NIPPON KOEI CO.,LTD.

QUANTITY CALCULATION COVER SHEET

Project	Detailed Design on Port Reactivation Project in La Union Province	Project Code	JC1N004/2N001
Work Section Title	Crane anchoring frame	Pay Item No. (BOQ)	2B - 2005
Quantity Item	Concrete for cover	Unit	m^3

Calculation Procedure Applied

Volume of concrete for cover was computed for crane anchoring frame.

References, Calculation Base and Revisions

References: Tender Drawings:

DW-QW-01-059 Detail of Anchor - Jack up Plate of Socket Block.

Rev	Prepared by	Prepared Date	No. of Pages	Checked by	Checked Date	Reviewed by	Reviewed Date	Superseded by Calc No.
0	Karla Garcia			Mr. Inuma		Mr. Ando		
1								
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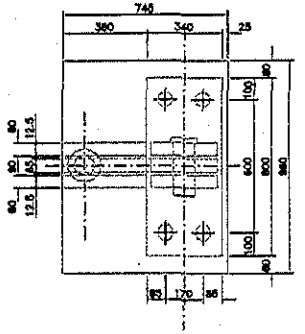
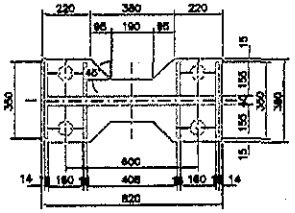
3								

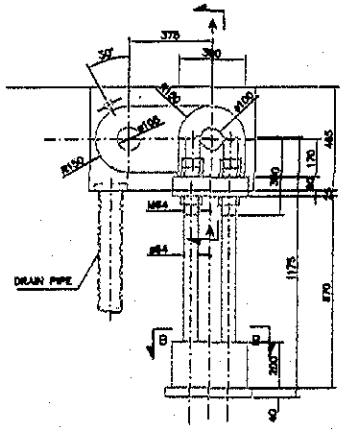
DETAIL OF ANCHORING FRAME

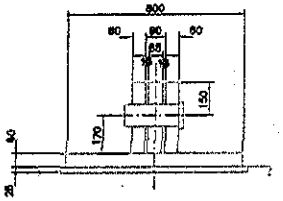
SCALE 1:20





SECTION B–B

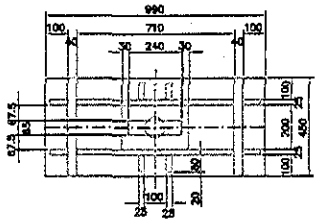




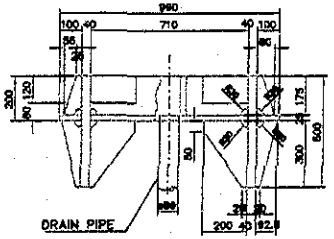
SECTION A–A

DETAIL OF SOCKET BLOCK

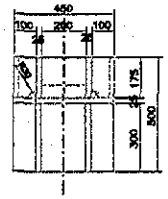
SCALE 1:20



PLAN



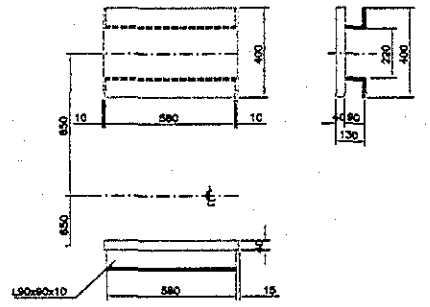
FRONT VIEW



LATERAL VIEW

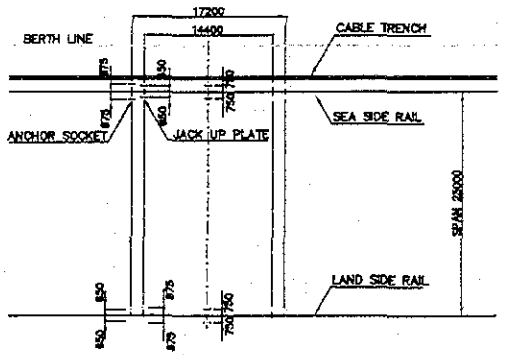
DETAIL OF JACK UP PLATE

SCALE 1:20



PLAN OF ANCHOR AND JACK UP PLATE

SCALE 1:500

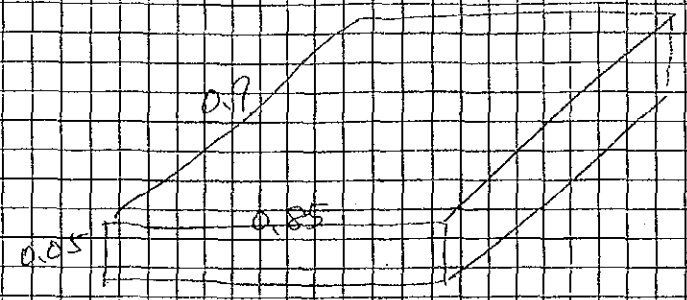


059

572

Project	Detailed Design on Port Reactivation Project in La Union	Calc. File No.	
Section	Crane anchoring frame	Calc. Index No.	
Subject	Concrete for cover	Page No.	Rev.

References/ Notes



N = 16

$V_1 = 0.85 \times 0.9 \times 0.05$

$= 0.383$ 0.0383

$= 0.4\ m^3$ ≈ 0.04

$V = 0.4 \times 16 = \boxed{0.64}\ m^3$

	Prepared by		Checked by	
		/ /200		/ /200

FN: Calculation_Sheet

NIPPON KOEI CO.,LTD.

QUANTITY CALCULATION COVER SHEET

Project	Detailed Design on Port Reactivation Project in La Union Province	**Project Code**	JC1N004/2N001
Work Section Title	Fender	**Pay Item No. (BOQ)**	2B - 2J
Quantity Item	Type - A	**Unit**	Sets

Calculation Procedure Applied

Fender was to be set in front of apron for Container berth.
See attached drawings.

References, Calculation Base and Revisions

References : Tender Drawings :

DW - 2 W - 01 - 040 Detail layout Plan Container and Multipurpose Berth (1)
DW - 2W1 - 01 - 041 Detail layout Plan Container and Multipurpose Berth (2)

Rev	Prepared		No. of	Checked		Reviewed		Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
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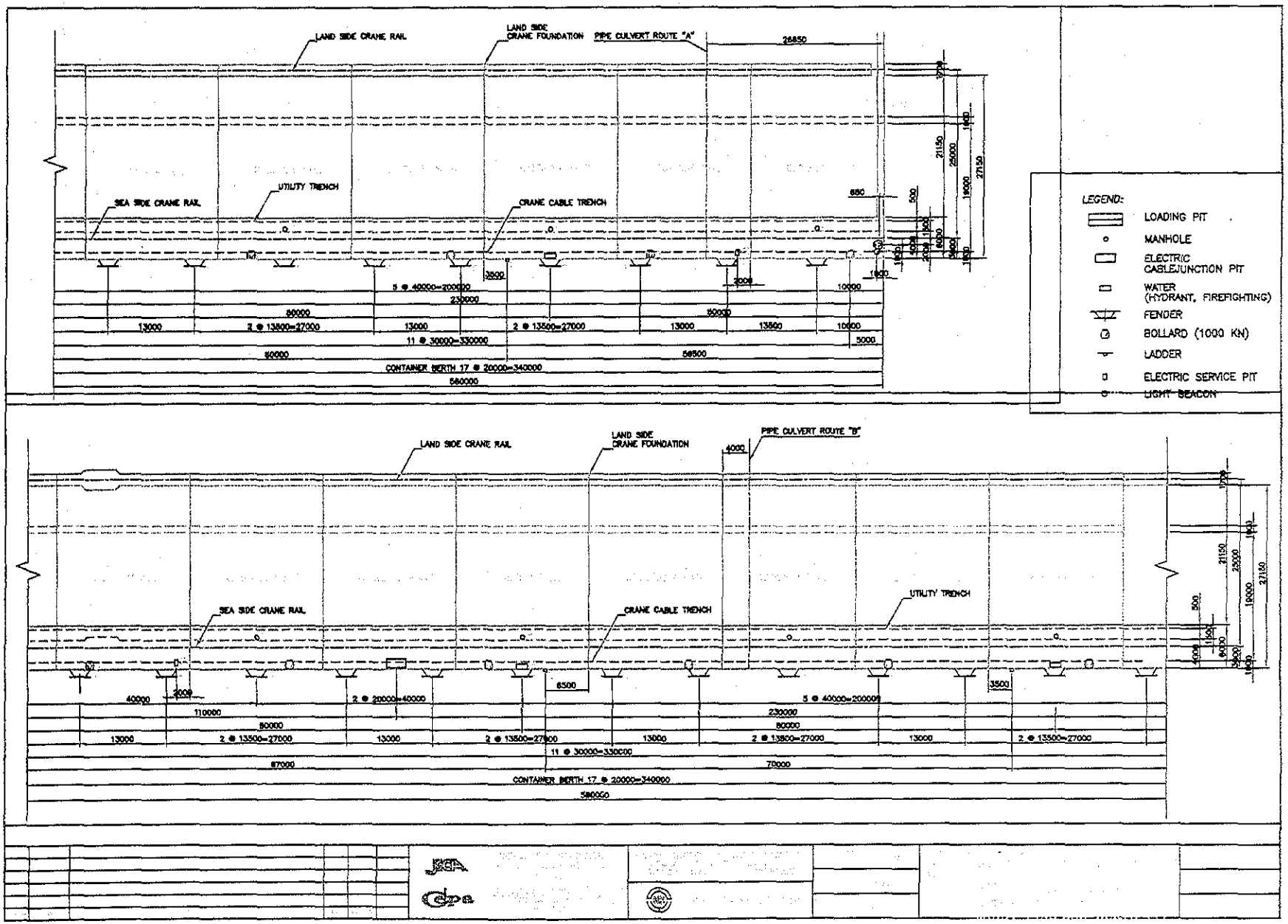
2								
3								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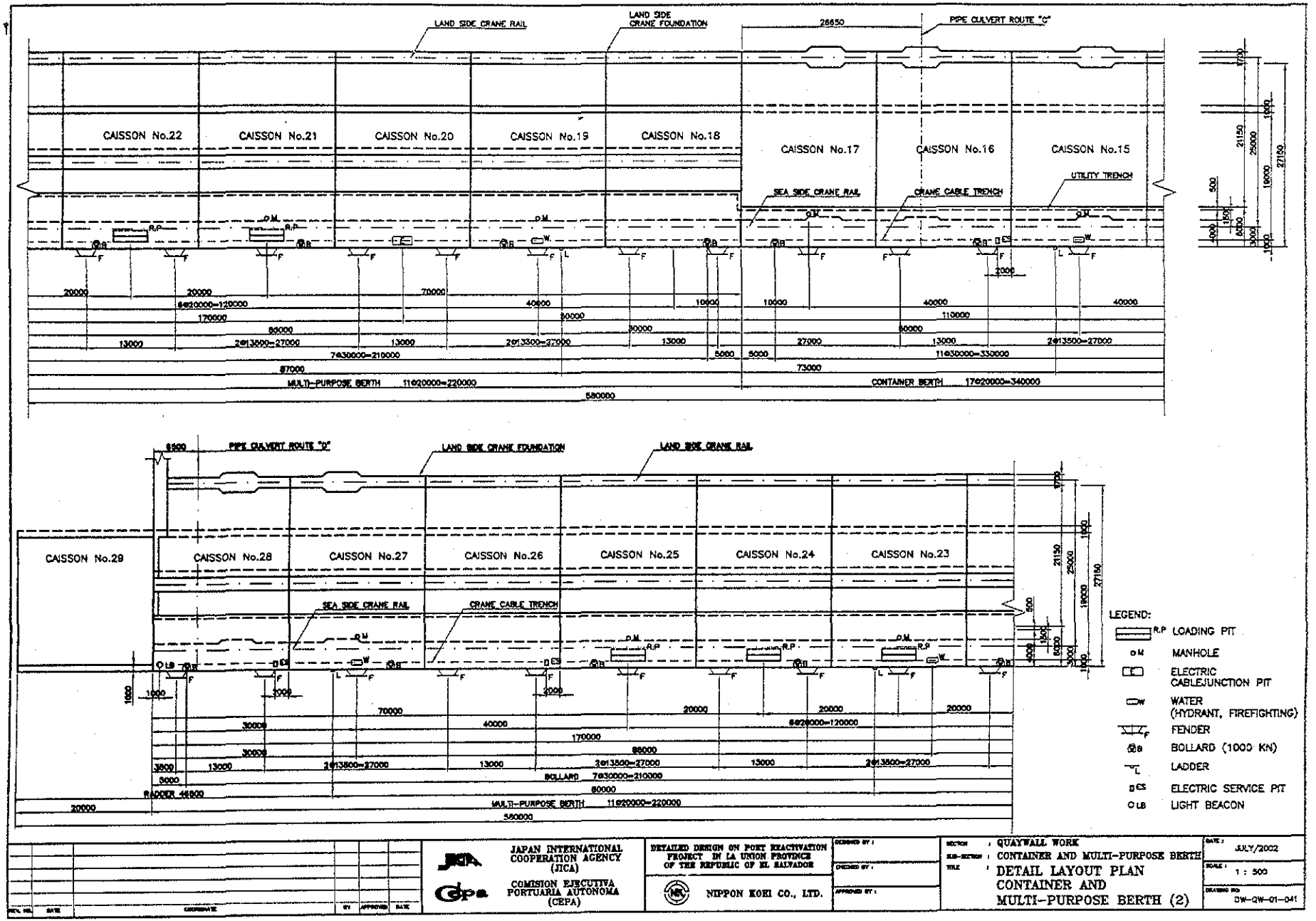
LAND SIDE CRANE FOUNDATION
PIPE CULVERT ROUTE "A"
26850
SEA SIDE CRANE RAIL
UTILITY TRENCH
CRANE CABLE TRENCH
5 @ 40000=200000
230000
80000
13000
2 @ 13500=27000
13000
2 @ 13500=27000
13000
13500
10000
11 @ 30000=330000
5000
80000
56500
CONTAINER BERTH 17 @ 20000=340000
560000
LEGEND:
LOADING PIT
MANHOLE
ELECTRIC CABLE/JUNCTION PIT
WATER (HYDRANT, FIREFIGHTING)
FENDER
BOLLARD (1000 KN)
LADDER
ELECTRIC SERVICE PIT
LIGHT BEACON
LAND SIDE CRANE RAIL
LAND SIDE CRANE FOUNDATION
PIPE CULVERT ROUTE "B"
4000
SEA SIDE CRANE RAIL
CRANE CABLE TRENCH
UTILITY TRENCH
6500
3500
40000
2000
2 @ 20000=40000
110000
5 @ 40000=200000
230000
80000
13000
2 @ 13500=27000
13000
2 @ 13500=27000
13000
2 @ 13500=27000
13000
2 @ 13500=27000
11 @ 30000=330000
87000
70000
CONTAINER BERTH 17 @ 20000=340000
560000



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

DESIGNED BY :
CHECKED BY :
APPROVED BY :

SECTION : QUAYWALL WORK
SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH
TITLE : DETAIL LAYOUT PLAN CONTAINER AND MULTI-PURPOSE BERTH (2)

DATE : JULY/2002
SCALE : 1 : 500
DRAWING NO. SW-QW-01-041

Project	Detailed Design on Port Reactivation Project in La Union	Calc. File No.	
Section	Fender	Calc. Index No.	
Subject	Type -A	Page No.	Rev.

References/ Notes

$N = \geq 5$

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NIPPON KOEI CO.,LTD.

QUANTITY CALCULATION COVER SHEET

Project	Detailed Design on Port Reactivation Project in La Union Province	**Project Code**	JC1N004/2N001
Work Section Title	Bollard	**Pay Item No. (BOQ)**	2B-22
Quantity Item	Bollard	**Unit**	Sets

Calculation Procedure Applied

Bollard was to be set on the coping.

See attached drawing.

References. Calculation Base and Revisions

References: Tender Drawings:

DW-QW-01-040 Detail layout Plan Container and Multipurpose Berth (1)

DW-QW-01-041 Detail layout Plan Container and Multipurpose Berth (2)

Rev	Prepared		No. of	Checked		Reviewed		Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
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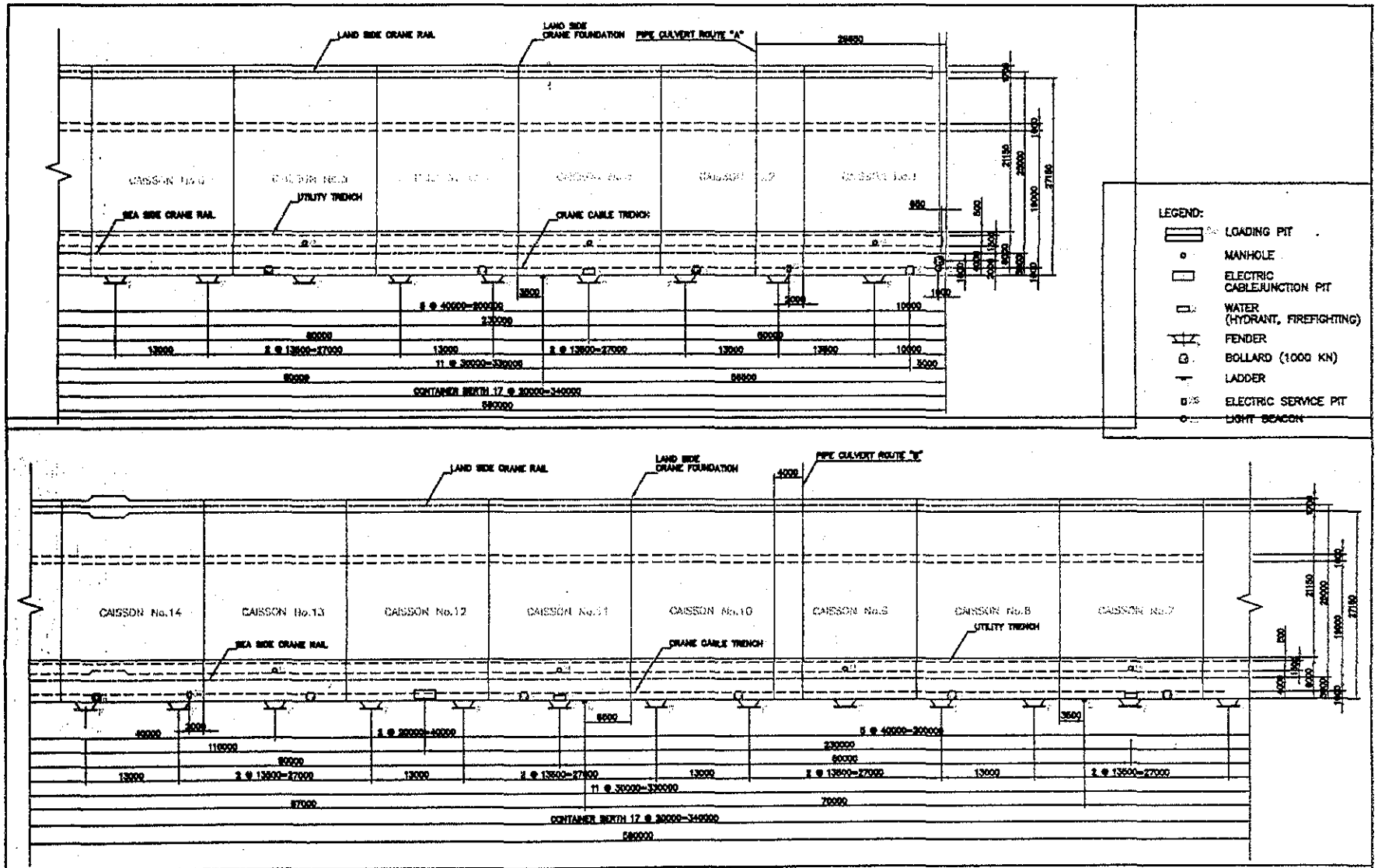
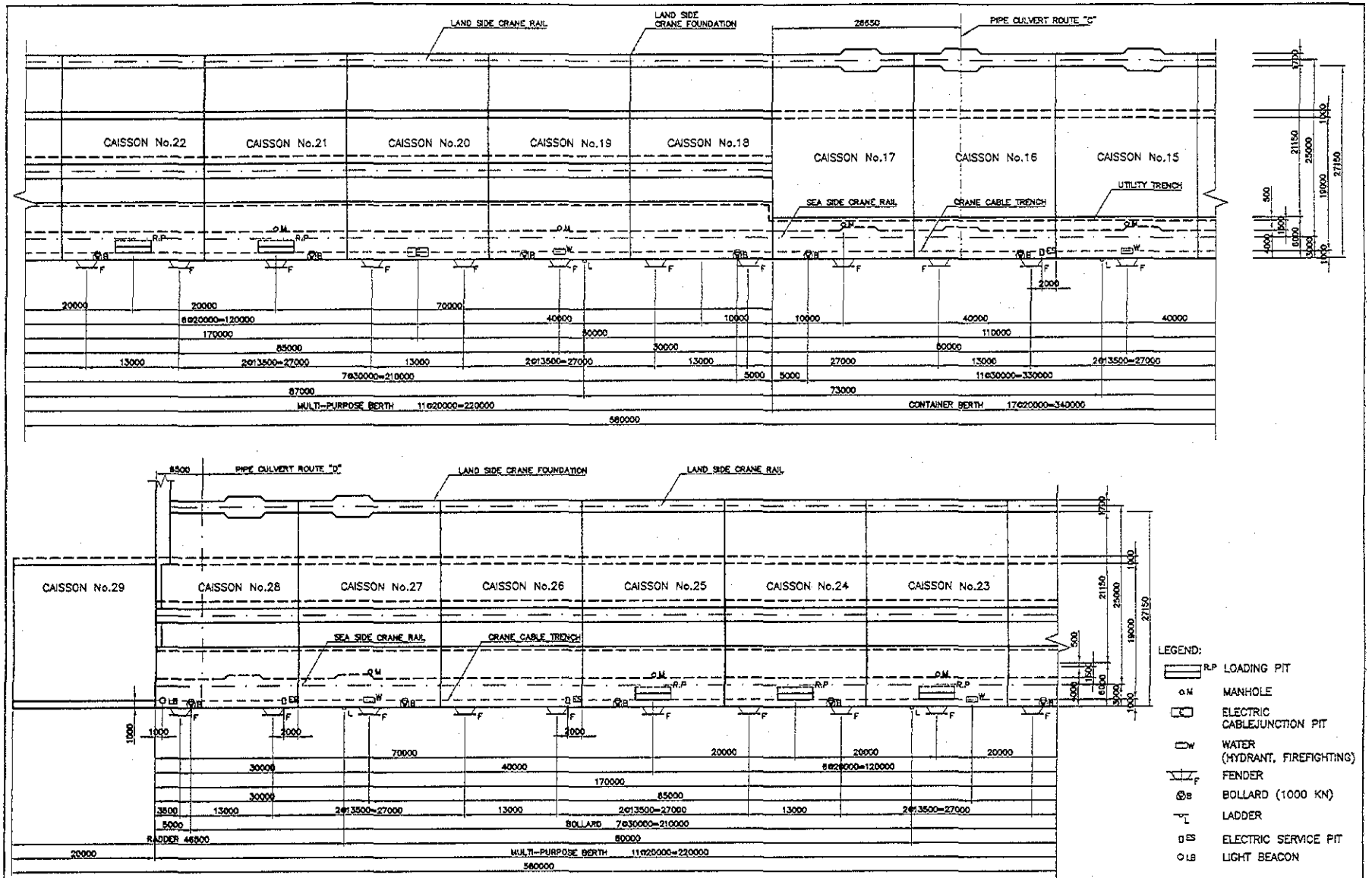

LAND SIDE CRANE RAIL
LAND SIDE CRANE FOUNDATION
PIPE CULVERT ROUTE "A"
SEA SIDE CRANE RAIL
UTILITY TRENCH
CRANE CABLE TRENCH
CONTAINER BERTH 17 @ 30000=340000
580000
LEGEND:
LOADING PIT
MANHOLE
ELECTRIC CABLE/JUNCTION PIT
WATER (HYDRANT, FIREFIGHTING)
FENDER
BOLLARD (1000 KN)
LADDER
ELECTRIC SERVICE PIT
LIGHT BEACON
CAISSON No.14
CAISSON No.13
CAISSON No.12
CAISSON No.11
CAISSON No.10
CAISSON No.9
CAISSON No.8
CAISSON No.7
PIPE CULVERT ROUTE "B"
CONTAINER BERTH 17 @ 30000=340000
580000



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : QUAYWALL WORK SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH TITLE : DETAIL LAYOUT PLAN CONTAINER AND MULTI-PURPOSE BERTH (2)	DATE : JULY/2002 SCALE : 1 : 500 DRAWING NO. DW-QW-01-041

Project	Detailed Design on Port Reactivation Project in La Union	Calc. File No.	
Section	Bollard	Calc. Index No.	
Subject	Bollard	Page No.	Rev.

References/ Notes

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			/ /200		/ /200

NIPPON KOEI CO.,LTD.

QUANTITY CALCULATION COVER SHEET

Project	Detailed Design on Port Reactivation Project in La Union Province	**Project Code**	JC1N004/2N001
Work Section Title	Ladder	**Pay Item No. (BOQ)**	2B - 23
Quantity Item	Ladder	**Unit**	Sets

Calculation Procedure Applied

Ladder was to be set in front of the apron in order to get on or off a ship.

See attached drawings.

References, Calculation Base and Revisions

References : Tender Drawings :

DW - QN - 01 - 040 Detail Layout Plan Container and Multipurpose Berth (1)

DW - QN - 01 - 041 Detail Layout Plan Container and Multipurpose Berth (2)

Rev	Prepared		No. of	Checked		Reviewed		Superseded
	by	Date	Pages	by	Date	by	Date	by Calc No.
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1								
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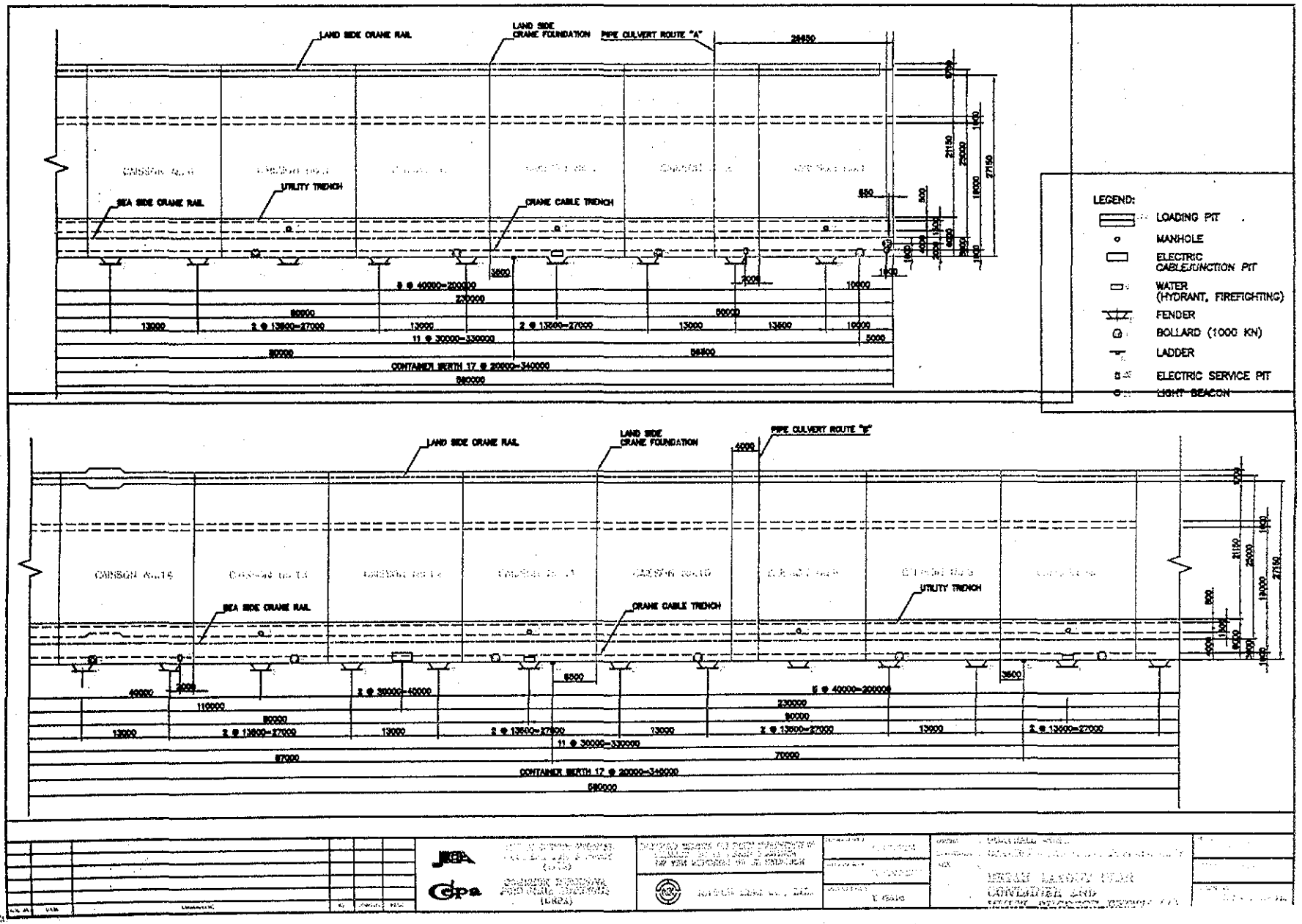
LAND SIDE CRANE RAIL
LAND SIDE CRANE FOUNDATION
PIPE CULVERT ROUTE "A"
28450
SEA SIDE CRANE RAIL
UTILITY TRENCH
CRANE CABLE TRENCH
3600
7000
10000
9 @ 40000=360000
220000
80000
13000
2 @ 13600=27000
13000
2 @ 13600=27000
13000
13600
10000
11 @ 30000=330000
5000
80000
56800
CONTAINER BERTH 17 @ 20000=340000
680000
LEGEND:
LOADING PIT
MANHOLE
ELECTRIC CABLE/JUNCTION PIT
WATER (HYDRANT, FIREFIGHTING)
FENDER
BOLLARD (1000 KN)
LADDER
ELECTRIC SERVICE PIT
LIGHT BEACON
LAND SIDE CRANE RAIL
LAND SIDE CRANE FOUNDATION
PIPE CULVERT ROUTE "B"
4000
SEA SIDE CRANE RAIL
CRANE CABLE TRENCH
UTILITY TRENCH
3600
6500
40000
2000
110000
3 @ 30000=40000
9 @ 40000=360000
230000
80000
13000
2 @ 13600=27000
13000
2 @ 13600=27000
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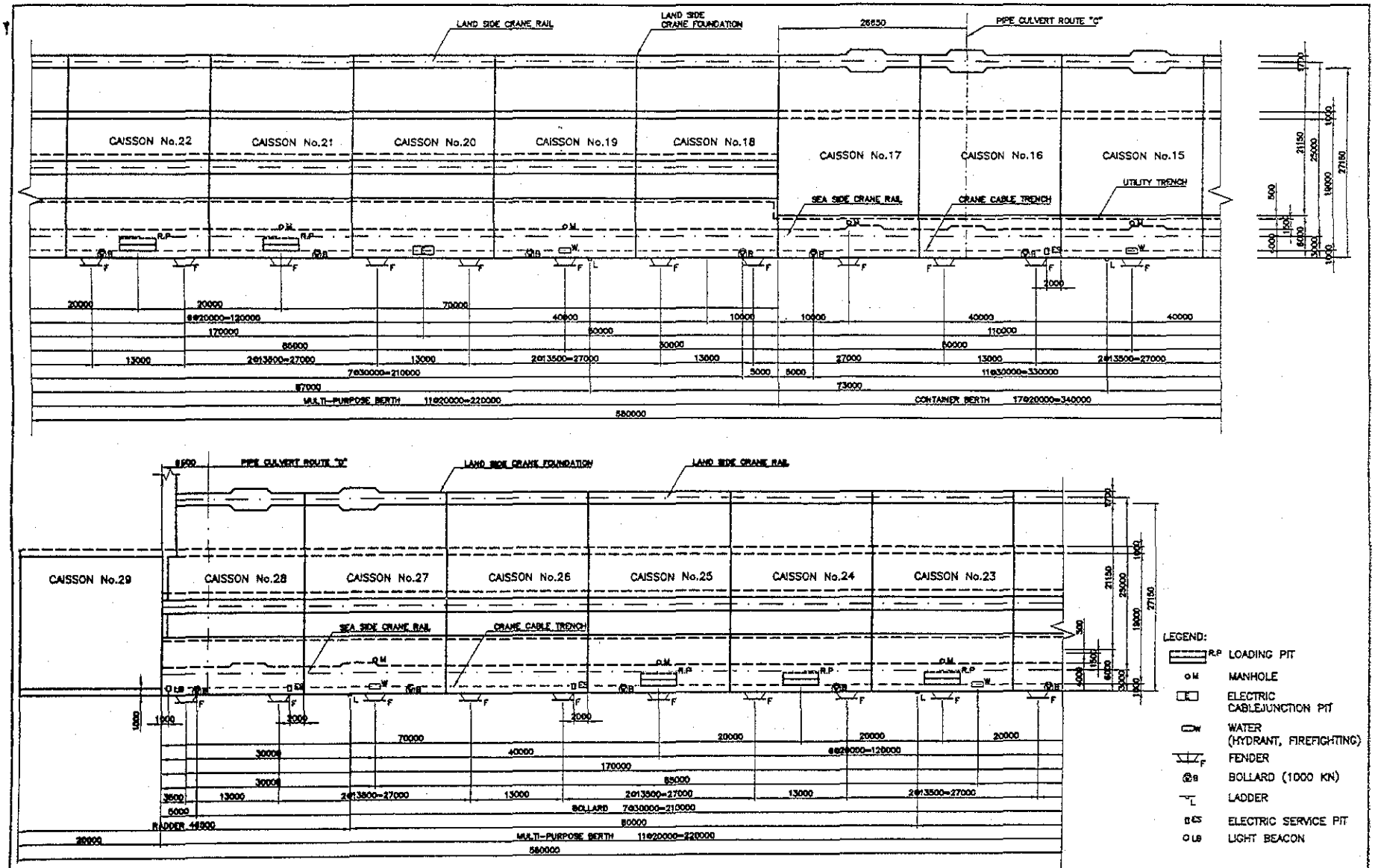

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

SECTION : QUAYWALL WORK
SUB-SECTION : CONTAINER AND MULTI-PURPOSE BERTH
TITLE : DETAIL LAYOUT PLAN CONTAINER AND MULTI-PURPOSE BERTH (2)

DATE : JULY/2002
SCALE : 1 : 500
DRAWING NO. DW-QW-01-041

Project	Detailed Design on Port Reactivation Project in La Union	Calc. File No.	
Section	Ladder	Calc. Index No.	
Subject	Ladder	Page No.	Rev.

References/ Notes

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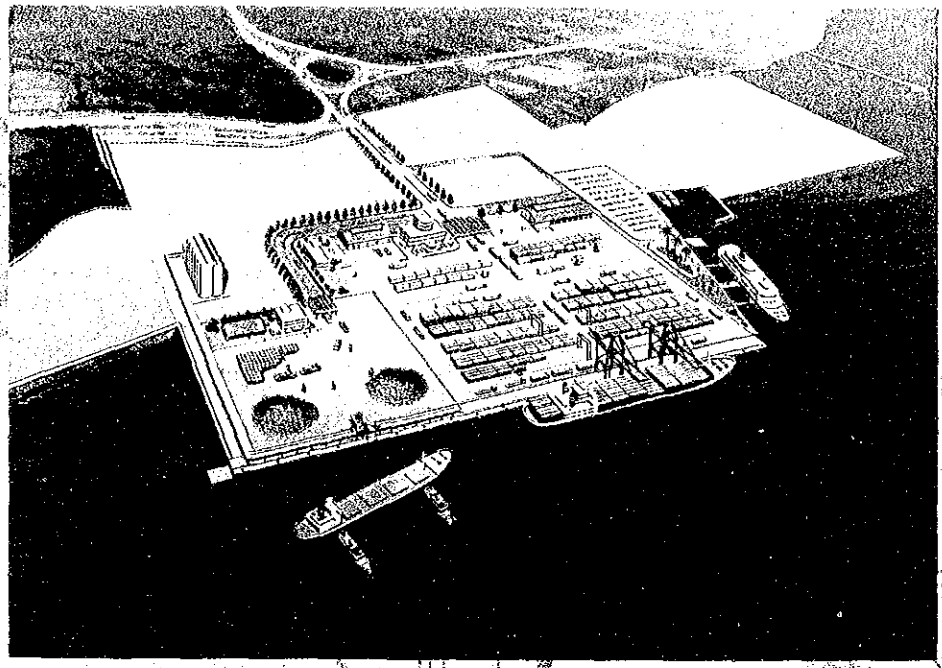

JICA