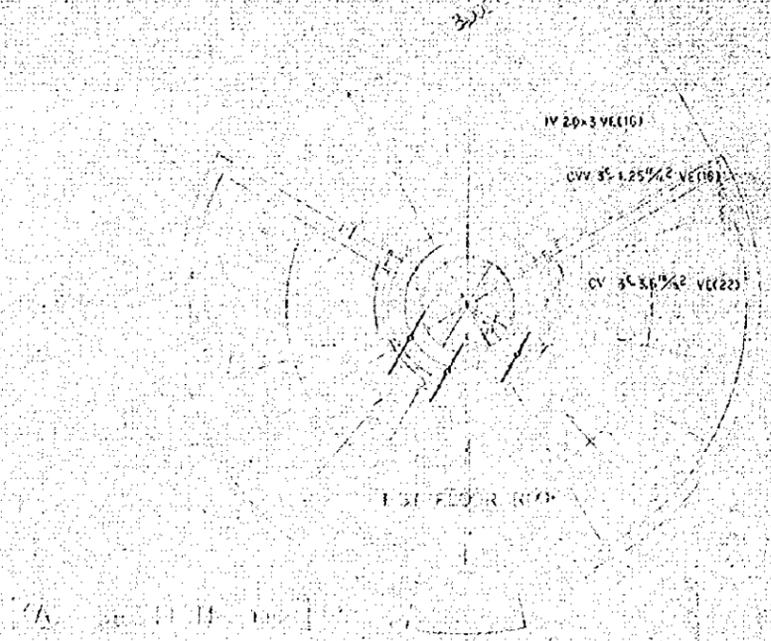
NAVIGATION AIDS
ARRANGEMENT
LIGHT BEACON
STRUCTURAL DRAWINGS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE	REV. NO.		

1:50

DATE DEC. 10, 1975 DWG. NO. 11-31



SECTION (112) & SECTION (113)

SECTION (110)

NO	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
 PAKISTAN

NAVIGATION AIDS
 ARRANGEMENT
 LIGHT-HOUSE
 ELECTRICAL INSTALLATIONS NO. 1
 INDCOR ELECTRIC WIRING PLAN

JAPAN INTERNATIONAL COOPERATION AGENCY

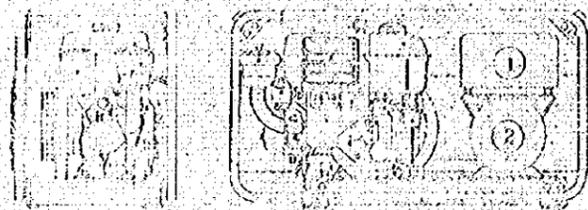
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>T. Umeda</i>			<i>M. J. J. J.</i>

SCALE 1:100

DATE: 10/10/77 DWG. NO: J-32

DIESEL GENERATOR

DIMENSIONS (mm)



UNIT	L	W	H
Dimensions	1005	400	511
Weight	15.0	kg	

SPECIFICATIONS

GENERAL SPECIFICATIONS	CAPACITY	2.2 KVA	2.2 KW
	VOLTAGE	230 V	
	AMPERE	10 A	
	FREQUENCY	50 Hz	
	RATED SPEED	2000 RPM	
	PHASE	SINGLE PHASE	
	POWER FACTOR	1.0	
	EXCITING SYSTEM	STATIC EXCITING SYSTEM	
	DRIVING SYSTEM	V BELT DRIVE	
	TYPE	4-CYCLE HORIZONTAL DIESEL ENGINE	
ELECTRICAL SPECIFICATIONS	DOSE x STROKE	75 x 75	
	IGNITION	5 HP / 2000 RPM	
	STARTING SYSTEM	HAND	
	COOLING SYSTEM	CONDENSER	
	LUBRICATION SYSTEM	FORCED LUBRICATION WITH TROCH	
	PURE OIL CONSUMPTION	LTR./HOUR: 1.24 IMP. GAL./HOUR: 0.21 U.S. GAL./HOUR: 0.34	
	LUB. OIL CONSUMPTION	LTR./HOUR: 0.009 IMP. GAL./HOUR: 0.002 U.S. GAL./HOUR: 0.0028	
	FUEL TANK CAPACITY	LTR.: 6.5 IMP. GAL.: 1.4 U.S. GAL.: 1.7	

NAME OF PARTS

1	SWITCH BOARD
2	A.C. GENERATOR
3	FUEL OIL TANK
4	CONDENSER
5	AIR CLEANER
6	SILENCER
7	C.W. SUPPLY
8	REGULATOR HANDLE
9	LUB. OIL SUPPLY PORT
10	OIL INDICATOR
11	FUEL OIL FILTER
12	STARTING HANDLE

SWITCH BOARD ACCESSORIES

1	FUSE LAMP	1
2	CONSENT	2
1	1/2 FUSE BRANCH	1

STANDARD SPARE PARTS

1	PILOT LAMP	1
1	CARBON BRUSH	1 SET

STANDARD ACCESSORIES

1	TOOLS FOR MAINTENANCE AND INSPECTION	1 SET
1	WATER COVER	1

- Notes:
- 1. (Symbol) include conduit base work with specification:
 - 17 20 x 2 VE (16)
 - 17 20 x 3 VE (16)
 - 2. (Symbol) with specification:
 - IV 600V polypropylene insulated wire
 - CV 600V twisted pair shielded cable with insulation and polypropylene braided shielded cable
 - CV 600V polypropylene sheathed cable (control cable)
 - CV 600V rubber covered insulated polypropylene cable
 - 3. (Symbol) stainless steel 0.6mm



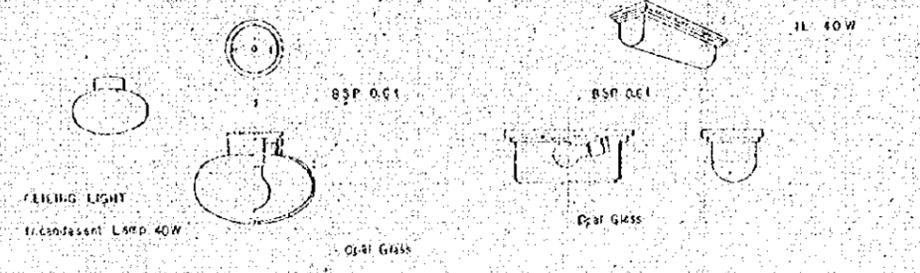
CUP CONTACT ANEMOMETER

Wind velocity is measured by means of revolving three-cups, and provides switch closures for each turn of wind cup. Device of contact ensures constant time so that prevents the contact from making in the off position. Anemometer rotor measuring 10cm in diameter consists of three-cups, each 10cm in diameter. Over all height of cups and housing 37 cm. Corrosion-free construction. Accuracy: better than 5% between 2-60m/s. Starting wind speed: less than 2m/s. Wt. 35g.

EVENT COUNTER (METRIC CASE)

Event counter operates continuously with 10, 15 and 30mm diameter. Wind cup passing a station in period time may be read off visually at a remote location. Remote type indicator has five multiplying value dial as from 1X to 10 up to 10000 X 10000. Size: 125 X 100 X 100mm. Wt. 0.2kg.

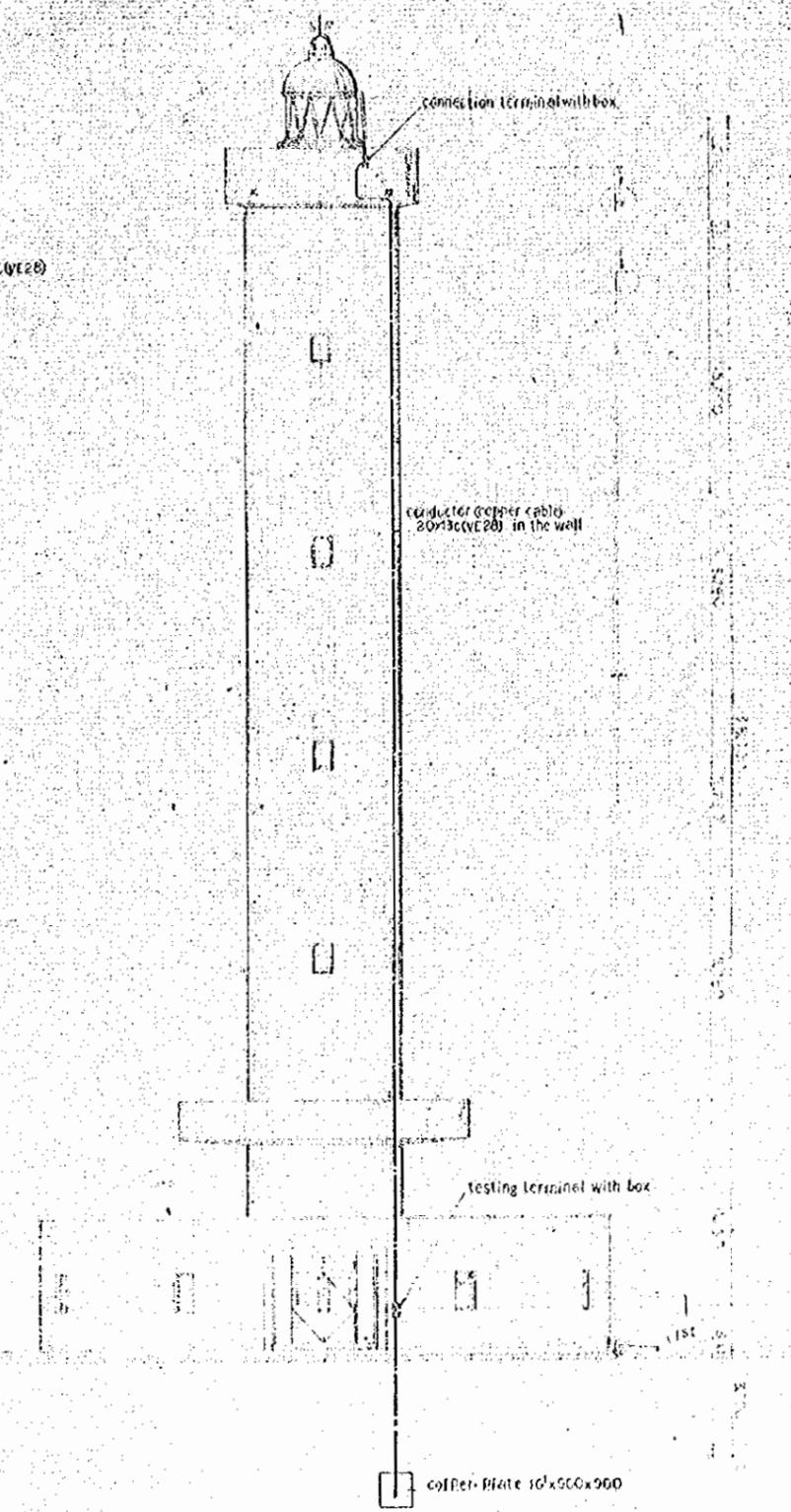
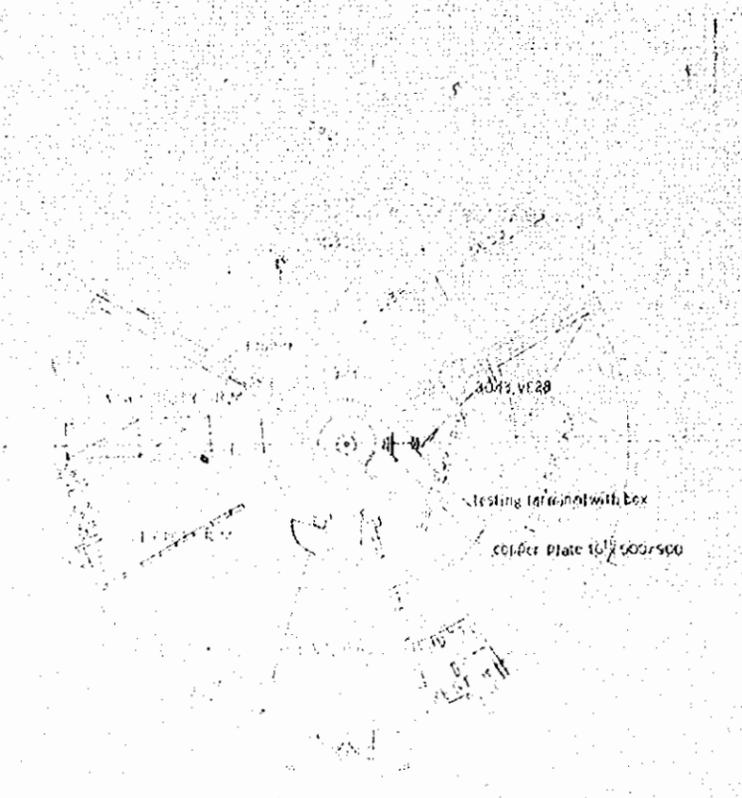
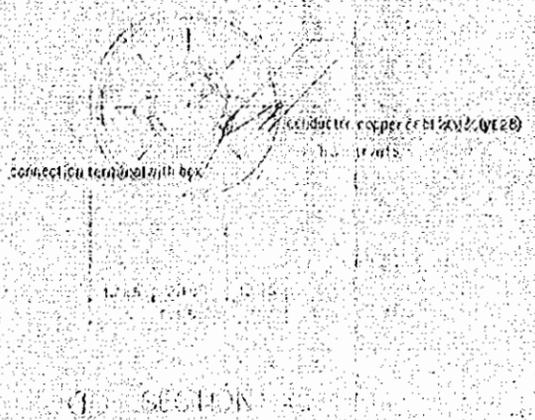
FIGURE PLAN OF LIGHTING FIXTURE



EXPLANATORY NOTES

Symbol	Name and rating etc.
A, A1, A2	Diesel Generator Single-phase AC 220VA, 220V
(S)	Control Switch Re Fuse Breaker 10-50A, 250V, 1 (Box type)
(C)	Ceiling Light Lighting Fixture (see drawing)
(B)	Bracket light Drawing vide
(O)	Socket-outlet 2P 250V 10A
(T)	Toggle Switch 1P 250V 10A
(J)	Junction Box Flush stainless plate
(L)	Landing Airing Cell-Steel
(F)	Floor Floor-slab
(A)	Cup Contact anemometer
(E)	Event Counter (Metric case)
(ET)	Earth Terminal
(EP)	Earth plate earth bar 10-4-1500
(P)	Plan P-300

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT LIGHT HOUSE			
ELECTRICAL INSTALLATIONS NO.2 MENTION SPECIFICATIONS			
JAPAN INTERNATIONAL COOPERATION AGENCY CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>J. H. ...</i>			<i>M. J. ...</i>
SCALE		REV. NO.	
DATE: 10/1976		DWG. NO: 1/33	



NO.	DATE	DESCRIPTION	APPROVED

REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-HOUSE

LIGHTING ROD EQUIPMENT (1)
PLAN, SECTION & ELEVATION

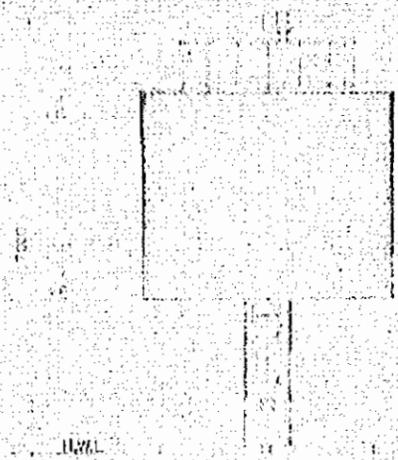
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS

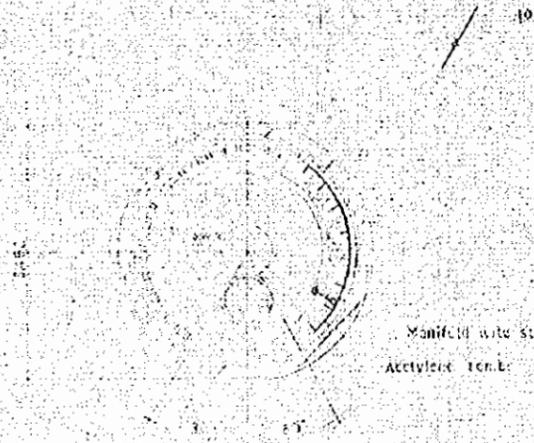
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SCALE

DATE: 10/1975 DWG. NO. 34



ELEVATION 1:100



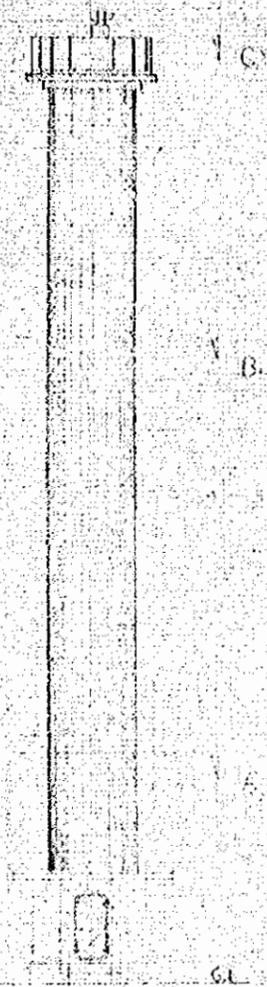
Manifold with stop valves
Acetylene tank

PLAN 1:10



Large Light Lanterns
Accy. pipe cap stop

PLAN 1:10



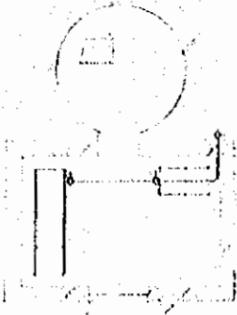
ELEVATION 1:100

RIGHT LEADING-LIGHTS

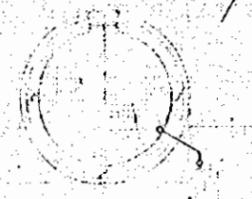
LEAR LEADING-LIGHTS

Scale: 1 MP - 10 mm

Manifold with stop valves



PLAN 1:10



PLAN 1:10



PLAN 1:10

Accy. pipe cap stop
Large Light Lanterns



PLAN 1:10

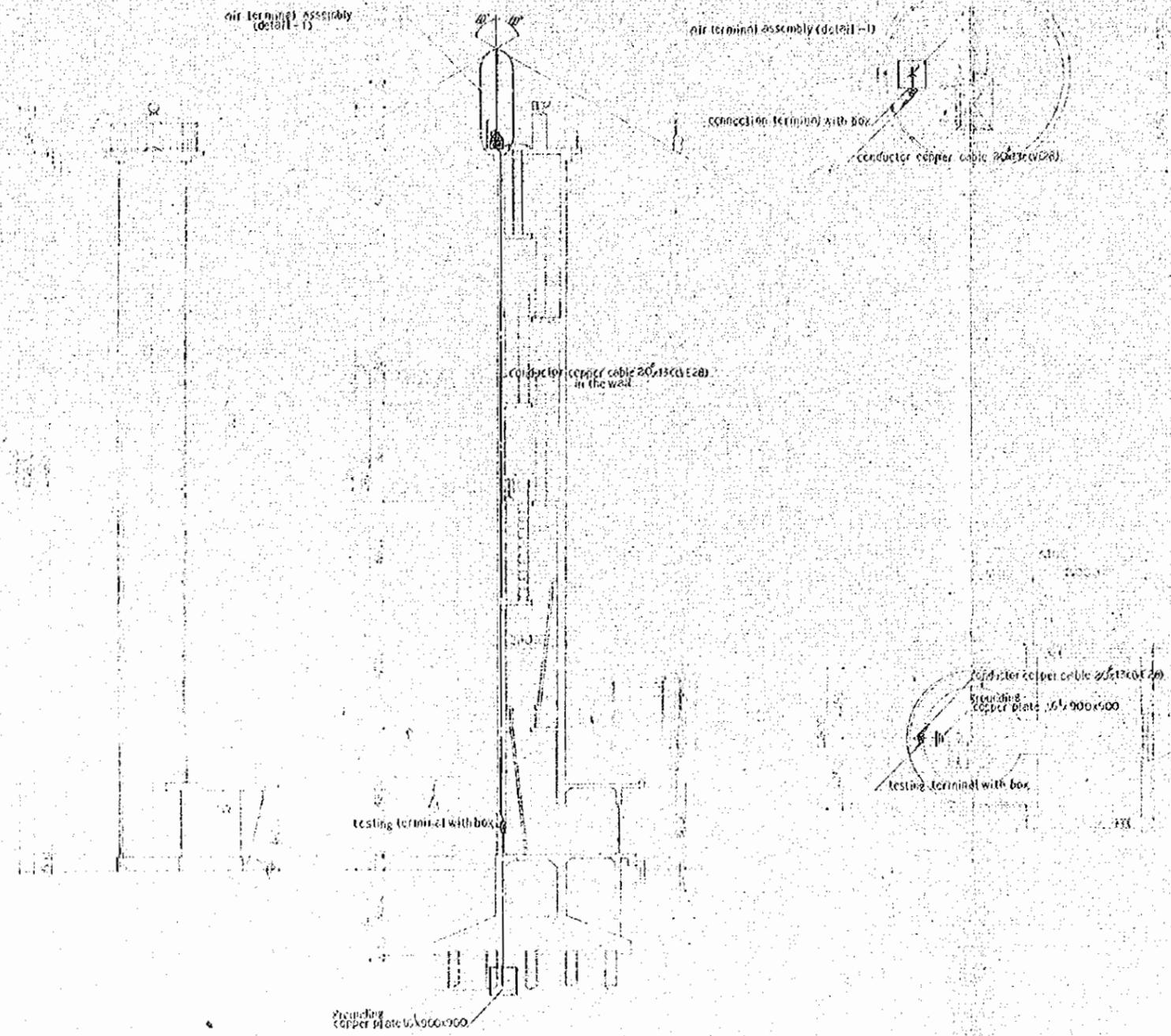
NO.	DATE	DESCRIPTION	APPROVED

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LEADING LIGHTS
GAS PIPING

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE	REV. NO.		
DATE: DEC. 10 1975	DWG. NO: JI-35		



NO.	DATE	DESCRIPTION	APPROVED

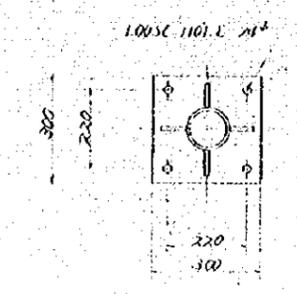
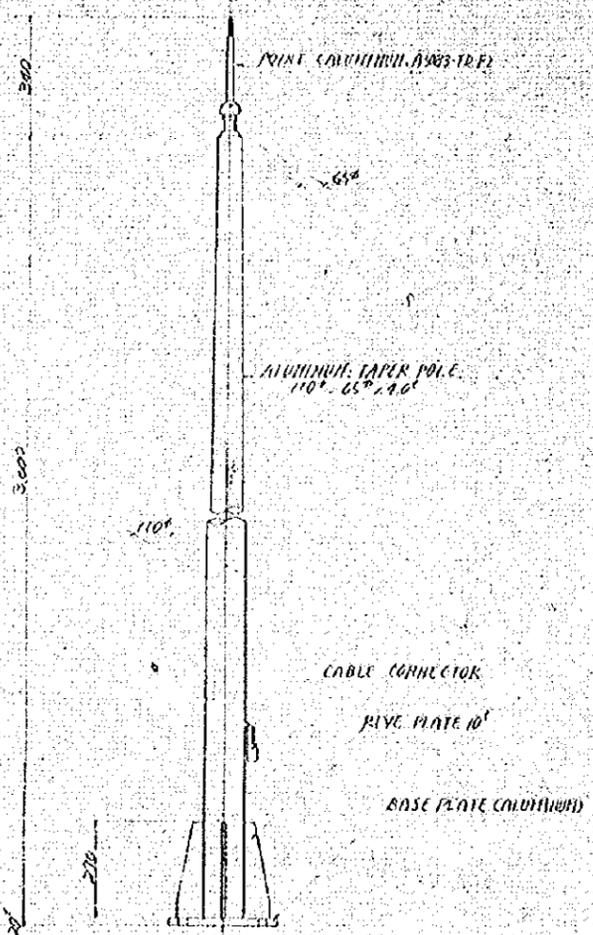
REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

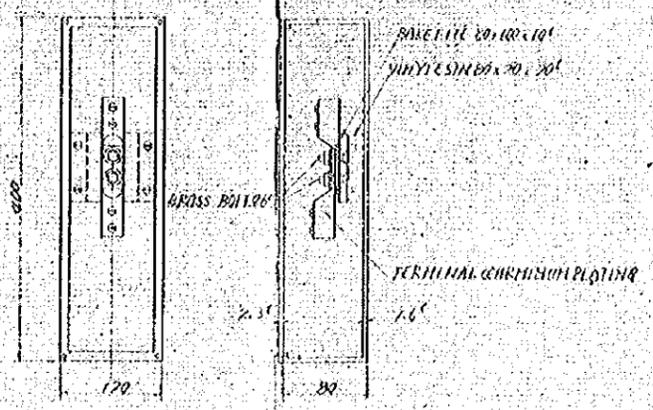
NAVIGATION AIDS
ARRANGEMENT
REAR LEADING LIGHTS
LIGHTING ROD EQUIPMENT (2)
PLAN, SECTION & ELEVATION

JAPAN INTERNATIONAL COOPERATION AGENCY

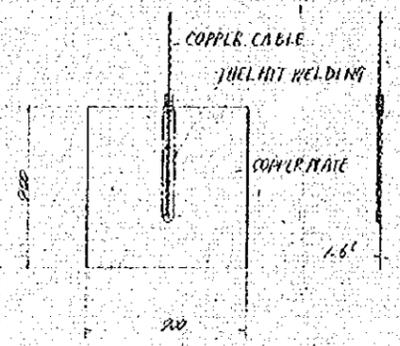
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>H. S. Adh</i>			<i>H. S. Adh</i>
SCALE			REV. NO.
1:50			
DATE: DEC 10, 1975			DWG. NO: J-36



DETAIL - 1
AIR TERMINAL ASSEMBLY



TESTING AND CONNECTION TERMINAL WITH BOX



GROUNDING COPPER PLATE SCALE 1/20

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT. MUHAMMAD BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT HOUSE AND
REAR LEADING LIGHTS
LIGHTING RCD EQUIPMENT (3)
DETAIL PLAN

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>T. Hasegawa</i>			<i>M. Subhan</i>
SCALE			REV. NO.

DATE: 10-19-75 DWG. NO: 11-37

DATE: 10.19.71 DWG. NO.: 38

SCALE: 1:200

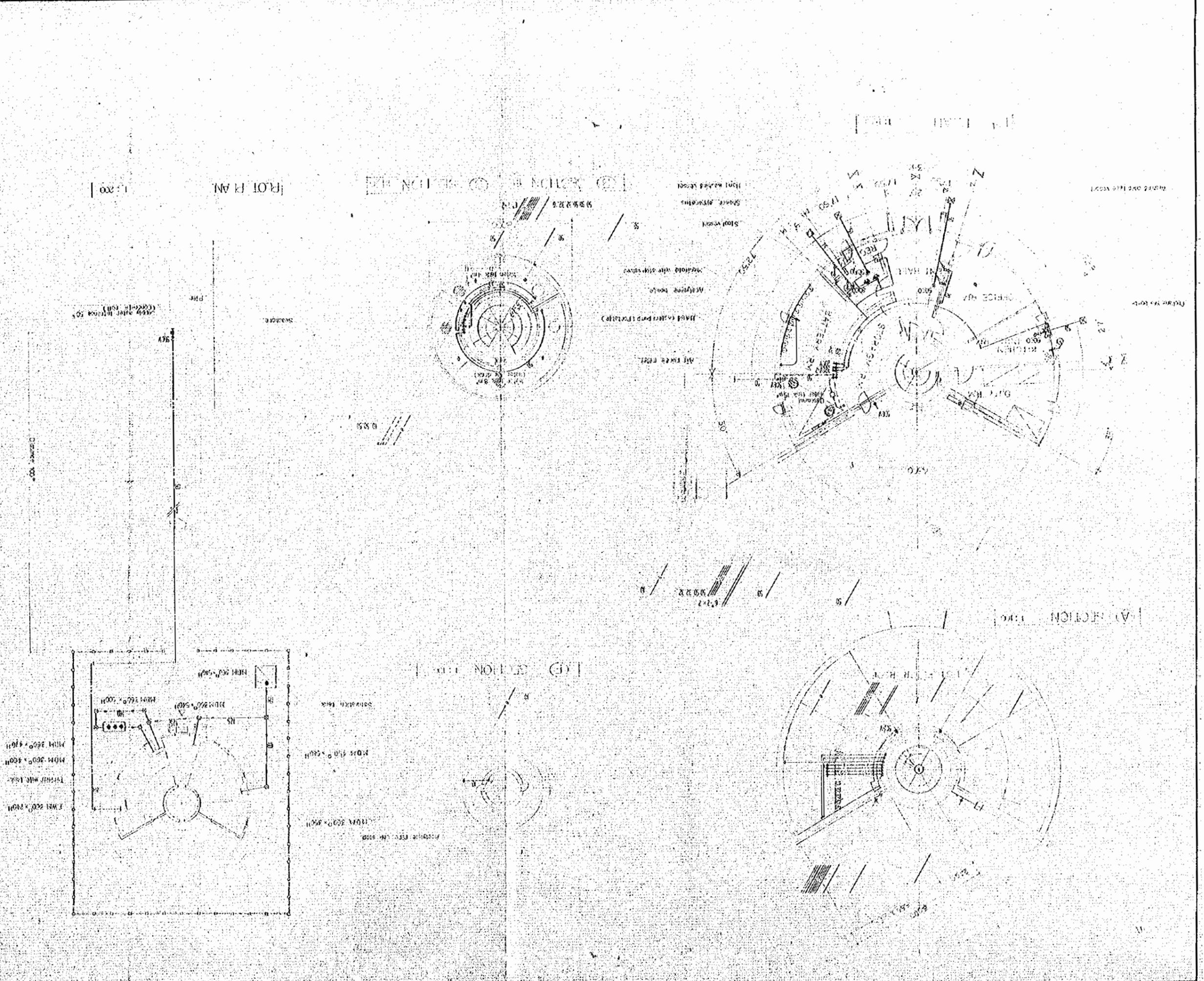
PROJECT: NAVIGATION AIDS ARRANGEMENT LIGHT HOUSE WATER SUPPLY TO DRAINAGE AND PUMPING EQUIPMENT PLAN FIGURES NO. 1

CONSULTANTS: JAPAN INTERNATIONAL COOPERATION AGENCY

REVISION:

NO.	DATE	DESCRIPTION	APPROVED

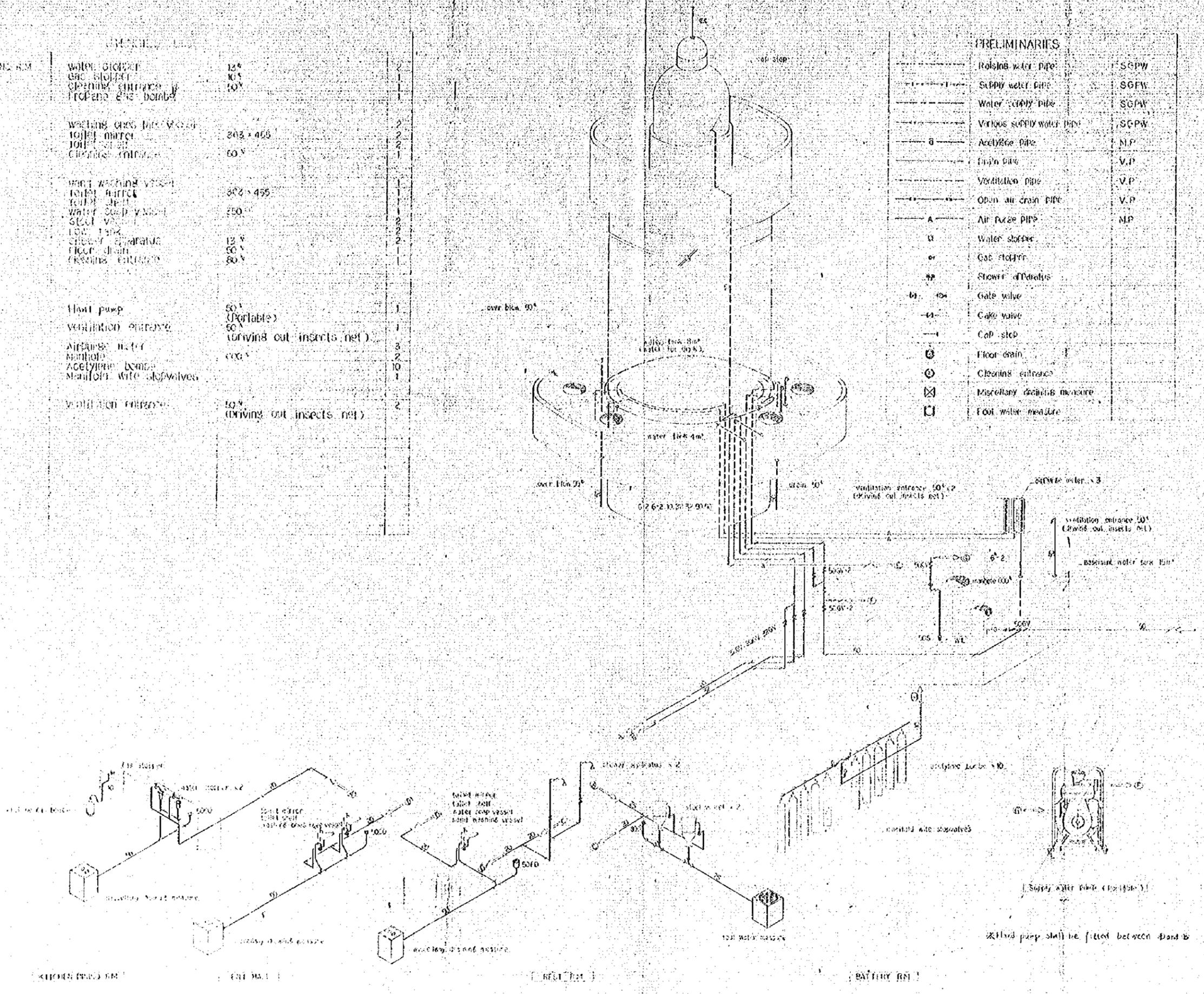
GENERAL NOTES



ROOM	ITEMS	SIZE	QTY
KITCHEN DINING RM	Water stopper	13"	2
	Gas stopper	10"	1
	Cleaning entrance	10"	1
	Propane gas bottle		1
ENT HALL	Washing cups for vessel		2
	Toilet mirror	20" x 45"	2
	Toilet seat		2
	Cleaning entrance	60"	1
REST RM	Wash washing vessel		1
	Toilet mirror	30" x 45"	1
	Toilet seat		1
	Water supply vessel	250"	2
	SGPW		2
	LOW 13"		2
	Shower apparatus	13"	2
	Floor drain	50"	2
Cleaning entrance	80"	1	
BATTERY RM	Main pump	50"	1
	Ventilation entrance	50"	1
	Airports water		3
	Manhole	50"	2
WATER TANK	ACetylene lamp		10
	Manifold with stopvalves		1
	Ventilation entrance	10"	2
	(Driving out insects net)		

PRELIMINARIES

—	Galvanized water pipe	SGPW
—	Supply water pipe	SGPW
—	Water supply pipe	SGPW
—	Various supply water pipe	SGPW
—	Acetylene pipe	N.P.
—	Drain pipe	V.P.
—	Ventilation pipe	V.P.
—	Open air drain pipe	V.P.
—	Air purge pipe	N.P.
W	Water stopper	
G	Gas stopper	
SP	Shower apparatus	
GV	Gate valve	
CV	Check valve	
CS	Cap stop	
FD	Floor drain	
CE	Cleaning entrance	
MC	Miscellaneous cleaning measure	
FW	Foot water measure	



NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-HOUSE

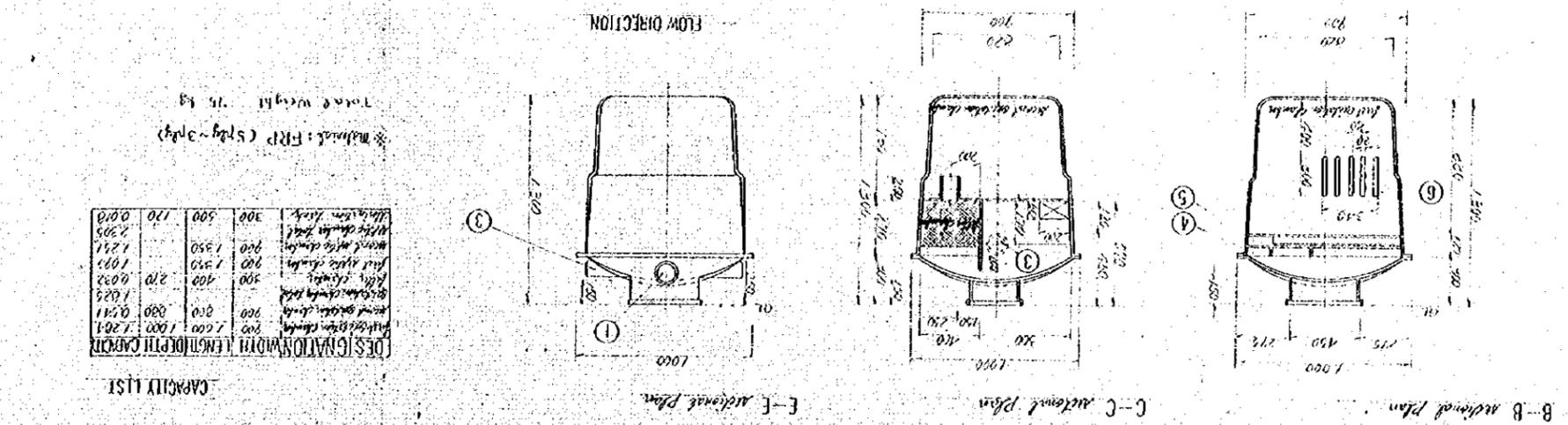
WATER SUPPLY TO DRAINAGE AND
PLUMBING EQUIPMENT
MENTION SPECIFICATION 10/2

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>Handwritten signature</i>			<i>Handwritten signature</i>
SCALE		REV. 10	
1:50			

DATE: 10/1975 DWG. NO: 11-39

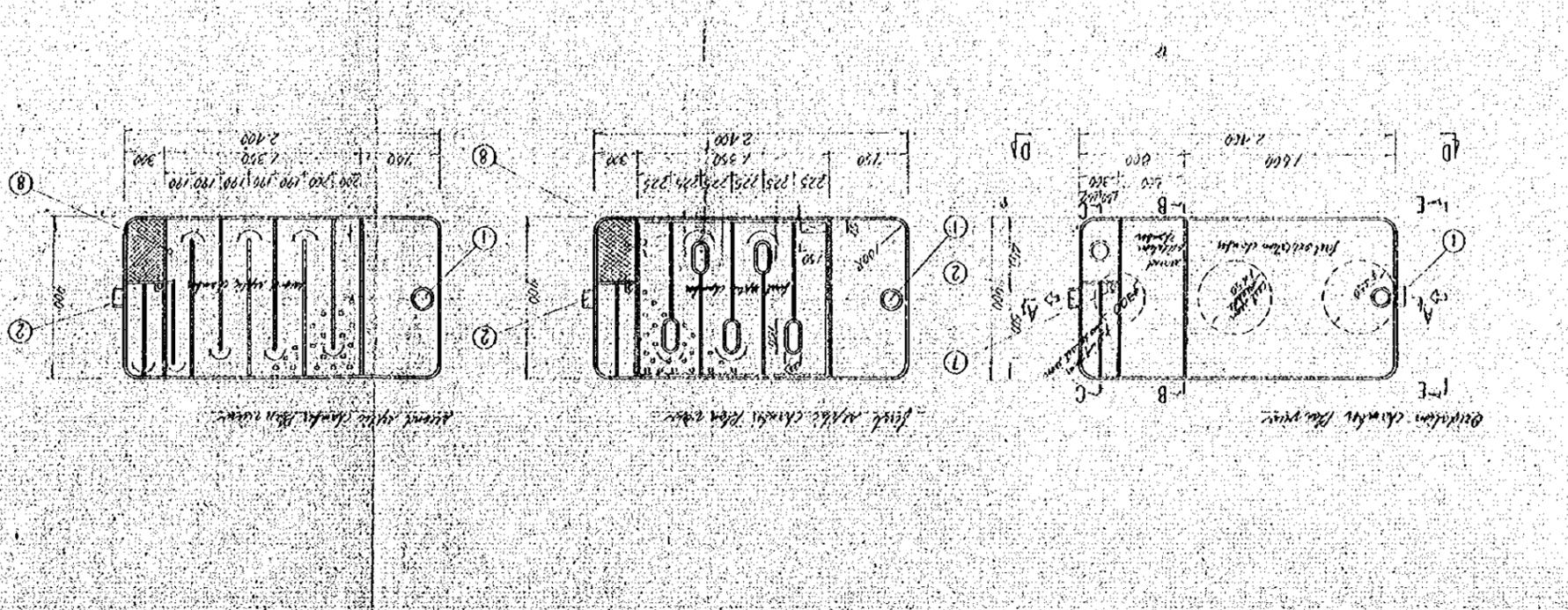
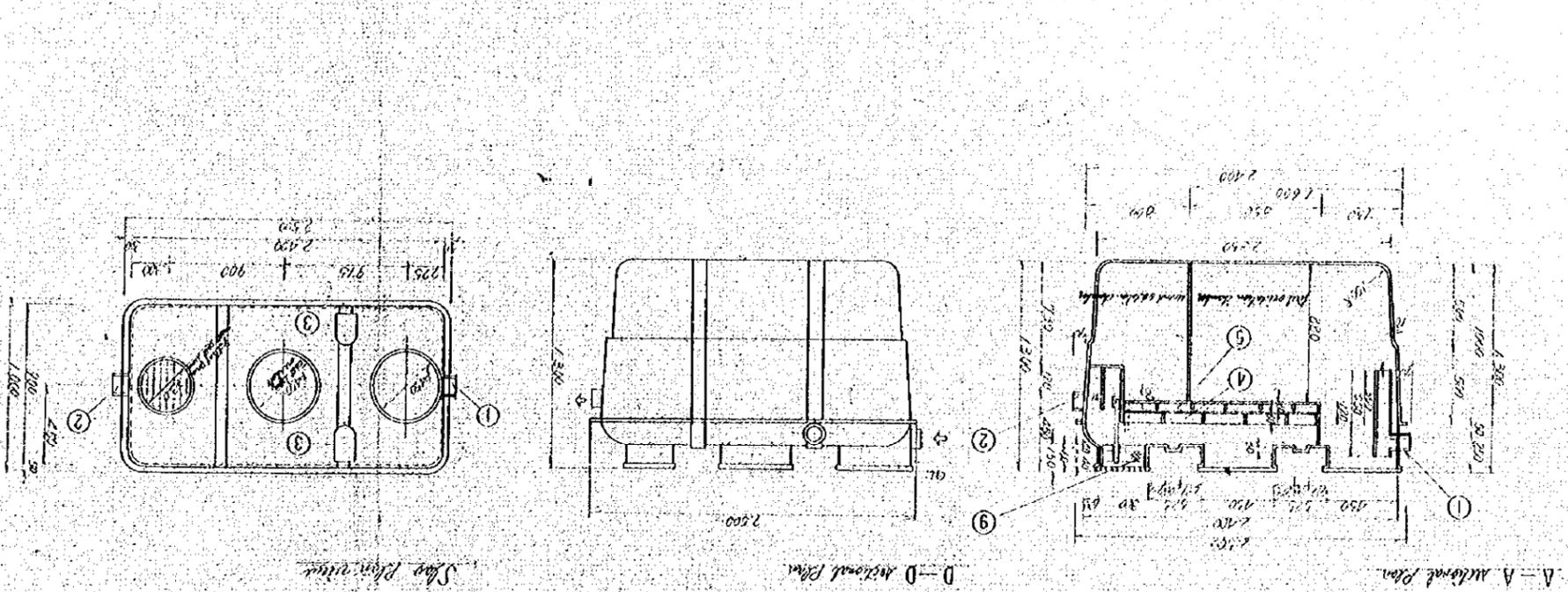
GENERAL NOTES
 ① inlet pipe
 ② outlet pipe
 ③ precoat filter
 ④ first water chamber
 ⑤ second water chamber
 ⑥ air
 ⑦ distributor
 ⑧ gas filter
 ⑨ sand receiver and underflow pipe

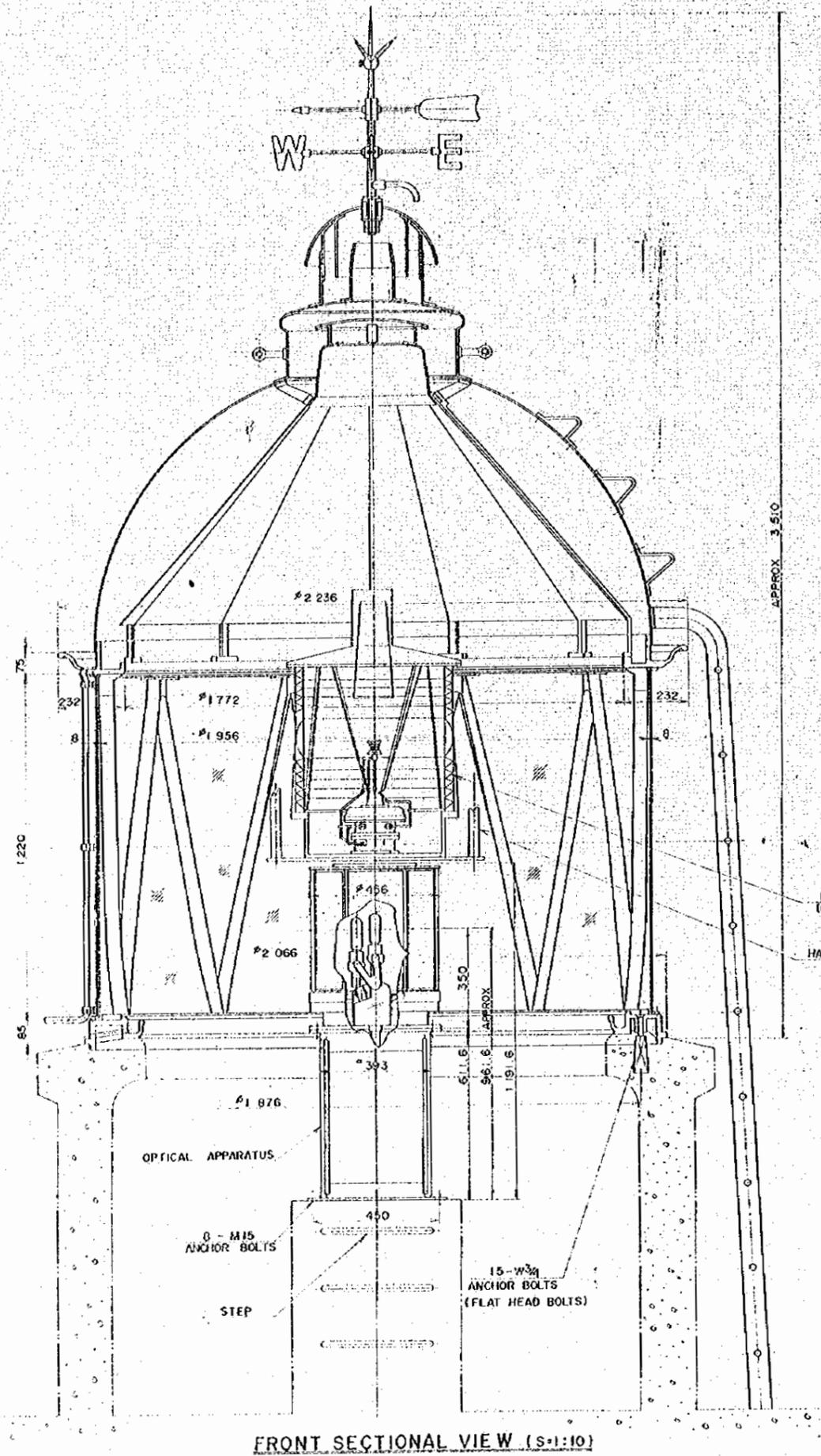


DESIGNATION AND LENGTH DEPTH CAPACITY

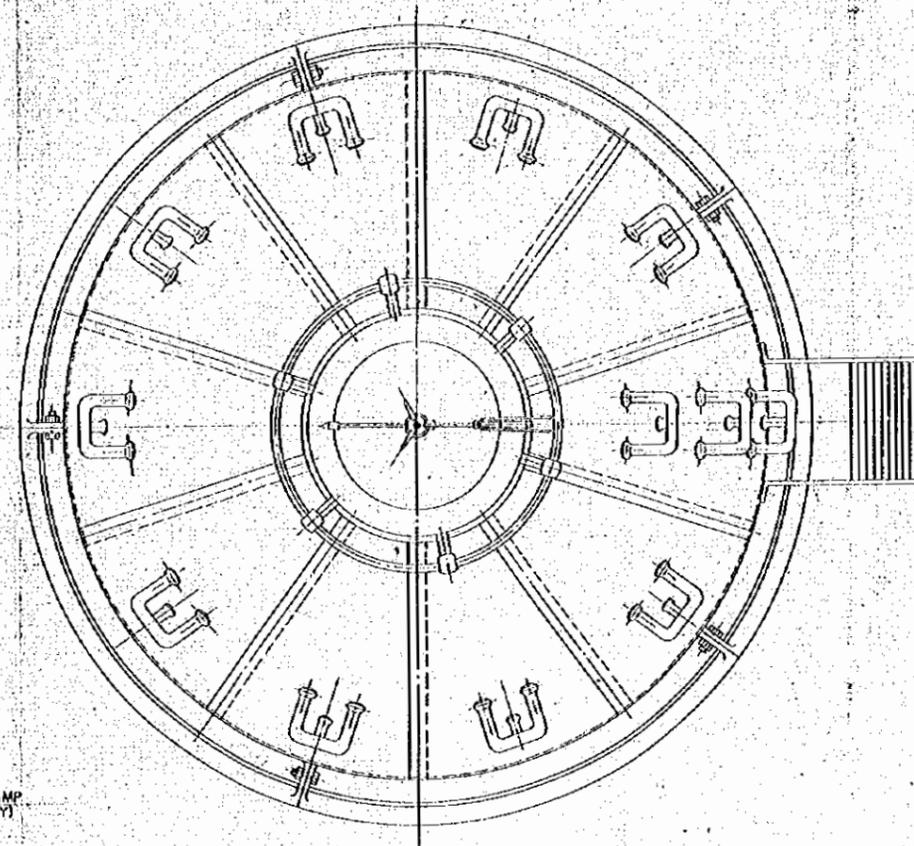
DESIGNATION	LENGTH	DEPTH	CAPACITY
1st water chamber	1000	1000	1.000
2nd water chamber	1000	1000	1.000
3rd water chamber	1000	1000	1.000
4th water chamber	1000	1000	1.000
5th water chamber	1000	1000	1.000
6th water chamber	1000	1000	1.000
7th water chamber	1000	1000	1.000
8th water chamber	1000	1000	1.000
9th water chamber	1000	1000	1.000
10th water chamber	1000	1000	1.000
11th water chamber	1000	1000	1.000
12th water chamber	1000	1000	1.000
13th water chamber	1000	1000	1.000
14th water chamber	1000	1000	1.000
15th water chamber	1000	1000	1.000
16th water chamber	1000	1000	1.000
17th water chamber	1000	1000	1.000
18th water chamber	1000	1000	1.000
19th water chamber	1000	1000	1.000
20th water chamber	1000	1000	1.000
21st water chamber	1000	1000	1.000
22nd water chamber	1000	1000	1.000
23rd water chamber	1000	1000	1.000
24th water chamber	1000	1000	1.000
25th water chamber	1000	1000	1.000
26th water chamber	1000	1000	1.000
27th water chamber	1000	1000	1.000
28th water chamber	1000	1000	1.000
29th water chamber	1000	1000	1.000
30th water chamber	1000	1000	1.000
31st water chamber	1000	1000	1.000
32nd water chamber	1000	1000	1.000
33rd water chamber	1000	1000	1.000
34th water chamber	1000	1000	1.000
35th water chamber	1000	1000	1.000
36th water chamber	1000	1000	1.000
37th water chamber	1000	1000	1.000
38th water chamber	1000	1000	1.000
39th water chamber	1000	1000	1.000
40th water chamber	1000	1000	1.000
41st water chamber	1000	1000	1.000
42nd water chamber	1000	1000	1.000
43rd water chamber	1000	1000	1.000
44th water chamber	1000	1000	1.000
45th water chamber	1000	1000	1.000
46th water chamber	1000	1000	1.000
47th water chamber	1000	1000	1.000
48th water chamber	1000	1000	1.000
49th water chamber	1000	1000	1.000
50th water chamber	1000	1000	1.000
51st water chamber	1000	1000	1.000
52nd water chamber	1000	1000	1.000
53rd water chamber	1000	1000	1.000
54th water chamber	1000	1000	1.000
55th water chamber	1000	1000	1.000
56th water chamber	1000	1000	1.000
57th water chamber	1000	1000	1.000
58th water chamber	1000	1000	1.000
59th water chamber	1000	1000	1.000
60th water chamber	1000	1000	1.000
61st water chamber	1000	1000	1.000
62nd water chamber	1000	1000	1.000
63rd water chamber	1000	1000	1.000
64th water chamber	1000	1000	1.000
65th water chamber	1000	1000	1.000
66th water chamber	1000	1000	1.000
67th water chamber	1000	1000	1.000
68th water chamber	1000	1000	1.000
69th water chamber	1000	1000	1.000
70th water chamber	1000	1000	1.000
71st water chamber	1000	1000	1.000
72nd water chamber	1000	1000	1.000
73rd water chamber	1000	1000	1.000
74th water chamber	1000	1000	1.000
75th water chamber	1000	1000	1.000
76th water chamber	1000	1000	1.000
77th water chamber	1000	1000	1.000
78th water chamber	1000	1000	1.000
79th water chamber	1000	1000	1.000
80th water chamber	1000	1000	1.000
81st water chamber	1000	1000	1.000
82nd water chamber	1000	1000	1.000
83rd water chamber	1000	1000	1.000
84th water chamber	1000	1000	1.000
85th water chamber	1000	1000	1.000
86th water chamber	1000	1000	1.000
87th water chamber	1000	1000	1.000
88th water chamber	1000	1000	1.000
89th water chamber	1000	1000	1.000
90th water chamber	1000	1000	1.000
91st water chamber	1000	1000	1.000
92nd water chamber	1000	1000	1.000
93rd water chamber	1000	1000	1.000
94th water chamber	1000	1000	1.000
95th water chamber	1000	1000	1.000
96th water chamber	1000	1000	1.000
97th water chamber	1000	1000	1.000
98th water chamber	1000	1000	1.000
99th water chamber	1000	1000	1.000
100th water chamber	1000	1000	1.000

Materials: FRP (5 ply ~ 3 ply)
 Tank weight: 75 kg





FRONT SECTIONAL VIEW (S:1:10)



TOP VIEW (S:1:10)

LENS LAMP (EMERGENCY)
HANGING FIXED STRUCTURE

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

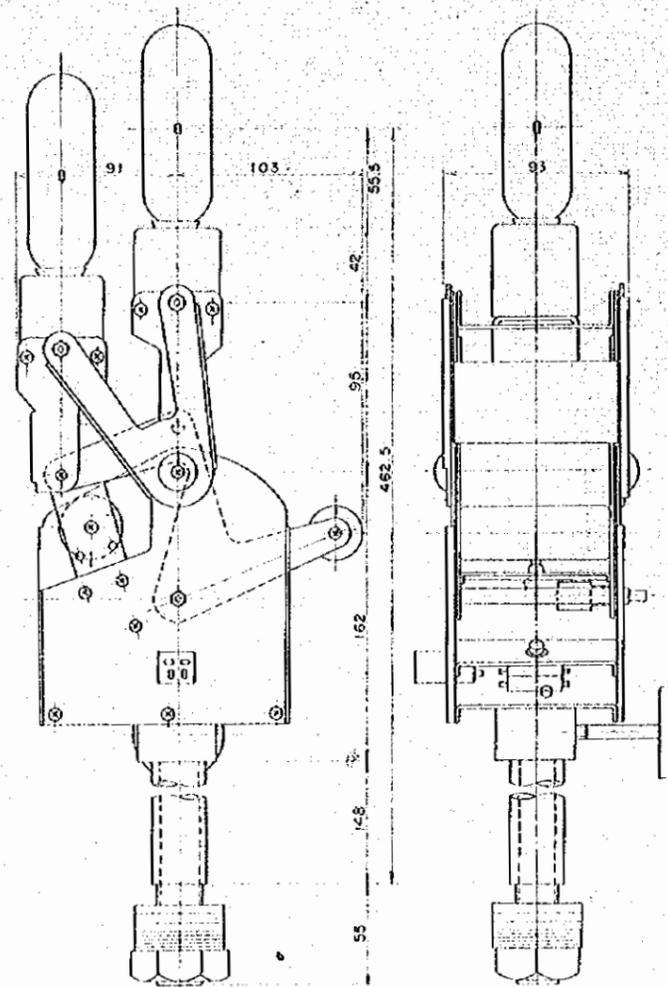
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
LIGHTHOUSE

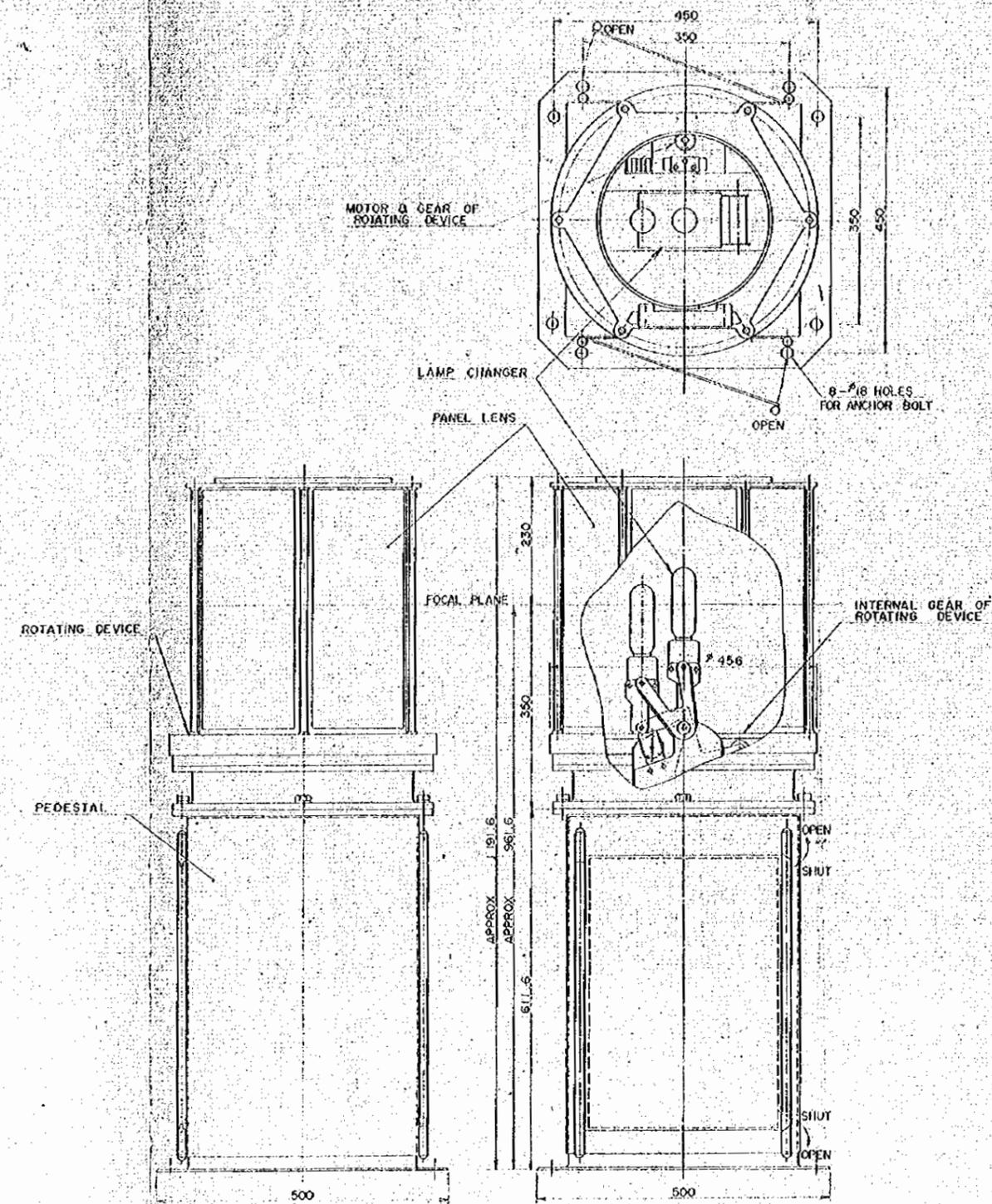
Lantern & Optical
Apparatus

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE		REV. No	
1:10		MM	
DATE DEC-13-1975		DVG. NO. II-41	



LAMP CHANGER (S:1:2)



OPTICAL APPARATUS (S:1:5)

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
LIGHTHOUSE
OPTICAL APPARATUS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
	27	17	114
SCALE		REV. No.	
1:5, 1:2		MM	
DATE DEC. 13. 1975		DWG. NO. II - 42	

