

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

SIHANOUKVILLE PORT, MINISTRY OF PUBLIC WORKS AND TRANSPORT

THE KINGDOM OF CAMBODIA

**THE STUDY ON THE MASTER PLANNING
AND FEASIBILITY STUDY OF
THE SIHANOUKVILLE PORT
IN THE KINGDOM OF CAMBODIA**

**FINAL REPORT
VOL.2 MASTER PLANNING
JUNE 1997**

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Note) The following exchange rates are employed
in this report.

1 US Dollar=107 Japanese Yen=2,594 Cambodian Riels
(May 20, 1996)



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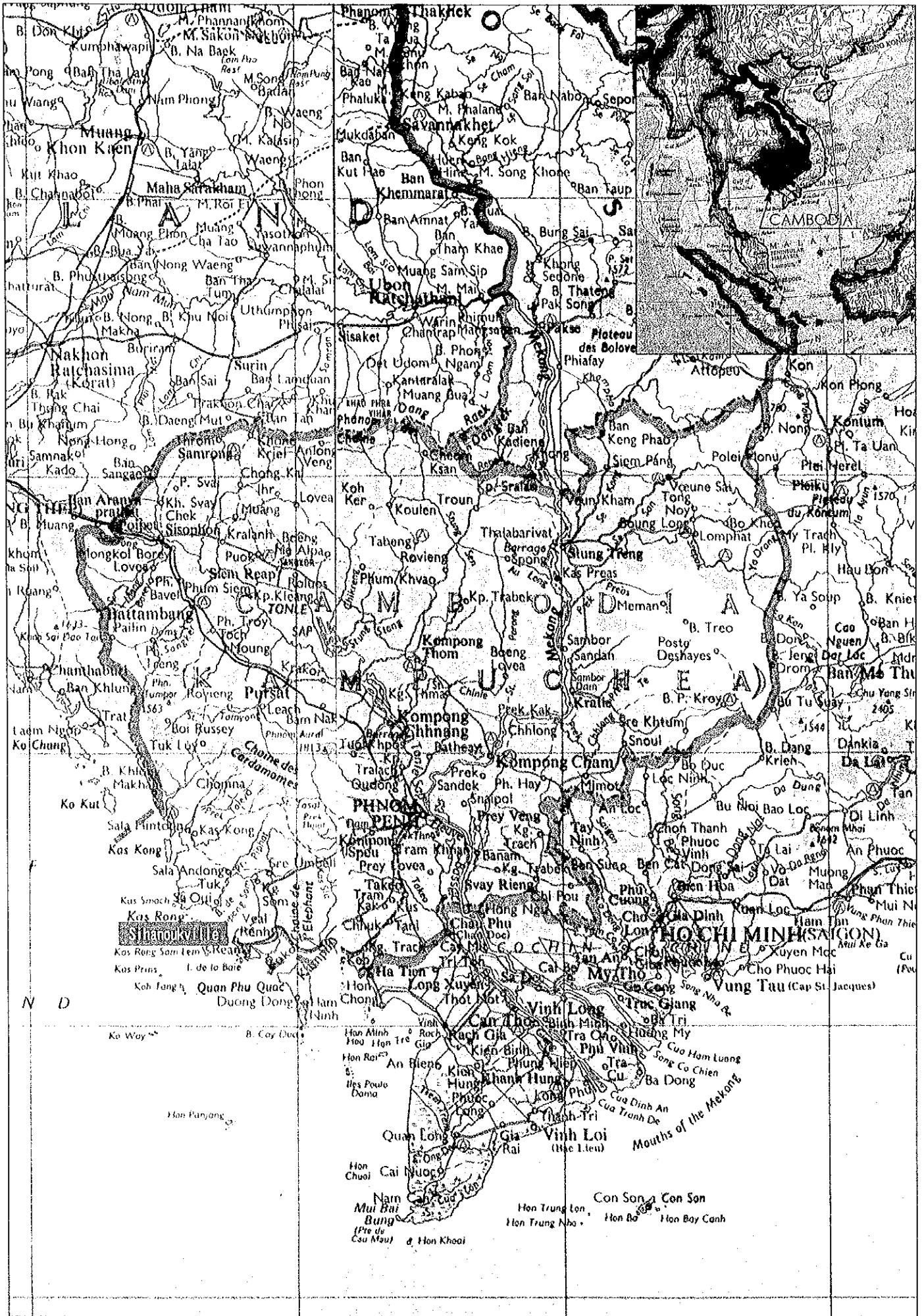
**THE STUDY ON THE MASTER PLANNING AND
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FINAL REPORT

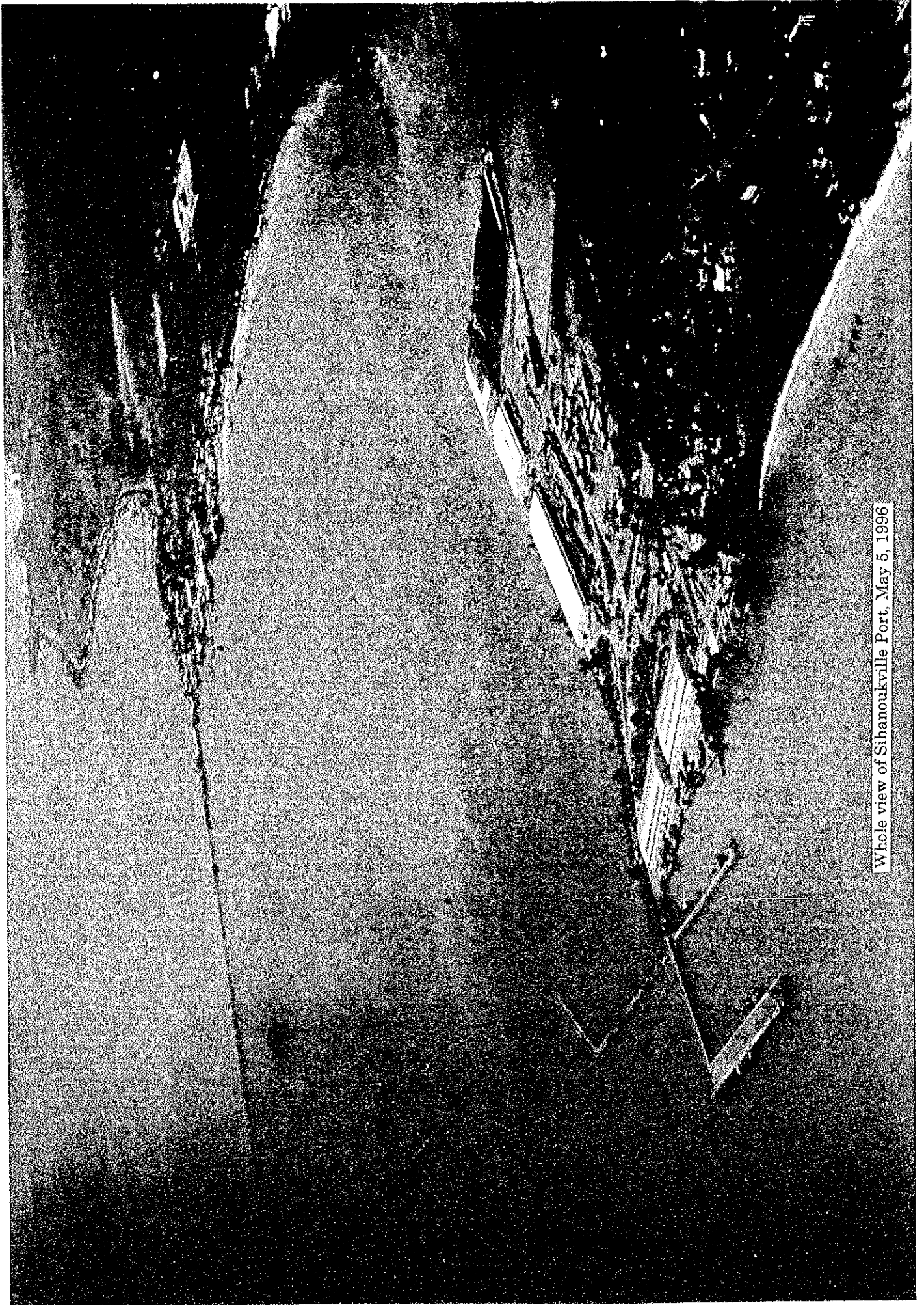
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Location map

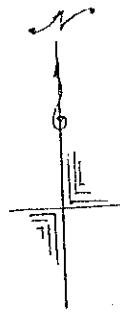


Whole view of Sihanoukville Port, May 5, 1996

Sihanoukville Port (Present Situation)

s=1/50,000

Oil Port



Breakwater

North

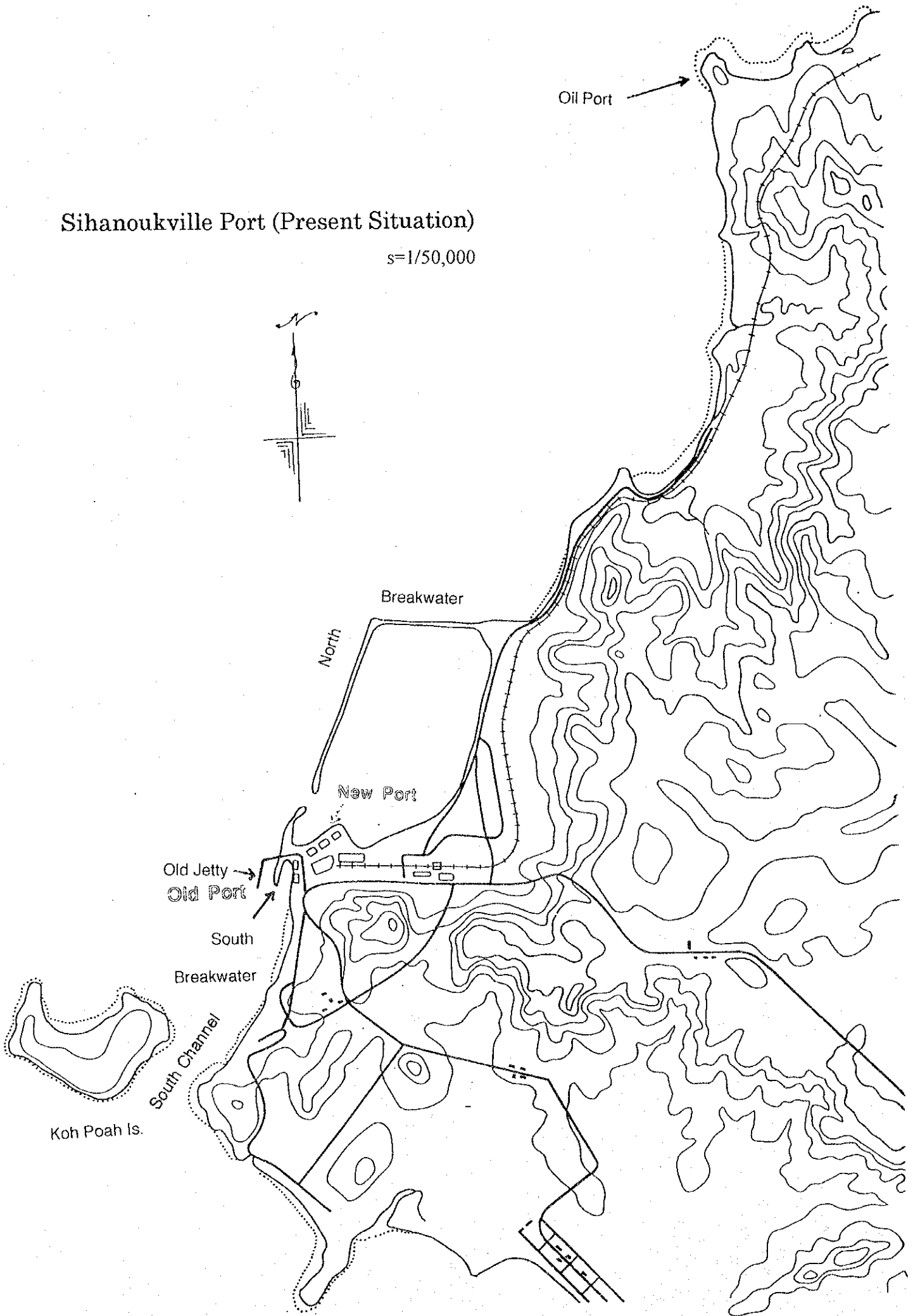
New Port

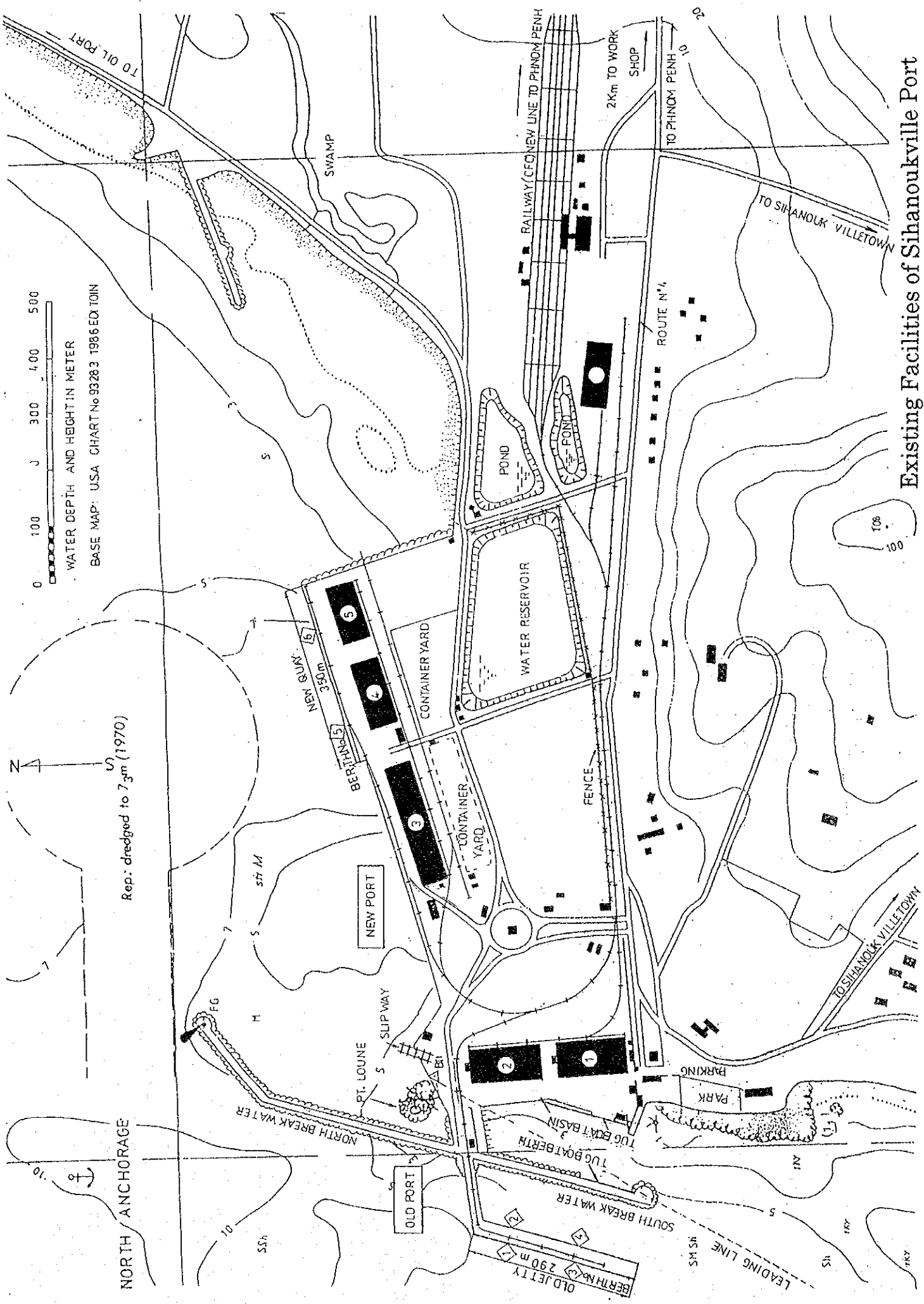
Old Jetty
Old Port

South
Breakwater

South Channel

Koh Poah Is.

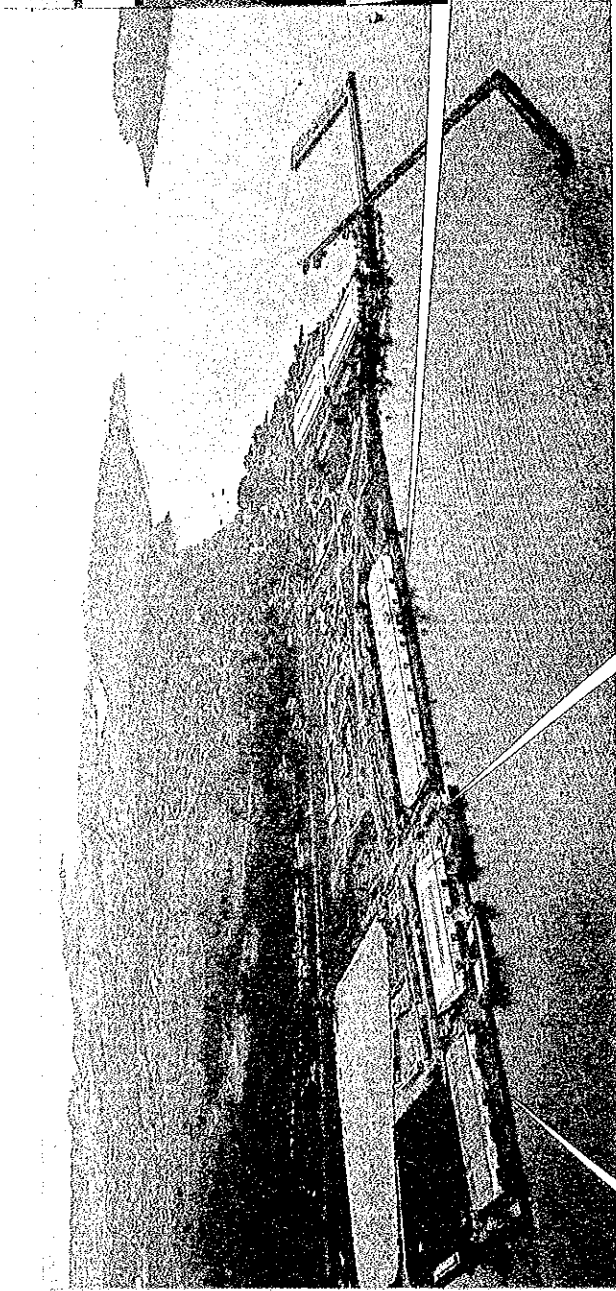




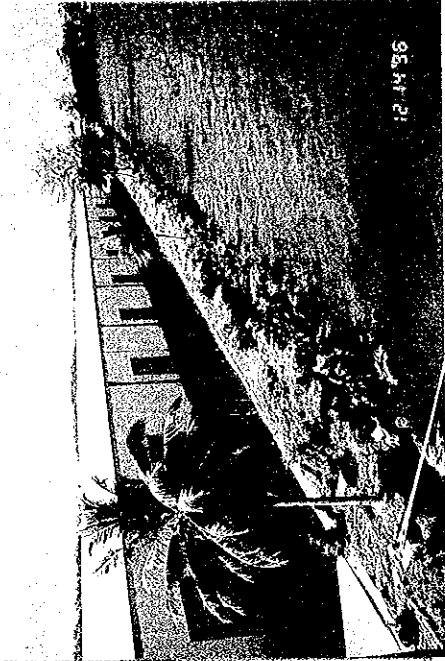
0 100 200 300 400 500
 WATER DEPTH AND HEIGHT IN METER
 BASE MAP: USA CHART No 93283 1986 ED TOIN

Rep.: dredged to 7.3m (1970)

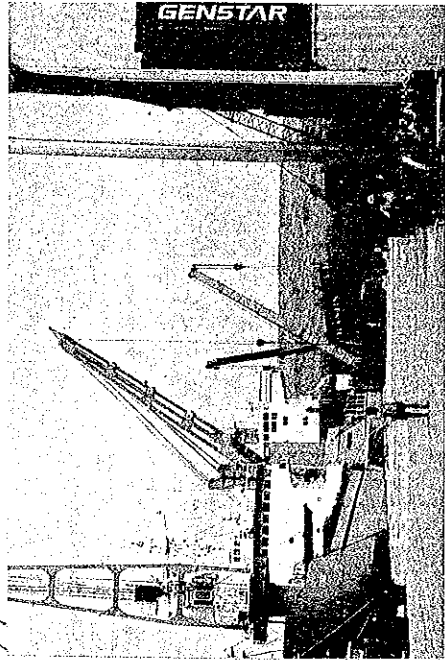
Existing Facilities of Sihanoukville Port



Aero-photo of "New Port" (left) and "Old Jetty" (right),
Dec. 23, 1996



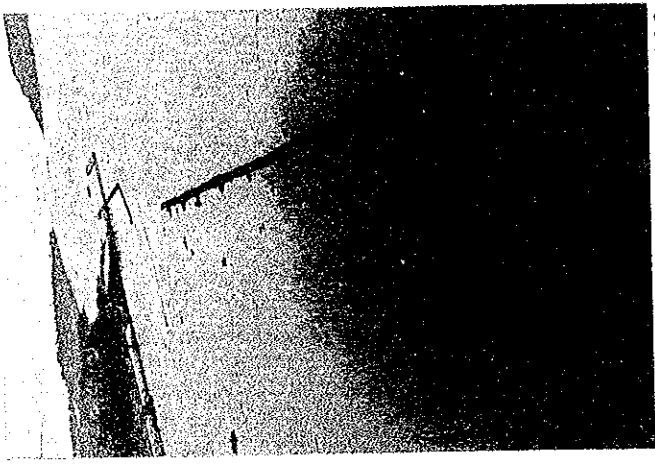
Proposed site of Urgent Rehabilitation Plan,
Dec. 14, 1996



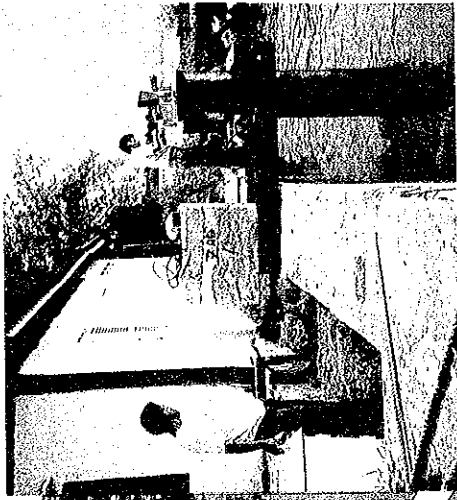
Container cargo handling by ship-gear
and mobile-cranes at "New Quay", Dec. 14, 1996



Container ship alongside of "New Quay", Dec. 12, 1996



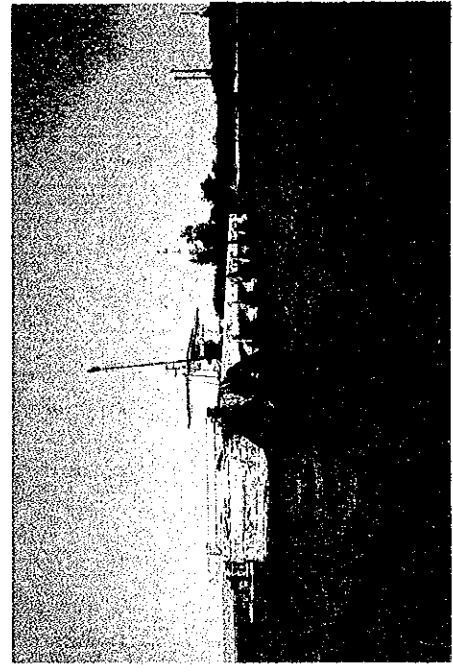
North Breakwater, Dec. 23, 1996



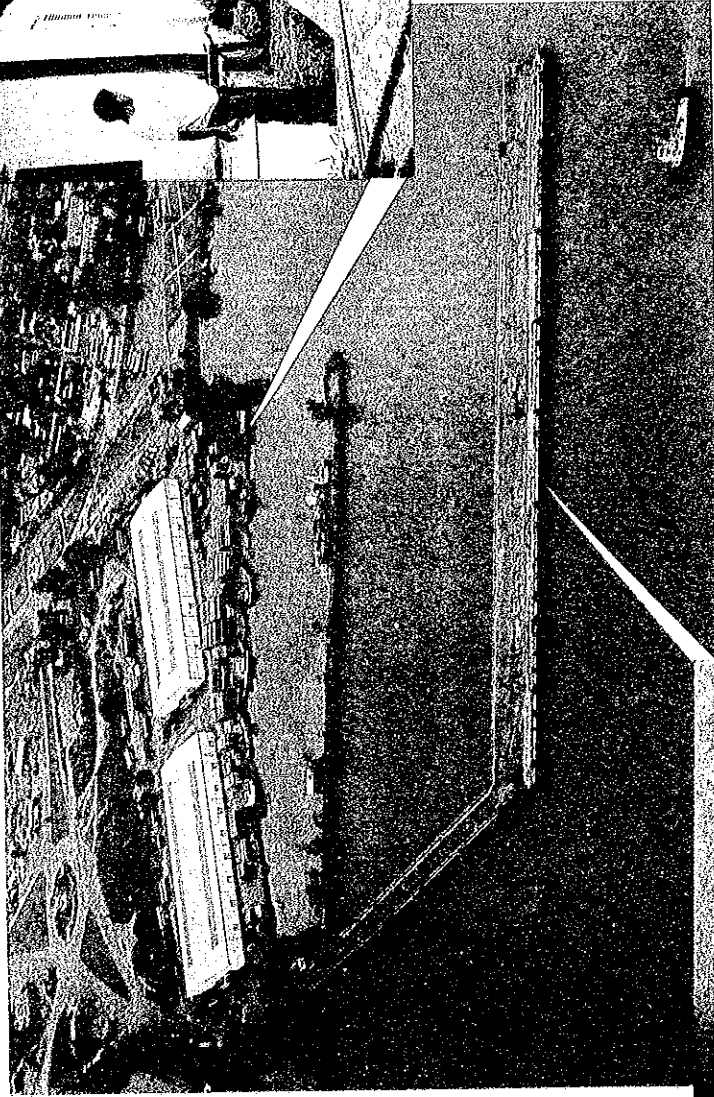
A tide gauge installed by the Study Team at the corner of "Tug Boat Basin, May 15, 1996



Bagged cargo handling at "Old Jetty" Mar. 15, 1997



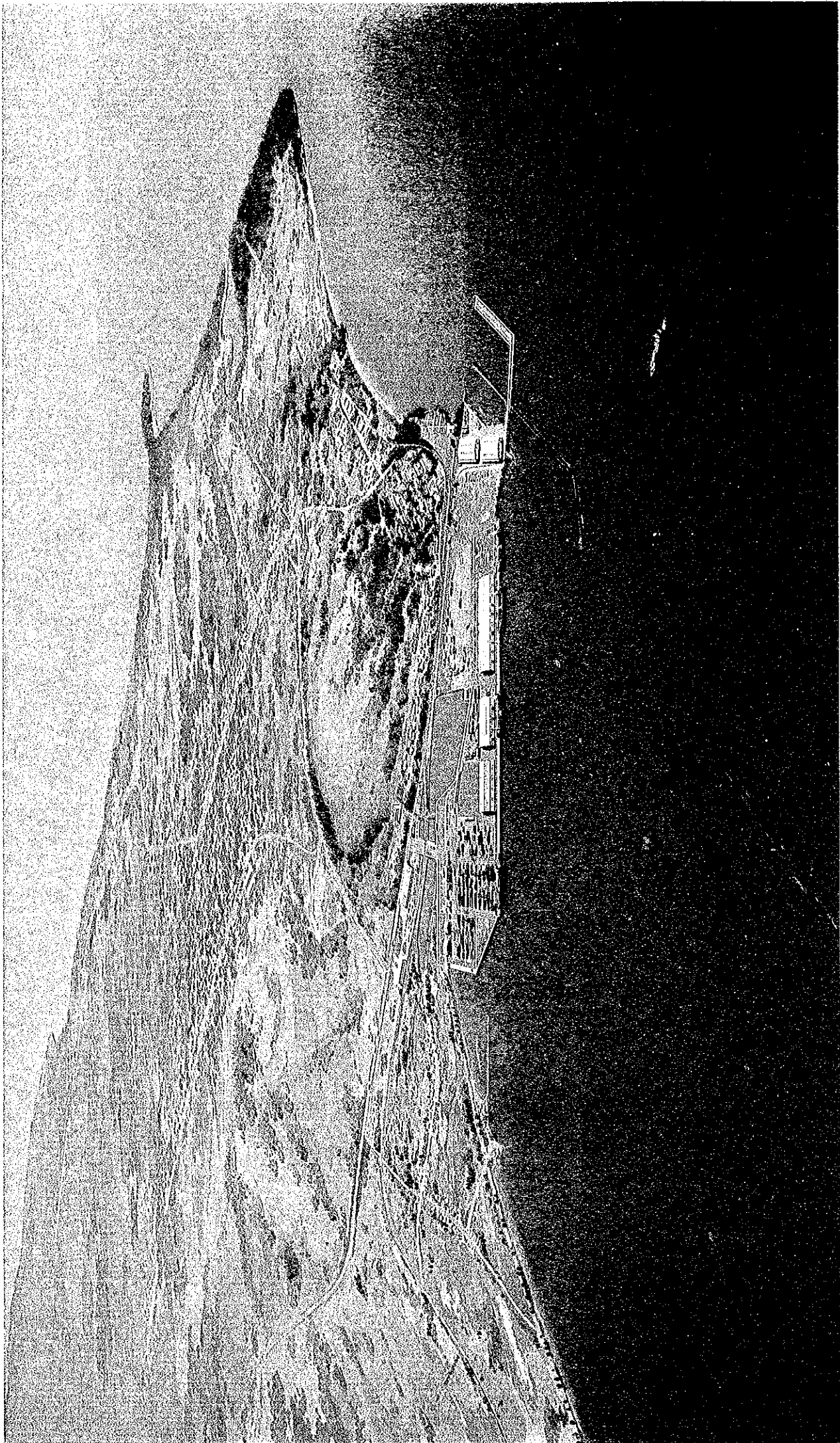
Oil Port Jetty, Nov. 15, 1996



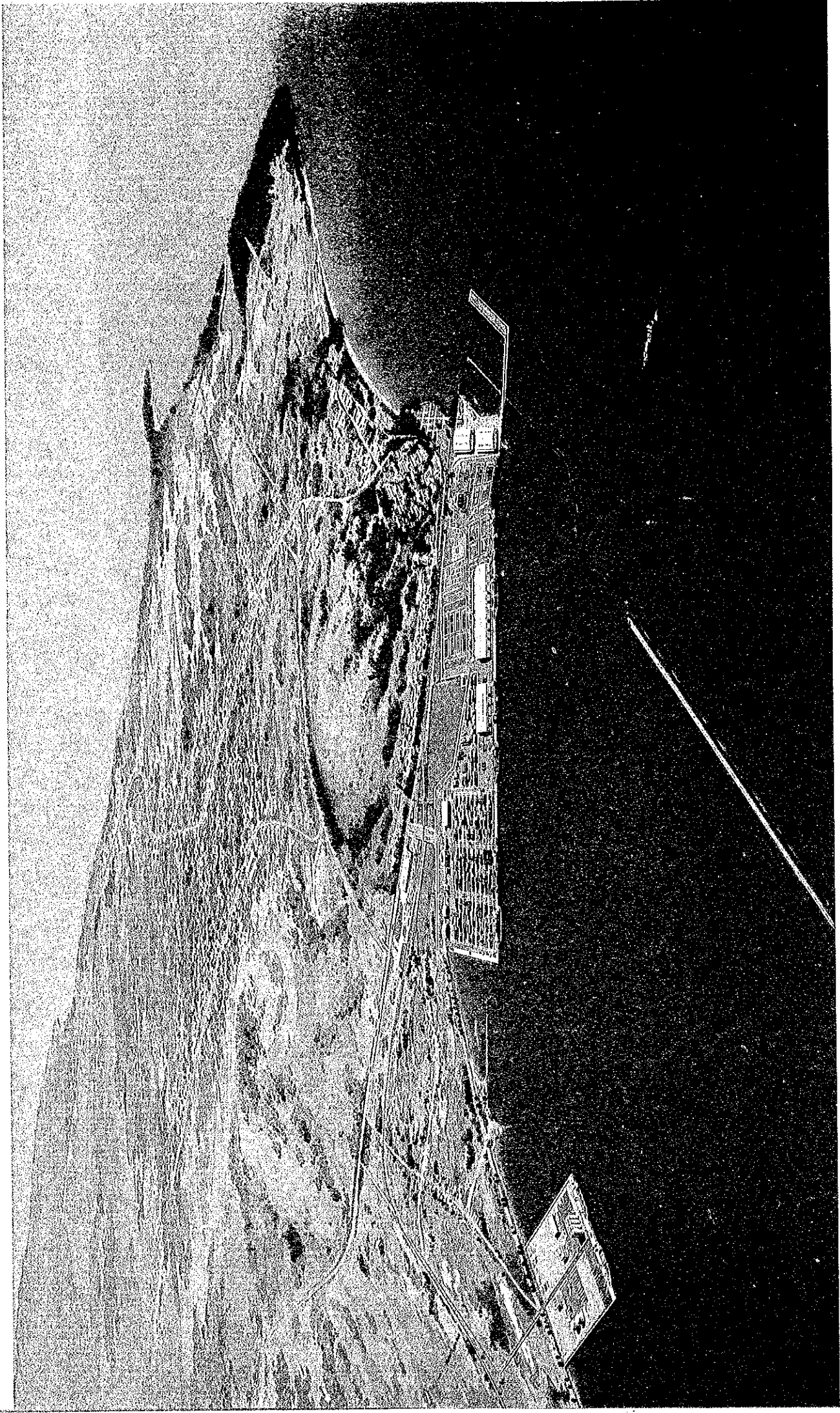
P/C beams underneath the "Old Jetty" Apr. 25, 1996



Spalled P/C beam and broken up P/C cables Apr. 25, 1996



Short-term Development Plan (up to 2005)



Long-term Development Plan (up to 2015)

LIST OF ABBREVIATIONS

A	ADB	: Asian Development Bank
	ASTM	: American Society for Testing and Materials
B	BOD	: Biological Oxygen Demand
	BOR	: Berth Occupancy Rate
	BOT	: Built, Operate and Transfer
C	CD	: Chart Datum
	CDC	: Council for the Development of Cambodia
	CDL	: Chart Datum Level
	CFC	: Conversion Factor for Consumption
	CFRC	: Royal Railway of Cambodia
	CFS	: Container Freight Station
	CIF	: Cost, Insurance and Freight
	COD	: Chemical Oxygen Demand
	COMECON	: Council for Mutual Economic Assistance
	CPI	: Consumer Price Index
CY	: Container Yard	
D	DO	: Dissolved Oxygen
	DWT	: Dead Weight Tonnage
E	EIA	: Environmental Impact Assessment
	EIRR	: Economic Internal Rate of Return
	EMPA	: Europe Maritime Pilot Association
F	FIRR	: Financial Internal Rate of Return
	FOB	: Free on Board
	FSDP	: First Socioeconomic Development Plan, 1996-2000
G	GDP	: Gross Domestic Product
	GOC	: Government of Cambodia
	GOJ	: Government of Japan
	GVW	: Gross Vehicle Weight
H	HWL	: High Water Level
I	IALA	: International Association of Lighthouse Authorities
	IEE	: Initial Environmental Evaluation
	IUUP	: University of Paris

J	JICA	: Japan International Cooperation Agency
	JIS	: Japanese Industrial Standard
K	KAMSAB	: Kampuchea Shipping Agency & Brokers
L	LAQ	: Lease a Quay
	LOA	: Length Over All
	LUP	: License to Use a Port
	LWL	: Low Water Level
M	MPWT	: Ministry of Public Works and Transport
	MSL	: Mean Sea Level
N	NGO	: Non-government Organization
	NPRDC	: National Programme to Rehabilitate and Develop Cambodia
O	OCC	: Opportunity Cost of Capital
	OCDI	: Overseas Coastal Area Development Institute of Japan
	OECF	: Overseas Economic Cooperation Fund
P	P/C	: Pre-stressed Concrete
	PIP	: Public Investment Program
	PPM	: Parts per Million
	PS	: Horse Power
Q	QC	: Quality Control
R	R/C	: Reinforced Concrete
S	SCF	: Standard Conversion Factor
	SPT	: Standard Penetration Test
	SS	: Suspended Solid
T	TEU	: Twenty Footer Equivalent Unit
U	U/P	: Unit Prices
	UKC	: Under Keel Clearance
	UNCTAD	: United Nations Conference on Trade and Development
	UNTAC	: United Nations Transitional Authority in Cambodia
	US\$: US Dollar
	USSR	: Union of Soviet Socialist Republics
W	WB	: World Bank

CONTENTS

1. Introduction	1-1
1.1 Background of the Study	1-1
1.1.1 Background	1-1
1.1.2 Scope of work	1-2
1.2 Methodology of master planning	1-2
1.3 Maps for reference	1-2
2. Brief review of the existing situation	2-1
2.1 General aspects of the country	2-1
2.2 Natural conditions	2-2
2.2.1 Geography	2-2
2.2.2 Natural conditions	2-3
2.3 Socioeconomic situation	2-4
2.3.1 Laws and regulations related to the project	2-4
2.3.2 National economic situation	2-6
2.3.3 National development plans	2-18
2.4 Transportation sector	2-22
2.4.1 Transportation network in Cambodia	2-22
2.4.2 Port network	2-24
2.4.3 Functions of Sihanoukville Port in the cargo traffic in the country	2-26
2.5 Present situation of Sihanoukville Port	2-27
2.5.1 Natural situations	2-27
2.5.2 Administrative organization, and operation and management	2-93
2.5.3 Port facilities	2-111
2.5.4 Port activities	2-141
2.6 Present situation of the region and Sihanoukville city	2-170
2.6.1 Development plans of region	2-170
2.6.2 Socioeconomic activities in the port area of Sihanoukville	2-174
2.6.3 Environmental aspect of the project area and vicinities of the city	2-174
3. Forecast of cargo traffic for the master plan	3-1
3.1 Socioeconomic framework in 2015	3-1
3.1.1 Population	3-1
3.1.2 Economic framework	3-1
3.2 Demand forecast	3-3
3.2.1 Methodology for demand forecast	3-3
3.2.2 Main cargo throughput in Cambodia port	3-5
3.2.3 Cargo volume at Sihanoukville Port	3-17
4. Formulation of the development strategy of cargo transportation	4-1
4.1 The role of Sihanoukville Port and its dry port in the international and domestic trade	4-1

4.2	Assumption and conditions introduced	4-3
4.2.1	Dimensions of calling ships	4-3
4.2.2	Approach channels to the port	4-6
4.2.3	Criteria for the productivity of berth, yard, shed and freight stations	4-9
4.3	Cargo handling capacity of the existing port facilities	4-10
4.3.1	Present capacity of Sihanoukville Port	4-10
4.3.2	Improvement plan for urgent stage	4-11
4.3.3	Improvement plan in future	4-13
5.	Long-term development plan	5-1
5.1	Long-term development plan of the port facilities	5-1
5.1.1	Elements to be considered in Long-term plan	5-1
5.1.2	Number of berths required in 2015	5-2
5.1.3	Construction schedule	5-9
5.2	Long-term development plan of management and operation	5-10
5.2.1	General principles of port management and operation	5-10
5.2.2	Modernization of port management and operation	5-13
5.2.3	Possible alternatives for privatization in management and operation	5-26
5.3	Preliminary design and cost estimate	5-31
5.3.1	General	5-31
5.3.2	Design condition	5-31
5.3.3	Quay construction plan	5-35
5.3.4	Approach channel and port basin	5-54
5.3.5	Planning of cargo handling and storage facilities	5-70
5.3.6	Required scale of cargo handling equipment	5-85
5.3.7	Navigation aids	5-92
5.3.8	Project cost study	5-92
5.4	Initial environmental evaluation	5-101
5.4.1	General	5-101
5.4.2	Initial environmental evaluation	5-102
5.5	Preliminary economic analysis	5-103
5.5.1	Methodology	5-103
5.5.2	Prerequisites of analysis	5-103
5.5.3	Costs of the projects	5-104
5.5.4	Benefits of the projects	5-105
5.5.5	Evaluation of the projects	5-107
5.6	Over-all evaluation of the proposed alternative plans	5-109
6.	Conclusions and recommendations	6-1
6.1	Conclusions	6-1
6.2	Recommendations	6-4
7.	Urgent improvement plan	7-1
7.1	Construction of alternative facilities to the Old Jetty	7-1
7.1.1	Concept of the Urgent improvement plan	7-1

7.1.2 Alternative facilities to the Old Jetty	7-2
7.2 Navigation channel and navigation aids	7-5
7.3 Operational improvement plan	7-5

APPENDICIES

Appendix A : Probability of occurrence of waves	A-1
Appendix B : Initial environmental evaluation for the master planning and feasibility study of the Sihanoukville Port in the Kingdom of Cambodia	B-1

LIST OF TABLES

Table - 2.3.1-1	Investment project approved by CDC	2-5
Table - 2.3.2-1	Trend of population in Cambodia	2-7
Table - 2.3.2-2	GDP by industrial origin at 1989 constant price	2-8
Table - 2.3.2-3	Share of GDP by industrial origin at market price	2-9
Table - 2.3.2-4	Socioeconomic indicators	2-9
Table - 2.3.2-5	Agriculture production	2-11
Table - 2.3.2-6	Yield of rice	2-12
Table - 2.3.2-7	Livestock production	2-12
Table - 2.3.2-8	Fish catch	2-13
Table - 2.3.2-9	Forestry production	2-13
Table - 2.3.2-10	Trend of GDP at industry sector and service sector	2-15
Table - 2.3.2-11	Industrial production at 1980 constant price	2-15
Table - 2.3.2-12	External trade in 1994 and 1995	2-17
Table - 2.3.3-1	Projected public and private investment (1996-2000)	2-19
Table - 2.3.3-2	Sectoral allocation of the public investment (1996-2000)	2-20
Table - 2.3.3-3	Allocation by sector (PIP 1996-1998)	2-21
Table - 2.4.2-1	Classification of ports of Cambodia	2-25
Table - 2.5.1-1 (a)	Monthly average of maximum temperature (°C)	2-29
Table - 2.5.1-1 (b)	Monthly average of minimum temperature (°C)	2-29
Table - 2.5.1-2	Average, max. and min. of temperature (1957-1971)	2-29
Table - 2.5.1-3	Monthly maximum of wind (m/s) (1984-1995)	2-30
Table - 2.5.1-4	Wind direction with max. speed in each month (m/s, 1960-1969)	2-30
Table - 2.5.1-5	Frequency of wind-speed by direction (%) in 8 min. observation (1963-1970)	2-33
Table - 2.5.1-6	Rainfall historical (Station; Sihanoukville)	2-34
Table - 2.5.1-7	Average, maximum and minimum quantity of rainfall at Sihanoukville (1956-1971)	2-35
Table - 2.5.1-8	Average, maximum and minimum day numbers with rain (1957-1972, 1982-1985)	2-35
Table - 2.5.1-9	Intensity of rainfall (1960-1970)	2-35
Table - 2.5.1-10	Summary of topographic survey results	2-39
Table - 2.5.1-11	Summary of level survey results	2-39
Table - 2.5.1-12	Summary of bathymetric survey results	2-40
Table - 2.5.1-13	Summary of seismic results	2-46

Table - 2.5.1-14	Particulars of bore holes	2-49
Table - 2.5.1.15 (a)	Quantity of subsoil investigation works	2-49
Table - 2.5.1.15 (b)	Summary of undisturbed samples	2-50
Table - 2.5.1-16	Symbols used in the technical report for engineering research, Vol.2, Geological research engineering (Extended port area)	2-52
Table - 2.5.1-17 (a)	Properties of subsoil material	2-54
Table - 2.5.1-17 (b)	Properties of subsoil material	2-55
Table - 2.5.1-18 (a)	Summary of laboratory test results	2-56
Table - 2.5.1-18 (b)	Summary of laboratory test results	2-57
Table - 2.5.1-19	One month tide observation from 13 May to 12 June	2-79
Table - 2.5.1-20	Harmonic constants at Sihanoukville Port in 1996	2-80
Table - 2.5.1-21	Harmonic constants at Sihanoukville Port	2-80
Table - 2.5.1-22	Results of harmonic analysis at location C-3	2-90
Table - 2.5.2-1	Number of employees of Sihanoukville Port	2-99
Table - 2.5.2-2	Number of employees of Sihanoukville Port (1991-1996)	2-99
Table - 2.5.2-3	Age structure of employees	2-99
Table - 2.5.2-4	Number of engineers of Sihanoukville Port	2-100
Table - 2.5.2-5	Port operating hours and closing days by each function	2-101
Table - 2.5.2-6	Training program at Sihanoukville Port (1996-2000)	2-102
Table - 2.5.2-7	Port service performance in 1995	2-103
Table - 2.5.2-8 (a)	Port tariff: Navigation charges & dues	2-104
Table - 2.5.2-8 (b)	Port tariff: Stevedoring charges (except containers)	2-105
Table - 2.5.2-8 (c)	Port tariff: Other charges	2-105
Table - 2.5.2-8 (d)	Port tariff: Hire of labor, facilities & equipment	2-106
Table - 2.5.2-9	Income statement of Sihanoukville Port	2-108
Table - 2.5.2-10	Durable years of assets for depreciation	2-110
Table - 2.5.3 (1)-1	Port related rehabilitation projects by ADB funding	2-113
Table - 2.5.3 (1)-2	Port related rehabilitation project by Cambodian local fund	2-113
Table - 2.5.3 (1)-3	Concrete strength test by Schmidt hammer	2-118
Table - 2.5.3 (1)-4	Results of structural analysis	2-119
Table - 2.5.3 (1)-5	Other port facilities of Sihanoukville Port	2-120
Table - 2.5.3 (1)-6	Saline contents and concrete cover (depth)	2-126
Table - 2.5.3 (2)-1	Existing building facilities of Sihanoukville Port	2-132
Table - 2.5.3 (3)-1 (a)	Classification of cargo handling equipment	2-134
Table - 2.5.3 (3)-1 (b)	Classification of cargo handling equipment	2-135
Table - 2.5.3 (3)-1 (c)	Classification of cargo handling equipment	2-136
Table - 2.5.3 (3)-2	Organization of Technical Office	2-137

Table - 2.5.3 (3)-3	Present condition of workshop and ship repair	2-138
Table - 2.5.3 (3)-4	Present condition of construction equipment and generators	2-139
Table - 2.5.3 (4)-1	Lists of existing navigational aids	2-140
Table - 2.5.4-1	Cargo volume by commodity	2-143
Table - 2.5.4-2	Number of calling vessel and cargo volume at Sihanoukville Port	2-145
Table - 2.5.4-3	Cargo volume by commodity	2-147
Table - 2.5.4-4	Cargo volume by package type	2-148
Table - 2.5.4-5	Container traffic at Sihanoukville Port	2-149
Table - 2.5.4-6	Reefer container	2-150
Table - 2.5.4-7	Cargo movement by commodity	2-153
Table - 2.5.4-8	Ship sizes classified by type of cargoes (in1995)	2-155
Table - 2.5.4-9	Main functions of the related offices for cargo handling operation and others at Sihanoukville Port	2-156
Table - 2.5.4-10	Formation of gang and total number of workers	2-157
Table - 2.5.4-11	Cargo throughput at Sihanoukville Port	2-164
Table - 2.5.4-12	Delivered / Received general cargo volume of warehouse and open storage yard in 1995	2-165
Table - 2.5.4-13	Container movement through the port in 1995	2-165
Table - 2.5.4-14	Container movement through the gate	2-166
Table - 2.5.4-15	Dwelling time of containers	2-167
Table - 2.5.4-16	Productivity of container handling by ship's crane	2-169
Table - 2.6.1-1	List of regional development projects	2-173
Table - 3.1.1-1	Projected population	3-1
Table - 3.1.1-2	GDP growth rate	3-3
Table - 3.1.1-3	Value of GDP	3-3
Table - 3.2.1-1	Cargo volume by main commodity in both ports	3-4
Table - 3.2.2-1	Import volume of cargo by macro forecast	3-5
Table - 3.2.2-2	Export volume of cargo by macro forecast	3-6
Table - 3.2.2-3	Import volume of fertilizer	3-6
Table - 3.2.2-4	Import volume of cement	3-7
Table - 3.2.2-5	Import / export volume of rice	3-8
Table - 3.2.2-6	Import volume of sugar	3-8
Table - 3.2.2-7	Import volume of wheat	3-9
Table - 3.2.2-8	Import volume of steel	3-9
Table - 3.2.2-9	Import volume of machinery and equipment	3-10
Table - 3.2.2-10	Import volume of bitumen	3-10

Table - 3.2.2-11	Import volume of fuel	3-11
Table - 3.2.2-12	Import volume of other general cargo	3-11
Table - 3.2.2-13	Export volume of wood product	3-12
Table - 3.2.2-14	Export volume of rubber	3-13
Table - 3.2.2-15	Export volume of agriculture product	3-14
Table - 3.2.2-16	Export volume of other general cargo	3-14
Table - 3.2.2-17	Summary of forecasted cargo volume in Cambodia	3-16
Table - 3.2.3-1	Share of cargo at Sihanoukville Port	3-18
Table - 3.2.3-2	Trend of containerization in Cambodia	3-19
Table - 3.2.3-3	Containerization rate in future	3-19
Table - 3.2.3-4 (a)	Cargo volume by commodity / package type at Sihanoukville Port	3-20
Table - 3.2.3-4 (b)	Cargo volume by commodity / package type at Sihanoukville Port	3-21
Table - 3.2.3-4 (c)	Cargo volume by commodity / package type at Sihanoukville Port	3-22
Table - 3.2.3-5	TEU and number of container	3-23
Table - 3.2.3-6	Import volume of fuel at Sihanoukville Port	3-23
Table - 4.1.1-1	Cargo volume share of Sihanoukville Port (1995)	4-1
Table - 4.1.1-2	Share of the origins and destinations of the cargoes	4-2
Table - 4.2.1-1	Ship sizes used for layout plan of berthing facilities	4-6
Table - 4.2.1-2	Calculation of number of calling ships	4-7
Table - 4.2.1-3	Size of calling vessels	4-8
Table - 4.2.3-1	Criteria for cargo handling productivity	4-9
Table - 4.3.2-1	Required cargo handling equipment and facilities in urgent stage	4-13
Table - 5.1.2-1	Requirement of berth at various stages of the project	5-8
Table - 5.2.2-1 (a)	Training program	5-24
Table - 5.2.2-1 (b)	Training program for operators(theory)	5-24
Table - 5.2.2-1 (c)	Training program for operators (practical training)	5-25
Table - 5.2.2-1 (d)	Training program for personal computer operators	5-25
Table - 5.2.3-1	Port authorities' duties in the world	5-26
Table - 5.2.3-2	Methods of privatization	5-27
Table - 5.3.2-1	Maximum objective ships and berth dimension	5-31
Table - 5.3.2-2	Equivalent deepwater wave	5-33
Table - 5.3.2-3	Significant wave	5-33

Table - 5.3.2-4	Sub-soil conditions	5-34
Table - 5.3.3-1	Comparison of quay structural types	5-39
Table - 5.3.3-2	List of proposed facilities for Long term plan (Case M-1)	5-50
Table - 5.3.3-3	List of proposed facilities for Long term plan (Case M-2)	5-52
Table - 5.3.4-1	Required new tug boats	5-61
Table - 5.3.5-1	Volume of cargoes passing through transit shed and open storage yard in 2015	5-70
Table - 5.3.5-2	Required size of the transit shed and open storage yard	5-71
Table - 5.3.5-3	Generated traffic volume in 2015	5-73
Table - 5.3.5-4	Comparison of handling systems	5-75
Table - 5.3.5-5	Degree and extend of computerization	5-76
Table - 5.3.5-6	Required storage capacity in container yard	5-81
Table - 5.3.6-1	Required general cargo handling equipment	5-86
Table - 5.3.6-2	Required number of transfer crane	5-88
Table - 5.3.6-3	Required number of chassis	5-89
Table - 5.3.6-4	Required number of container handling equipment	5-91
Table - 5.3.6-5	Required number of workers per gang by commodity	5-91
Table - 5.3.7-1	List of navigation aid on the N channel	5-92
Table - 5.3.8-1	Comparison of project cost	5-94
Table - 5.3.8-2	Cost estimation (Case H-1)	5-95
Table - 5.3.8-3	Cost estimation (Case M-1)	5-96
Table - 5.3.8-4	Cost estimation (Case L-1)	5-97
Table - 5.3.8-5	Cost estimation (Case H-2)	5-98
Table - 5.3.8-6	Cost estimation (Case M-2)	5-99
Table - 5.3.8-7	Cost estimation (Case L-2)	5-100
Table - 5.5.2-1	Size of ship and working efficiency of cargo handling in both cases	5-104
Table - 5.5.3-1	Costs of the projects in Sihanoukville Port	5-105
Table - 5.5.4-1	Benefits of the projects	5-107
Table - 5.5.5-1	EIRR of Master plan	5-107
Table - 5.6.1	Evaluation of the alternative plans	5-110
Table - 7.1.2-1	Quay arrangement of Urgent improvement plan	7-4
Table - 7.1.2-2	Cost estimates for Urgent improvement plan	7-4

LIST OF FIGURES

Fig. - 1-1	Work flow	1-3
Fig. - 1-2	Location map	1-4
Fig. - 1-3	Bay of Kompong Som	1-5
Fig. - 1-4	Sihanoukville Port (1)	1-6
Fig. - 1-5	Sihanoukville Port (2)	1-7
Fig. - 1-6	Sihanoukville Port (3)	1-8
Fig. - 1-7	Sihanoukville Port (Oil port)	1-9
Fig. - 2.3.2-1	Population by age group	2-6
Fig. - 2.3.2-2	Trend of GDP by industrial origin at 1989 constant price	2-8
Fig. - 2.3.2-3	GDP trend of agriculture	2-10
Fig. - 2.3.2-4	Trend of agriculture production	2-11
Fig. - 2.3.2-5	GDP trend of industry and service	2-14
Fig. - 2.3.2-6	Trend of external trade	2-16
Fig. - 2.4.1-1	Major national road network	2-23
Fig. - 2.5.1-1	Wind rose at Sihanoukville (1983-87,1994-96)	2-31
Fig. - 2.5.1-2	Wind rose at Sihanoukville (1963-70)	2-32
Fig. - 2.5.1-3	Equipment set-up of topographic survey	2-37
Fig. - 2.5.1-4	Location map of topographic and bathymetric survey area	2-38
Fig. - 2.5.1-5	Equipment set-up of bathymetric survey	2-41
Fig. - 2.5.1-6	Location map of detailed bathymetric & seismic survey	2-42
Fig. - 2.5.1-7	Location map of less-detailed bathymetric survey	2-43
Fig. - 2.5.1-8	Equipment set-up of seismic survey	2-45
Fig. - 2.5.1-9 (a)	Location map of subsoil investigation survey	2-47
Fig. - 2.5.1-9 (b)	Boring Location map (1988)	2-48
Fig. - 2.5.1-10	Soil profile at project site	2-58
Fig. - 2.5.1-10 (a)	Bore log (BH-No.1)	2-59
Fig. - 2.5.1-10 (b)	Bore log (BH-No.2)	2-60
Fig. - 2.5.1-11	Stratification at new wharf planned	2-61
Fig. - 2.5.1-12	Stratification at new port basin	2-62
Fig. - 2.5.1-13	Bore log (BH-No.3)	2-63
Fig. - 2.5.1-14 (a)	Bore log (BH-No.4)	2-64
Fig. - 2.5.1-14 (b)	Bore log (BH-No.5)	2-64
Fig. - 2.5.1-15 (a)	Bore log (BH-No.6)	2-65
Fig. - 2.5.1-15 (b)	Bore log (BH-No.7)	2-65

Fig. - 2.5.1-16 (a)	Bore log (BH-No.8)	2-66
Fig. - 2.5.1-16 (b)	Bore log (BH-No.9)	2-67
Fig. - 2.5.1-16 (c)	Bore log (BH-No.10)	2-68
Fig. - 2.5.1-17	Location of tide gauge	2-74
Fig. - 2.5.1-18	Schematic deployment figure of tide gauge	2-75
Fig. - 2.5.1-19 (a)	Tidal observation results (May to June)	2-76
Fig. - 2.5.1-19 (b)	Tidal observation results (July to August)	2-77
Fig. - 2.5.1-19 (c)	Tidal observation results (September to October)	2-78
Fig. - 2.5.1-20	Location map of environmental survey	2-82
Fig. - 2.5.1-21	Equipment set-up of self-recording current meter	2-83
Fig. - 2.5.1-22 (a)	Results of current survey by USSR in 1988 (Ebb tide)	2-84
Fig. - 2.5.1-22 (b)	Results of current survey by USSR in 1988 (Flood tide)	2-84
Fig. - 2.5.1-23	Results of current survey at oil port area in 1988	2-85
Fig. - 2.5.1-24	Seabed material by 1988 survey by USSR	2-86
Fig. - 2.5.1-25 (a)	Locus scatter plot of seawater at south existing port entrance channel C-1	2-87
Fig. - 2.5.1-25 (b)	Locus scatter plot of seawater at south existing port entrance channel C-1	2-87
Fig. - 2.5.1-25 (c)	Locus direction percentage exceedance chart at south existing port entrance channel C-1	2-87
Fig. - 2.5.1-26 (a)	Locus scatter plot of seawater at west new port entrance channel C-2	2-88
Fig. - 2.5.1-26 (b)	Locus direction percentage exceedance chart at west new port entrance channel C-2	2-88
Fig. - 2.5.1-26 (c)	Locus velocity percentage exceedance chart of seawater at west new port entrance channel C-2	2-88
Fig. - 2.5.1-27 (a)	Locus scatter plot of seawater at south-west of port C-3	2-89
Fig. - 2.5.1-27 (b)	Locus direction percentage exceedance chart at south-west of port C-3	2-89
Fig. - 2.5.1-27 (c)	Locus velocity percentage exceedance of seawater at south-west of port C-3	2-89
Fig. - 2.5.1-28 (a)	Results of harmonic analysis (1m below sea water surface)	2-91
Fig. - 2.5.1-28 (b)	Results of harmonic analysis (1m above the seabed)	2-92
Fig. - 2.5.2-1	Organization chart of Ministry of Public Works and Transport	2-94
Fig. - 2.5.2-2	Organization chart of Sihanoukville Port	2-97
Fig. - 2.5.2-3	Flow of port operation	2-98
Fig. - 2.5.2-4	Age structure of employees	2-99
Fig. - 2.5.2-5	Operating income	2-109

Fig. - 2.5.2-6	Operating revenue	2-109
Fig. - 2.5.3 (1)-1	Location plan of existing facilities of Sihanoukville Port	2-121
Fig. - 2.5.3 (1)-2	Structural layout plan of Main Jetty (Old Port)	2-122
Fig. - 2.5.3 (1)-3	Structural layout plan of Access Jetty	2-123
Fig. - 2.5.3 (1)-4	Typical section of Main Jetty (Old Port)	2-124
Fig. - 2.5.3 (1)-5	Results of visual inspection of Old Jetty	2-125
Fig. - 2.5.3 (1)-6	Saline contents and concrete cover depth	2-126
Fig. - 2.5.3 (1)-7	Cross section of P/C beam and area affected with permeated salt	2-127
Fig. - 2.5.3 (1)-8	Equipotential contour map on the P/C beam	2-128
Fig. - 2.5.3 (1)-9	Test procedure of natural electric potential on the P/C beam	2-128
Fig. - 2.5.3 (1)-10	Typical section of the New Quay	2-129
Fig. - 2.5.3 (1)-11	Typical section of Tug Boat Basin Quay	2-130
Fig. - 2.5.3 (1)-12	Original design section of North Breakwater	2-130
Fig. - 2.5.3 (1)-13	Present abandoned section of North Breakwater	2-130
Fig. - 2.5.3 (1)-14	Layout plan of existing Work Shop	2-131
Fig. - 2.5.4-1	Trend of cargo	2-142
Fig. - 2.5.4-2	Share of cargo	2-142
Fig. - 2.5.4-3	Trend of calling vessel and cargo volume	2-145
Fig. - 2.5.4-4	Trend of cargo volume	2-146
Fig. - 2.5.4-5	Trend of package type	2-148
Fig. - 2.5.4-6	Trend of container traffic	2-149
Fig. - 2.5.4-7	Comparison between Phnom Penh Port and Sihanoukville Port	2-151
Fig. - 2.5.4-8	Share in each port by commodity	2-152
Fig. - 2.5.4-9	Share in each port by package type	2-152
Fig. - 2.5.4-10	Imported cargo destination	2-154
Fig. - 2.5.4-11	Existing layout of cargo handling facilities	2-158
Fig. - 2.6.1-1	Master plan of land use,1990	2-171
Fig. - 2.6.1-2	Land development plan,1995	2-172
Fig. - 3.2.3-1	Flow chart for forecast cargo volume at Sihanoukville Port	3-17
Fig. - 3.2.3-2 (a)	Forecasted cargo volume at Sihanoukville Port	3-20
Fig. - 3.2.3-2 (b)	Forecasted cargo volume at Sihanoukville Port	3-21
Fig. - 3.2.3-2 (c)	Forecasted cargo volume at Sihanoukville Port	3-22
Fig. - 4.2.1-1	Correlation between DWT and Year built (Full container ships employed in sea routes in Far East)	4-4
Fig. - 4.2.1-2	Correlation between DWT and Year built (Full container ships employed between Thailand and other ports in Far East)	4-4

Fig. - 5.1.3-1	Long-term layout plan (2015,High and Middle case), Plan-1 (H-1 and M-1)	5-3
Fig. - 5.1.3-2	Long-term layout plan (2015,High and Middle case), Plan-2 (H-2 and M-2)	5-4
Fig. - 5.1.3-3	Long-term layout plan (2015,Low case),Plan-1 (L-1)	5-5
Fig. - 5.1.3-4	Long-term layout plan (2015,Low case),Plan-2 (L-2)	5-6
Fig. - 5.2.2-1	Example of new organization for the container terminal (Sihanoukvill Port)	5-19
Fig. - 5.3.3-1	Location plan of quay structures by type, Case H-1, M-1	5-36
Fig. - 5.3.3-2	Location plan of quay structures by type, Case L-1	5-36
Fig. - 5.3.3-3	Location plan of quay structures by type, Case H-2, M-2	5-37
Fig. - 5.3.3-4	Location plan of quay structures by type, Case L-2	5-37
Fig. - 5.3.3-5	Typical cross section of berthing facilities (-10.5m Container berth)	5-43
Fig. - 5.3.3-6	Typical cross section of berthing facilities (-9m Container berth) ..	5-44
Fig. - 5.3.3-7	Renovation of the "New Quay" for container crane foundation	5-45
Fig. - 5.3.3-8	Renovation of the "New Quay" for container crane foundation	5-46
Fig. - 5.3.3-9	Typical cross section of berthing facilities (-8.5m Bulk cargo berth)	5-47
Fig. - 5.3.3-10	Typical cross section of berthing facilities (-8.5~-9.0m General cargo berth)	5-48
Fig. - 5.3.3-11	Typical cross section of berthing facilities (-8.5m Bulk cargo berth)	5-49
Fig. - 5.3.3-12	Long term plan (Case M-1)	5-51
Fig. - 5.3.3-13	Long term plan (Case M-2)	5-53
Fig. - 5.3.4-1	Definition of UKC	5-54
Fig. - 5.3.4-2	Typical width dimensions of channel for one-way traffic	5-56
Fig. - 5.3.4-3	Layout of new N channel	5-59
Fig. - 5.3.4-4	Necessary tug boat (s) thrust against vessel's DWT and winds	5-62
Fig. - 5.3.4-5	Dredging plan of navigation channel and port basin	5-65
Fig. - 5.3.4-6	Harmonic analysis of current survey	5-67
Fig. - 5.3.4-7	Simulation on siltation activity of navigation channel	5-68
Fig. - 5.3.4-8	Typical section of breakwater	5-69
Fig. - 5.3.5-1	Preliminary layout plan for each alternative	5-74
Fig. - 5.3.5-2	Out line of total computer system at terminal	5-78
Fig. - 5.3.5-3	Layout of container yard in the target year of 2015	5-84
Fig. - 7.1.2-1	Urgent improvement plan	7-3