

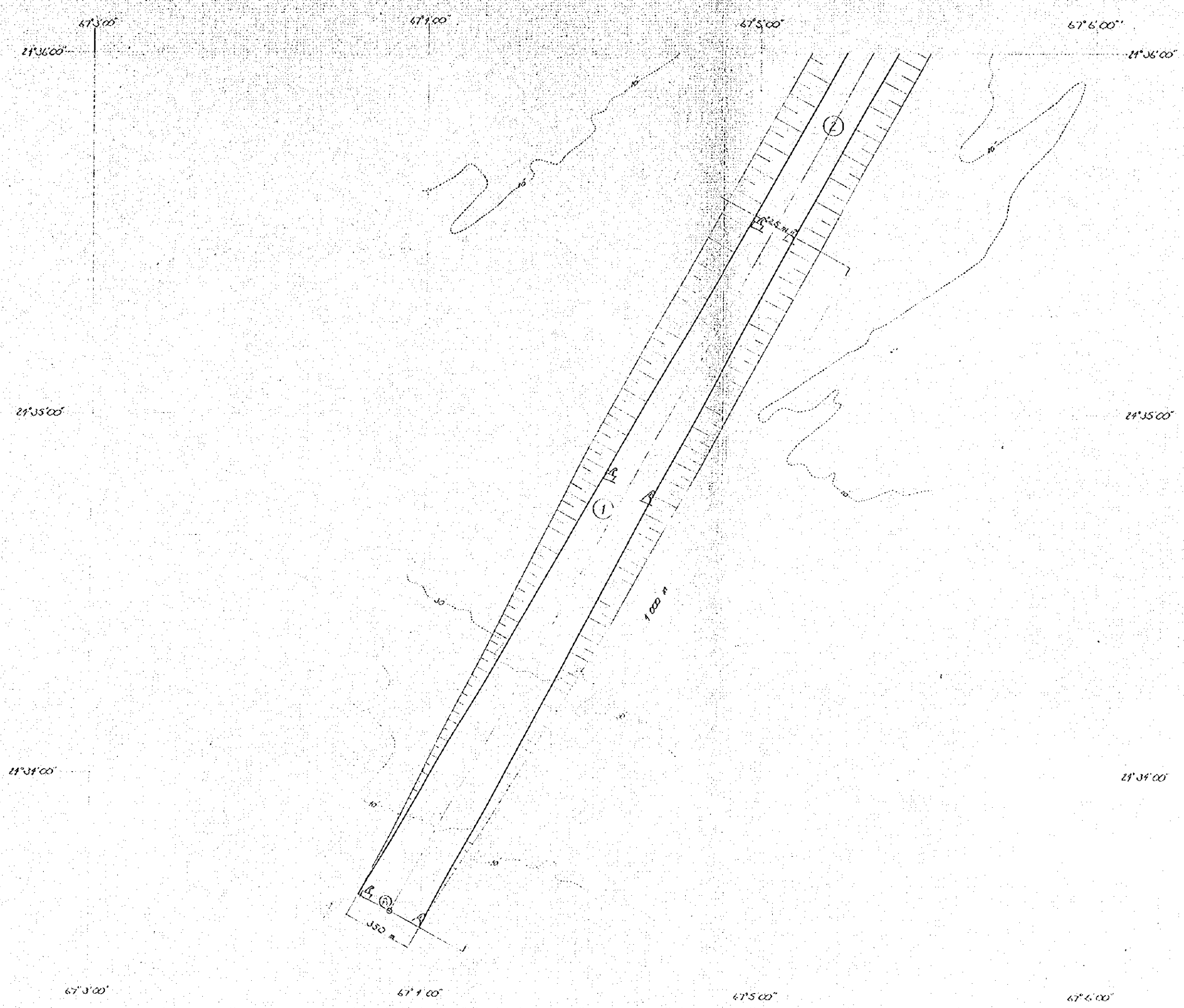
PORT MUHAMMAD - BIN - QASIM PROJECT

DETAILED DESIGN DRAWINGS

VOL. IV NAVIGATION AIDS

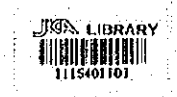
OCTOBER 1975

JAPAN INTERNATIONAL COOPERATION AGENCY

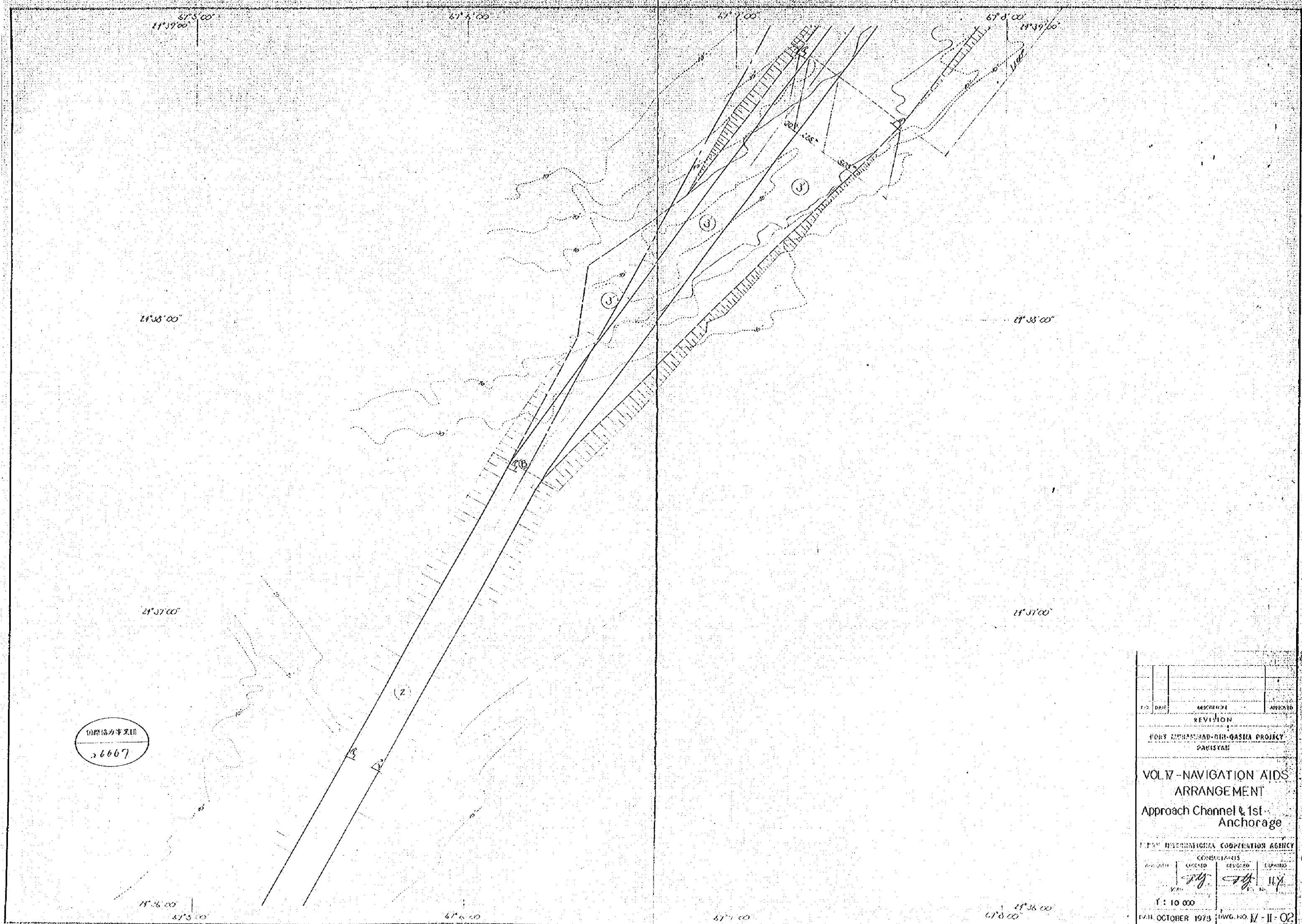


GENERAL NOTES

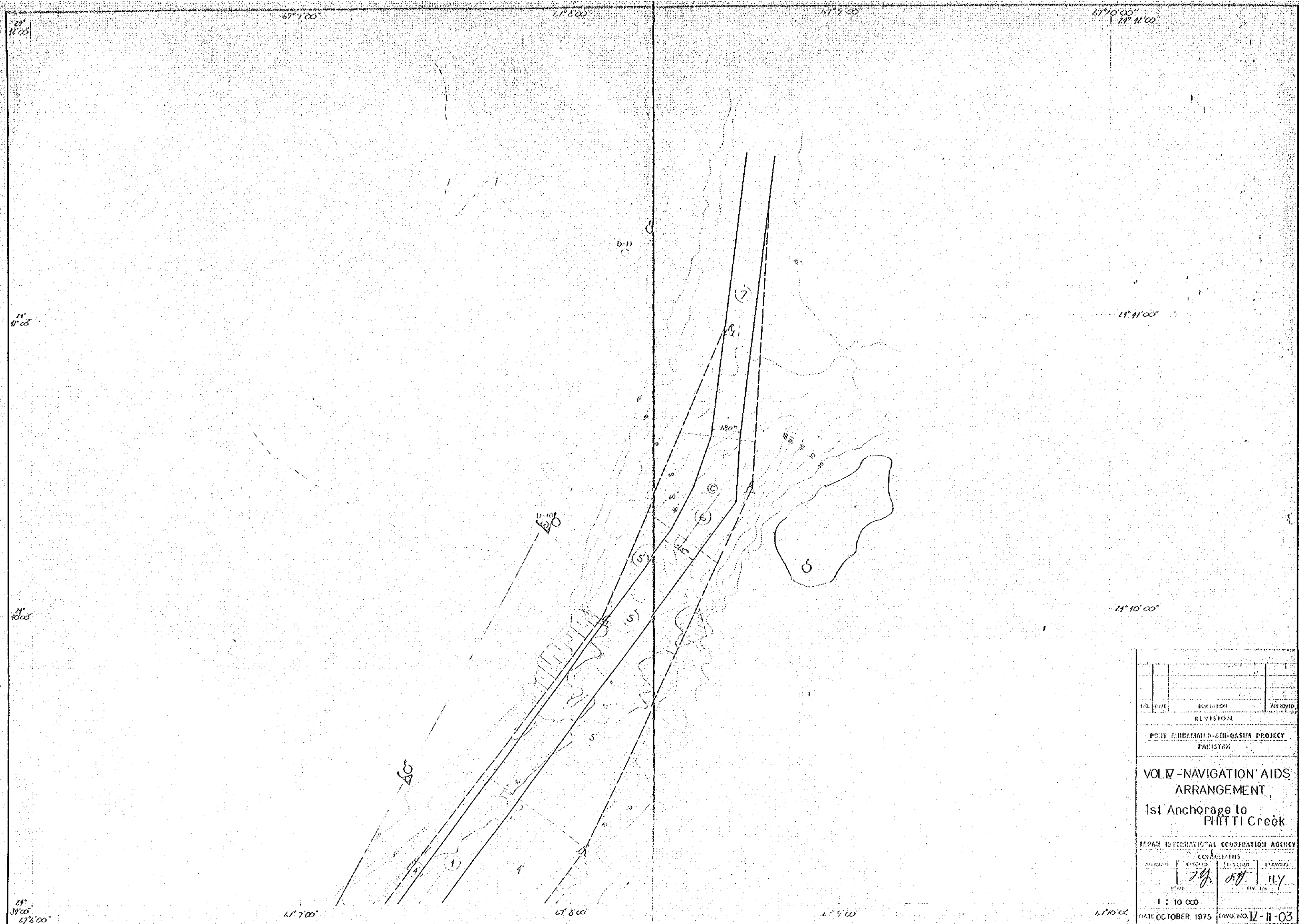
- ⊙ Entrance Buoy
- ⊙ Lighted Beacon
- ⊙ Loading Light
- ⊙ Channel Buoy (can)
- ⊙ Channel Buoy (conical)
- ⊙ Inner Channel Buoy (can)
- ⊙ Inner Channel Buoy (conical)



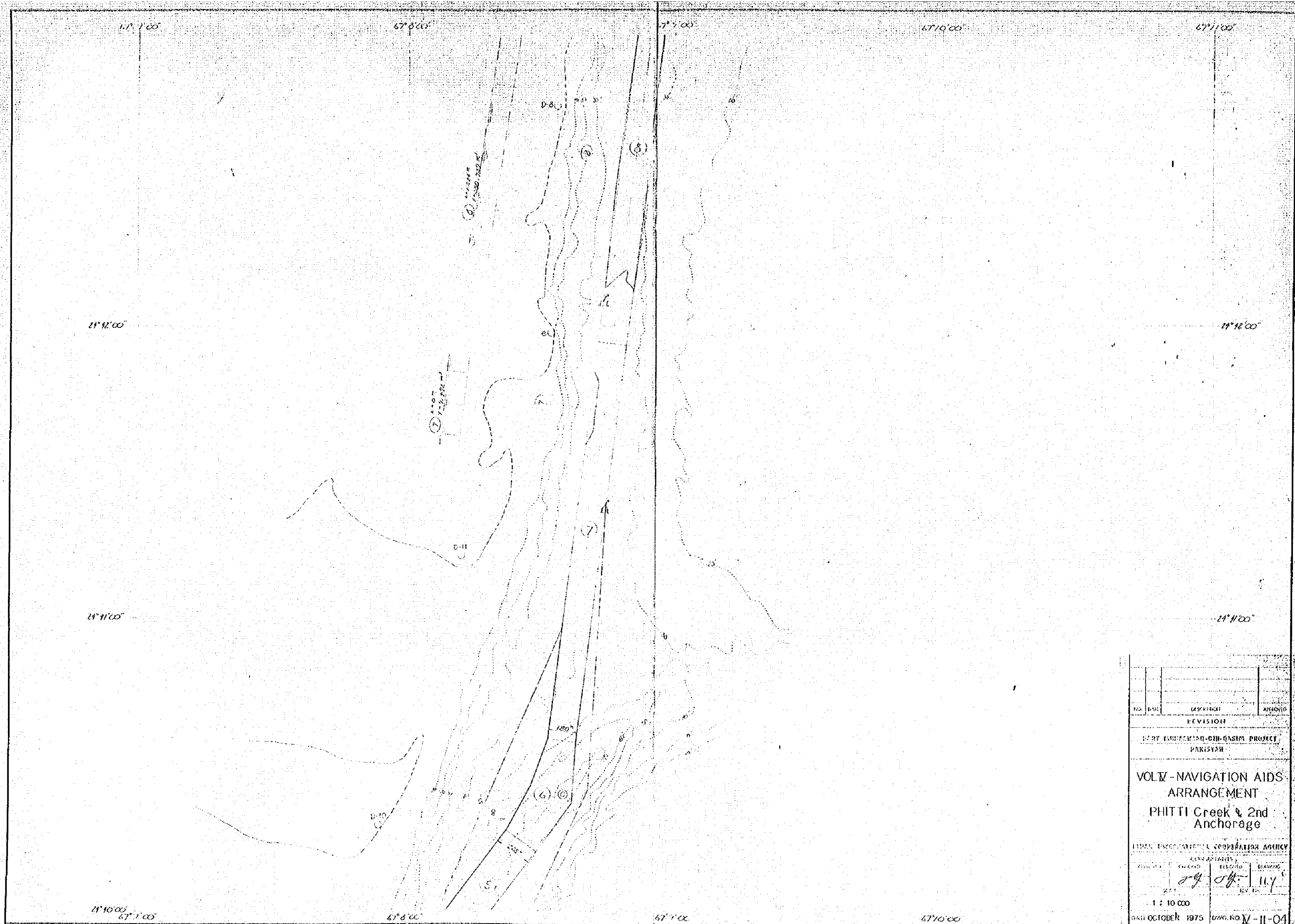
NO. 1044	ISSUED	APPROVED
REVISION		
PORT AUTHORITY OF NEW YORK AND NEW JERSEY		
VOL. IV - NAVIGATION AIDS ARRANGEMENT		
Entrance to Approach Channel		
COOPERATION AGENCY		
DATE	DESIGNED	ISSUED
OCT 75	AS	11/75
1 : 10 000		
DATE OCTOBER 1975 DWG. NO. M-11-01		



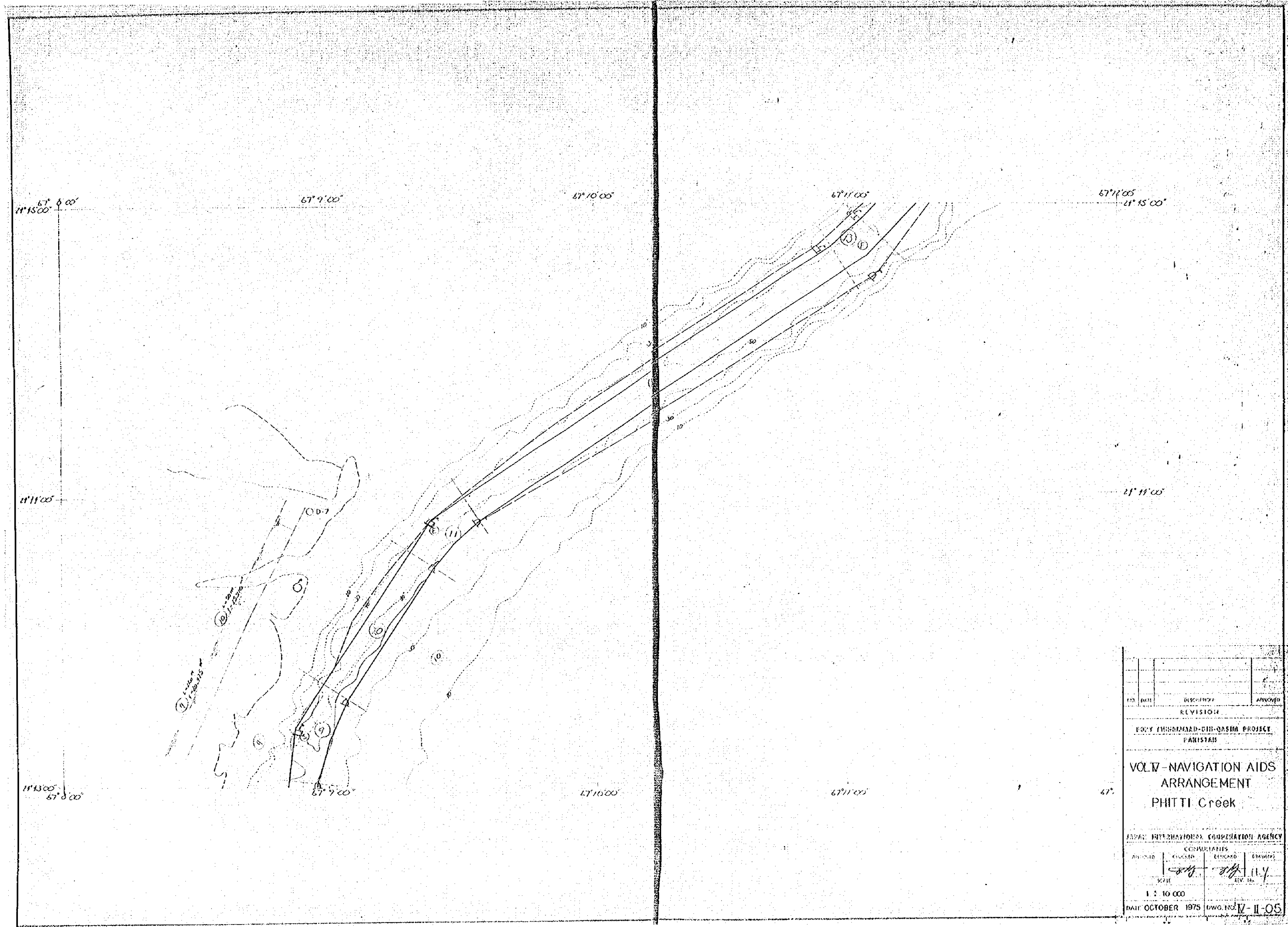
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MURHANAB-DIH-QASHIA PROJECT PAKISTAN			
VOL IV - NAVIGATION AIDS ARRANGEMENT			
Approach Channel & 1st Anchorage			
PACIFIC OCEANIC COOPERATION AGENCY			
CONSULTANTS			
APPROVED	DESIGNED	DRAWN	CHECKED
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
1:10,000		OCTOBER 1973	
NOVEMBER 1973		NO. II - 02	



NO.	DATE	BY	REVISION
POLY-ETHIOPIA-ETHIOPIA PROJECT PAULSTAR			
VOL. IV - NAVIGATION AIDS ARRANGEMENT 1st Anchorage to PHITTI Creek			
JAPAN INTERNATIONAL COOPERATION AGENCY COMMISSION			
APPROVED	DRAWN	CHECKED	REVISION
SCALE 1 : 10 000			
DATE: OCTOBER 1975			
DWG. NO. IV - II - 03			



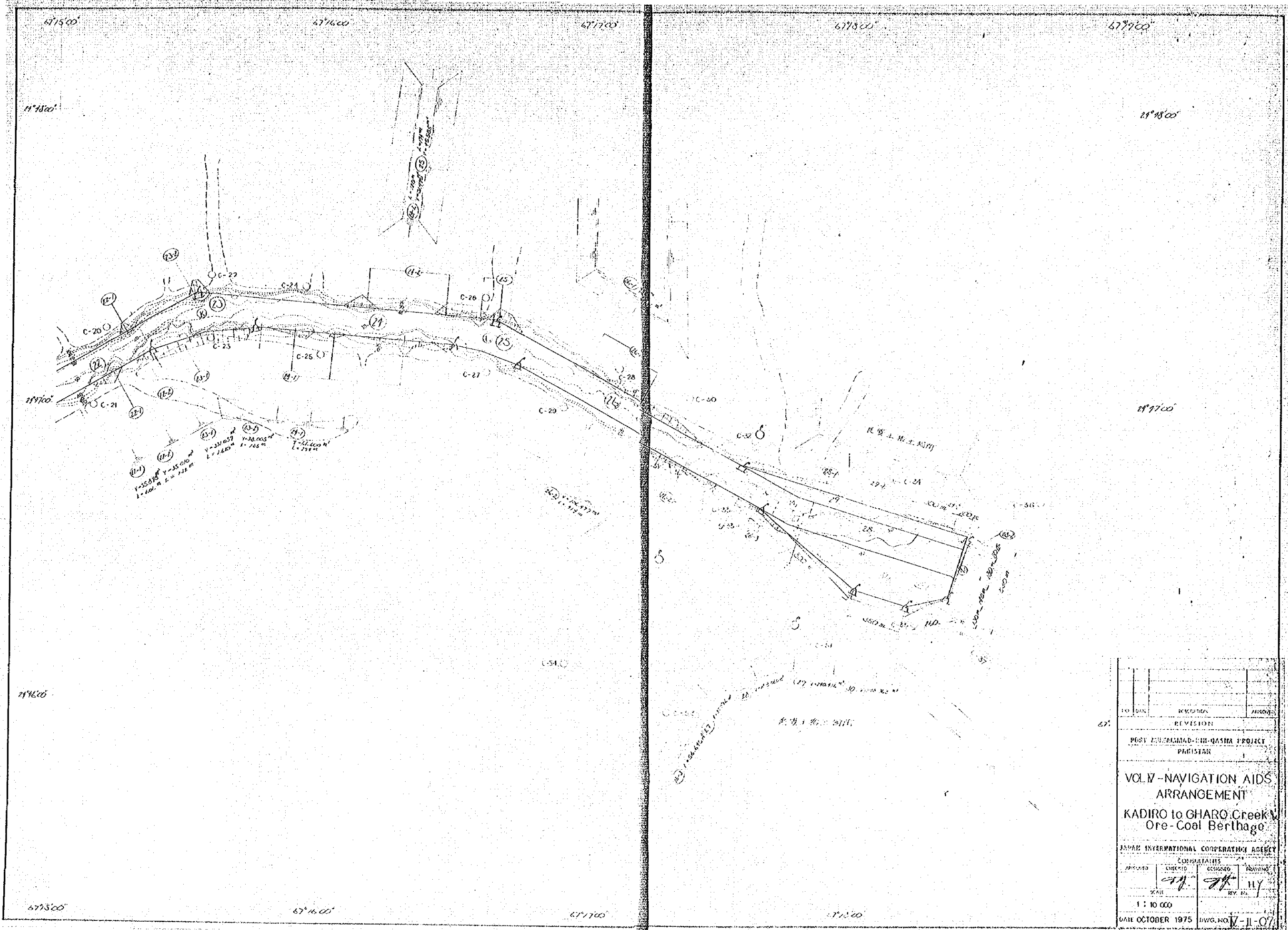
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT ENGINEERING-GRAB-BASIN PROJECT PARISTEEN			
VOL IV - NAVIGATION AIDS ARRANGEMENT PHITTI Creek & 2nd Anchorage			
LIPSAK ENGINEERING & CONSTRUCTION AGENCY			
DESIGNED	DRAWN	CHECKED	DATE
1 : 10 000			
DATE OCTOBER 1975		DWG. NO. IV-11-04	



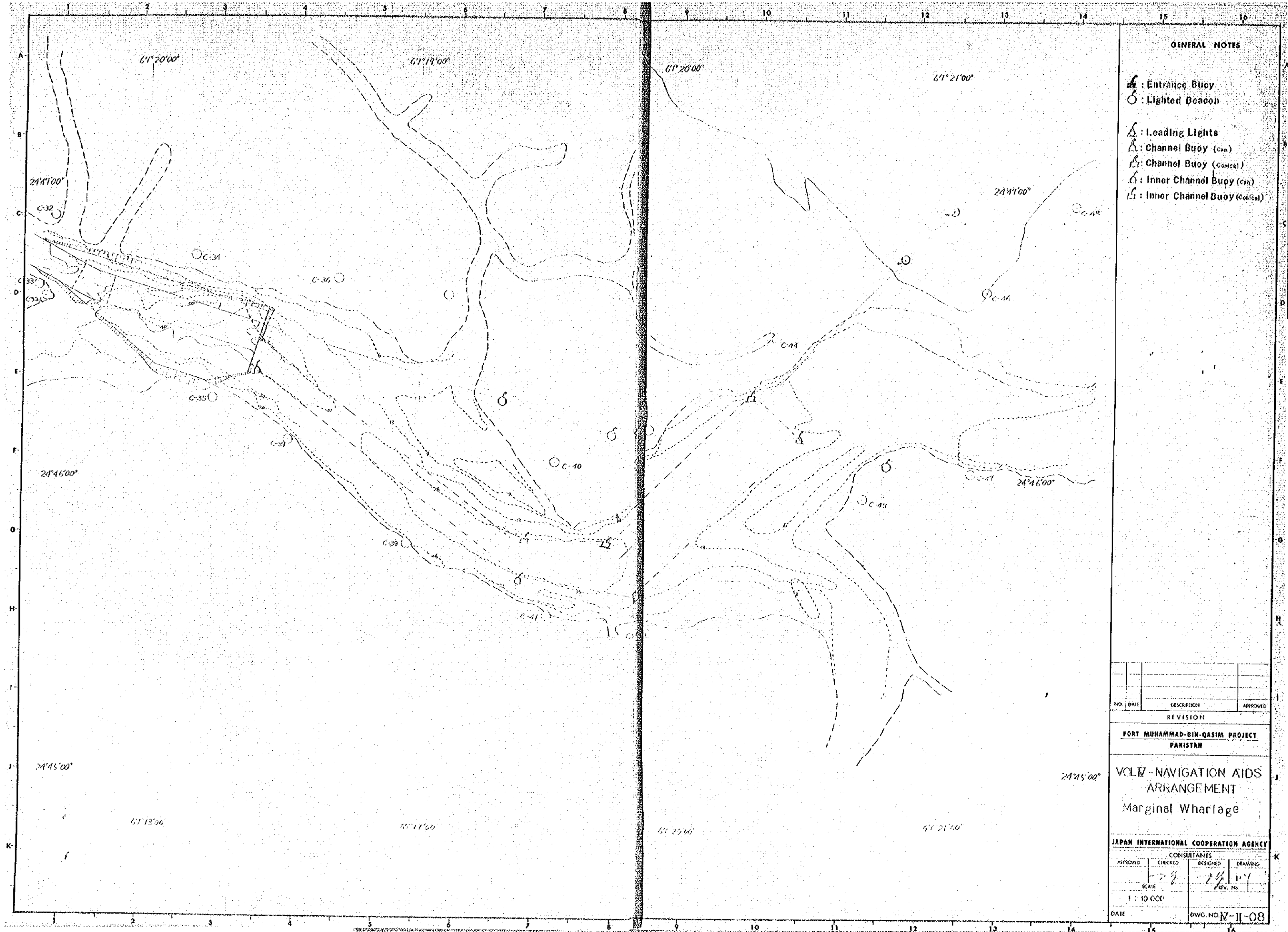
NO.	DATE	DESCRIPTION	APPROVED
REVISION:			
EGYPT FUNDAMENTAL-DIG-DASHA PROJECT PARISTAH			
VOL. IV - NAVIGATION AIDS ARRANGEMENT PHITTI Creek			
EGYPT INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
			11/1
SCALE			
1 : 10 000			
DATE: OCTOBER 1975 DWG. NO. IV-11-05			



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
FOUR PUNJAB-KH-QASIM PROJECT			
PAKISTAN			
VOL IV - NAVIGATION AIDS ARRANGEMENT			
PHITTI TO KADIRO Creek			
NORTH INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
DESIGNED	CHECKED	ENGINEER	DRAWING
SCALE 1 : 10 000			
DATE OCTOBER 1975 DWG. NO. V-II-06			



NO.	DATE	REVISION	BY
67			
PORT DEVELOPMENT - GHARO PROJECT PAKISTAN			
VOL. V - NAVIGATION AIDS ARRANGEMENT KADIRO to GHARO Creek Ore-Coal Berthing			
JAPAN INTERNATIONAL COOPERATIVE AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
BY: [Signature]	BY: [Signature]	BY: [Signature]	BY: [Signature]
1 : 10 000			
DATE: OCTOBER 1975		DWG. NO. V-11-07	



GENERAL NOTES

- : Entrance Buoy
- : Lighted Beacon
- : Leading Light
- : Channel Buoy (con)
- : Channel Buoy (conical)
- : Inner Channel Buoy (con)
- : Inner Channel Buoy (conical)

NO.	DATE	DESCRIPTION	APPROVED

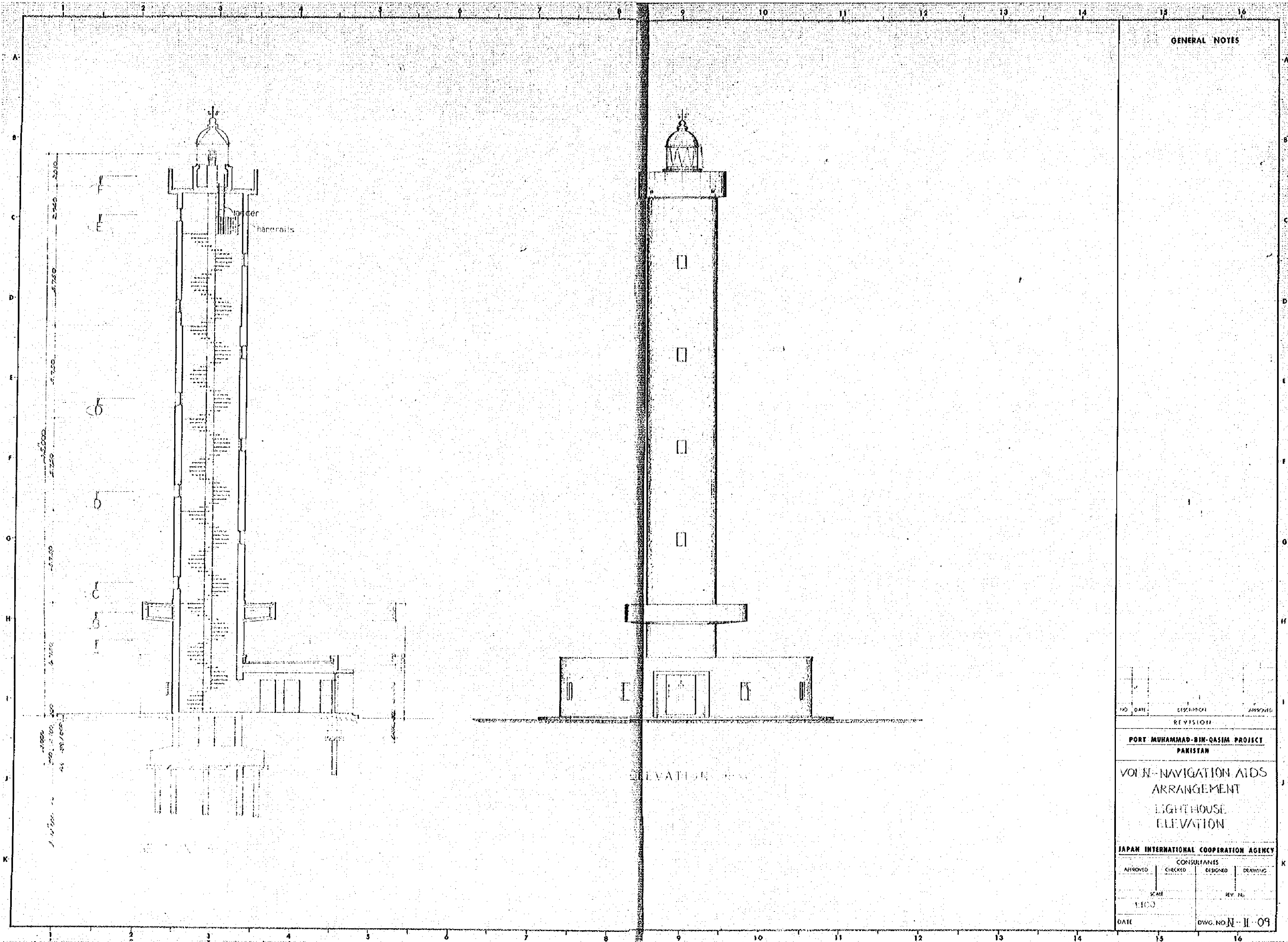
REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

VCLV - NAVIGATION AIDS
ARRANGEMENT
Marginal Wharfage

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	
1 : 10 000			
DATE		DWG. NO. IV-11-08	



GENERAL NOTES

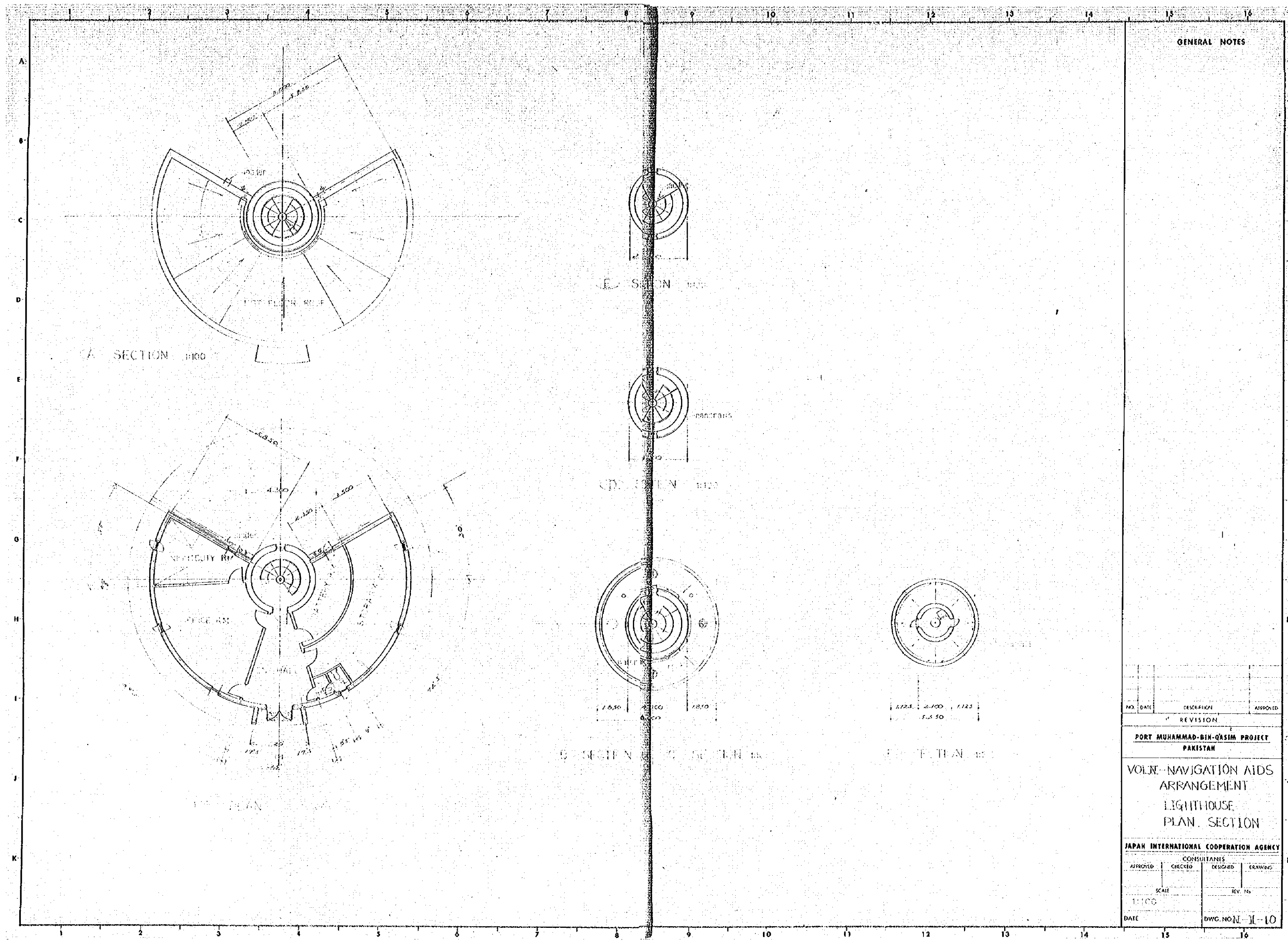
NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

VOYAGE-NAVIGATION AIDS
ARRANGEMENT
LIGHTHOUSE
ELEVATION

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	
1:100			
DATE		DWG. NO. N-II-09	



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

VOLUME NAVIGATION AIDS
ARRANGEMENT
LIGHTHOUSE
PLAN SECTION

JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
			REV. 15
SCALE		DATE	
1:100		DWG. NO. JI-10	

LIGHTHOUSE

EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
POACH	CONCRETE	MARBLE	SLOPE LT+120 HT+150 DOOR MAT
BE RM		WATER-PROOF MORTAL TROWEL	
WIND WALL APPENTICE			
VERANDA EXTERIOR WALL		WHITE MARBLE	
ROOF	CINDER CONCRETE	WATER-PROOF SHEETING	
ROOF DRAIN	CAST IRON LEADER		
CONDUCTOR	JAWD POLYVINYL		100 Φ
EXT STAGE	CINDER CONCRETE	WATER-PROOF SHEETING WATER-PROOF MORTAL	
PLANCHER		WHITE MARBLE	

EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
WATER NICK	CONCRETE	WATER-PROOF MORTAL TROWEL	
NAME PLATE		BRONZE	
WINDOW DOOR		STAINLESS	WIRE GLASS
COPING ROAD	CONCRETE	MARBLE	

GENERAL NOTES

LEADINGLIGHT EXTERIOR FINISH SCHEDULE			
PART	MATERIAL	FINISH	REMARKS
EXT WALL	CONCRETE	MOSSAIC	
HAND RAIL	STAINLESS		
LADDER			
STAGE	CONCRETE	WATER-PROOF MORTAL TROWEL	ROOF HATCH (WATER PROOFED) x 2
EXT WALL		MARBLE	
POACH			
WIND WALL APPENTICE			
ROOF	CINDER CONCRETE	WATER-PROOF SHEETING	ROOF HATCH (WATER PROOFED)
STAIR LANDING			
HAND RAIL	STAINLESS		
DOOR			

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

LIGHTHOUSE INTERIOR FINISH SCHEDULE																	
RM NO	ROOM NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MATERIAL	FINISH	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	
	ENT HALL	MORTAL	MARBLE	100	MORTAL	MARBLE				MORTAL	STEEL TROWEL	V.P.	SLC CEILING	ASBESTOS CEMENT BOARD		COAT HOOK	
	OFFICE RM																
	NIGHTLY DUTY																
	MEN RM																
	BATTERY R.M		STEEL TROWEL			STEEL TROWEL							STYROFOAM BOARD				
	STORAGE R.M																
	LIGHT RM																
	STAIRS										PLASTER SPRING					HAND RAIL - STEEL C.P	
	STAIR LANDING	STEEL	FLAME O.P													LADDER	

LEADINGLIGHT INTERIOR FINISH SCHEDULE																	
RM NO	ROOM NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MATERIAL	FINISH	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	
	BATH R.M	WATER-PROOF MORTAL	STEEL TROWEL	100	WATER-PROOF MORTAL	STEEL TROWEL				MORTAL	STEEL TROWEL		WATER-PROOF MORTAL	STEEL TROWEL		FEDERL STEEL O.P	
	BATH R.M									MORTAL			MORTAL		V.P.		
	LADDER	STEEL	O.P												V.P.		
	STAIR LANDING	MORTAL	STEEL TROWEL							MORTAL	STEEL TROWEL	V.P.	MORTAL		V.P.	HAND RAIL O.P	

LIGHT BEACON INTERIOR FINISH SCHEDULE																	
RM NO	ROOM NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MATERIAL	FINISH	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	MAT	FIN	HT	
	GAS STEEL BOX																

NO.	DATE	DESIGNER	APPROVED

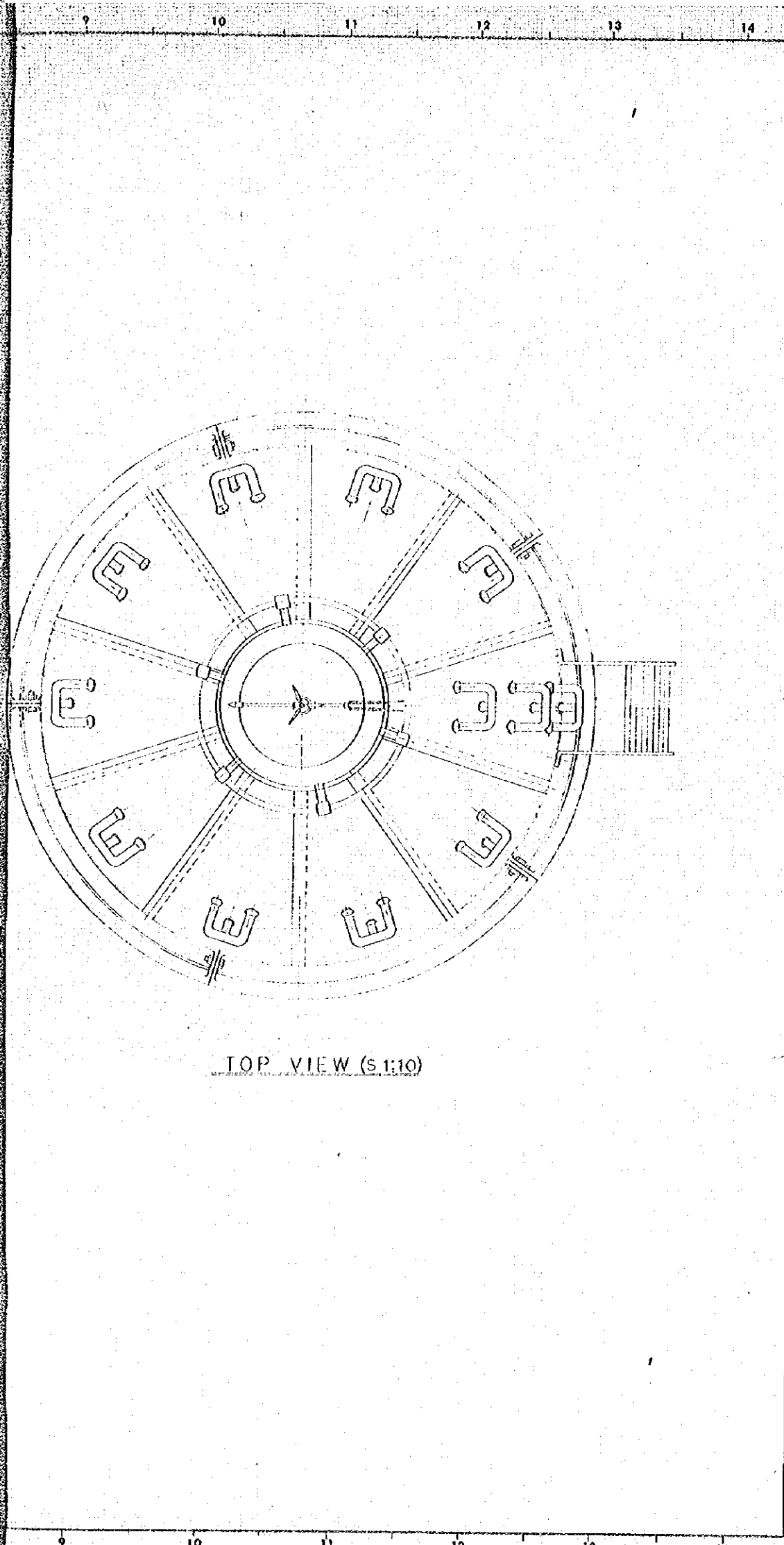
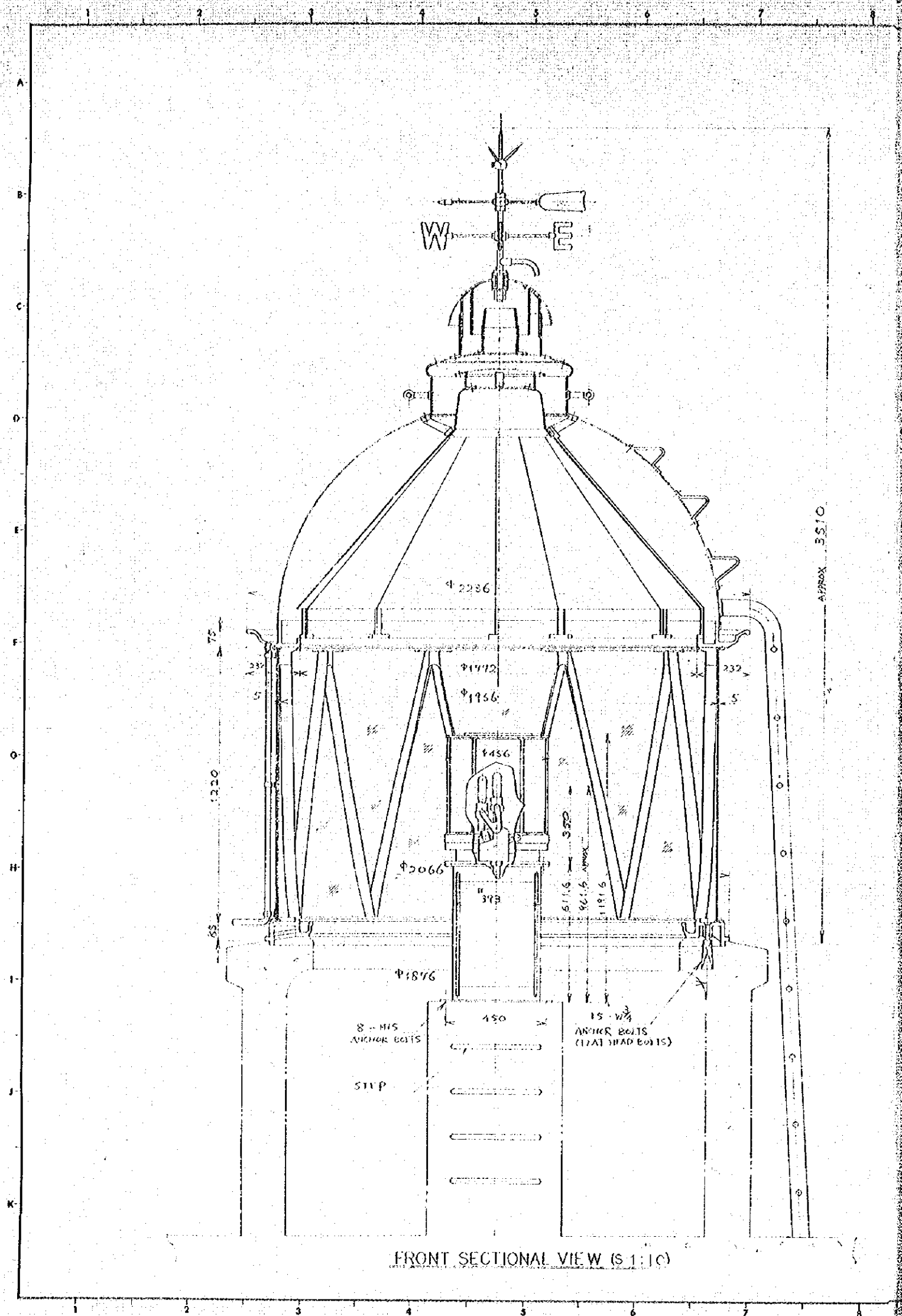
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN

VOL.IV-NAVIGATION AIDS ARRANGEMENT LIGHTHOUSE FINISHED SCHEDULE

JAPAN INTERNATIONAL COOPERATION AGENCY

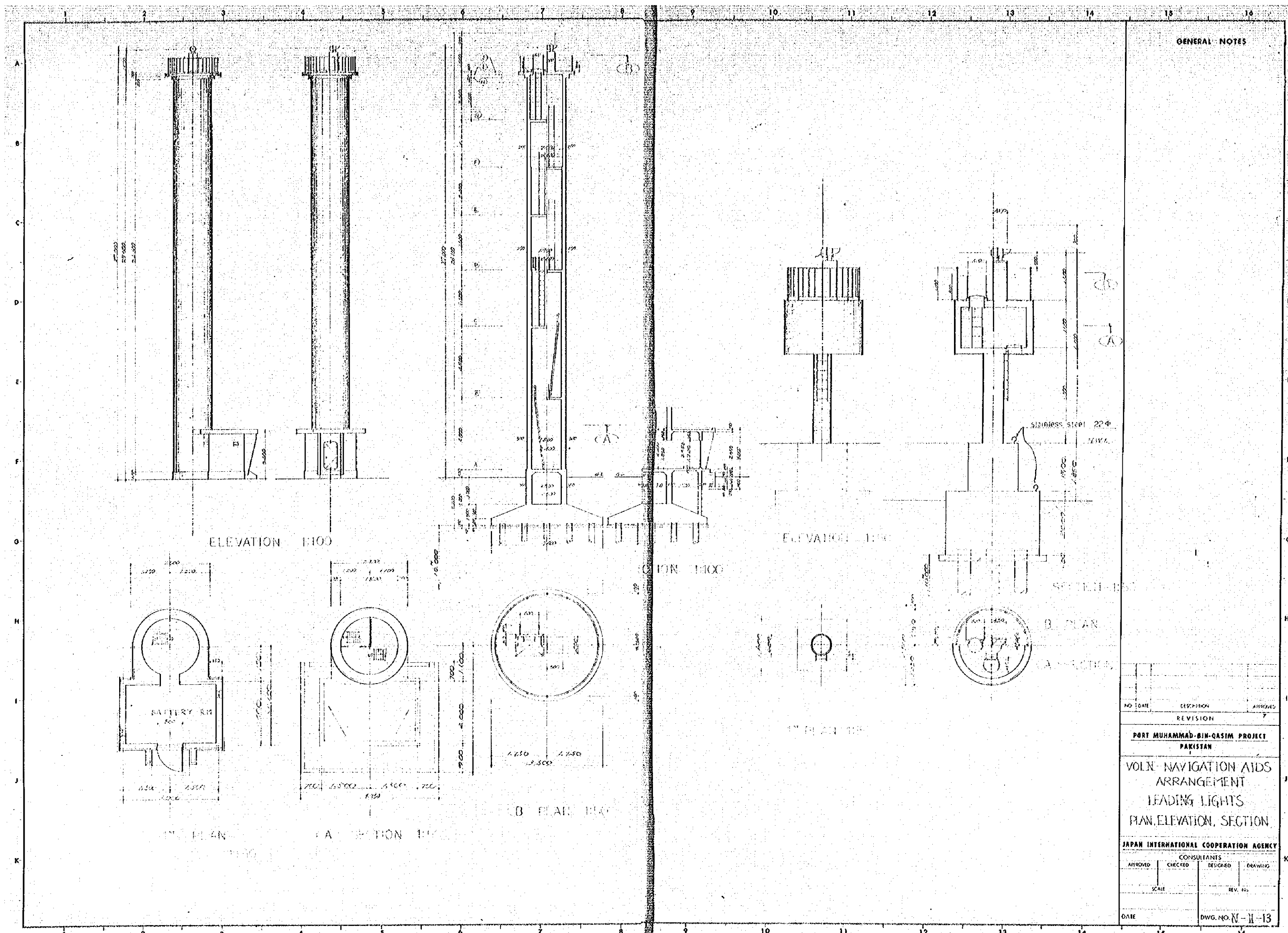
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE	REV. NO.		

DATE DWG. NO. JI-11



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
VCLV-NAVIGATION AIDS LIGHTHOUSE Lantern & Optical Apparatus			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE	DATE	REV. NO.	REV. BY
1:10	M.M.		
DATE	DWG. NO. V-11-12		



GENERAL NOTES

NO	DATE	DESCRIPTION	APPROVED

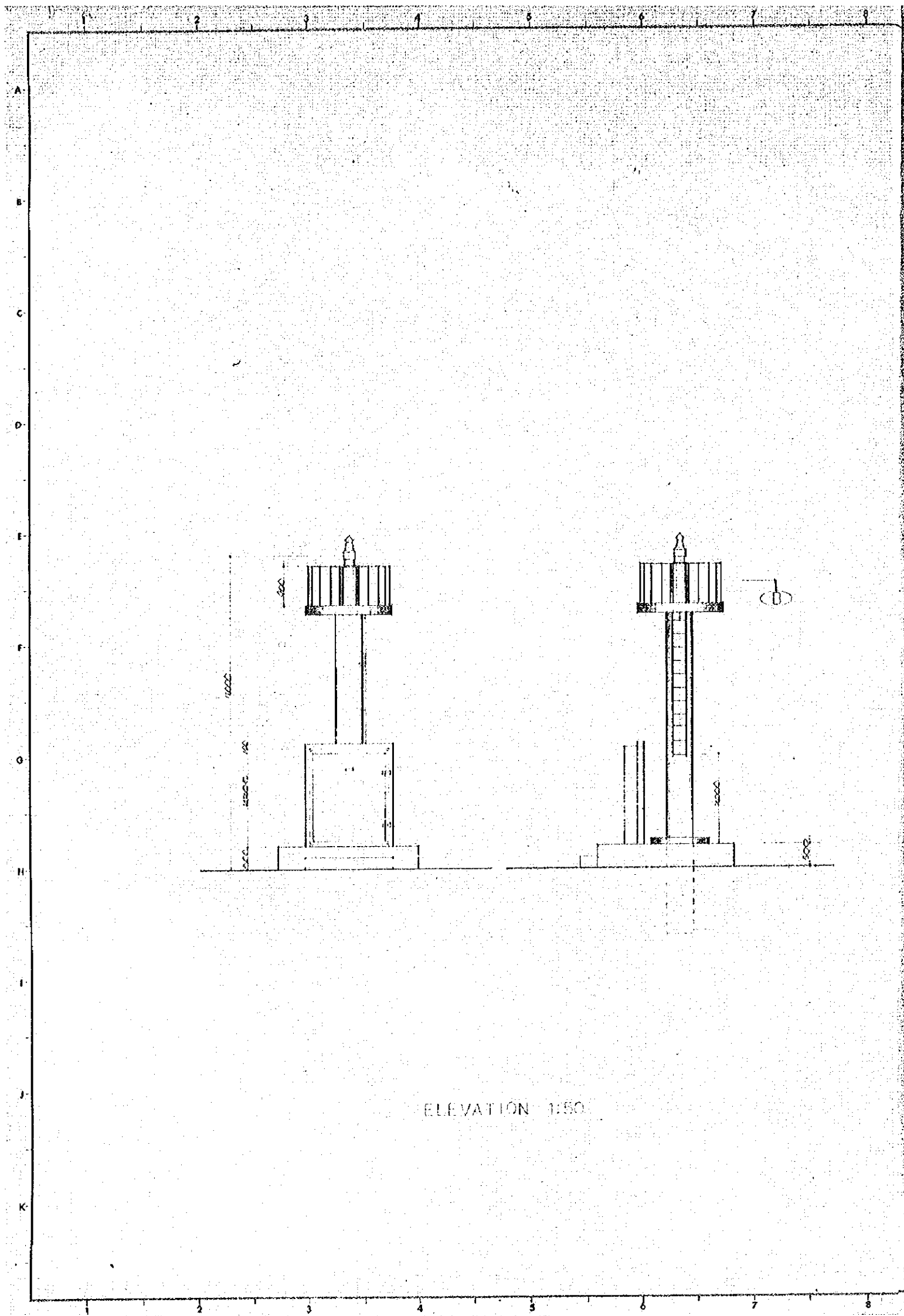
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

VOLN - NAVIGATION AIDS
ARRANGEMENT
LEADING LIGHTS
PLAN, ELEVATION, SECTION

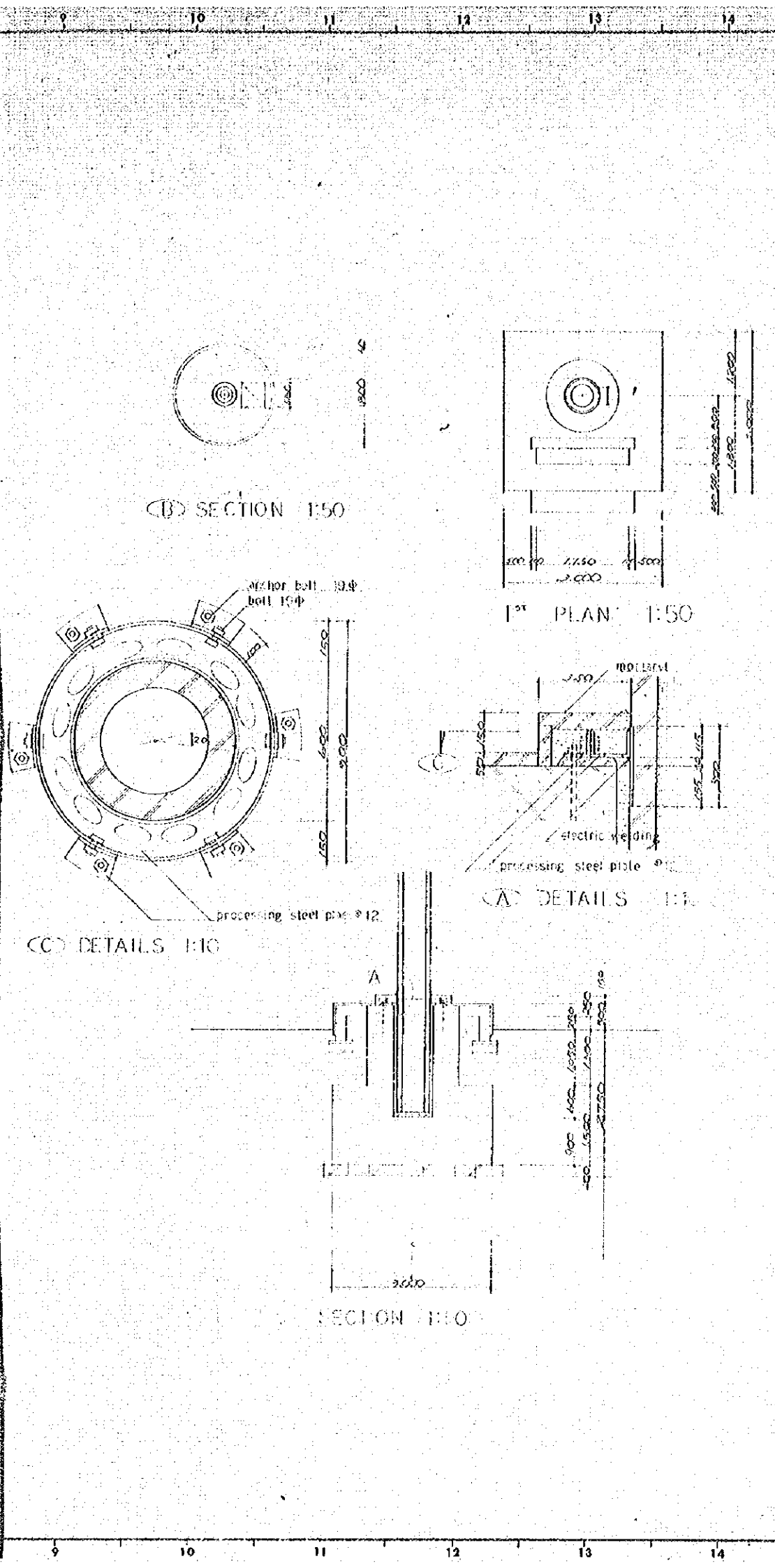
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING

SCALE: _____ REV. NO: _____
DATE: _____ DWG. NO. N-II-13



ELEVATION 1:50



(B) SECTION 1:50

(C) PLAN 1:50

(A) DETAILS 1:1

(C) DETAILS 1:10

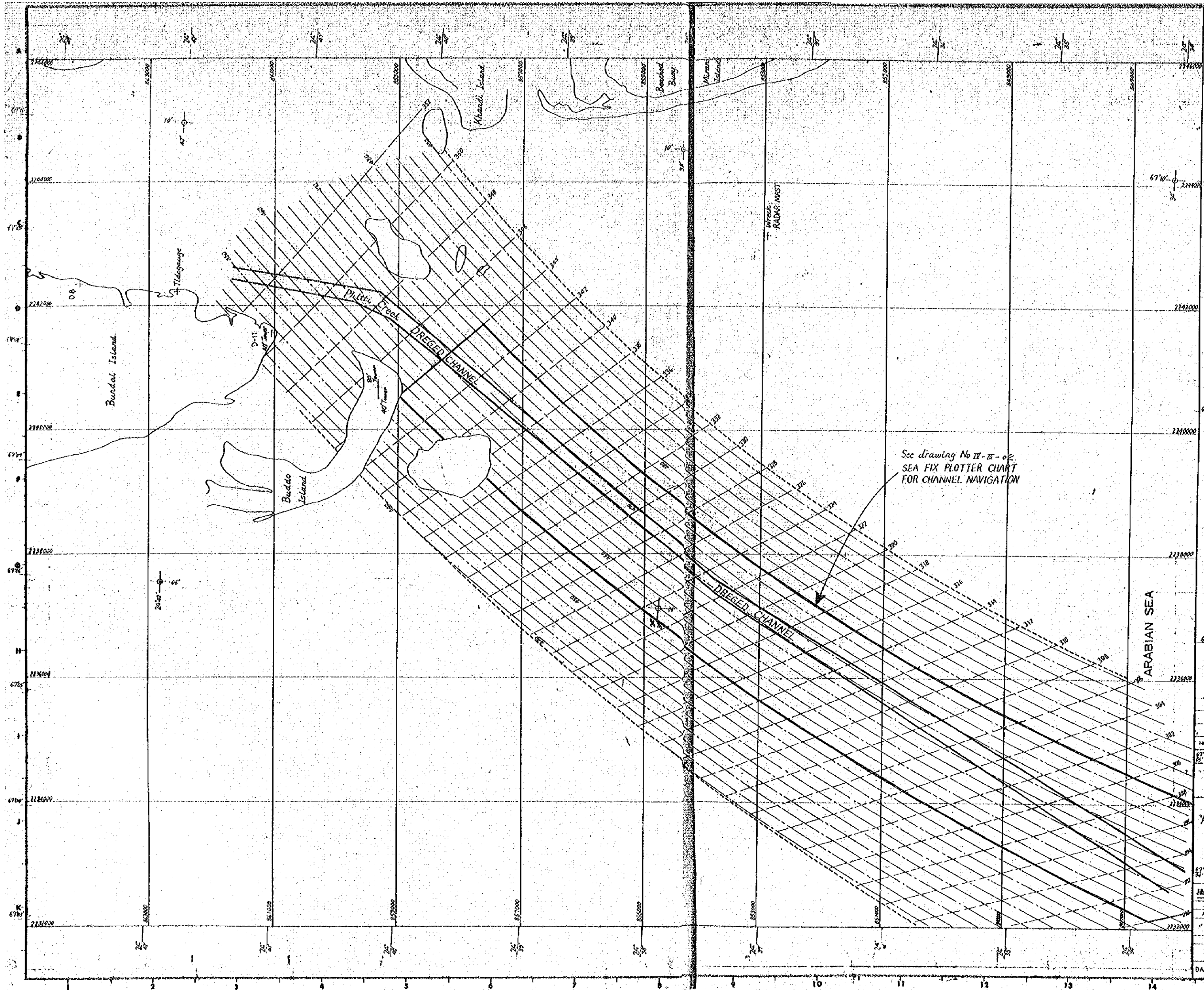
SECTION 1:10

GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN
VOL. N- NAVIGATION AIDS
ARRANGEMENT
LIGHTED BEACON
PLAN, ELEVATION, DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. No.	
DATE		DWG. NO. M-II-14	



GENERAL NOTES

POSITION OF STATION

	Easting (YRD)	Northing (YRD)
MASTER	2207850.98	881380.86
SLAVE 1	2234380.65	869497.99
SLAVE 2	2247815.10	847895.50

PATTERN 1

PATTERN 2

See drawing No II-III-02
SEA FIX PLOTTER CHART
FOR CHANNEL NAVIGATION

NO.	DATE	REVISION	APPROVED

FORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

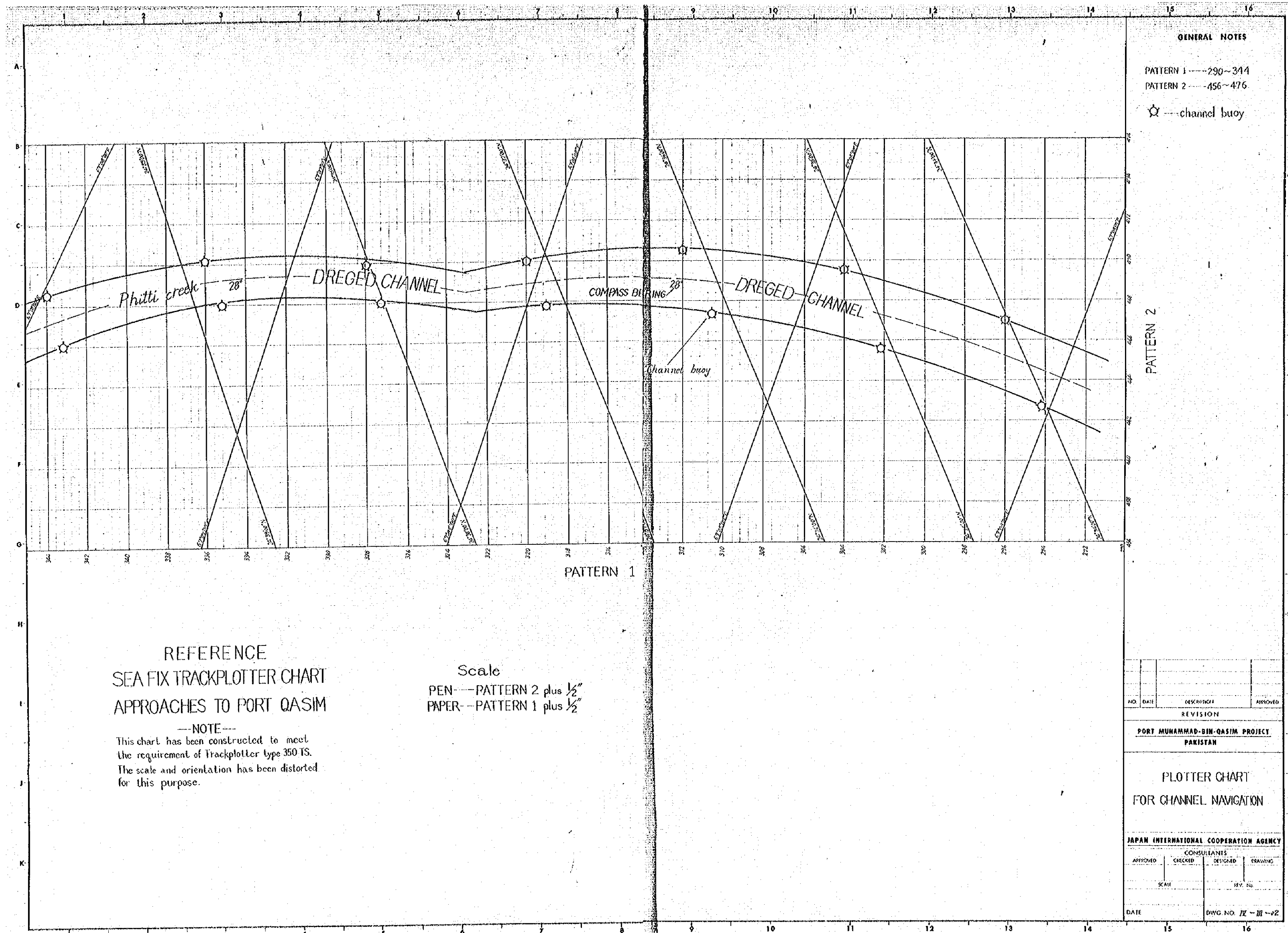
APPROACH CHANNEL
SEA-FIX SYSTEM

JAPAN INTERNATIONAL COOPERATION AGENCY
CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING

SCALE
1/25,000

DATE
OWC NO. II-III-01



GENERAL NOTES

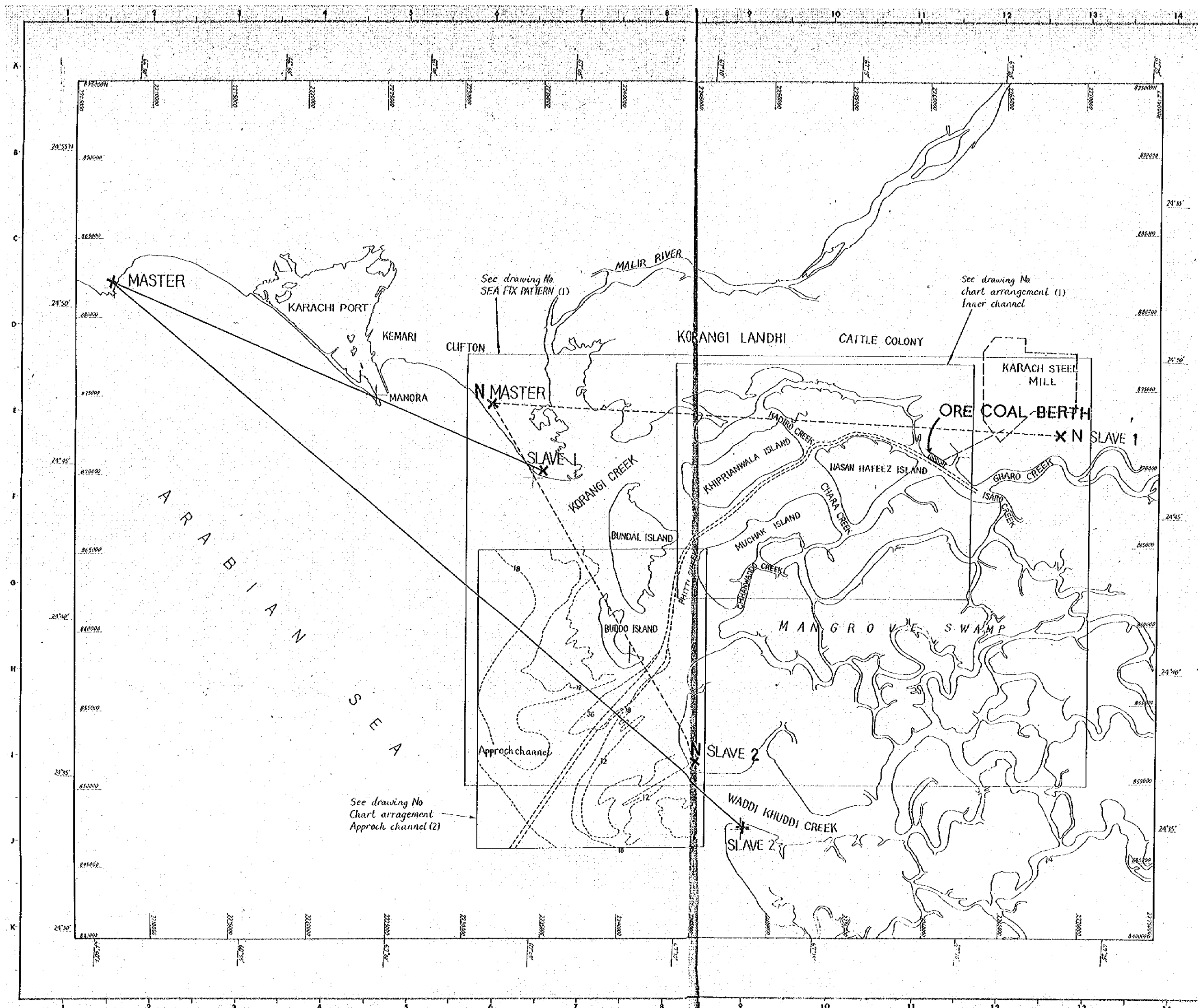
- PATTERN 1 --- 290~344
- PATTERN 2 --- 456~476
- ☆ --- channel buoy

REFERENCE
SEA FIX TRACKPLOTTER CHART
APPROACHES TO PORT QASIM

---NOTE---
 This chart has been constructed to meet
 the requirement of Trackplotter type 350 TS.
 The scale and orientation has been distorted
 for this purpose.

Scale
 PEN --- PATTERN 2 plus 1/2"
 PAPER --- PATTERN 1 plus 1/2"

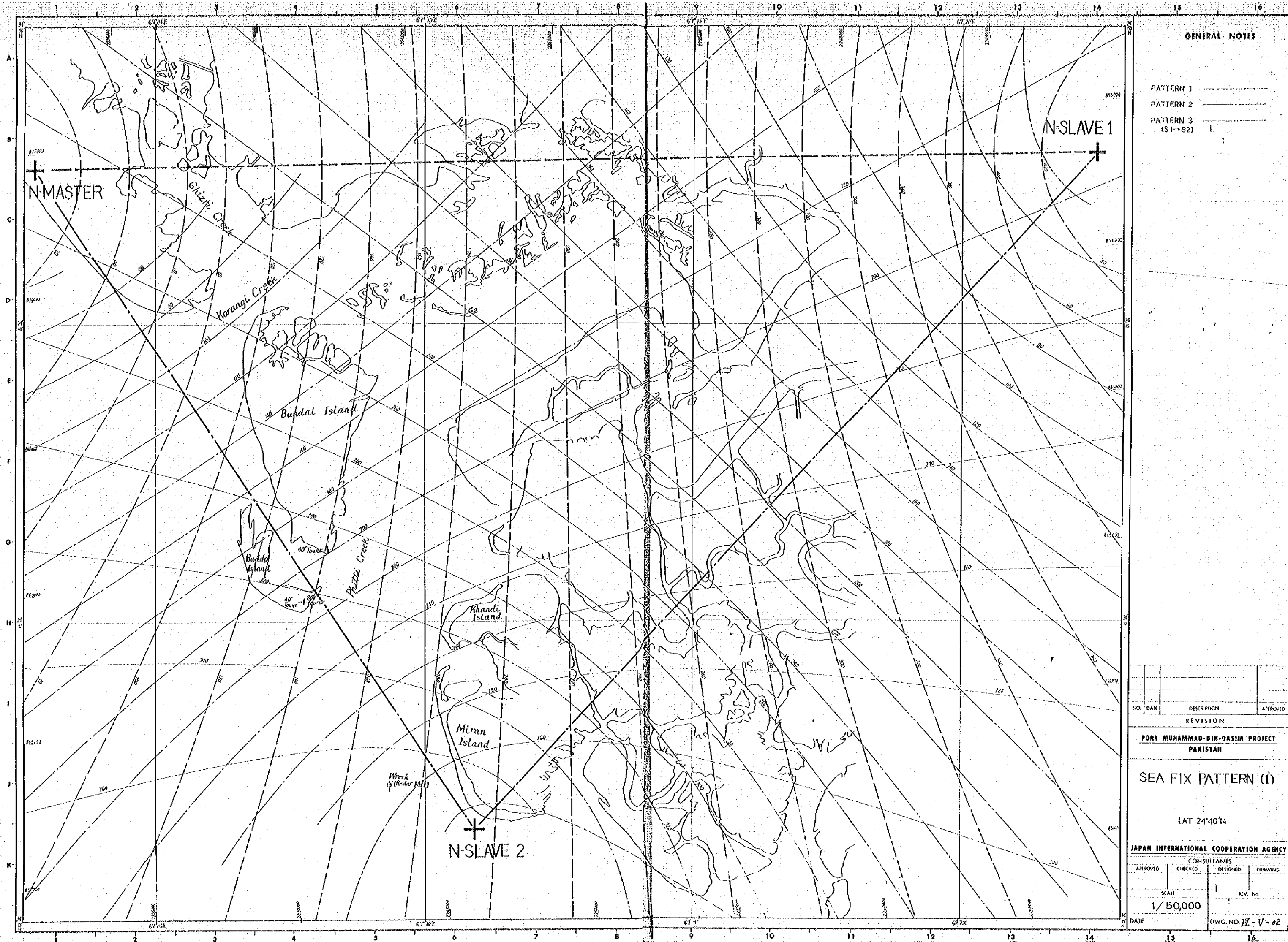
NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
PLOTTER CHART FOR CHANNEL NAVIGATION			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED		CONSULTANTS	
SCALE	CHECKED	DESIGNED	DRAWING
DATE	REV. NO.	DWG. NO. IX-III-02	



GENERAL NOTES

X --- Lat.
Y --- Long.

NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
SEA FIX CHAINS (STATION ARRANGEMENT)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED		CONSULTANTS	
CHECKED		DESIGNED	
SCALE		REV. NO.	
1/100,000			
DATE		DWG. NO. IV-V-01	



GENERAL NOTES

- PATTERN 1
- PATTERN 2
- PATTERN 3 (S1-S2)

NO	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

SEA FIX PATTERN (1)

LAT. 24°40'N

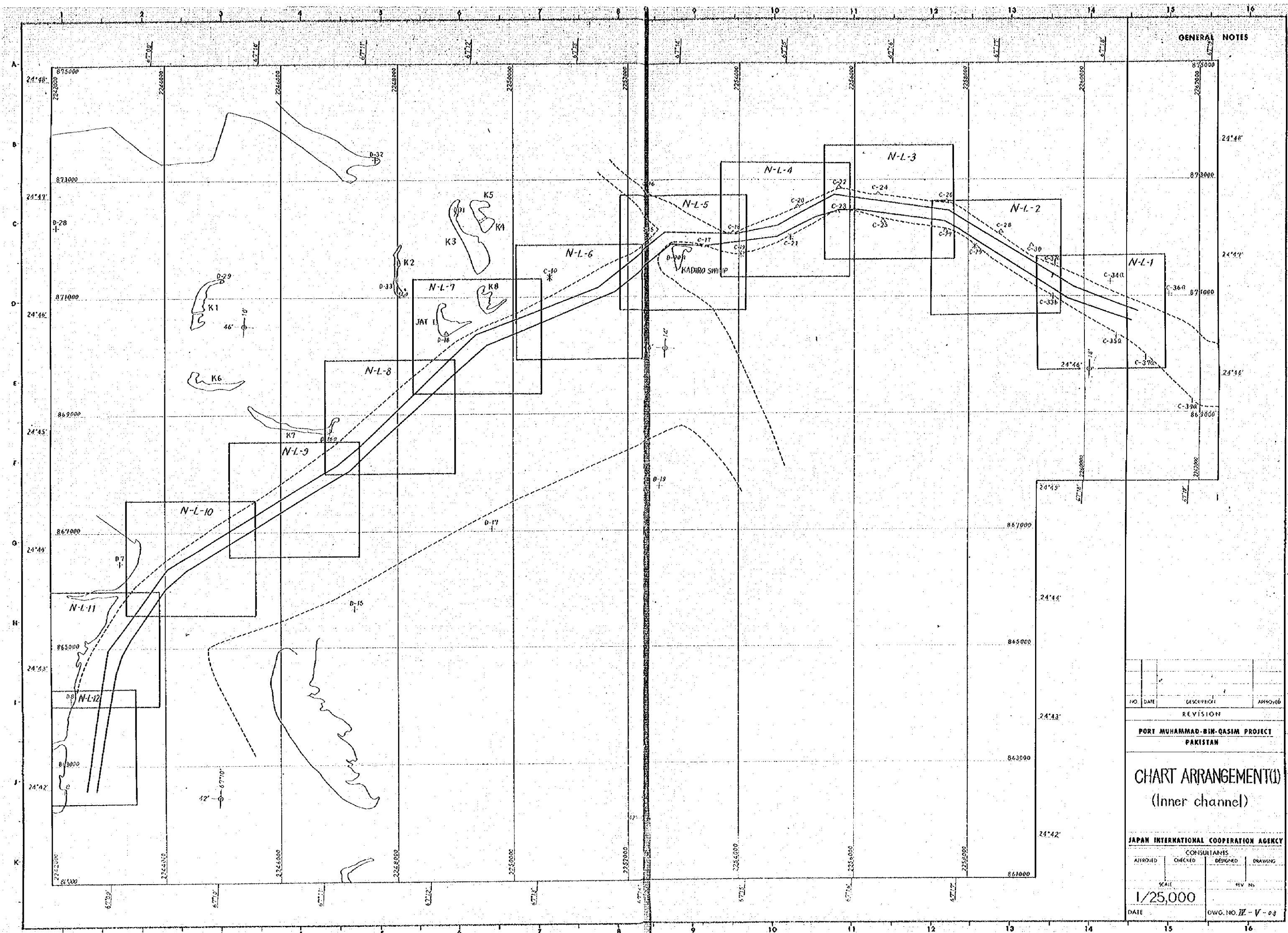
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS

APPROVED _____ CHECKED _____ DESIGNED _____ DRAWING _____

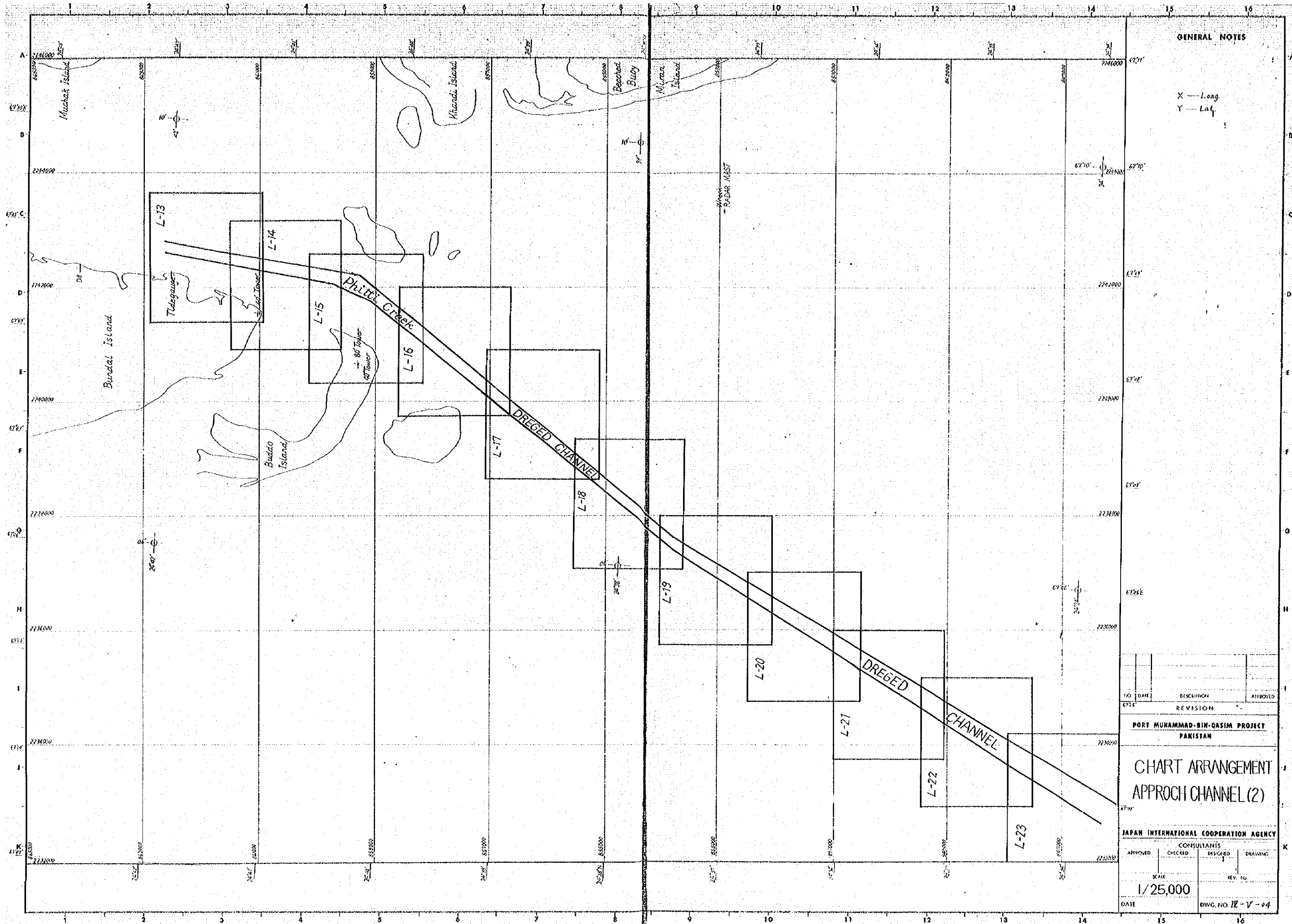
SCALE 1/50,000 REV. NO. _____

DATE _____ DWG. NO. IX-V-02



GENERAL NOTES

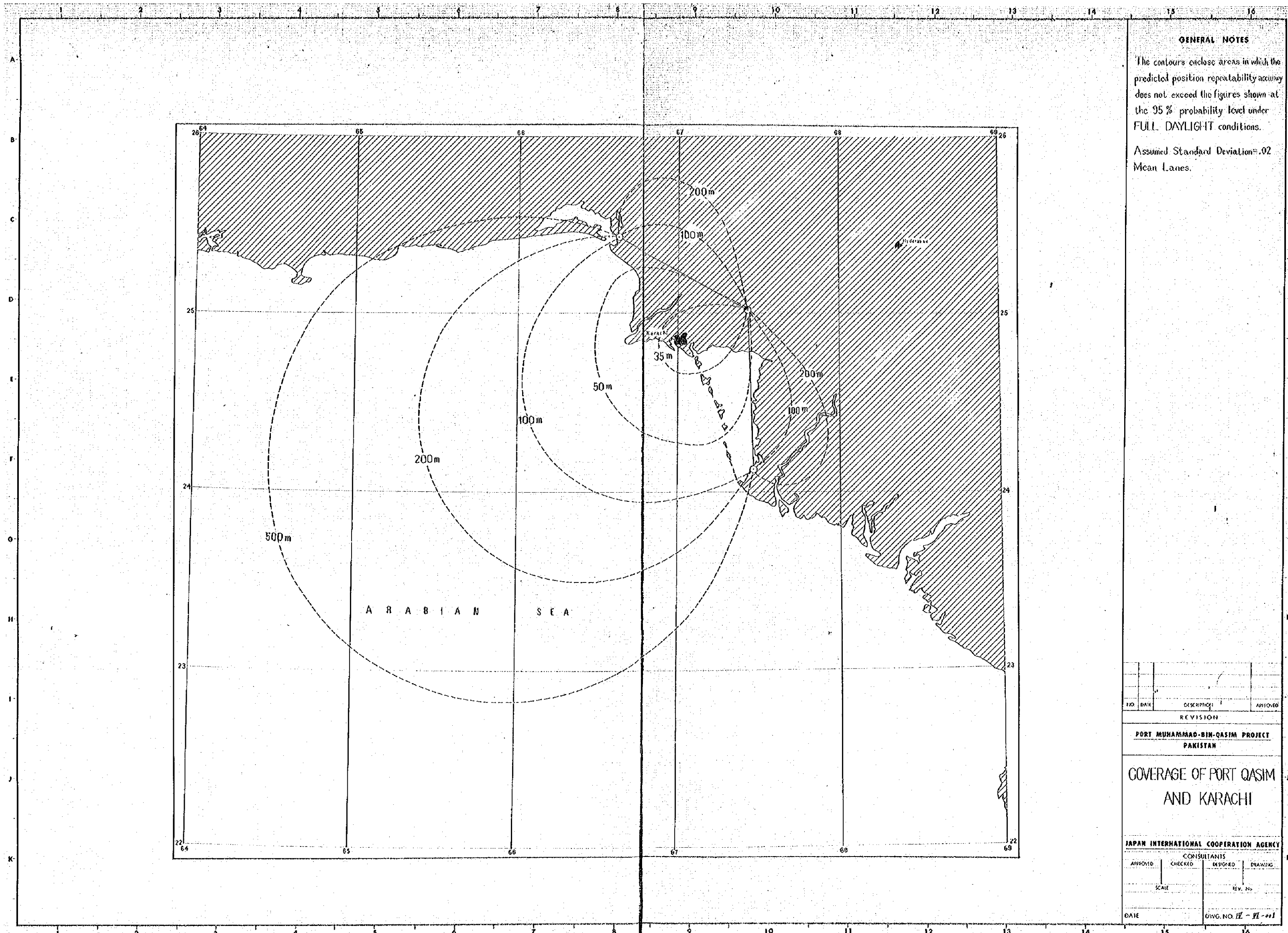
NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
CHART ARRANGEMENT(I) (Inner channel)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	
1/25,000			
DATE		OWG. NO. <i>II</i> - V - 03	



GENERAL NOTES

X — Long.
Y — Lat.

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MURAMMAD-SIN-QASIM PROJECT PAKISTAN			
CHART ARRANGEMENT APPROCH CHANNEL (2)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED		CONSULTANTS	
CHECKED		DESIGNED	
SCALE		REV. NO.	
1/25,000			
DATE		DWG. NO. II - V - 04	



GENERAL NOTES

The contours enclose areas in which the predicted position repeatability accuracy does not exceed the figures shown at the 95 % probability level under FULL DAYLIGHT conditions.

Assumed Standard Deviation = .02 Mean Lanes.

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

COVERAGE OF PORT QASIM AND KARACHI

JAPAN INTERNATIONAL COOPERATION AGENCY
CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. No.	
DATE		DWG. NO. <i>II-11-001</i>	

