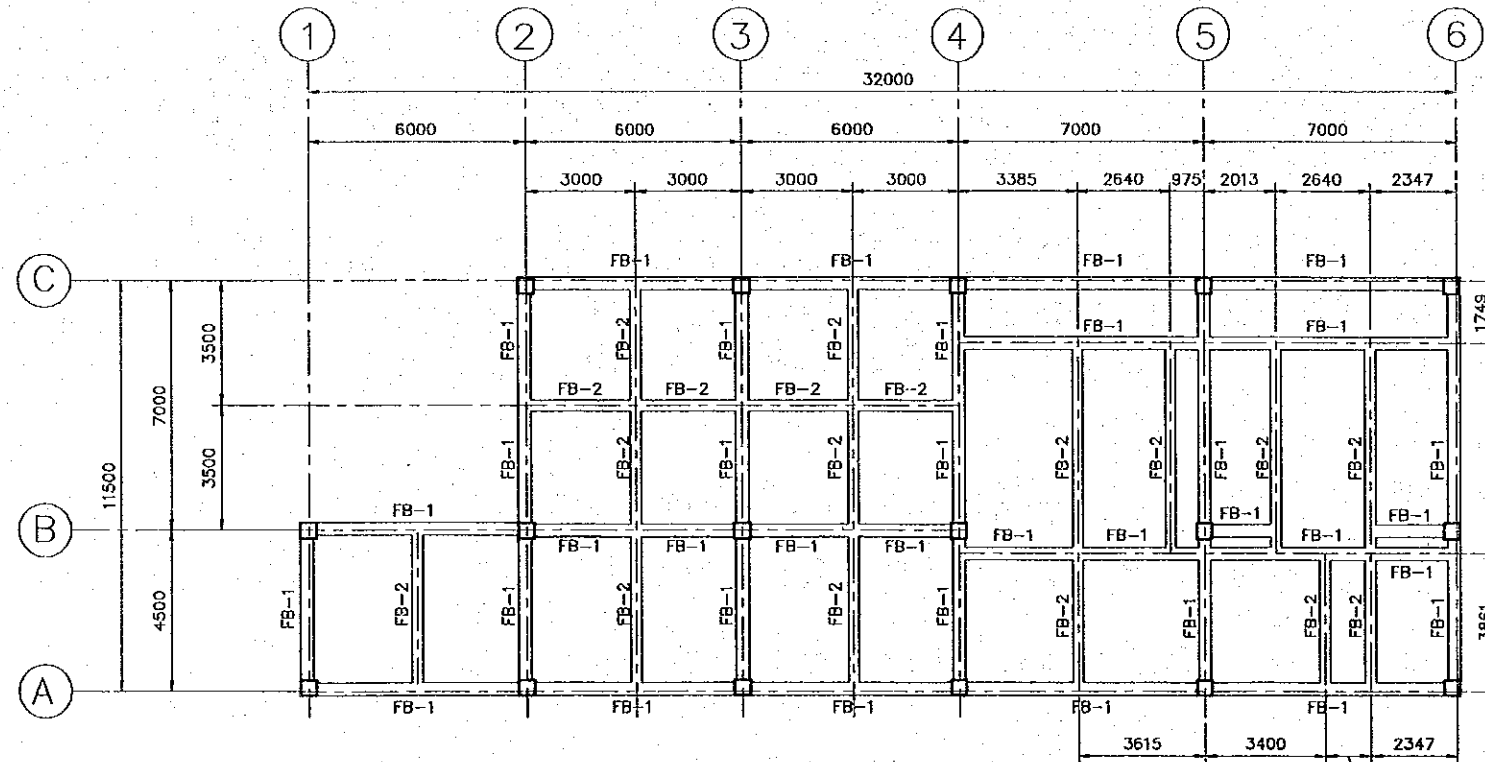
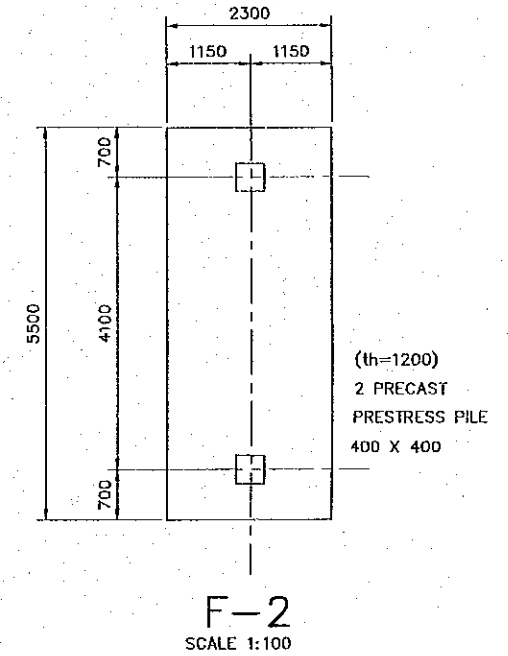
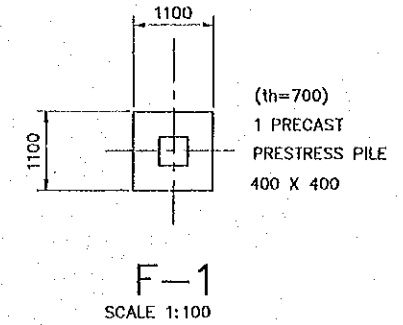


STRUCTURAL PILE PLAN
SCALE 1:200

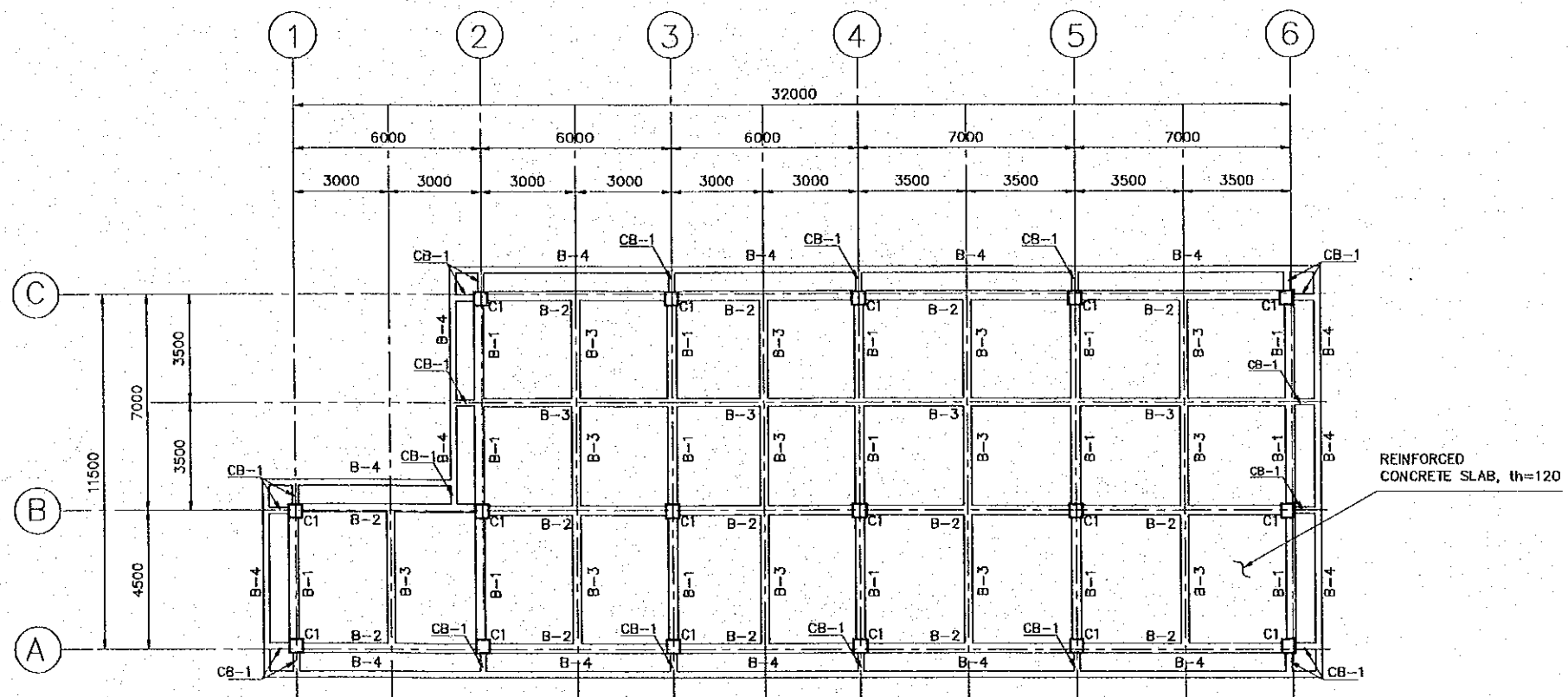


FOUNDATION PLAN
SCALE 1:200

FB: FOUNDATION BEAM
FB-1 IS 600 X 350
FB-2 IS 600 X 300

NOTE:
ALL FIRST FLOOR IS REINFORCED
CONCRETE SLAB, th=150.

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : BUILDING WORK	DATE : OCTOBER/2002
								CHECKED BY :	SUB-SECTION : POWER SUPPLY STATION	SCALE : 1:100, 1:200
								APPROVED BY :	TITLE : STRUCTURAL PILE AND FOUNDATION PLAN	DRAWING NO: BD-06-012



STRUCTURAL ROOF PLAN

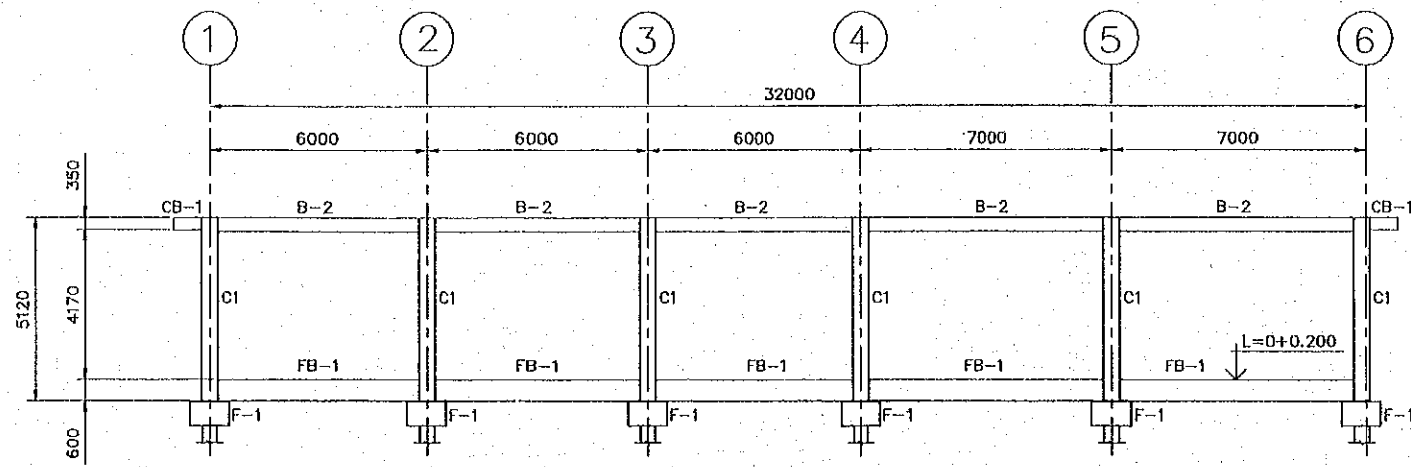
SCALE 1:200

B: BEAM
 B-1 IS 450 X 300
 B-2 IS 400 X 300
 B-3 IS 350 X 250
 B-4 IS 600 X 200

C: COLUMN
 C1 IS 450 X 450

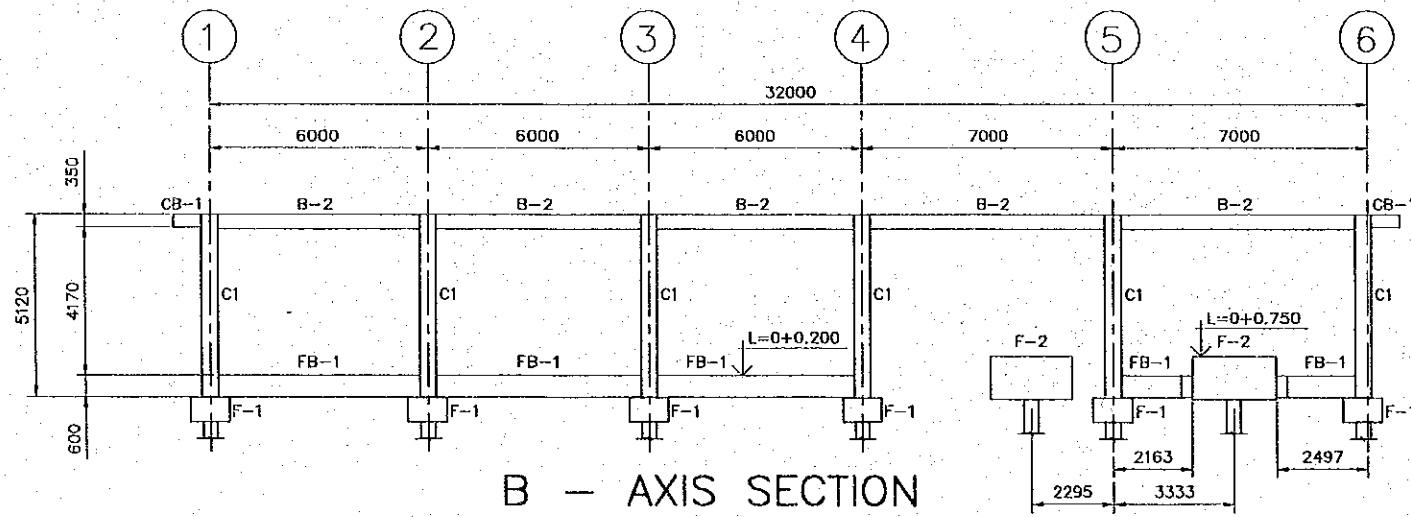
CB: CANTILEVER BEAM
 CB-1 IS 350 X 200

REV. NO.		DATE		COORDINATE		BY		APPROVED		DATE		JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : BUILDING WORK	DATE : OCTOBER/2002
														CHECKED BY :	SUB-SECTION : POWER SUPPLY STATION	SCALE : 1:200
												APPROVED BY :		TITLE : STRUCTURAL ROOF PLAN	DRAWING NO. : BD-06-013	



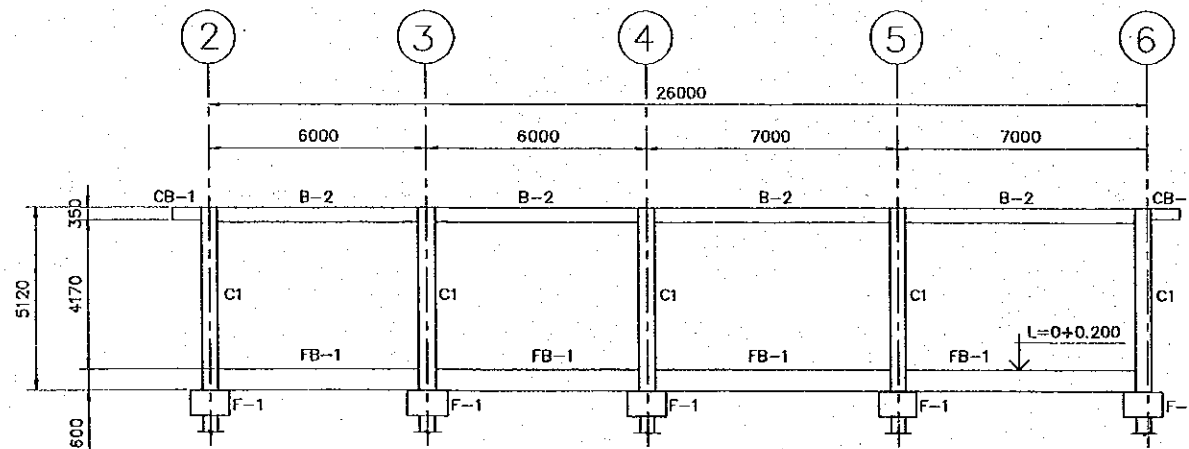
A - AXIS SECTION

SCALE 1:200



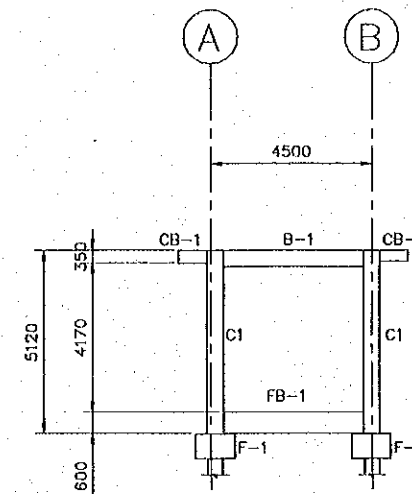
B - AXIS SECTION

SCALE 1:200



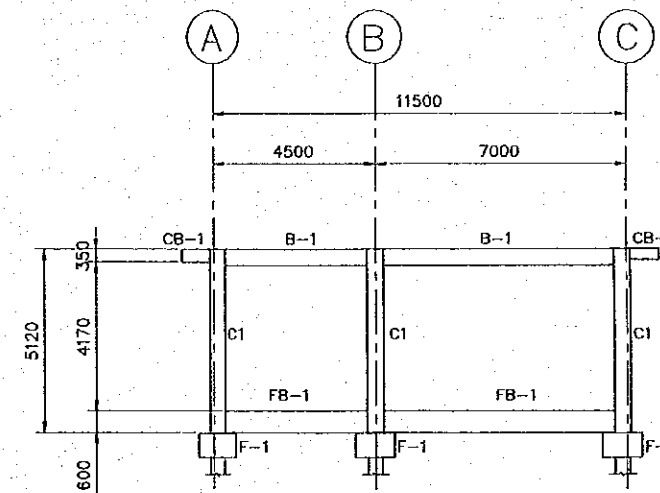
C - AXIS SECTION

SCALE 1:200



1 - AXIS SECTION

SCALE 1:200



2 TO 6 - AXIS SECTION

SCALE 1:200

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE



JICA
JAPAN INTERNATIONAL
COOPERATION AGENCY
(JICA)
COMISION EJECUTIVA
PORTUARIA AUTONOMA
(CEPA)

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



NIPPON KOEI CO., LTD.

DESIGNED BY :

CHECKED BY :

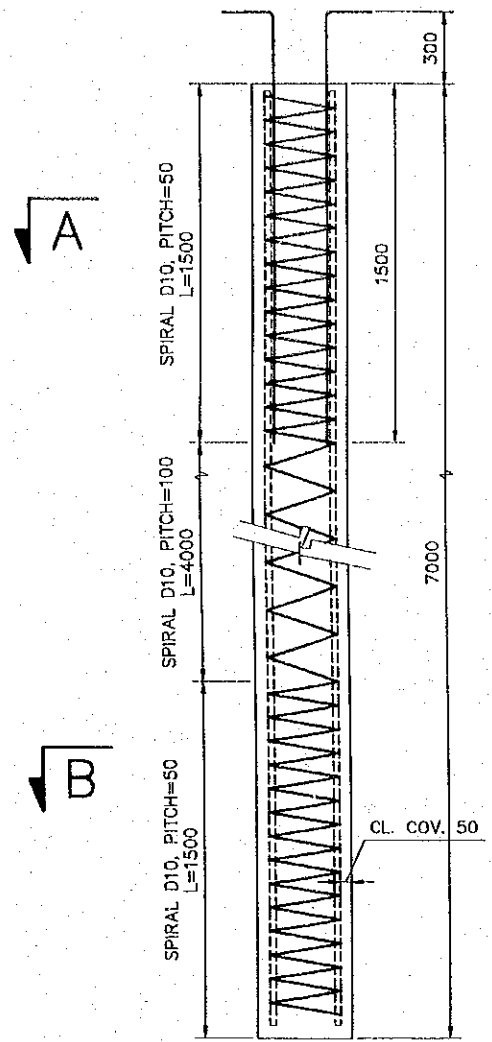
APPROVED BY :

SECTION : BUILDING WORK
SUB-SECTION : POWER SUPPLY STATION
TITLE : STRUCTURAL SECTIONS

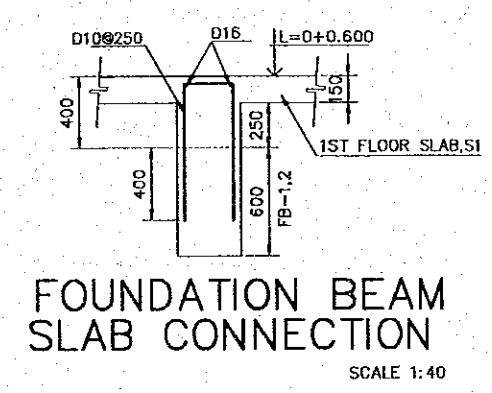
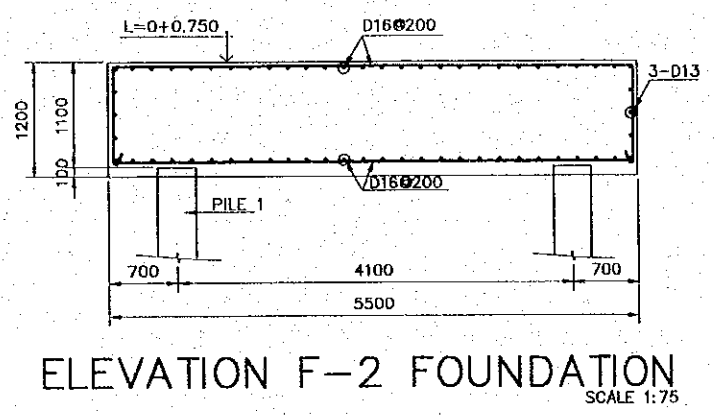
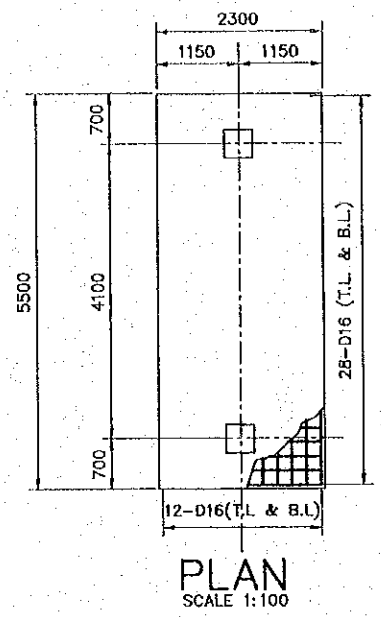
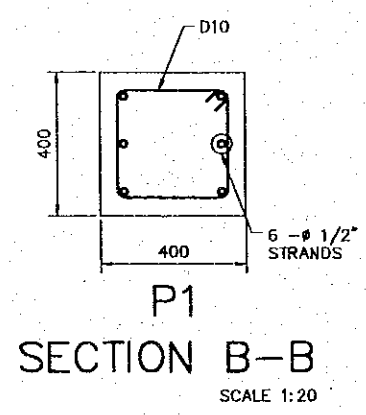
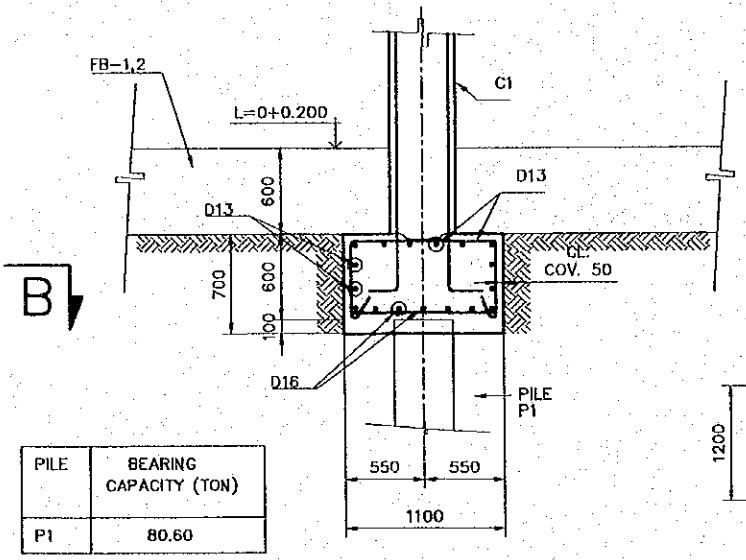
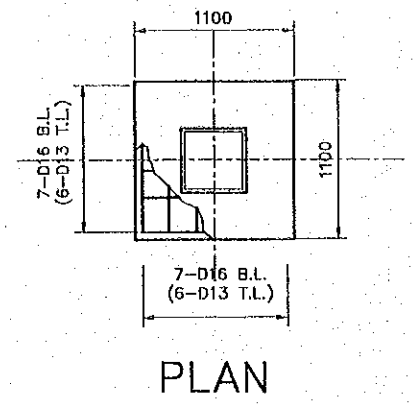
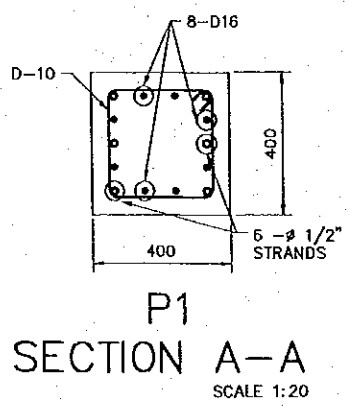
DATE : OCTOBER/2002

SCALE : 1:200

DRAWING NO :
BD-05-014

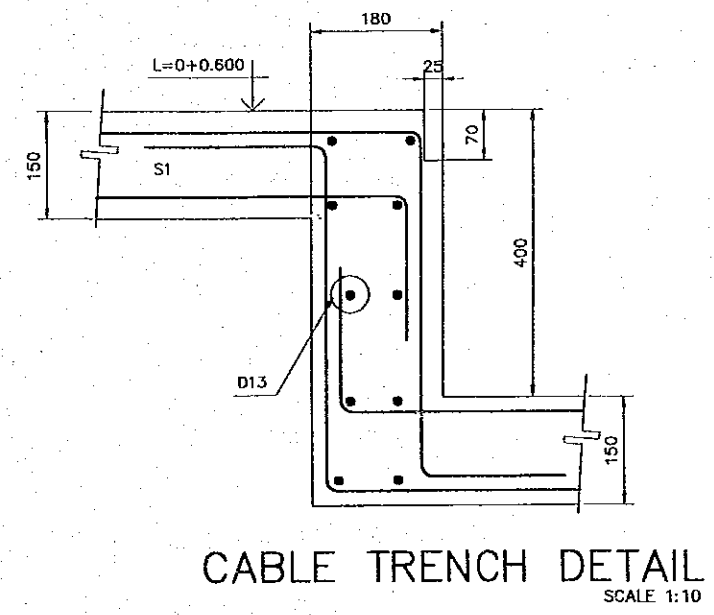
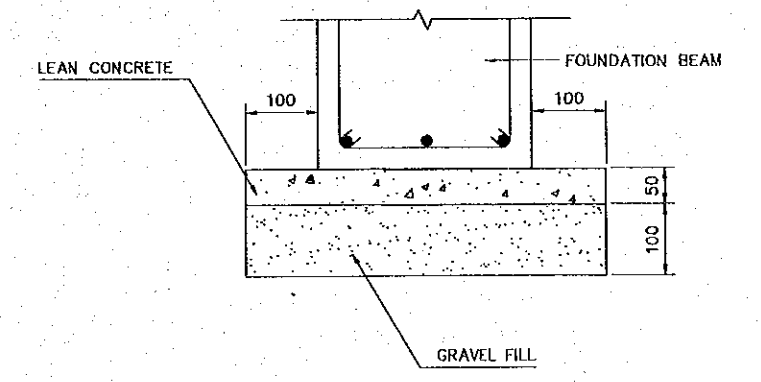


**P1
PRECAST PRESTRESS PILE**
SCALE 1:30



MARK	FB-1		FB-2	
	END	CENTER	END	CENTER
SECTION				
B x D	650 X 350		600 X 300	
TOP BAR	4-D22 (5-D22)	3-D22	3-D22	2-D22
BOTTOM BAR	3-D22	3-D22	3-D22	2-D22
STIRRUP	D10 @ 250		D10 @ 250	
WEB BAR	2-D13		2-D13	
TIE	D10 @ 1000		D10 @ 1000	

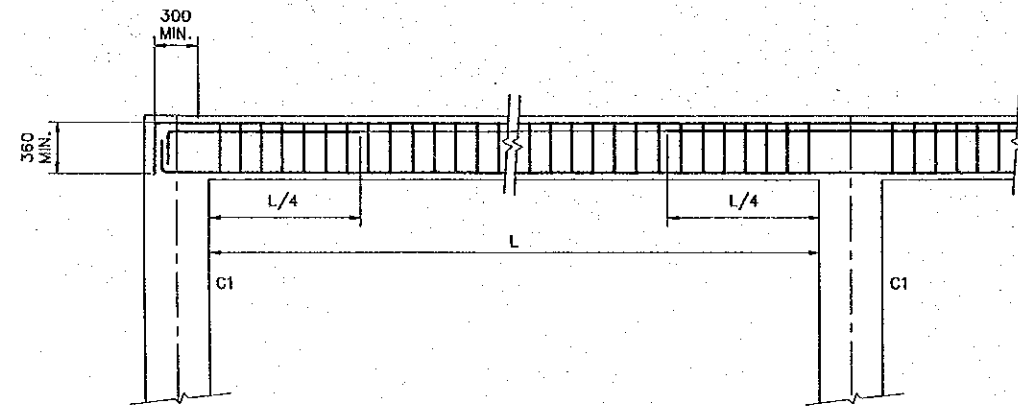
FOUNDATION BEAM SCHEDULE



REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY:	SECTION : BUILDING WORK SUB-SECTION : POWER SUPPLY STATION TITLE : STRUCTURAL PILE AND FOUNDATION SCHEDULE	DATE : OCTOBER/2002
								CHECKED BY:		SCALE : INDICATED
								APPROVED BY:		DRAWING NO.: BD-06-015

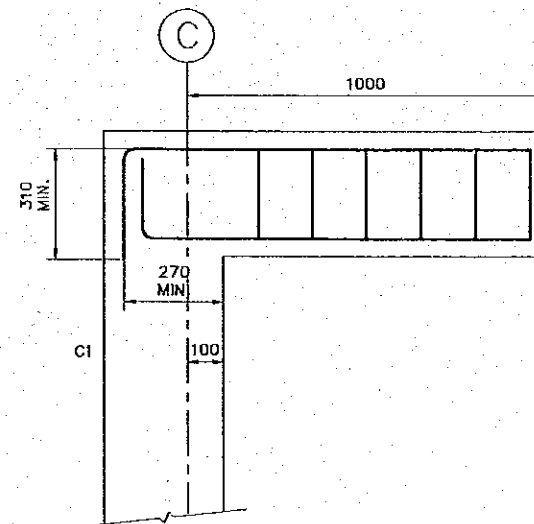
MARK	B-1		B-2		B-3	B-4	CB-1
PORTION	COLUMN END	CENTER	COLUMN END	CENTER	ALL	ALL	ALL
SECTION							
B x D	450 X 300		400 X 300		350 X 250	600 X 200	350 X 200
TOP BAR	4-D22		4-D22		3-D16	2-D16	2-D19
BOTTOM BAR	3-D22		3-D22		3-D16	2-D16	2-D19
STIRRUP	D10@150		D10@150		D10 @ 150	D10 @ 250	D10 @ 150
WEB BAR	2-D13		2-D13		---	2-D13	---
TIE	D10 @ 900		D10 @ 900		---	D10 @ 1000	---

BEAM SCHEDULE



B-1 AND B-2 ELEVATION

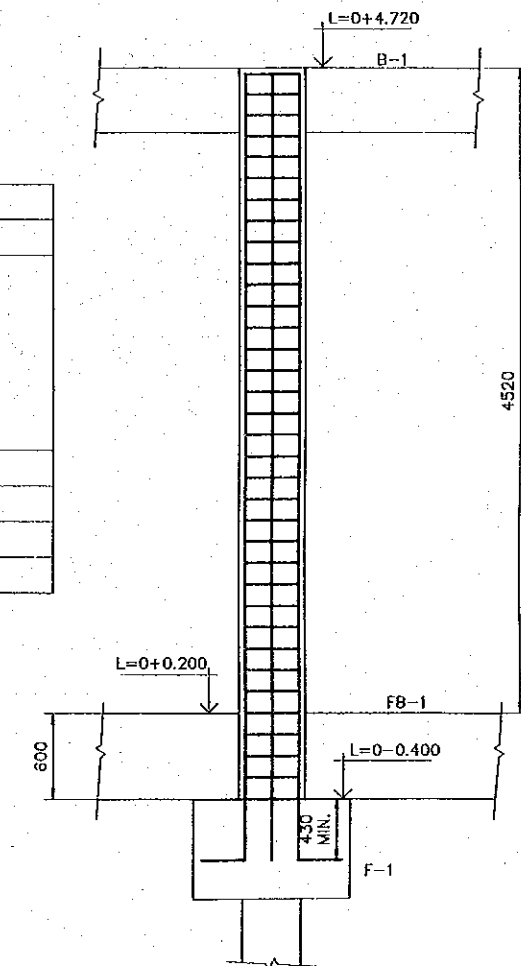
SCALE 1:50



CB-1 ELEVATION

SCALE 1:20

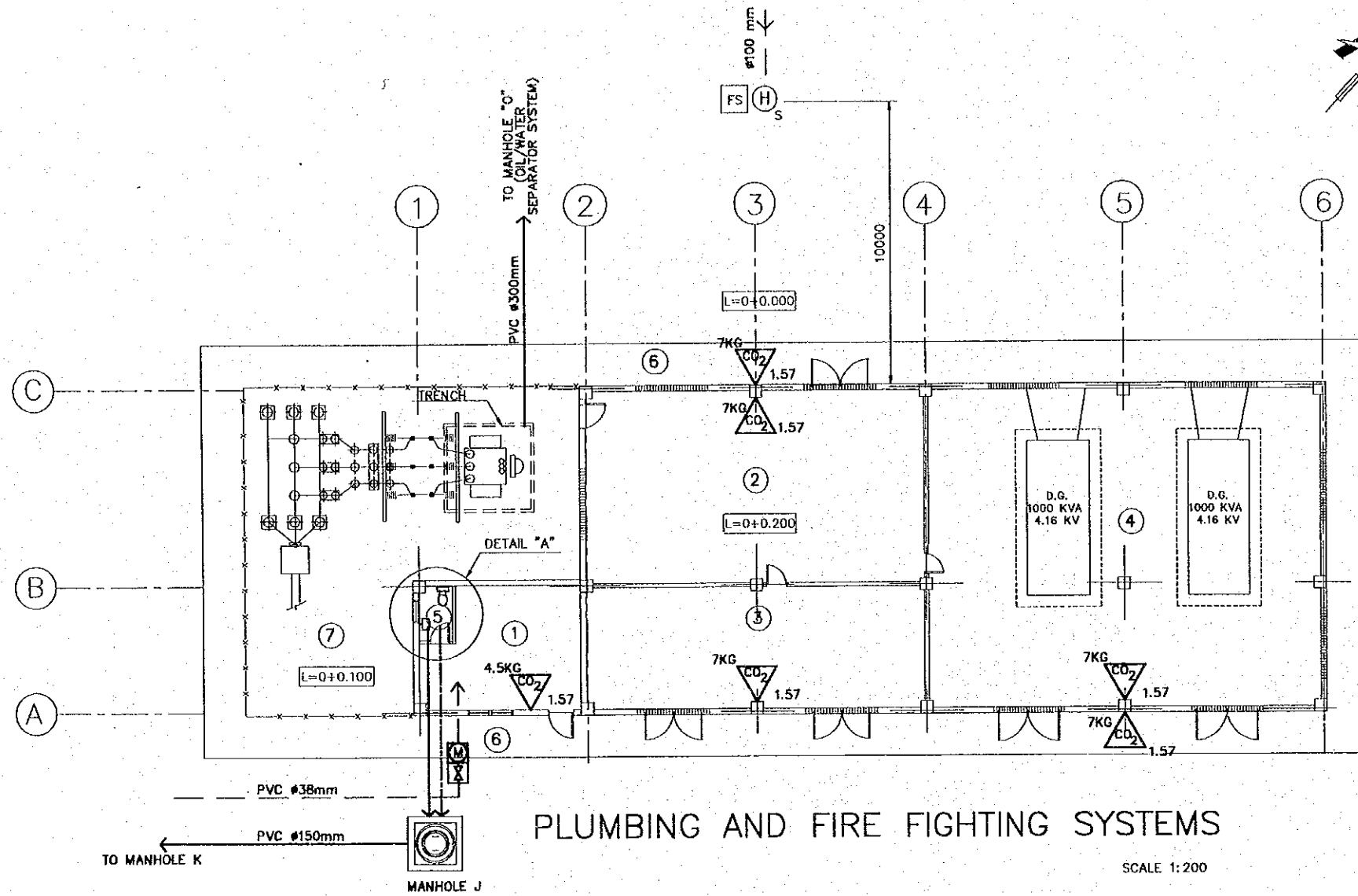
LEVEL	MARK	C1
L = 0 - 0.44 + L = 0 + 4.320	PORTION	
	SECTION	
	B x D	450 X 450
	MAIN BAR	8-D22
	HOOP	D10 @ 150
TIE	D10 @ 900	



COLUMN C1

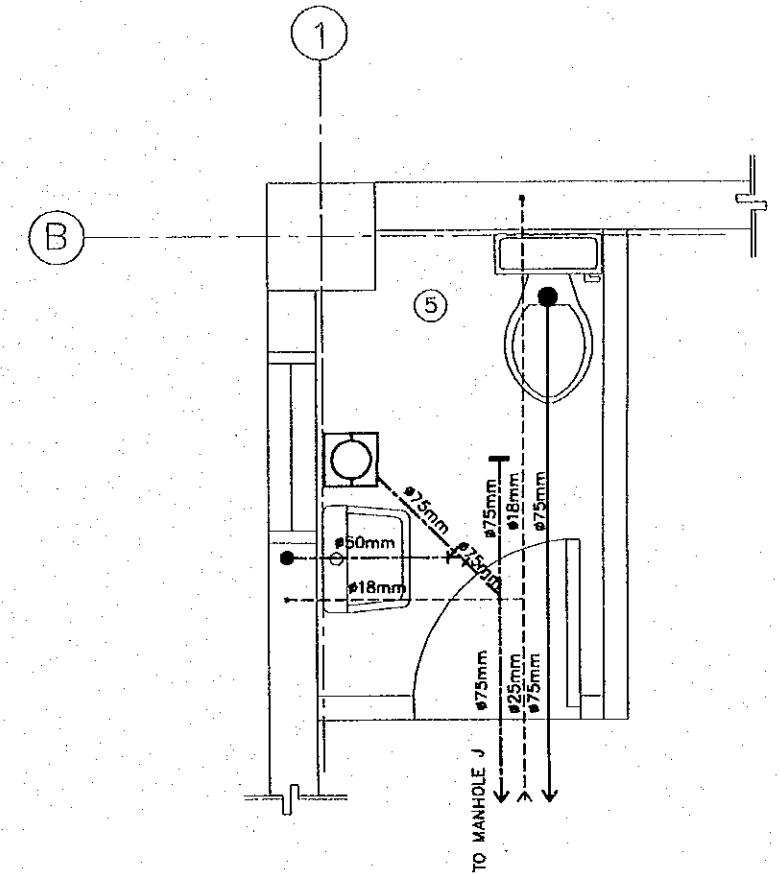
SCALE 1:50

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : BUILDING WORK	DATE : OCTOBER/2002
								CHECKED BY :	SUB-SECTION : POWER SUPPLY STATION	SCALE : INDICATED
								APPROVED BY :	TITLE : STRUCTURAL BEAM, COLUMN AND SLAB SCHEDULE	DRAWING NO. : BD-06-016



PLUMBING AND FIRE FIGHTING SYSTEMS

SCALE 1:200



DETAIL "A"

SCALE 1:30

PLUMBING SYMBOLS

●	VERTICAL PIPE DOWN	---	WATER SUPPLY PIPE
Ⓜ	METER INSIDE PIT	---	WASTE DRAINAGE PIPE
ⓧ	VALVE INSIDE PIT	---	SANITARY DRAINAGE PIPE
Ⓞ	FLOOR DRAIN		

NOTES

- 1) WASTE AND SANITARY DRAINAGE PIPES TO BE PVC
- 2) WATER SUPPLY PIPES TO BE PVC.
- 3) FIRE FIGHTING SYSTEM PIPES TO BE GALVANIZED IRON

FIRE FIGHTING SYMBOLS

	AB CLASS CO2 EXTINGUISHER
	FIRE HYDRANT STAND TYPE
	FIRE STATION CABINET
LEGEND	
P	WEIGHT IN KGS
h	PLACEMENT HEIGHT

(ROOM LIST)

- 1) OFFICE ROOM
- 2) SWITCHGEAR ROOM
- 3) TRANSFORMER ROOM
- 4) GENERATOR ROOM
- 5) TOILET
- 6) SIDEWALK
- 7) TRANSFORMER YARD

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE



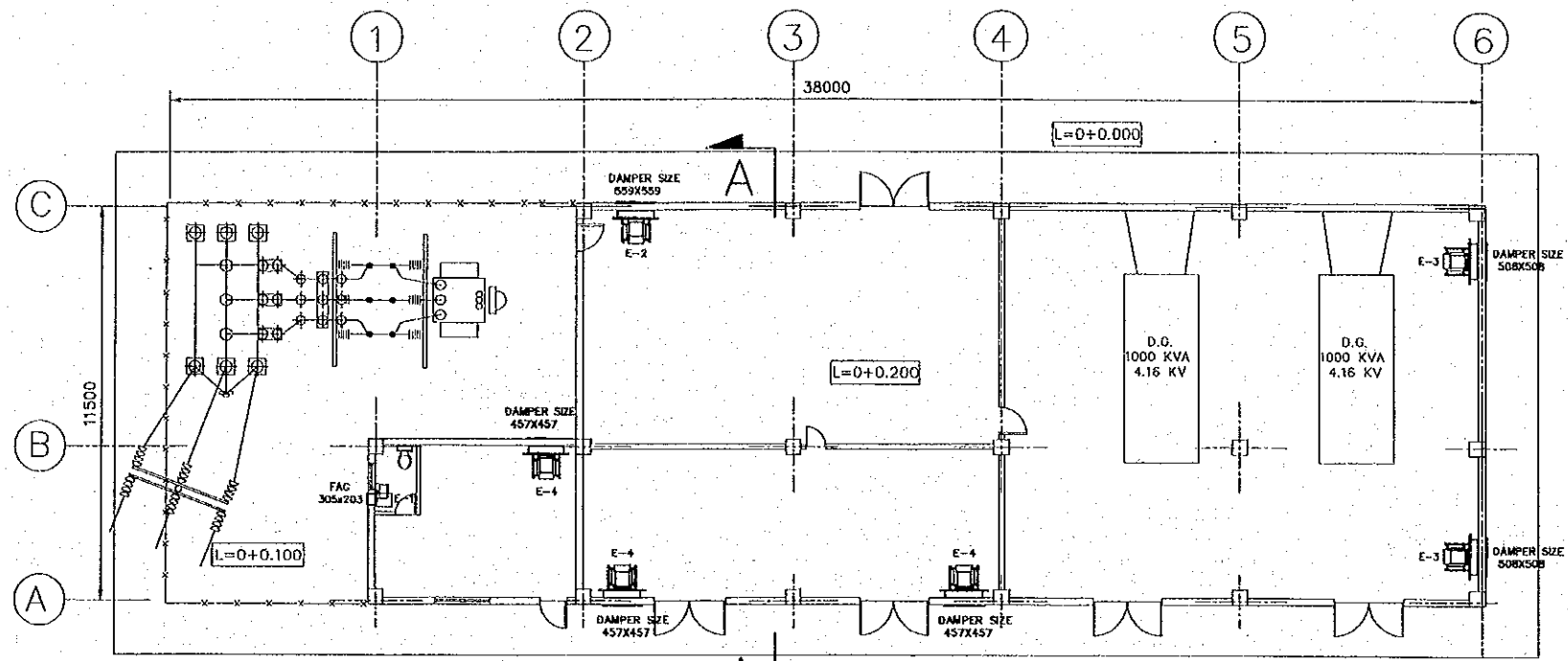
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR
NIPPON KOEI CO., LTD.

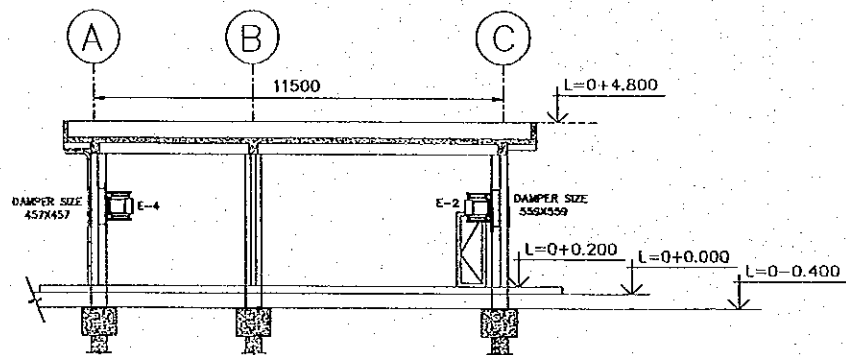
DESIGNED BY :
CHECKED BY :
APPROVED BY :

SECTION : BUILDING WORK
SUB-SECTION : POWER SUPPLY STATION
TITLE : PLUMBING SYSTEM AND FIRE FIGHTING SYSTEM

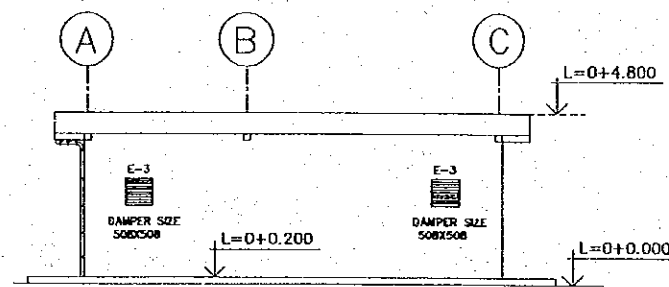
DATE : OCTOBER/2002
SCALE : INDICATED
DRAWING NO: BD-06-017



FIRST LEVEL
SCALE 1:200



SECTION A-A
SCALE 1:200



NORTHEAST ELEVATION
SCALE 1:200




SIMBOLOGY	DESCRIPTION
	CEILING EXTRACTOR FOR BATHROOMS
	WALL MOUNTED EXTRACTOR
	GRILLE

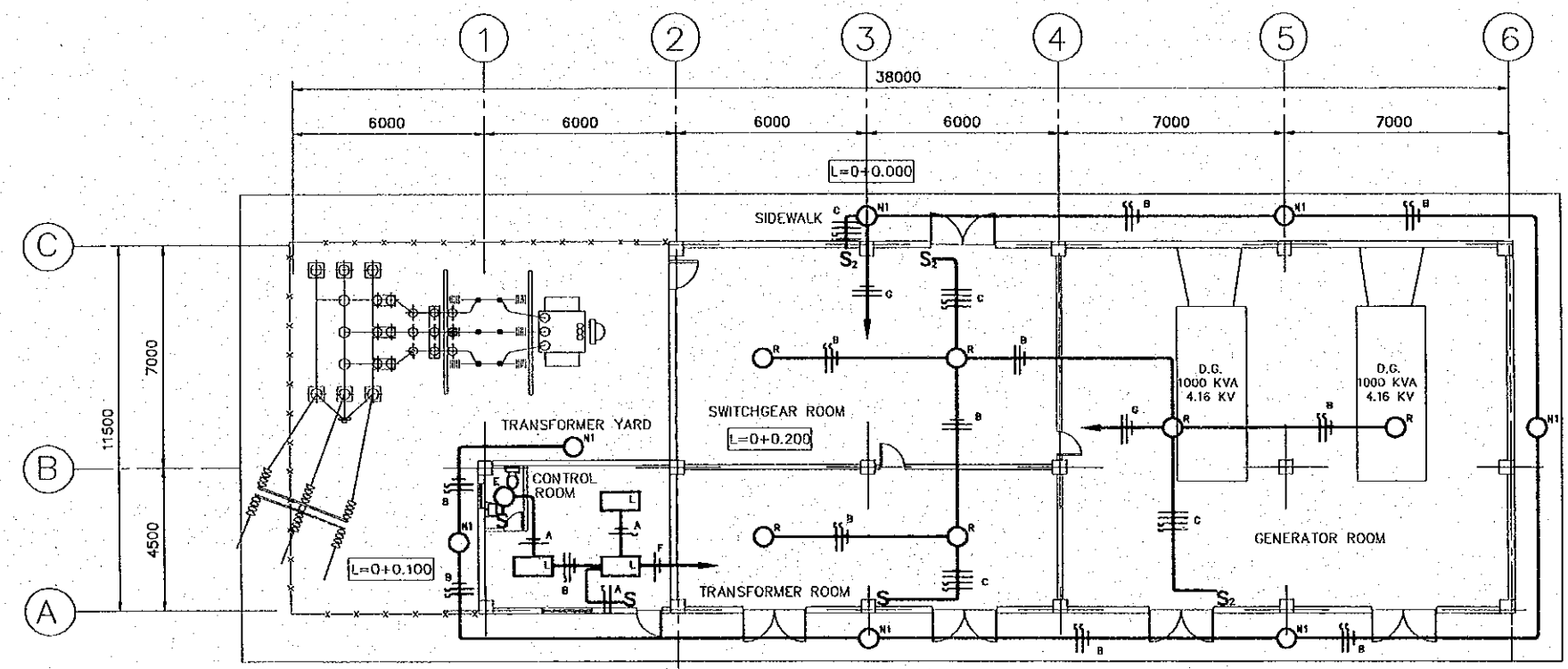
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : BUILDING WORK	DATE : OCTOBER/2002
								CHECKED BY :	SUB-SECTION : POWER SUPPLY STATION	SCALE : 1:200
								APPROVED BY :	TITLE : VAC SYSTEM 1st. FLOOR PLAN, ELEVATION & SECTION A-A	DRAWING NO. : BD-06-018

PANELBOARD SCHEDULE

PANEL T-PSS 3ø, 4 WIRE SURFACE MOUNTED 125 AMPERE MAIN
LOCATION POWER SUPPLY STATION 150 AMPERE BUS

CT No.	WIRING	AMPERE			DESCRIPTION	CB		PHASE	CB		DESCRIPTION	AMPERE			WIRING	CT No.	
		øA	øB	øC		Pole	A/C		Pole	A/C		øA	øB	øC			
1	2x5.3mm ²	3.60			Lighting offices	1	15	—	—	—	2	15	Lighting transf. room	9.60		3x5.3mm ²	2
3	3x5.3mm ²		7.20		MH Lighting	2	15	—	—	—				9.60			4
5			7.20					—	—	—	2	15	Lighting outdoor		5.00	3x5.3mm ²	6
7	2x5.3mm ²	2.40			Exhaust fan E1			—	—	—				5.00			8
9	2x5.3mm ²		5.80		Exhaust fan E4	1	15	—	—	—	1	20	Outlets		6.70	3x5.3mm ²	10
11	2x5.3mm ²		5.80		Exhaust fan E4	1	15	—	—	—	1	20	Outlets		6.70	3x5.3mm ²	12
13	2x5.3mm ²	5.80			Exhaust fan E2	1	15	—	—	—	2	15	T-WTF N°1	60.0		4x21.2mm ²	14
15	2x5.3mm ²		7.20		Exhaust fan E3	1	15	—	—	—				60.0			16
17	2x5.3mm ²		7.20		Exhaust fan E3	1	15	—	—	—				60.0			18
19	2x5.3mm ²	9.80			Fuel pump	1	15	—	—	—							20
21					Battery Charger			—	—	—							22
23								—	—	—							24
		86,4				TOTAL A/øA											
		96,5				TOTAL A/øB											
		91,9				TOTAL A/øC											
		28,344				TOTAL VA											

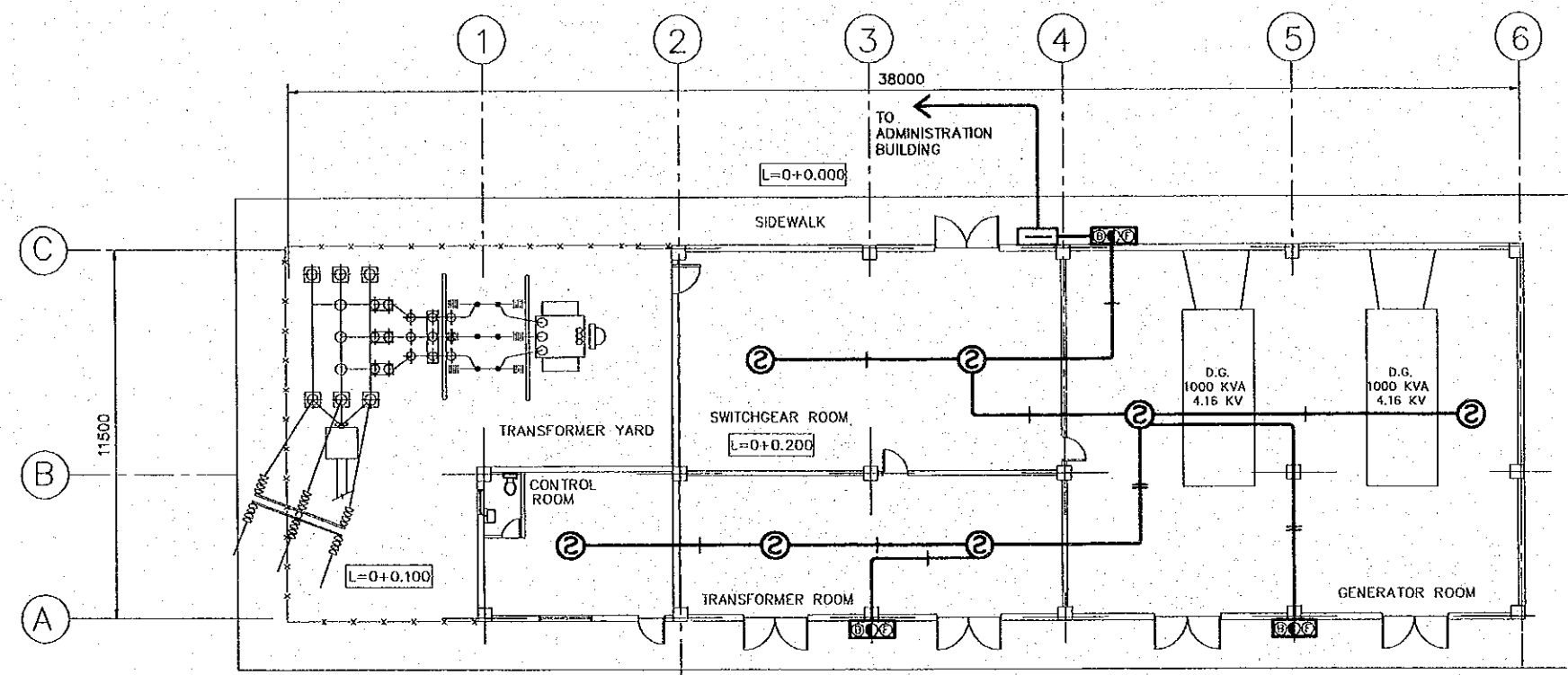
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR  NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :									
					CHECKED BY :			SUB-SECTION :	OCTOBER/2002										
					APPROVED BY :			TITLE :	NOT TO SCALE										
								BUILDING WORK		DRAWING NO. : BD-06-019									
								POWER SUPPLY STATION											
								PANELBOARD SCHEDULE											



LIGHTING FLOOR PLAN
SCALE 1:200

SYMBOLS	
	4X32 WATT FLOURESCENT FIXTURE SURFACE MOUNTED
	175 WATT/240V METAL HALIDE BANTAM 2000 FIXTURE
	150 WATT/240V HPS BANTAM 2000 FIXTURE
	60W INCANDESCENT FIXTURE SURFACE MOUNTED
	S SINGLE POLE SWITCH
	S ₂ DOUBLE POLE SWITCH
	— ELECTRICAL WIRING CONCEALED IN CEILING
	SWITCH LEG, PHASE, NEUTRAL
	➔ CIRCUIT FEEDER

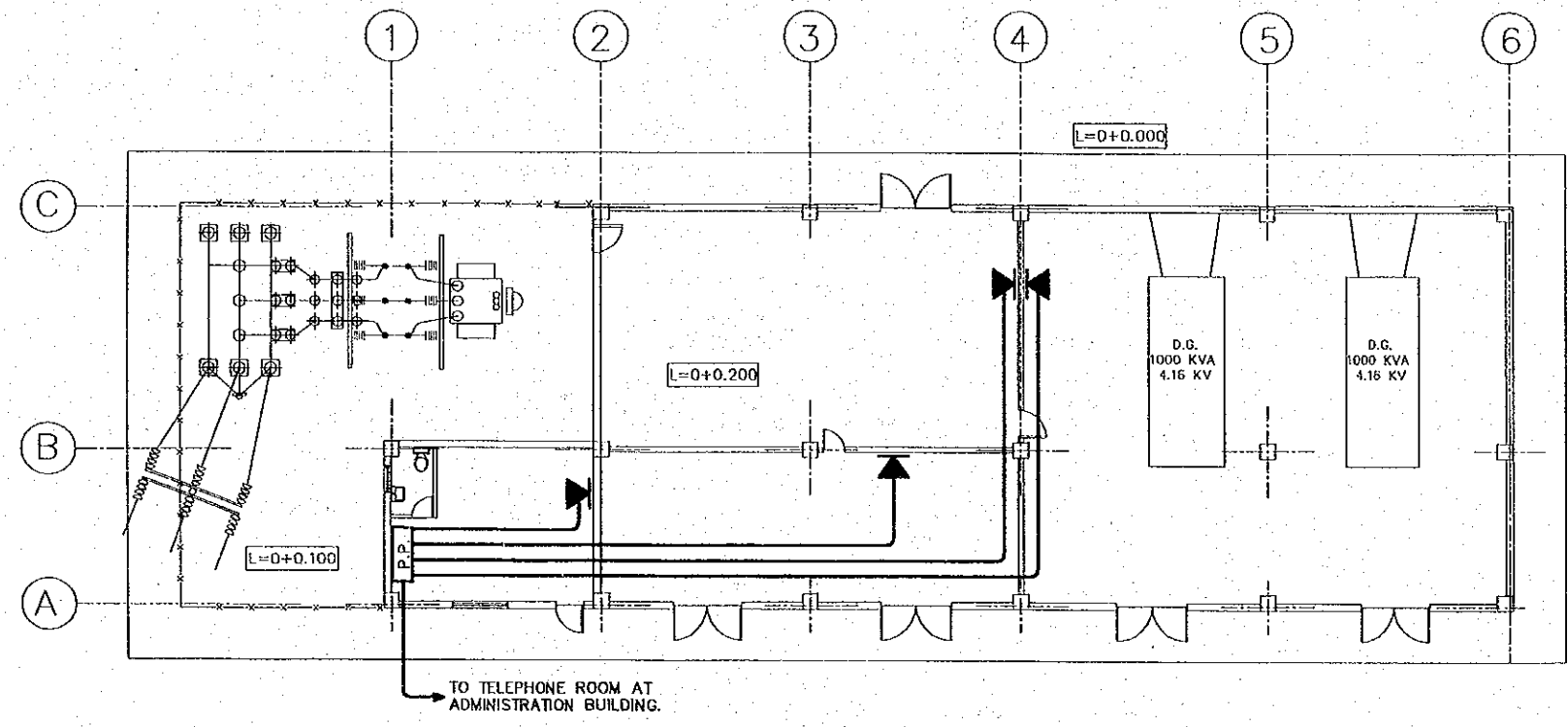
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									CHECKED BY :	SUB-SECTION : POWER SUPPLY STATION	SCALE : 1:200
									APPROVED BY :	TITLE : LIGHTING PLAN	DRAWING NO: BD-06-020



FIRE DETECTION SYSTEM
SCALE 1:200

SYMBOLS	
	AUTOMATIC FIRE DETECTOR, DIFFERENTIAL TYPE SPOT DETECTOR
	WIRING CONCEALED IN CEILING
	FIRE ALARM COMBINATION PANEL
	TERMINAL PANELBOARD

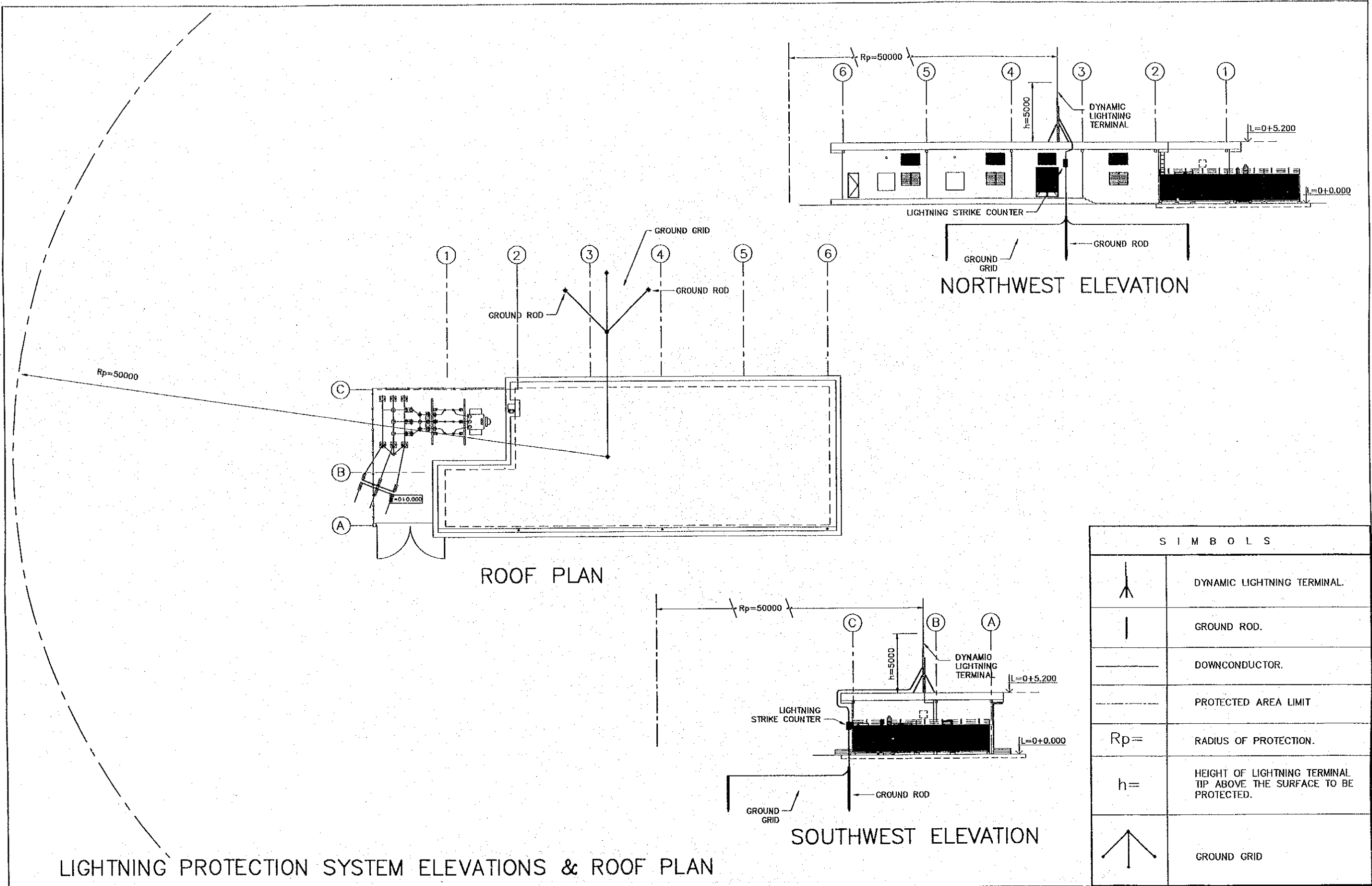
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR				DESIGNED BY : CHECKED BY : APPROVED BY :		SECTION : BUILDING WORK SUB-SECTION : POWER SUPPLY STATION TITLE : FIRE DETECTION SYSTEM		DATE : OCTOBER/2002 SCALE : 1:200 DRAWING NO: BD-06-021	
COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)				NIPPON KOEI CO., LTD.									
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE								



COMMUNICATION SYSTEM
FIRST LEVEL SCALE 1:200

SYMBOLS	
	WALL-MOUNTED TELECOMMUNICATIONS OUTLET BOX CONNECTOR
	PATCH PANEL
	UTP CAT-5e CABLE

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :
								CHECKED BY :	SUB-SECTION :	OCTOBER/2002
								APPROVED BY :	TITLE :	SCALE :
									COMMUNICATION SYSTEM	1:200
										DRAWING NO. : BD-06-022

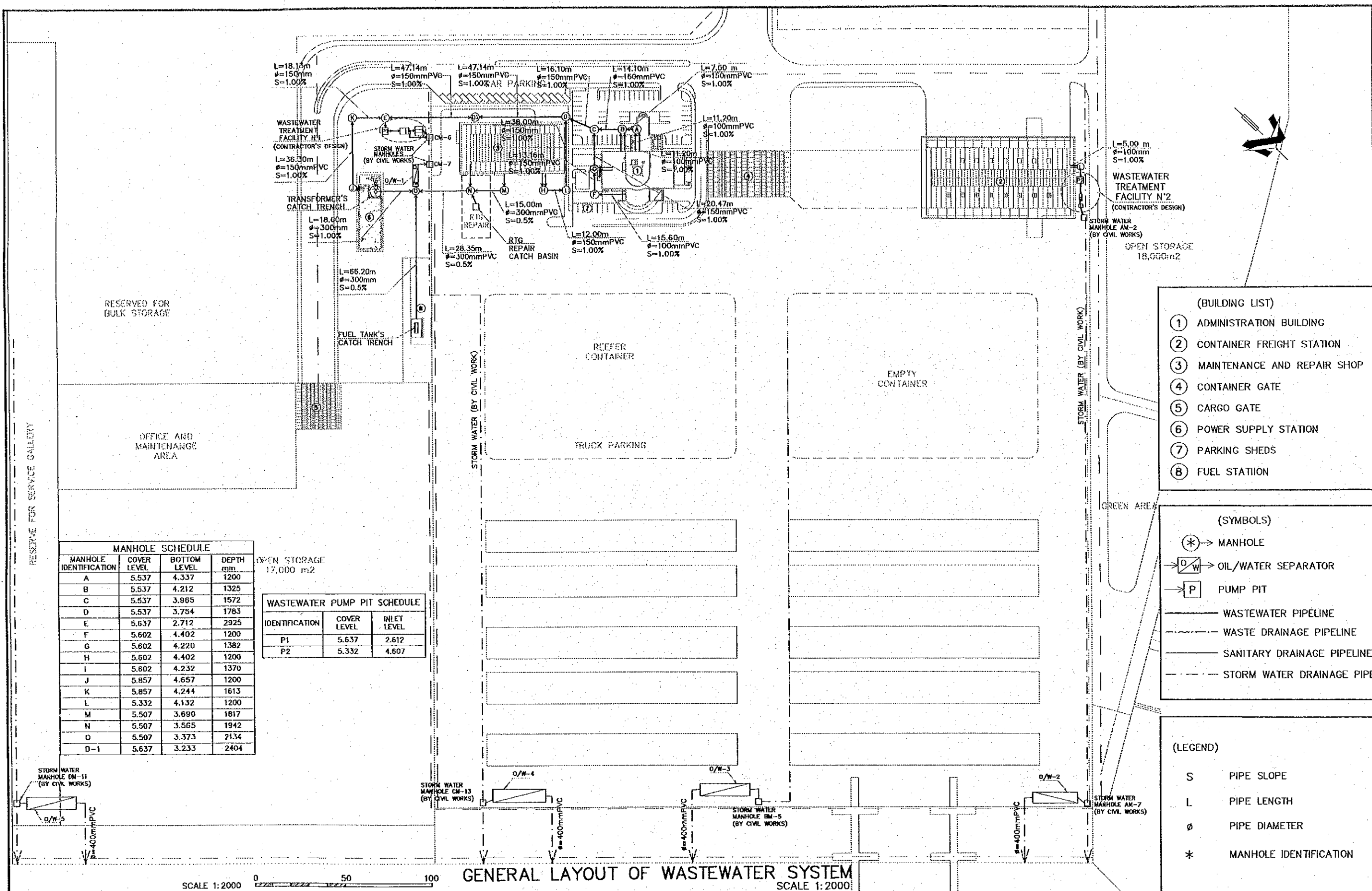


S I M B O L S	
	DYNAMIC LIGHTNING TERMINAL.
	GROUND ROD.
	DOWNCONDUCTOR.
	PROTECTED AREA LIMIT.
$R_p=$	RADIUS OF PROTECTION.
$h=$	HEIGHT OF LIGHTNING TERMINAL TIP ABOVE THE SURFACE TO BE PROTECTED.
	GROUND GRID

LIGHTNING PROTECTION SYSTEM ELEVATIONS & ROOF PLAN

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	 JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	 CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	 NK NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :
											CHECKED BY :
									APPROVED BY :	TITLE :	SCALE :
										LIGHTNING PROTECTION SYSTEM ELEVATIONS & ROOF PLAN	1:300
											DRAWING NO. : BD-06-023

UTILITY WORKS



MANHOLE SCHEDULE

MANHOLE IDENTIFICATION	COVER LEVEL	BOTTOM LEVEL	DEPTH min
A	5.537	4.337	1200
B	5.537	4.212	1325
C	5.537	3.965	1572
D	5.537	3.754	1783
E	5.637	2.712	2925
F	5.602	4.402	1200
G	5.602	4.220	1382
H	5.602	4.402	1200
I	5.602	4.232	1370
J	5.857	4.657	1200
K	5.857	4.244	1613
L	5.332	4.132	1200
M	5.507	3.690	1817
N	5.507	3.565	1942
O	5.507	3.373	2134
D-1	5.637	3.233	2404

WASTEWATER PUMP PIT SCHEDULE

IDENTIFICATION	COVER LEVEL	INLET LEVEL
P1	5.637	2.612
P2	5.332	4.607

- (BUILDING LIST)**
- ① ADMINISTRATION BUILDING
 - ② CONTAINER FREIGHT STATION
 - ③ MAINTENANCE AND REPAIR SHOP
 - ④ CONTAINER GATE
 - ⑤ CARGO GATE
 - ⑥ POWER SUPPLY STATION
 - ⑦ PARKING SHEDS
 - ⑧ FUEL STATION

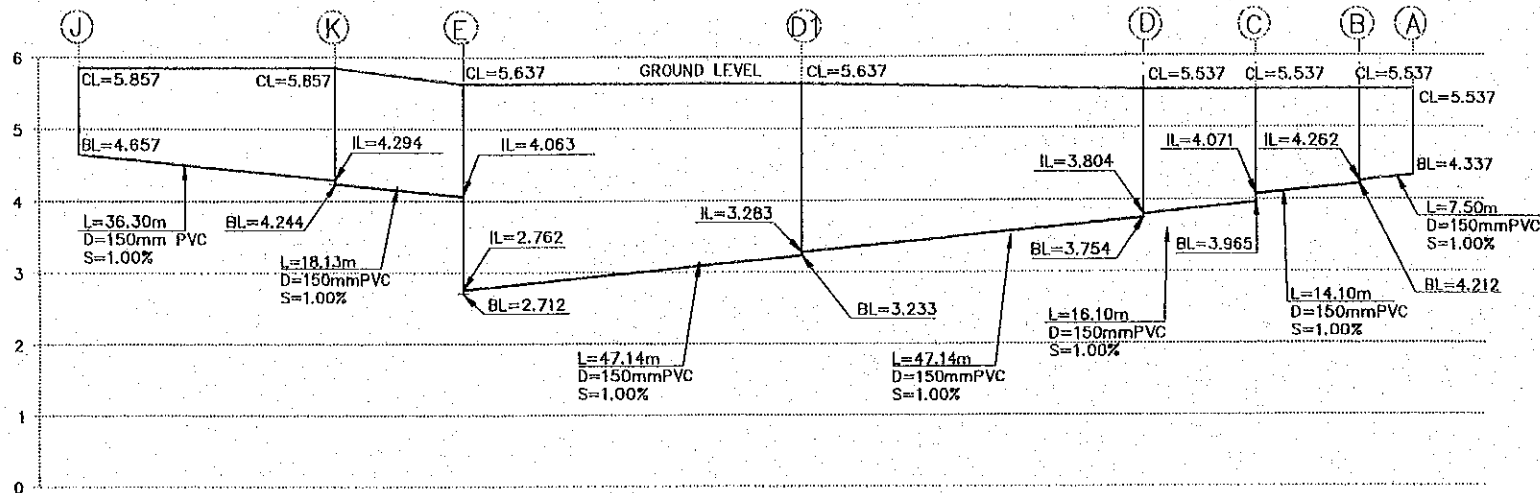
- (SYMBOLS)**
- ⊛ → MANHOLE
 - ⊞ → OIL/WATER SEPARATOR
 - ⊞ → PUMP PIT
 - WASTEWATER PIPELINE
 - - - WASTE DRAINAGE PIPELINE
 - SANITARY DRAINAGE PIPELINE
 - - - STORM WATER DRAINAGE PIPE

- (LEGEND)**
- S PIPE SLOPE
 - L PIPE LENGTH
 - ø PIPE DIAMETER
 - * MANHOLE IDENTIFICATION

SCALE 1:2000

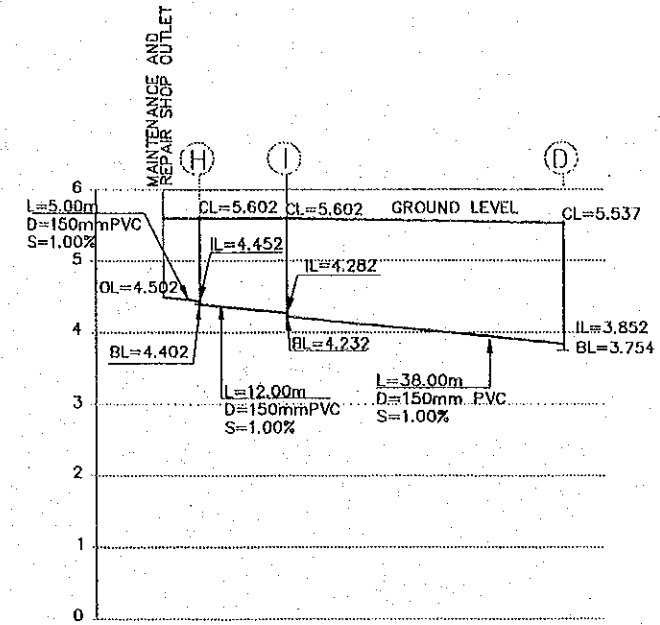
GENERAL LAYOUT OF WASTEWATER SYSTEM
SCALE 1:2000

	<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</p> <p>COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p>NIPPON KOEI CO., LTD.</p>	<p>DESIGNED BY :</p> <p>CHECKED BY :</p> <p>APPROVED BY :</p>	<p>SECTION : UTILITY WORK</p> <p>SUB-SECTION : WASTEWATER SYSTEM</p> <p>TITLE : GENERAL LAYOUT OF WASTEWATER SYSTEM</p>	<p>DATE : OCTOBER/2002</p> <p>SCALE : 1:2000</p> <p>DRAWING NO. : UT-01-001</p>
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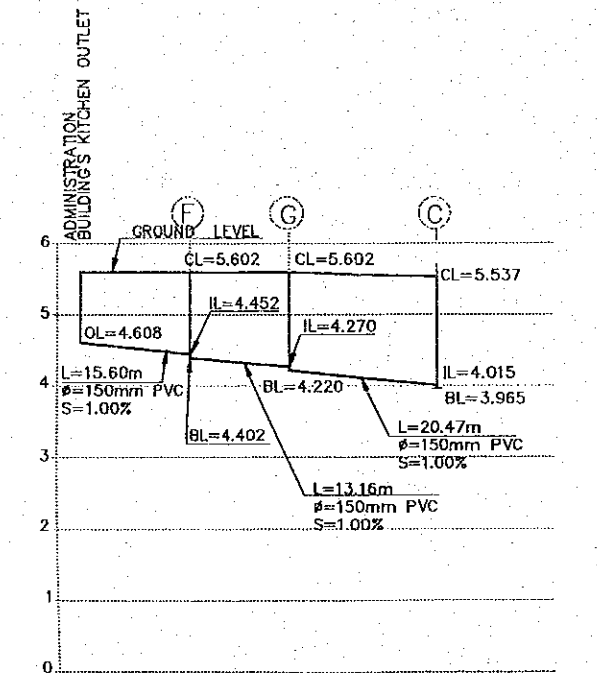
MAIN WASTEWATER PIPE PROFILE

(ADM. BUILDING, POWER STATION AND MAINT. AND REPAIR SHOP)
 VERTICAL SCALE 1:100
 HORIZONTAL SCALE 1:1000



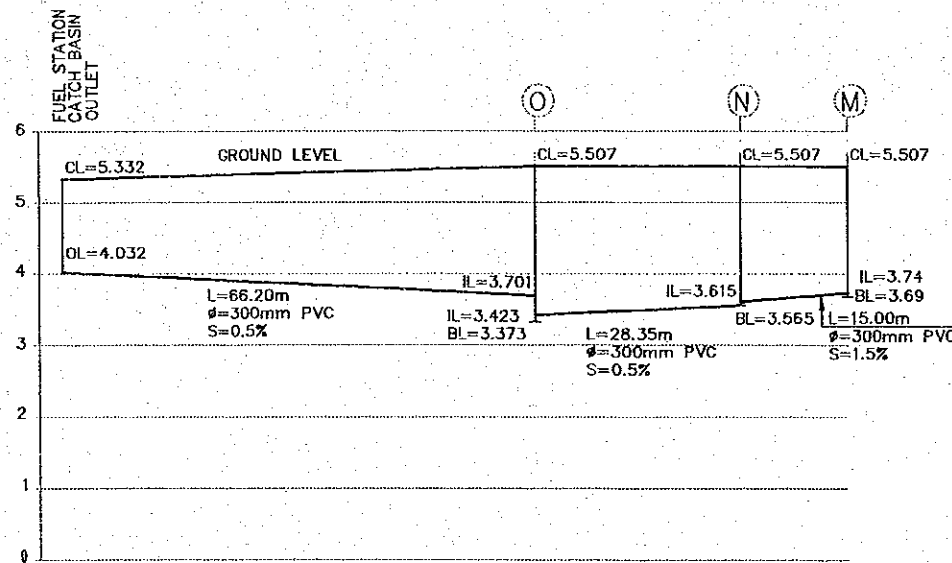
**MAINTENANCE AND REPAIR SHOP
 WASTEWATER FEEDER PIPE PROFILE**

VERTICAL SCALE 1:100
 HORIZONTAL SCALE 1:1000



**ADMINISTRATION BUILDING
 WASTEWATER FEEDER PIPE PROFILE**

VERTICAL SCALE 1:100
 HORIZONTAL SCALE 1:1000



OIL/WATER SEPARATOR FEEDER PROFILE

VERTICAL SCALE 1:100
 HORIZONTAL SCALE 1:1000

(LEGEND)

- OL OUTLET LEVEL
- BL MANHOLE BOTTOM LEVEL
- IL PIPE INLET LEVEL
- CL MANHOLE COVER LEVEL
- L LENGTH OF PIPE
- ∅ DIAMETER OF PIPE
- S SLOPE OF PIPE

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE



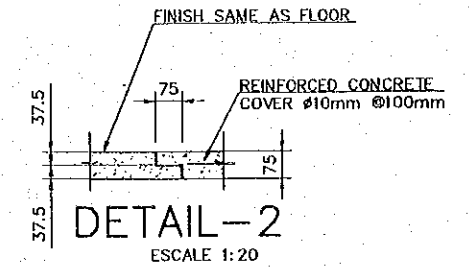
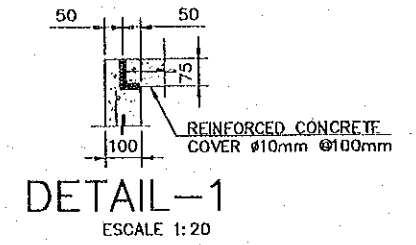
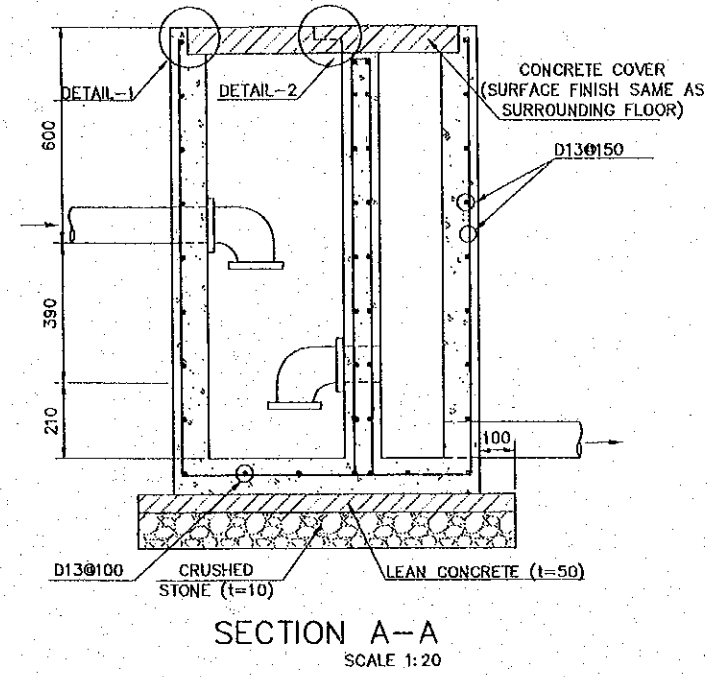
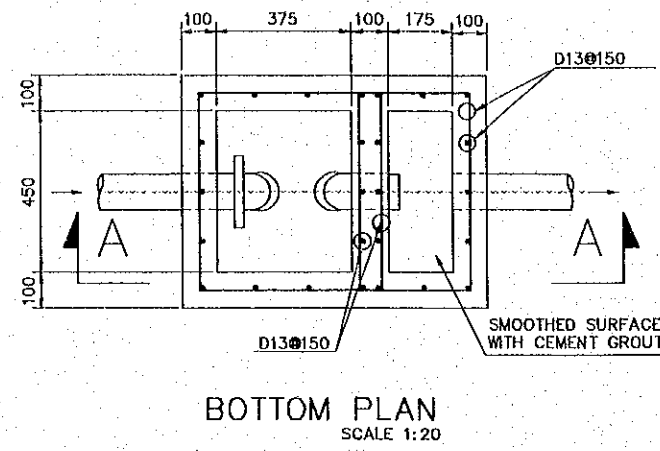
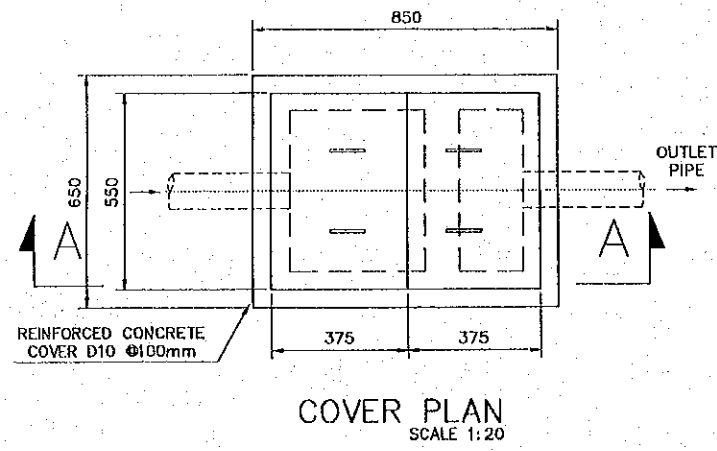
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 (JICA)
 COMISION EJECUTIVA
 PORTUARIA AUTONOMA
 (CEPA)

THE DETAILED DESIGN
 ON PORT REACTIVATION PROJECT
 IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR
 NIPPON KOEI CO., LTD.

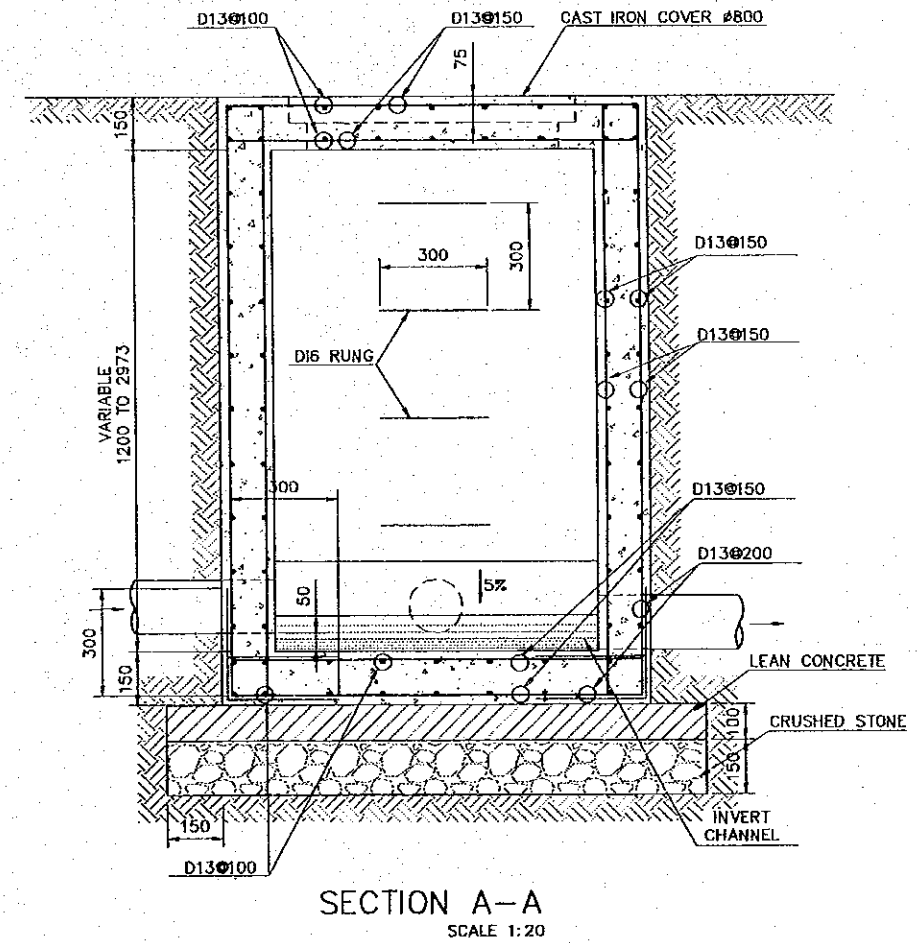
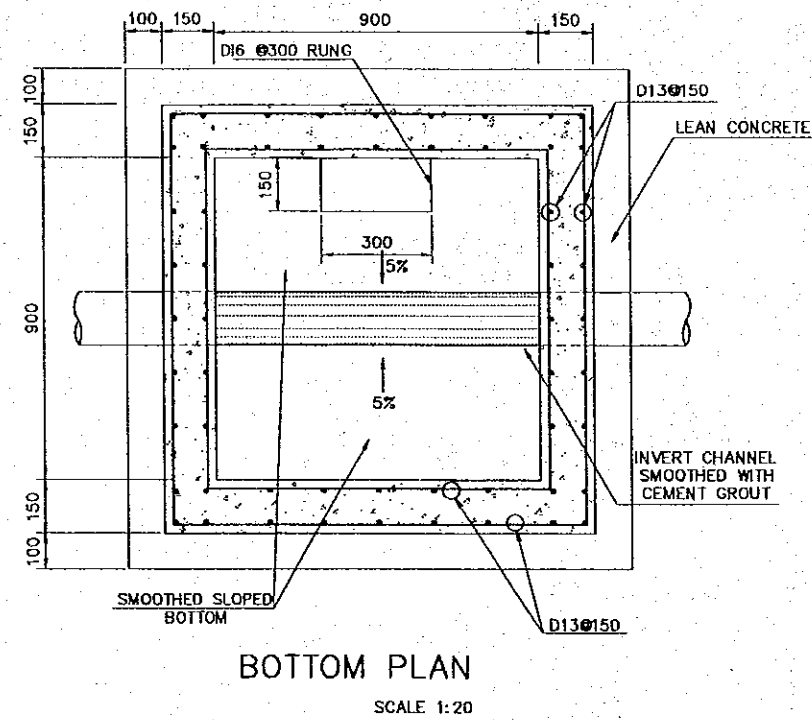
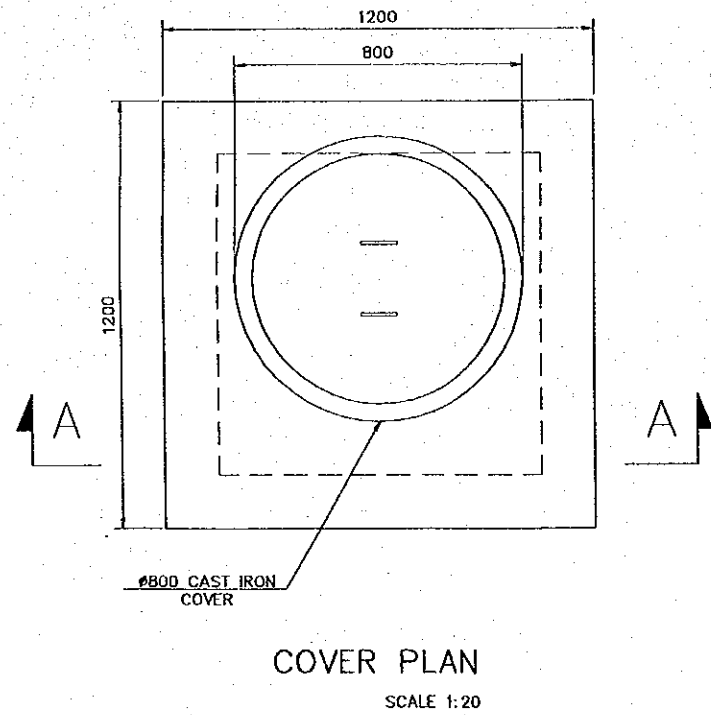
DESIGNED BY:
 CHECKED BY:
 APPROVED BY:

SECTION : UTILITY WORK
 SUB-SECTION : WASTEWATER SYSTEM
 TITLE : **DETAIL-1 OF WASTEWATER SYSTEM**

DATE : OCTOBER/2002
 SCALE : INDICATED
 DRAWING NO. : UT-01-002



GREASE TRAP



WASTEWATER TYPICAL MANHOLE

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JICA
JAPAN INTERNATIONAL
COOPERATION AGENCY
(JICA)

Cepa
COMISION EJECUTIVA
PORTUARIA AUTONOMA
(CEPA)

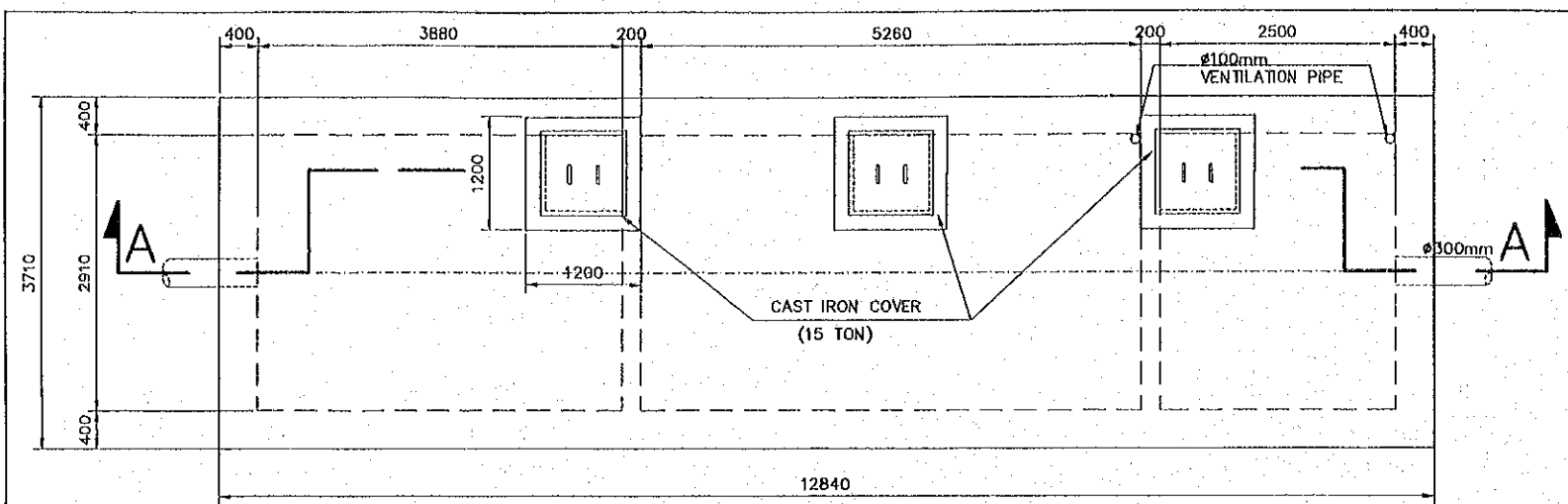
THE DETAILED DESIGN
ON PORT REACTIVATION PROJECT
IN LA UNION PROVINCE
OF THE REPUBLIC OF EL SALVADOR

NK
NIPPON KOEI CO., LTD.

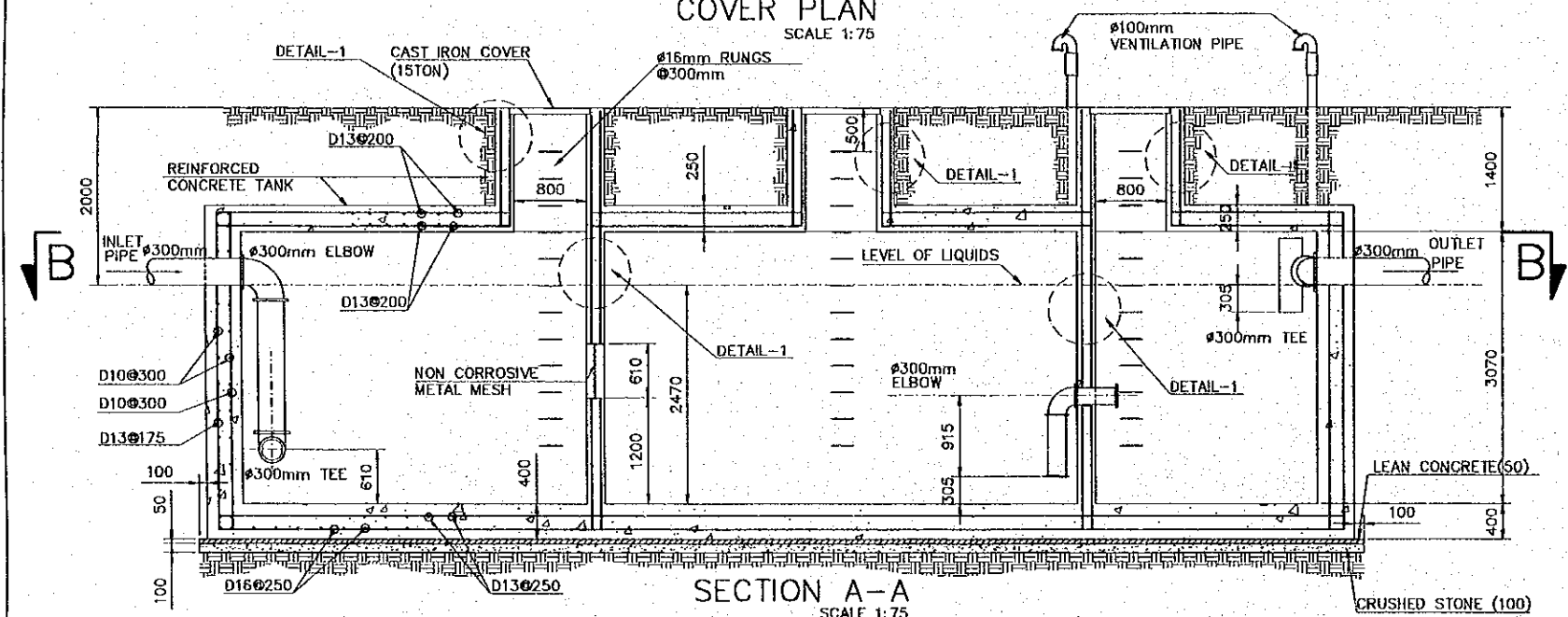
DESIGNED BY :
CHECKED BY :
APPROVED BY :

SECTION : UTILITY WORK
SUB-SECTION : WASTEWATER SYSTEM
TITLE : DETAIL-2 OF WASTEWATER SYSTEM

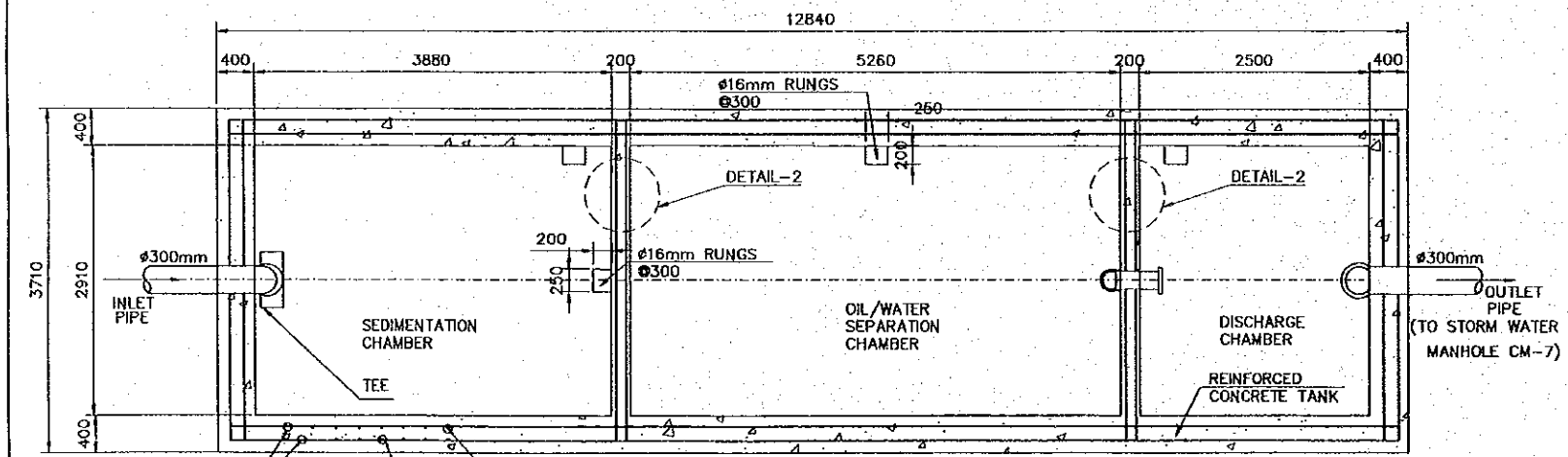
DATE : OCTOBER/2002
SCALE : INDICATED
DRAWING NO. : UT-01-003



COVER PLAN
SCALE 1:75

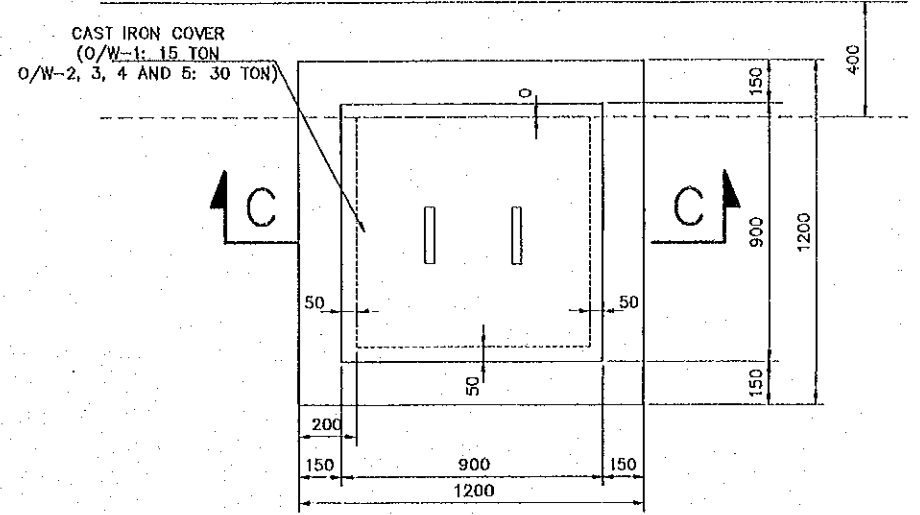


SECTION A-A
SCALE 1:75

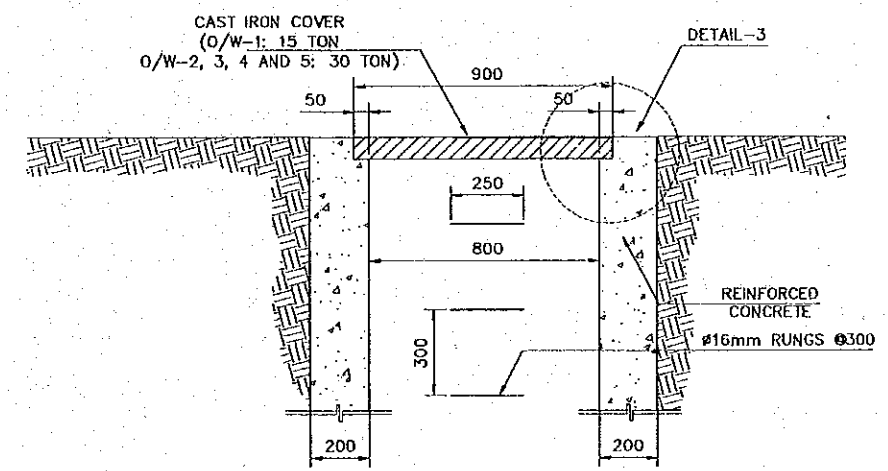


SECTION B-B
SCALE 1:75

OIL/WATER SEPARATOR-1 (M&R SHOP)

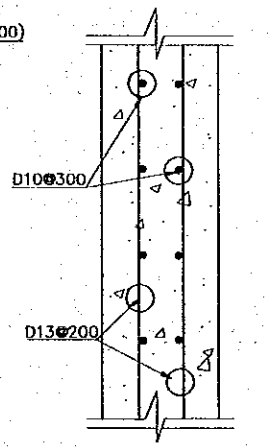


COVER PLAN
SCALE 1:25

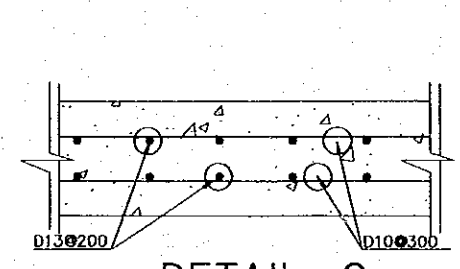


SECTION C-C
SCALE 1:25

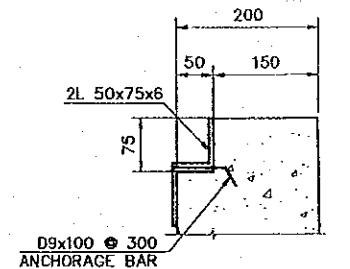
TYPICAL DETAIL OF MANHOLE FOR OIL/WATER SEPARATORS



DETAIL-1
SCALE 1:25




DETAIL-2
SCALE 1:25



DETAIL-3
SCALE 1:10

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

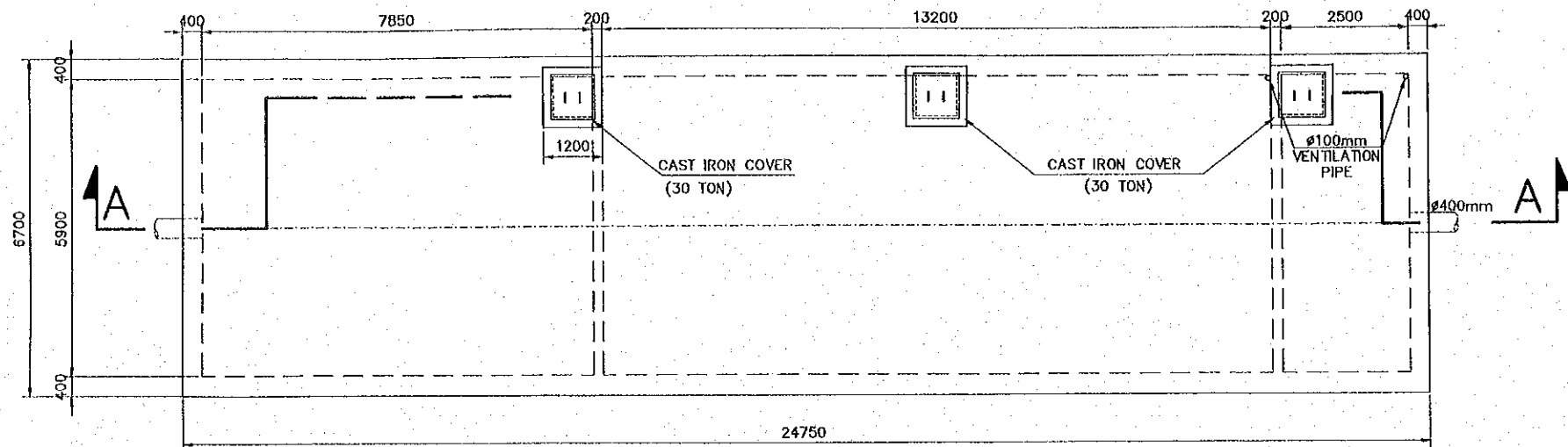
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

THE DETAILED DESIGN
 ON PORT REACTIVATION PROJECT
 IN LA UNION PROVINCE
 OF THE REPUBLIC OF EL SALVADOR
 NIPPON KOEI CO., LTD.

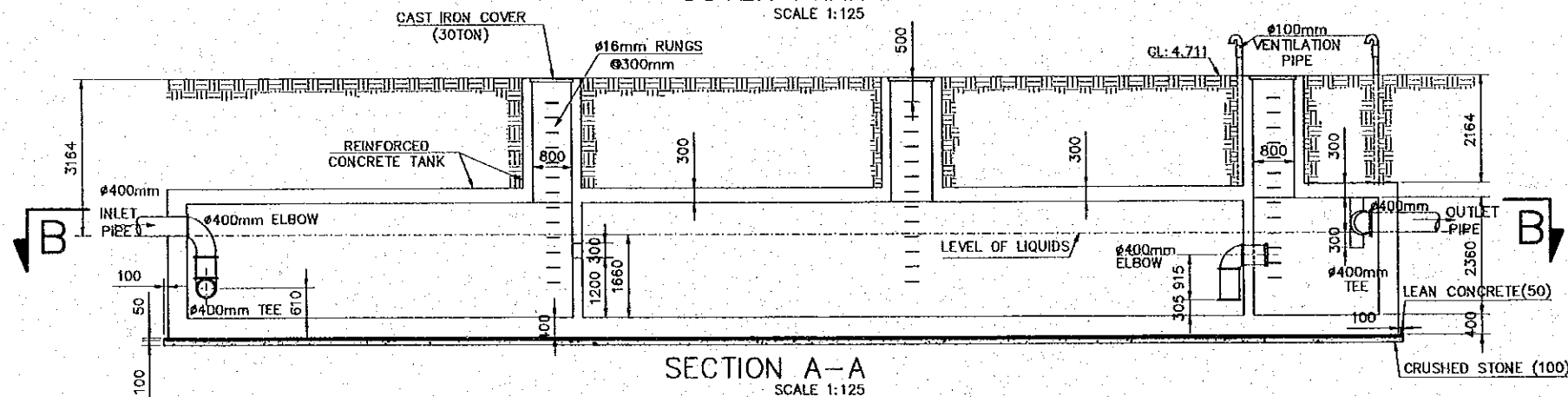
DESIGNED BY :
 CHECKED BY :
 APPROVED BY :

SECTION : UTILITY WORK
 SUB-SECTION : WASTEWATER SYSTEM
 TITLE : DETAILS OF OIL/WATER SEPARATOR-1 (M&R SHOP)

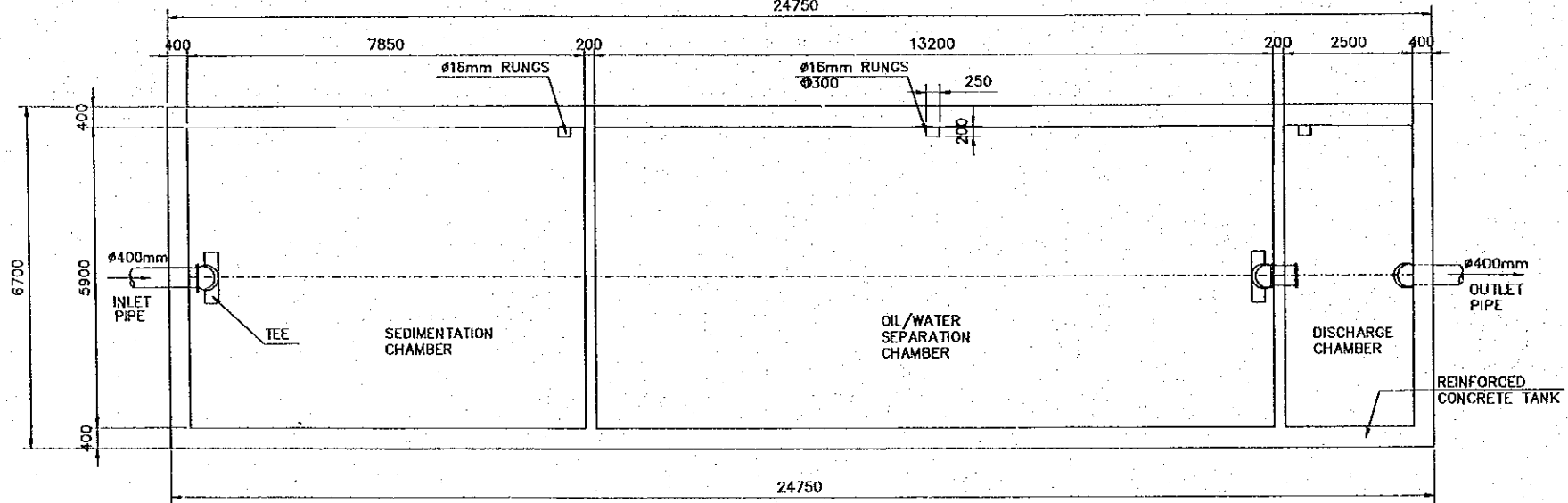
DATE : OCTOBER/2002
 SCALE : INDICATED
 DRAWING NO. : UT-01-004



COVER PLAN
SCALE 1:125

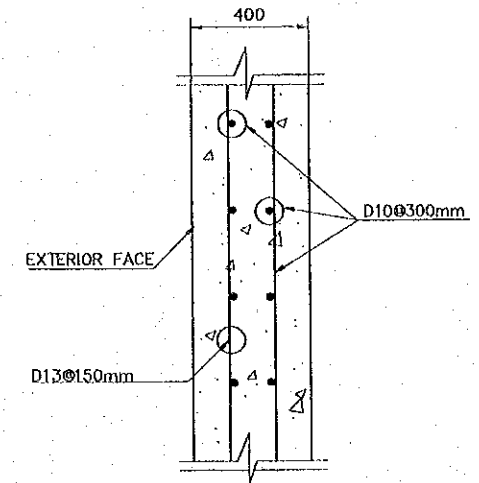


SECTION A-A
SCALE 1:125

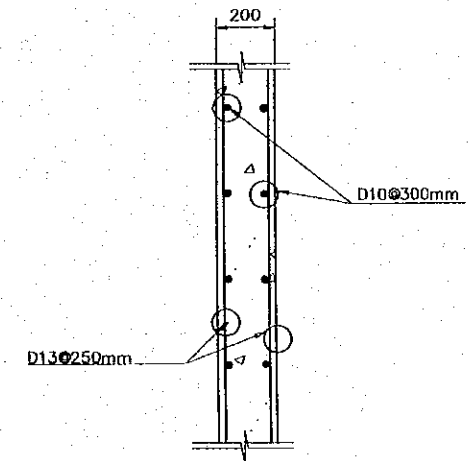


SECTION B-B
SCALE 1:125

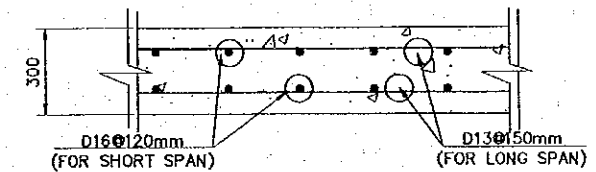
OIL/WATER SEPARATOR- 2 (ROUTE A)



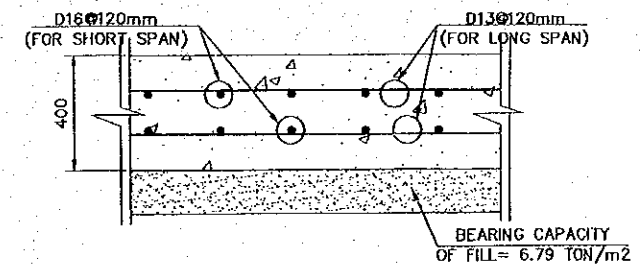
EXTERIOR WALL
SCALE 1:25



INTERIOR WALL
SCALE 1:25

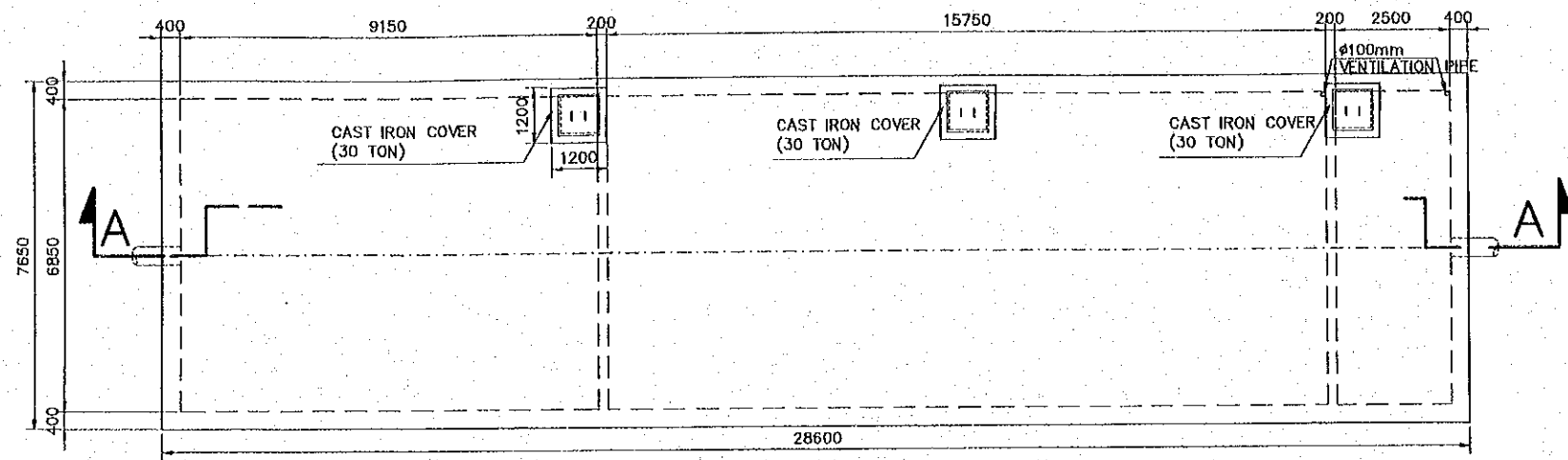


TOP SLAB
SCALE 1:25

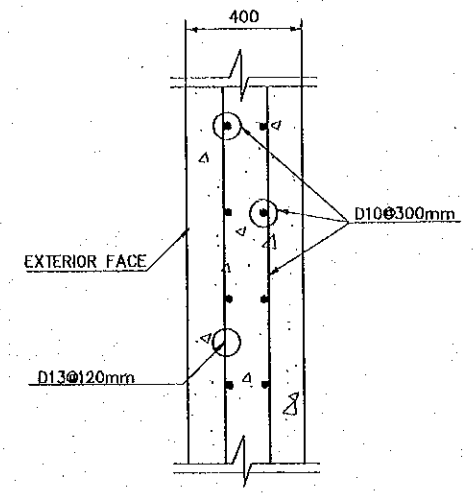


BOTTOM SLAB
SCALE 1:25

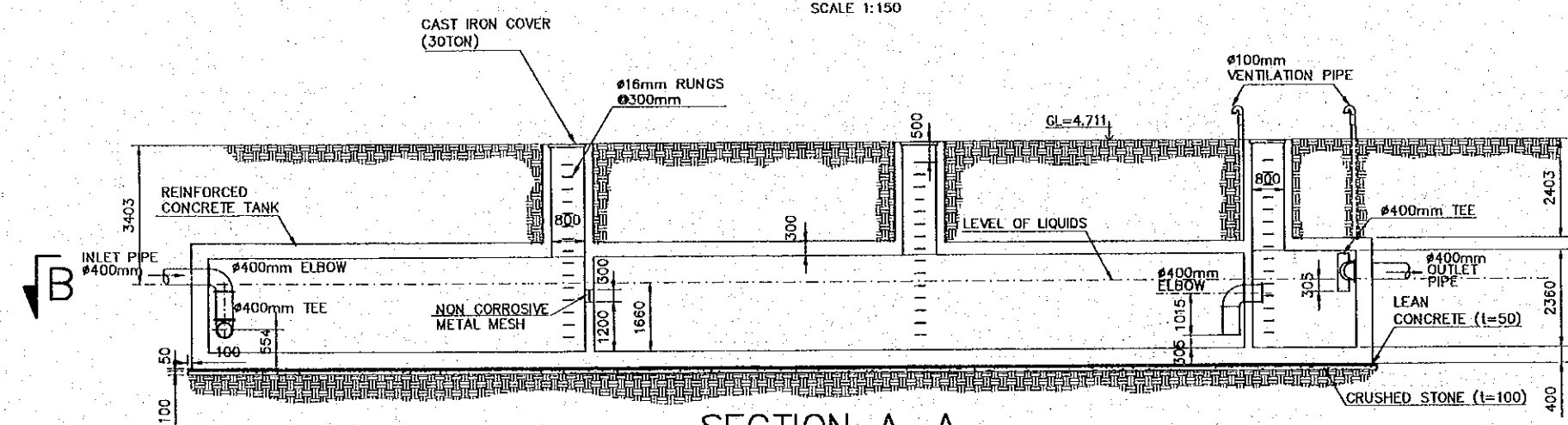
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY :	SECTION : UTILITY WORK	DATE : OCTOBER/2002
								COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	CHECKED BY :
								APPROVED BY :	TITLE : DETAILS OF OIL/WATER SEPARATOR-2 (ROUTE-A)	DRAWING NO. : UT-01-005



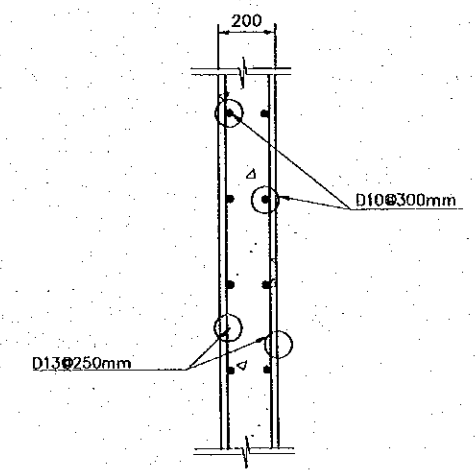
COVER PLAN
SCALE 1:150



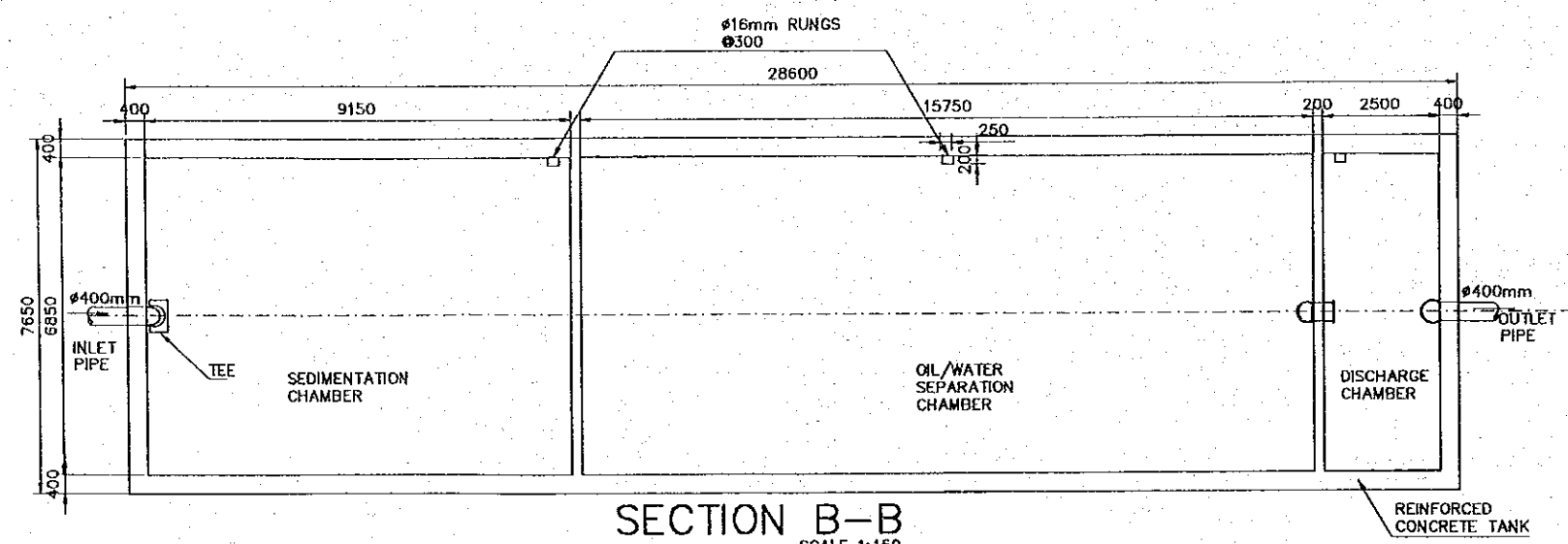
EXTERIOR WALL
SCALE 1:25



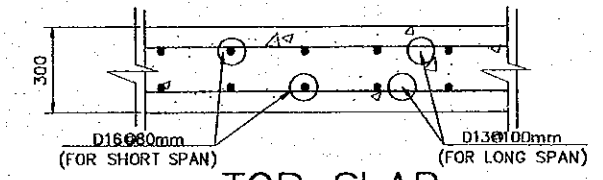
SECTION A-A
SCALE 1:150



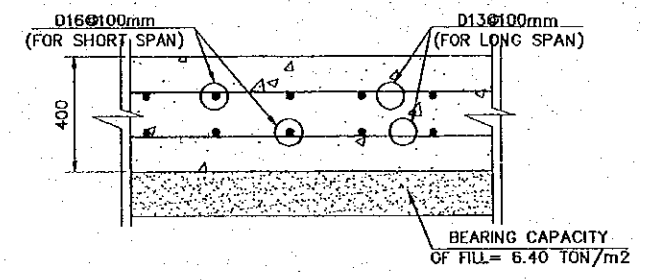
INTERIOR WALL
SCALE 1:25



SECTION B-B
SCALE 1:150



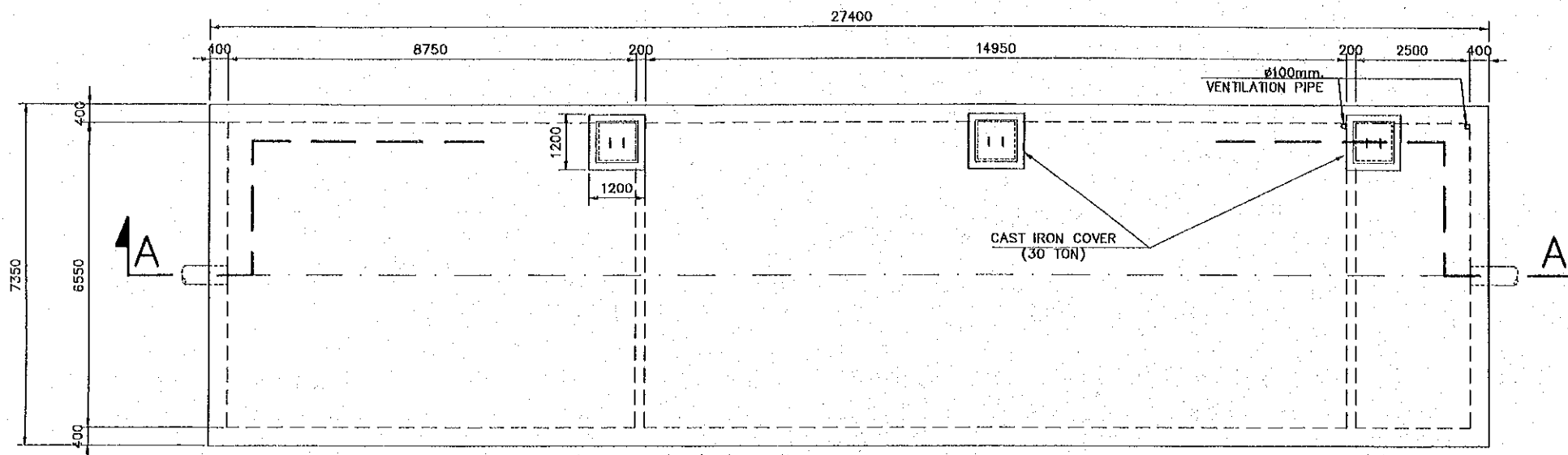
TOP SLAB
SCALE 1:25



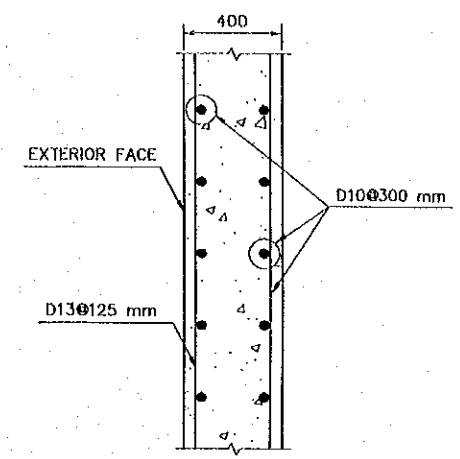
BOTTOM SLAB
SCALE 1:25

OIL/WATER SEPARATOR-4 (ROUTE-C)

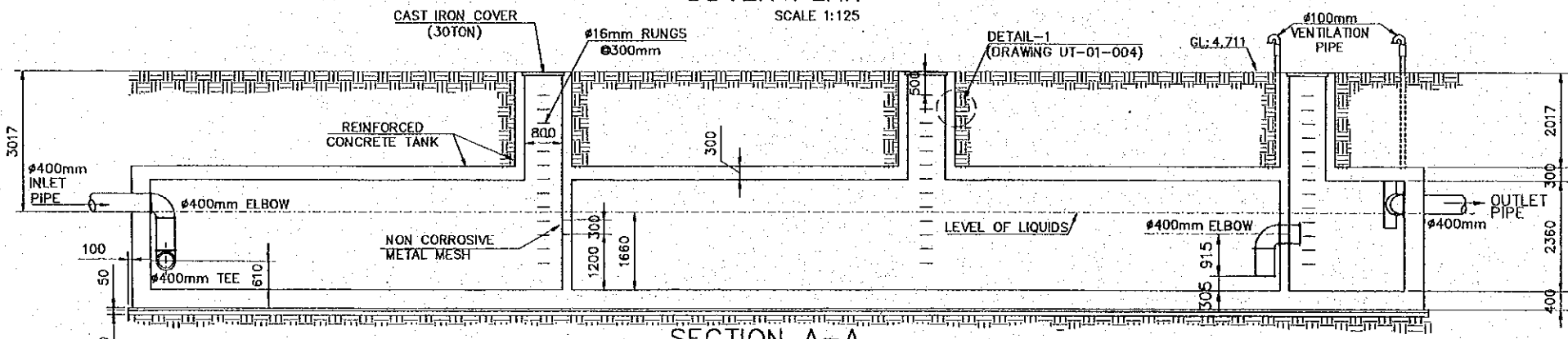
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : UTILITY WORK	DATE : OCTOBER/2002
								CHECKED BY :	SUB-SECTION : WASTEWATER SYSTEM	SCALE : 1 : 150
								APPROVED BY :	TITLE : DETAILS OF OIL/WATER SEPARATOR-4 (ROUTE-C)	DRAWING NO. : UT-01-007



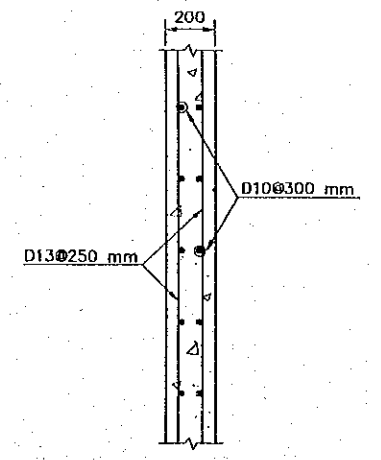
COVER PLAN
SCALE 1:125



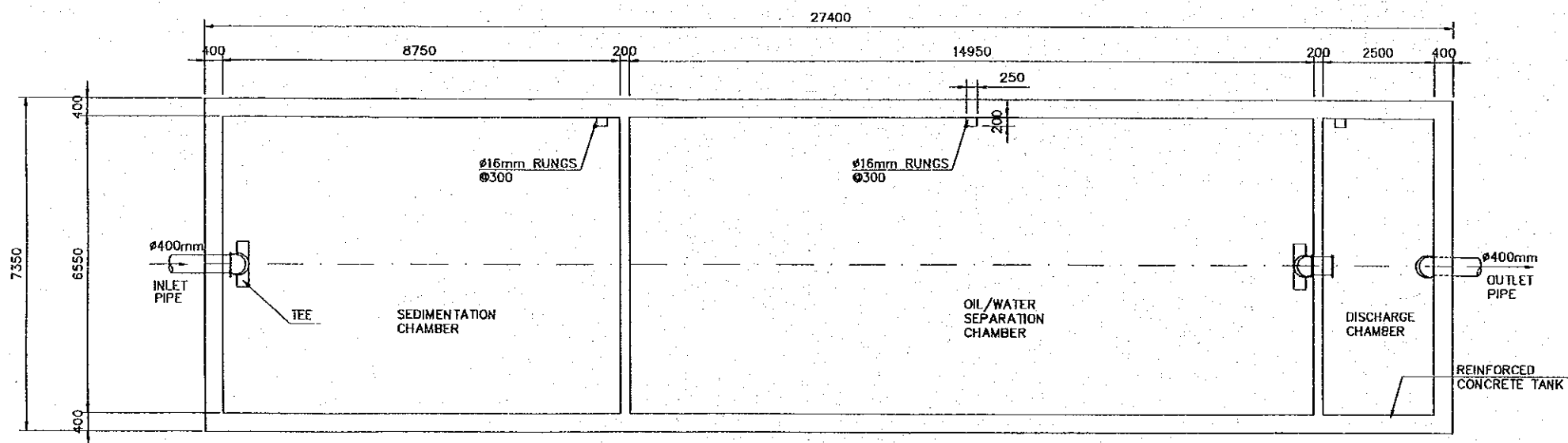
EXTERIOR WALL
SCALE 1:30



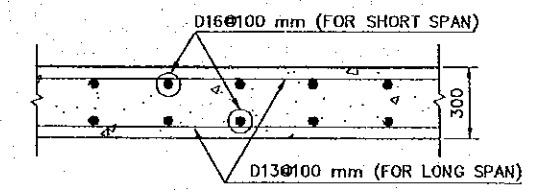
SECTION A-A
SCALE 1:125



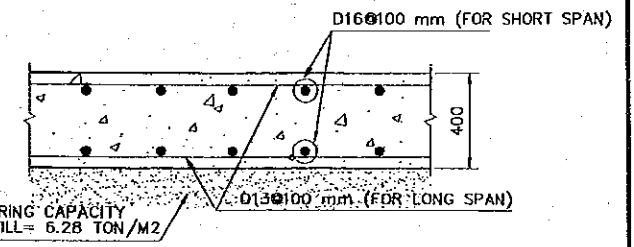
INTERIOR WALL
SCALE 1:30



SECTION B-B
SCALE 1:125



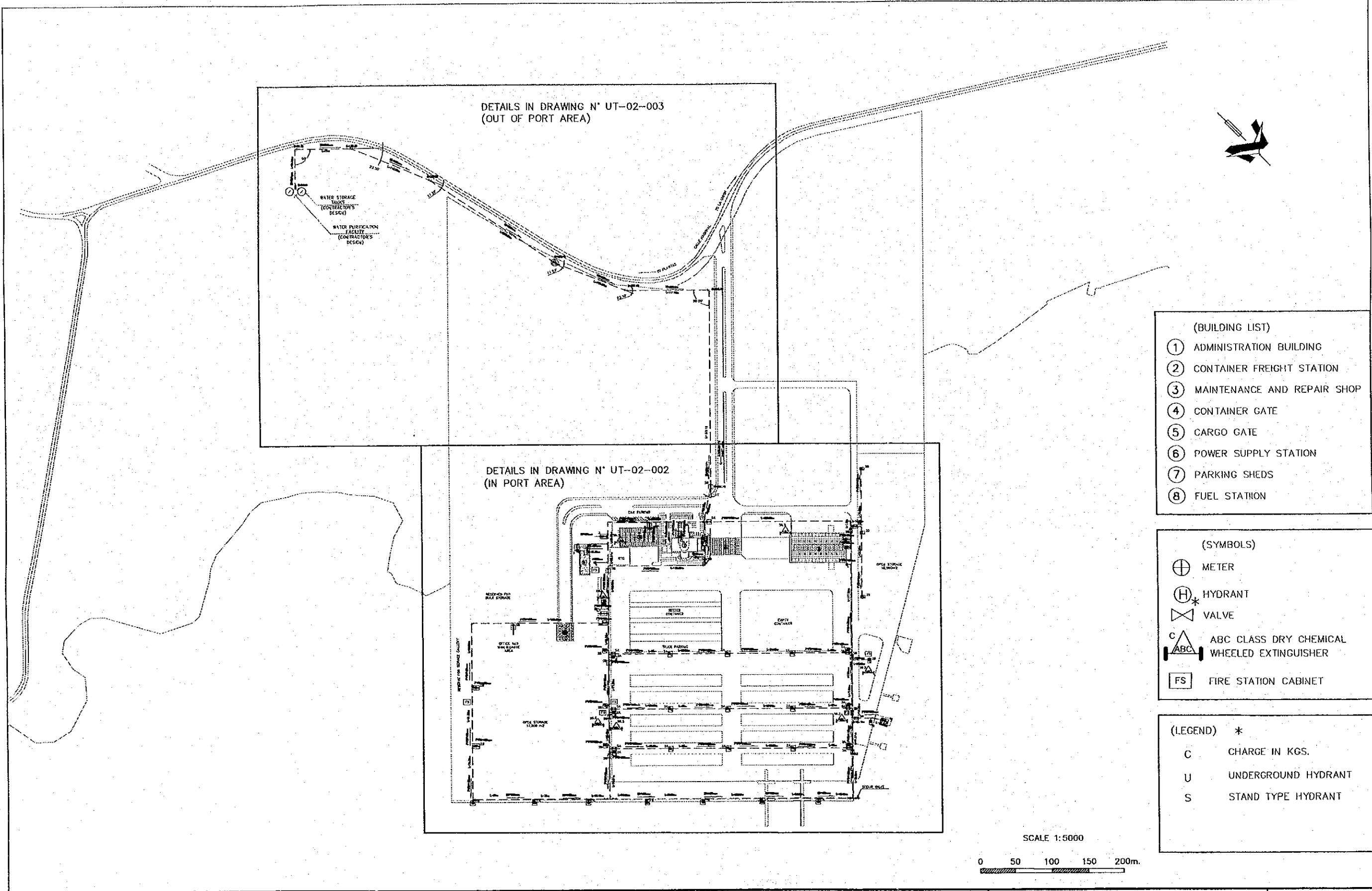
TOP SLAB
SCALE 1:30



BOTTOM SLAB
SCALE 1:30

OIL/WATER SEPARATOR- 5 (ROUTE D)

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR		DESIGNED BY : CHECKED BY : APPROVED BY :	SECTION : UTILITY WORK SUB-SECTION : WASTEWATER SYSTEM TITLE : DETAILS OF OIL/WATER SEPARATOR-5 (ROUTE-D)	DATE : OCTOBER/2002 SCALE : 1:125 DRAWING NO. : UT-01-008
COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)				NIPPON KOEI CO., LTD.				
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE			

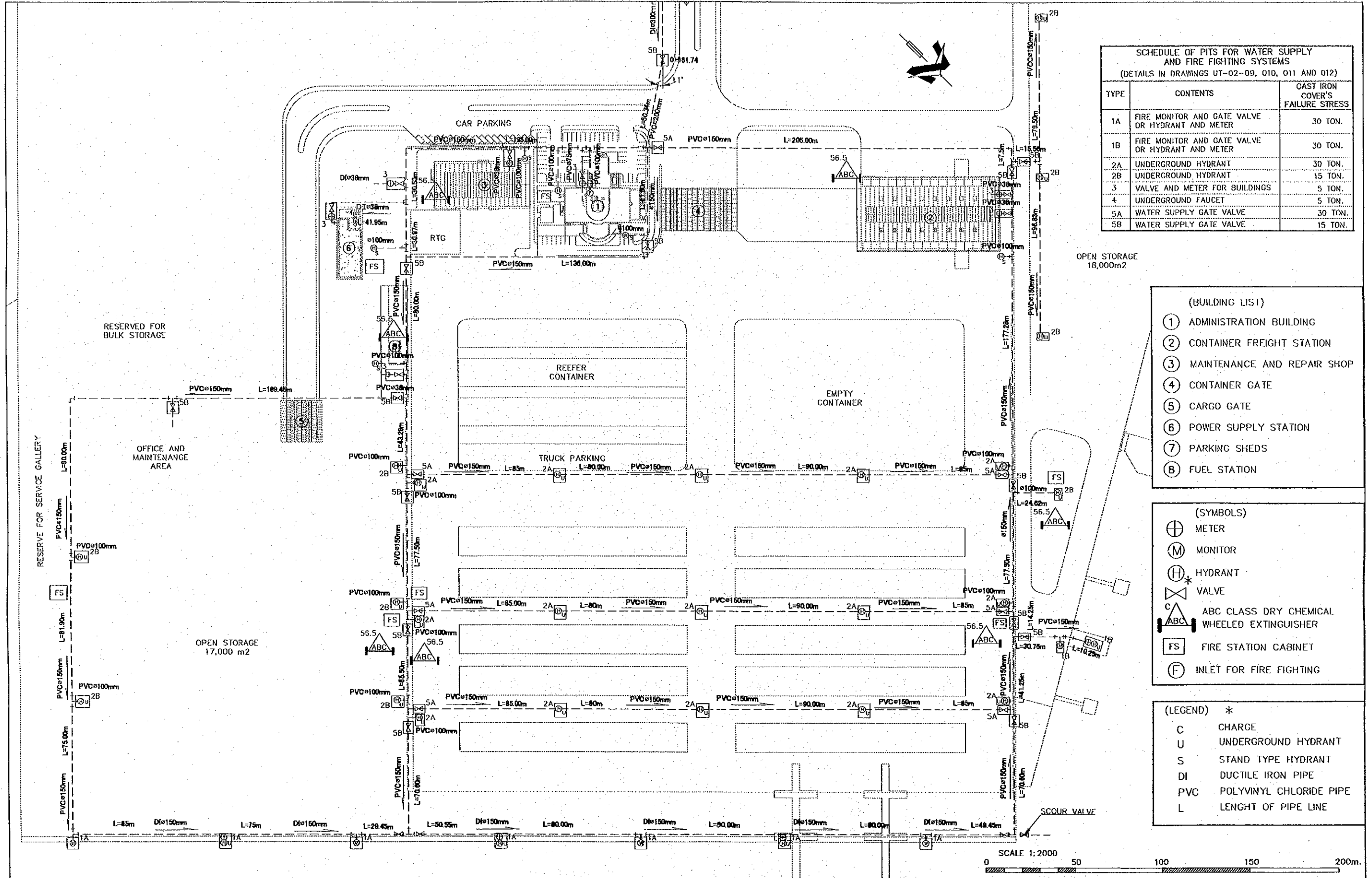


- (BUILDING LIST)
- ① ADMINISTRATION BUILDING
 - ② CONTAINER FREIGHT STATION
 - ③ MAINTENANCE AND REPAIR SHOP
 - ④ CONTAINER GATE
 - ⑤ CARGO GATE
 - ⑥ POWER SUPPLY STATION
 - ⑦ PARKING SHEDS
 - ⑧ FUEL STATION

- (SYMBOLS)
- ⊕ METER
 - ⊕* HYDRANT
 - ⊕ VALVE
 - ⊕^C ABC CLASS DRY CHEMICAL WHEELED EXTINGUISHER
 - FS FIRE STATION CABINET

- (LEGEND) *
- C CHARGE IN KGS.
 - U UNDERGROUND HYDRANT
 - S STAND TYPE HYDRANT

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : UTILITY WORK	DATE : OCTOBER/2002
									CHECKED BY :	SUB-SECTION : WATER SUPPLY AND FIRE FIGHTING SYSTEMS	SCALE : 1:5000
									APPROVED BY :	TITLE : GENERAL LAYOUT OF WATER SUPPLY AND FIRE FIGHTING SYSTEMS	DRAWING NO. : UT-02-001



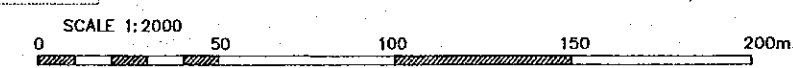
SCHEDULE OF PITS FOR WATER SUPPLY AND FIRE FIGHTING SYSTEMS
(DETAILS IN DRAWINGS UT-02-09, 010, 011 AND 012)

TYPE	CONTENTS	CAST IRON COVER'S FAILURE STRESS
1A	FIRE MONITOR AND GATE VALVE OR HYDRANT AND METER	30 TON.
1B	FIRE MONITOR AND GATE VALVE OR HYDRANT AND METER	30 TON.
2A	UNDERGROUND HYDRANT	30 TON.
2B	UNDERGROUND HYDRANT	15 TON.
3	VALVE AND METER FOR BUILDINGS	5 TON.
4	UNDERGROUND FAUCET	5 TON.
5A	WATER SUPPLY GATE VALVE	30 TON.
5B	WATER SUPPLY GATE VALVE	15 TON.

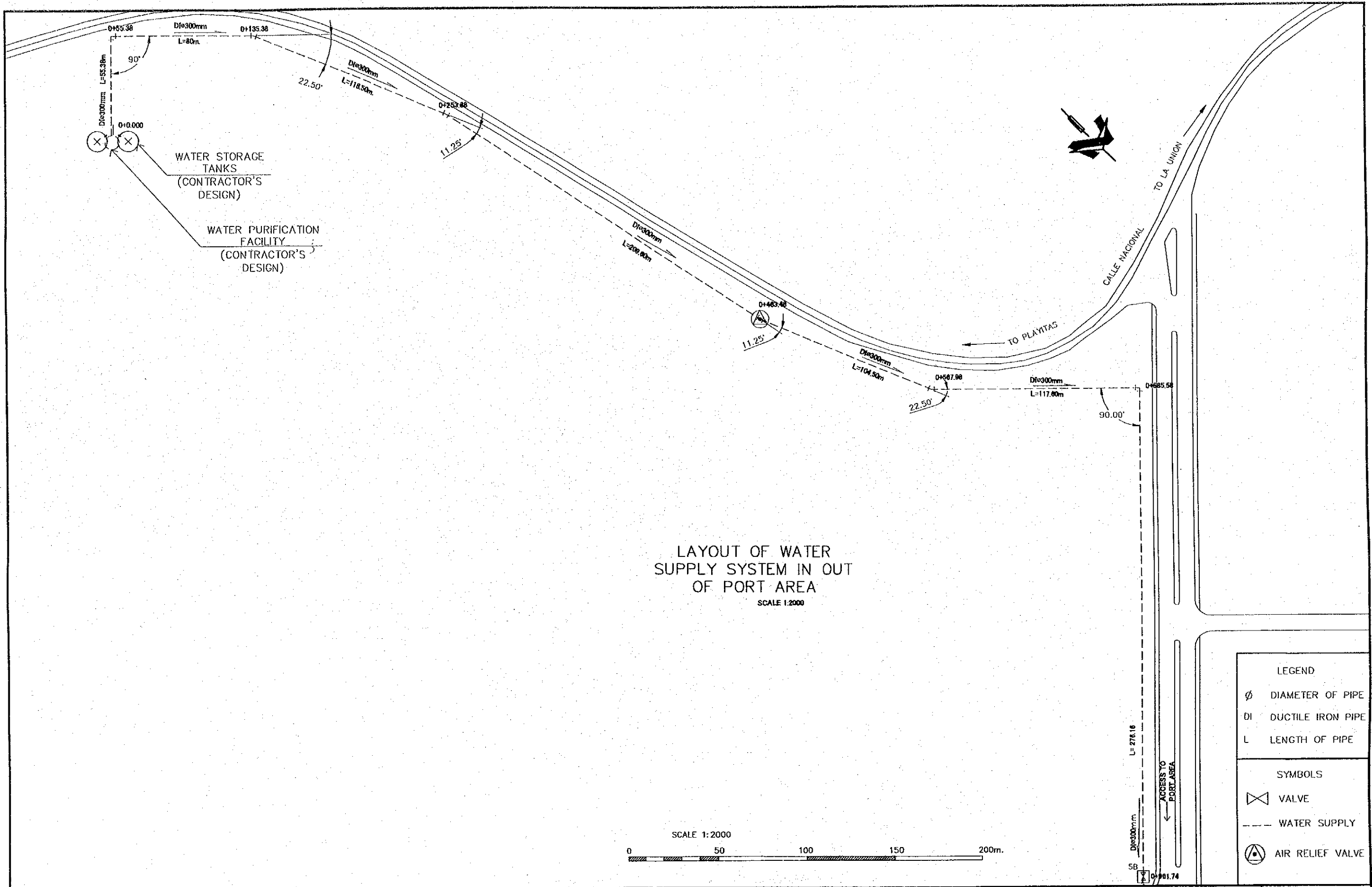
- (BUILDING LIST)
- ① ADMINISTRATION BUILDING
 - ② CONTAINER FREIGHT STATION
 - ③ MAINTENANCE AND REPAIR SHOP
 - ④ CONTAINER GATE
 - ⑤ CARGO GATE
 - ⑥ POWER SUPPLY STATION
 - ⑦ PARKING SHEDS
 - ⑧ FUEL STATION

- (SYMBOLS)
- ⊕ METER
 - Ⓜ MONITOR
 - Ⓜ* HYDRANT
 - ⊗ VALVE
 - ⊠ ABC CLASS DRY CHEMICAL WHEELED EXTINGUISHER
 - FS FIRE STATION CABINET
 - Ⓢ INLET FOR FIRE FIGHTING

- (LEGEND) *
- C CHARGE
 - U UNDERGROUND HYDRANT
 - S STAND TYPE HYDRANT
 - DI DUCTILE IRON PIPE
 - PVC POLYVINYL CHLORIDE PIPE
 - L LENGHT OF PIPE LINE



REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)		
						THE 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: UTILITY WORK SUB-SECTION: WATER SUPPLY AND FIRE FIGHTING SYSTEMS TITLE: LAYOUT OF WATER SUPPLY AND FIRE FIGHTING SYSTEMS IN PORT AREA	DATE: OCTOBER/2002 SCALE: 1:2000 DRAWING NO: UT-02-002



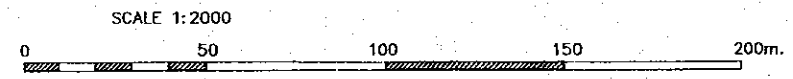
LAYOUT OF WATER SUPPLY SYSTEM IN OUT OF PORT AREA
SCALE 1:2000

LEGEND

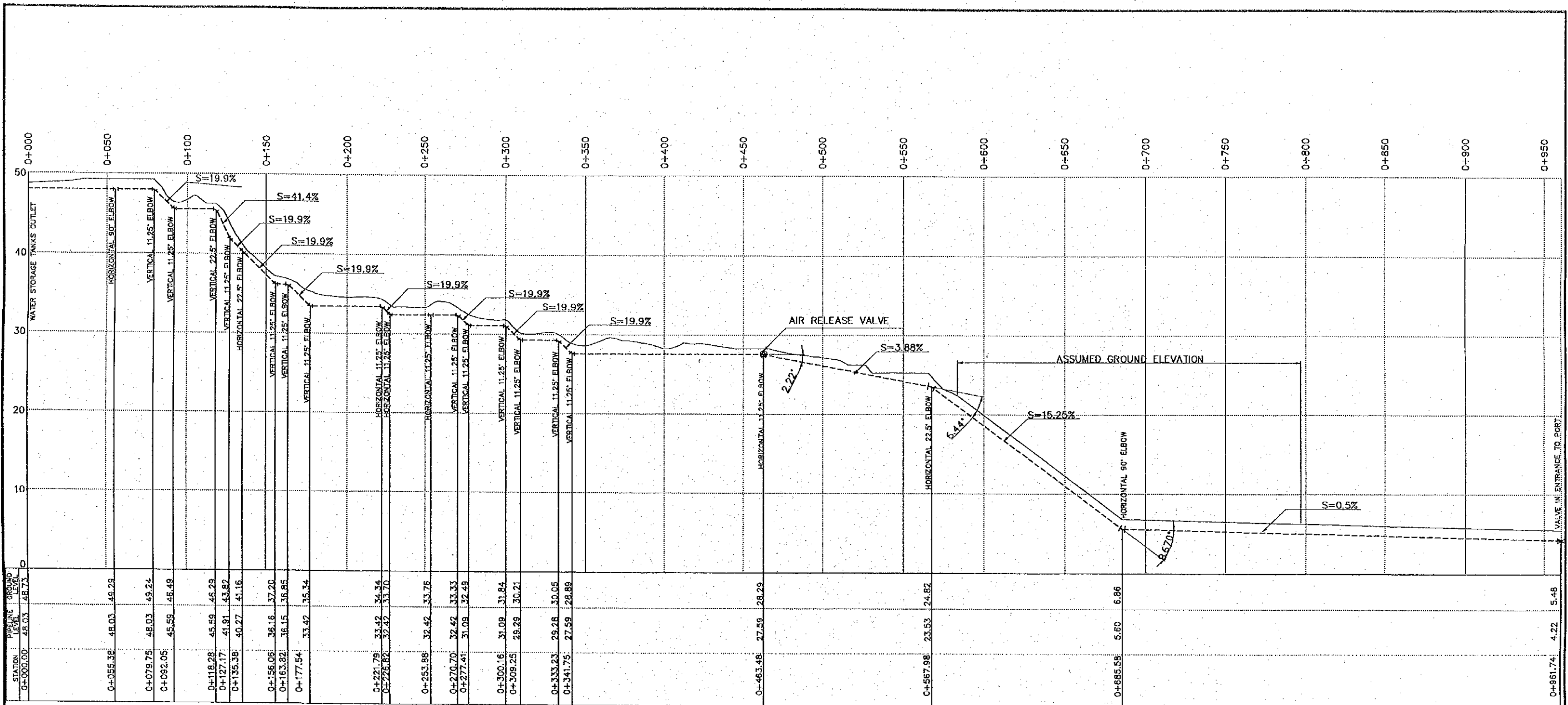
∅ DIAMETER OF PIPE
DI DUCTILE IRON PIPE
L LENGTH OF PIPE

SYMBOLS

⊗ VALVE
--- WATER SUPPLY
⊙ AIR RELIEF VALVE



REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION : UTILITY WORK SUB-SECTION : WATER SUPPLY AND FIRE FIGHTING SYSTEMS TITLE : LAYOUT OF WATER SUPPLY AND FIRE FIGHTING SYSTEMS IN OUT OF PORT AREA	DATE :
					CHECKED BY :			OCTOBER/2002		
					APPROVED BY :			SCALE : 1:2000		
										DRAWING NO. : UT-02-003



PROFILE OF WATER SUPPLY PIPE IN OUT OF PORT AREA

HORIZONTAL SCALE 1:2500
VERTICAL SCALE 1:500

SYMBOLS	
	GATE VALVE
	AIR RELIEF VALVE
	DUCTILE IRON #300mm WATER SUPPLY PIPE

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JICA
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Cepa
COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

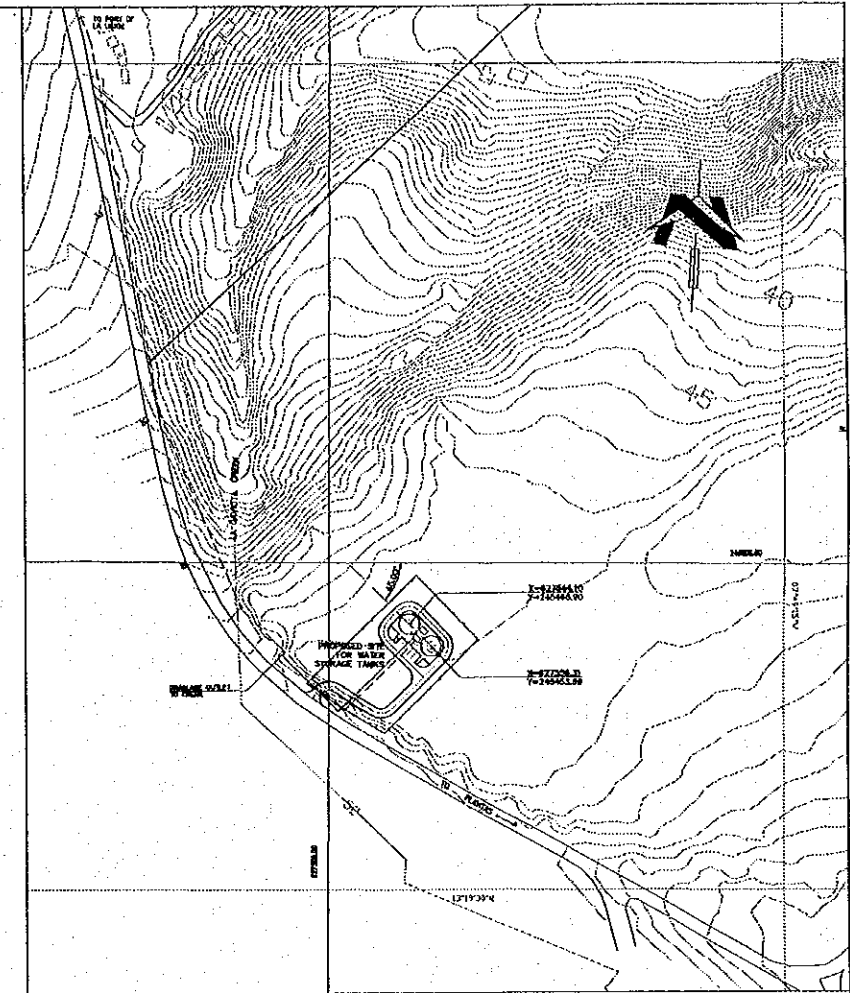
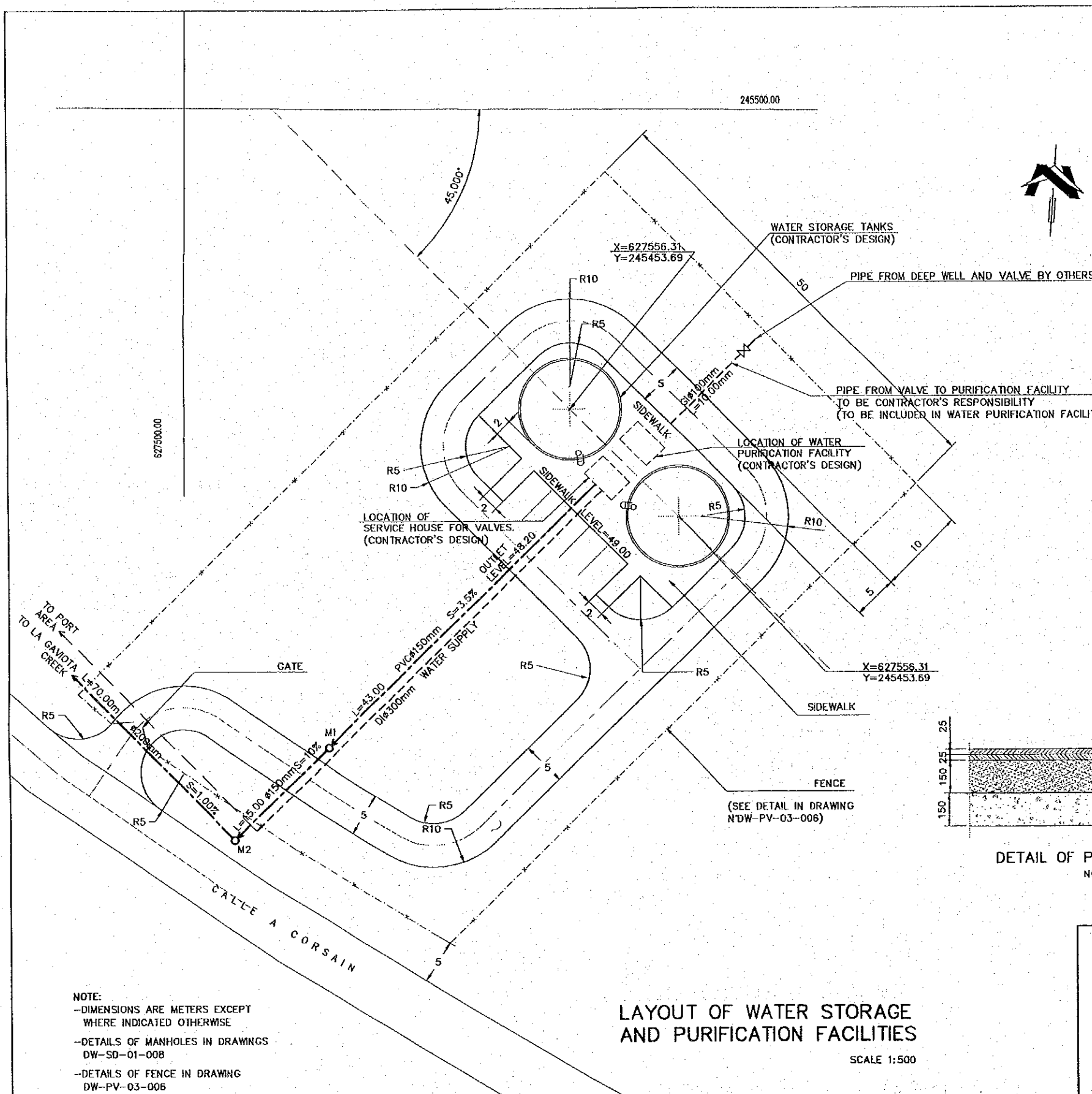
THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

NK
NIPPON KOEI CO., LTD.

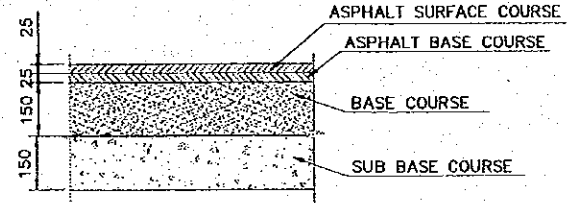
DESIGNED BY :
CHECKED BY :
APPROVED BY :

SECTION : UTILITY WORK
SUB-SECTION : WATER SUPPLY AND FIRE FIGHTING SYSTEMS
TITLE : PROFILE OF WATER SUPPLY PIPE IN OUT OF PORT AREA

DATE : OCTOBER/2002
SCALE : INDICATED
DRAWING NO: UT-02-004



PROPOSED LOCATION OF WATER STORAGE AND PURIFICATION FACILITIES
SCALE 1:4000



DETAIL OF PAVEMENT
NOT TO SCALE

MANHOLE SCHEDULE (DETAILS IN DRAWING DW-SD-01-008)					
MANHOLE IDENTIFICATION	COVER LEVEL	BOTTOM LEVEL	INLET LEVEL	DEPTH	TYPE
M1	49.00	45.85	45.94	3.15	1
M2	46.00	44.80	44.80	1.20	2

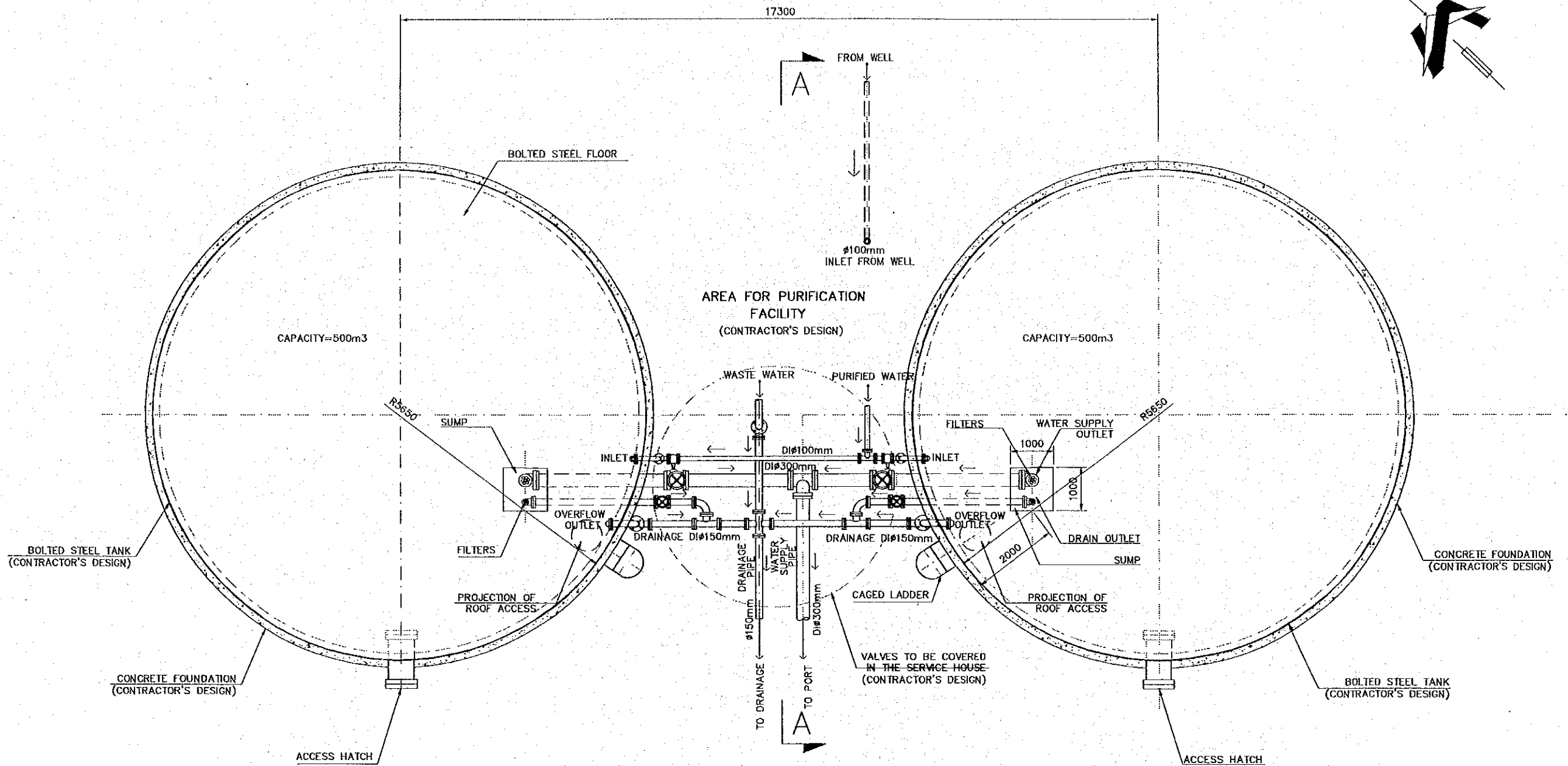
NOTE:
-DIMENSIONS ARE METERS EXCEPT WHERE INDICATED OTHERWISE
-DETAILS OF MANHOLES IN DRAWINGS DW-SD-01-008
-DETAILS OF FENCE IN DRAWING DW-PV-03-006

LAYOUT OF WATER STORAGE AND PURIFICATION FACILITIES

SCALE 1:500

LEGEND		PLUMBING SYMBOLS	
PVC	POLYVINYL CHLORIDE PIPE	-----	DRAINAGE PIPE PVC
DI	DUCTILE IRON PIPE	-----	WATER SUPPLY PIPE DI
GI	GALVANIZED IRON	→○→	MANHOLE
∅	DIAMETER OF PIPE		
S	SLOPE OF PIPE		
L	LENGTH OF PIPE		

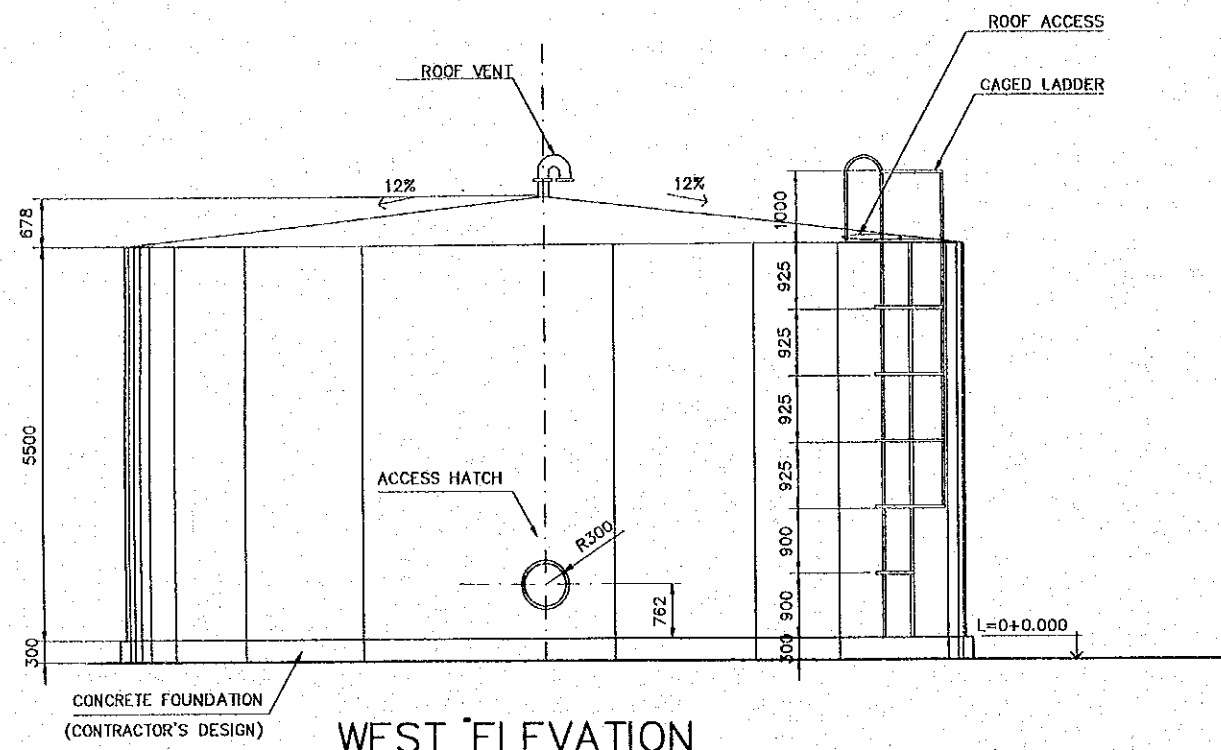
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE		<p>JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</p> <p>COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p>NIPPON KOEI CO., LTD.</p>	DESIGNED BY :	SECTION :	DATE :	
									CHECKED BY :	SUB-SECTION :	UTILITY WORK	OCTOBER/2002
									APPROVED BY :	TITLE :	PROPOSED LOCATION OF WATER STORAGE AND PURIFICATION FACILITIES	SCALE :
											DRAWING NO. :	
											UT-02-005	



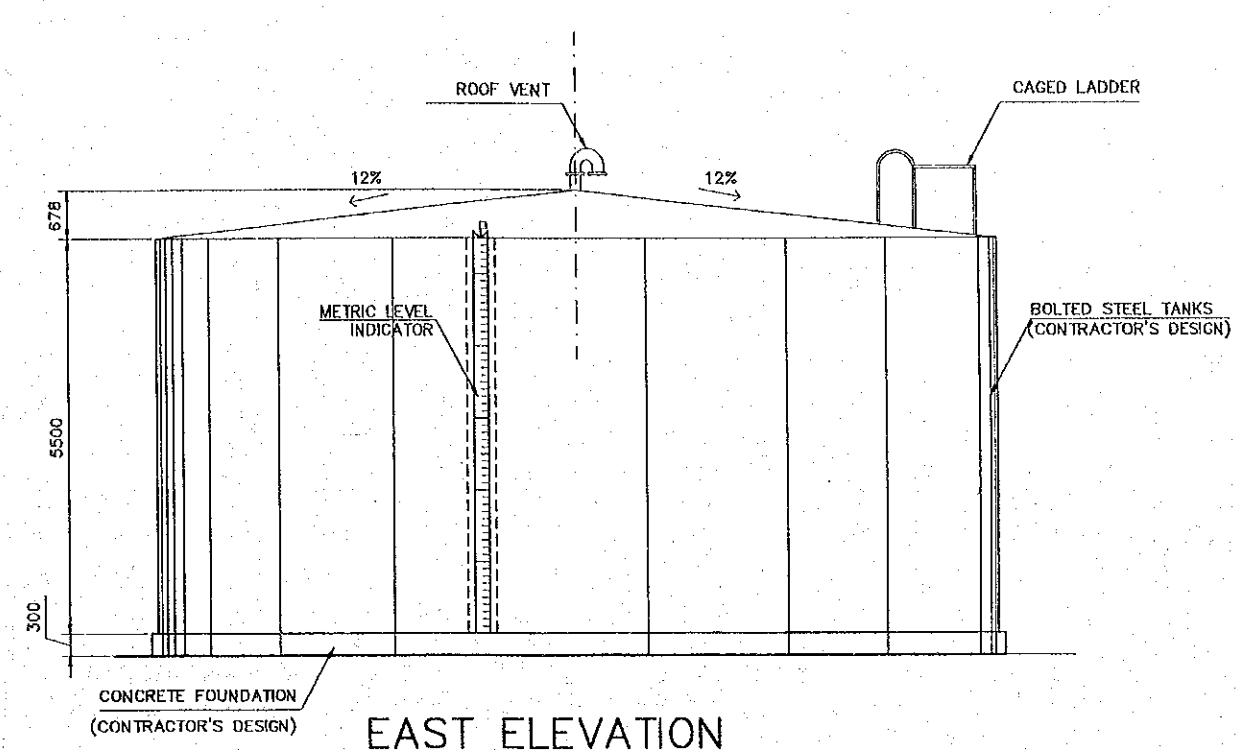
PLAN OF WATER TANKS

ESCALE 1:100

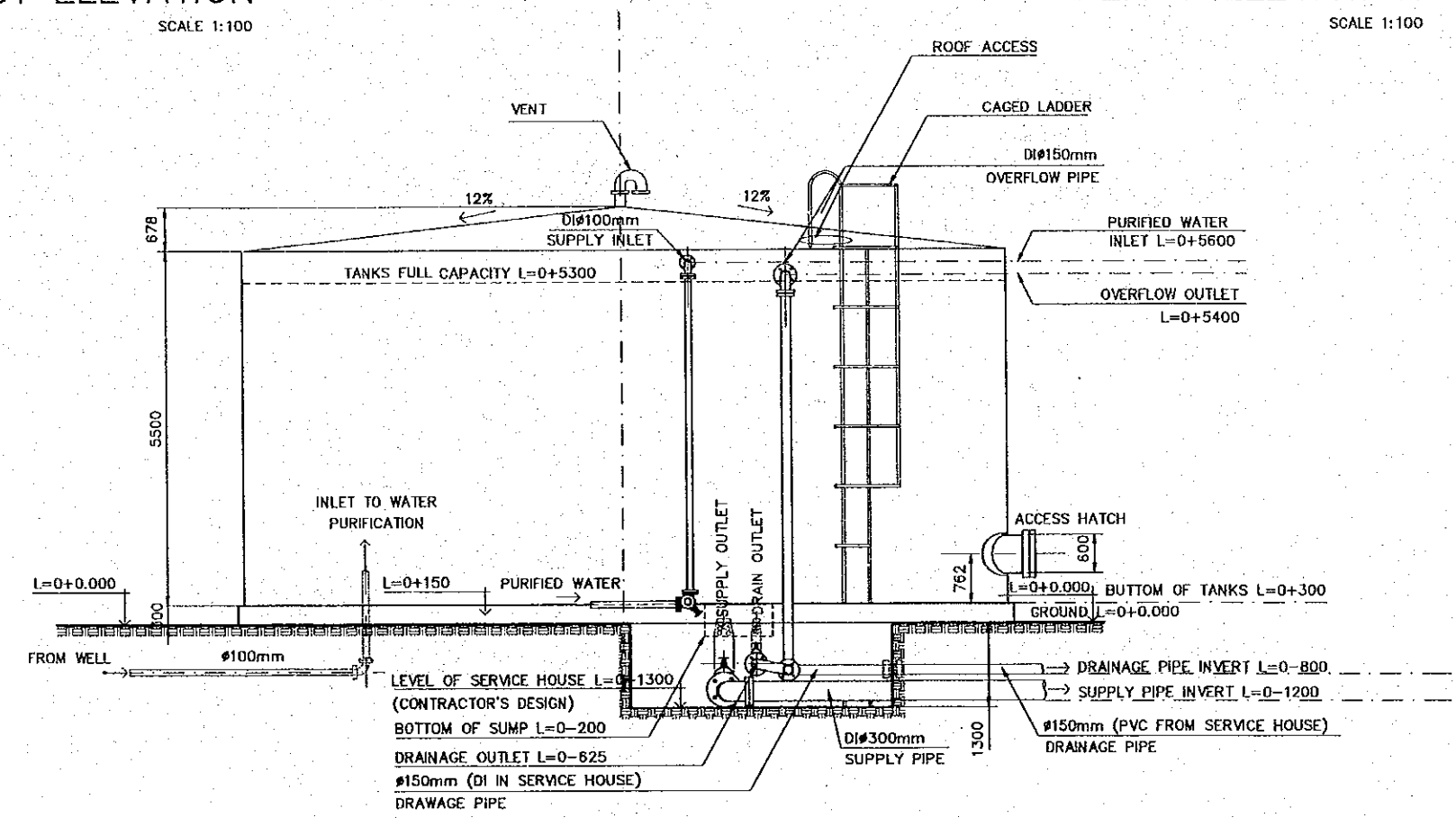
REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)	THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR NIPPON KOEI CO., LTD.	DESIGNED BY :	SECTION :	DATE :
								CHECKED BY :	SUB-SECTION :	SCALE :
								APPROVED BY :	TITLE :	DRAWING NO. :
									UTILITY WORK	OCTOBER/2002
									WATER SUPPLY AND FIRE FIGHTING SYSTEMS	SCALE : 1:100
									DETAIL-1 OF WATER STORAGE TANKS	DRAWING NO. : UT-02-006



WEST ELEVATION
SCALE 1:100



EAST ELEVATION
SCALE 1:100



SECTION A-A
SCALE 1:100

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JICA
JAPAN INTERNATIONAL
COOPERATION AGENCY
(JICA)

Cepa
COMISION EJECUTIVA
PORTUARIA AUTONOMA
(CEPA)

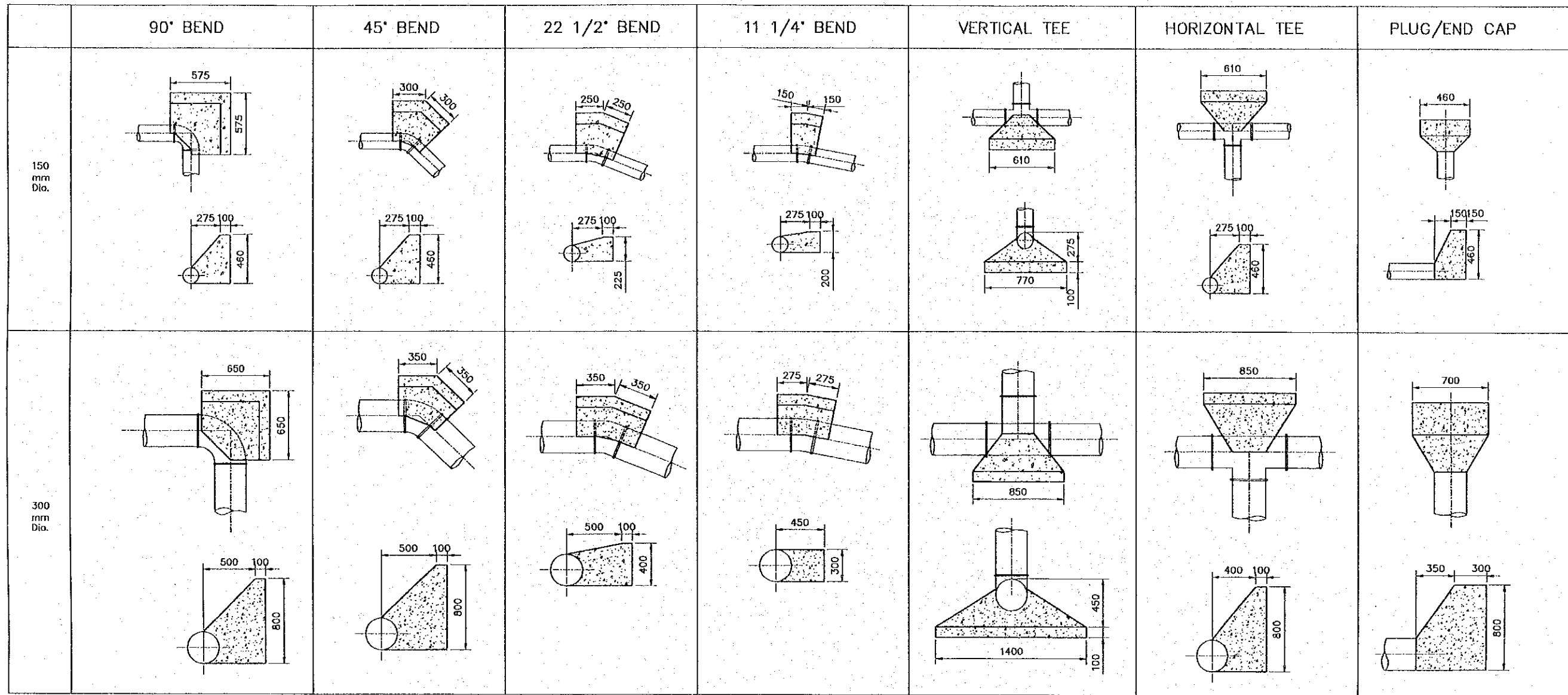
THE DETAILED DESIGN
ON PORT REACTIVATION PROJECT
IN LA UNION PROVINCE
OF THE REPUBLIC OF EL SALVADOR

NKK NIPPON KOEI CO., LTD.

DESIGNED BY :
CHECKED BY :
APPROVED BY :

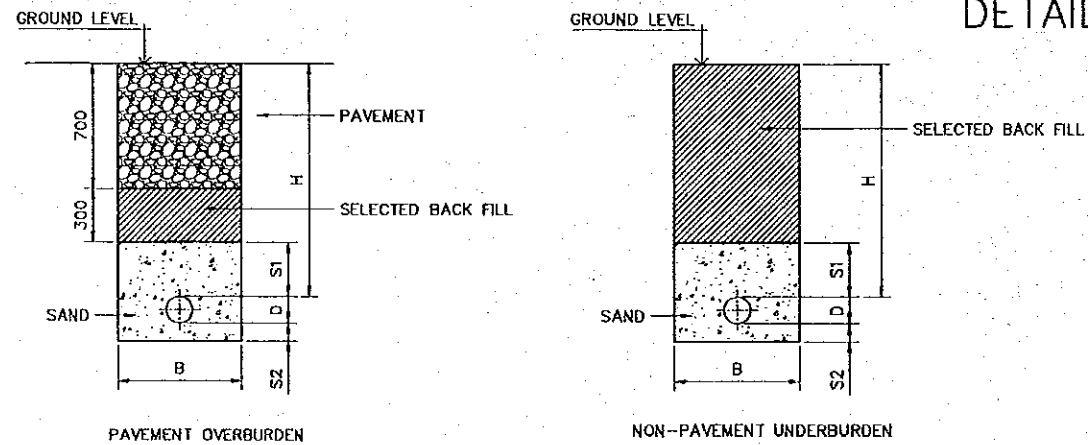
SECTION : UTILITY WORK
SUB-SECTION : WATER SUPPLY AND FIRE FIGHTING
TITLE : SYSTEMS
DETAIL-2 OF WATER STORAGE
TANKS

DATE : OCTOBER/2002
SCALE : 1:100
DRAWING NO : UT-02-007



DETAIL OF ANCHOR BLOCKS

NOT TO SCALE



PIPE TRENCHING DETAIL

NOT TO SCALE

PIPE DIAMETER D (mm)	B (mm)	SAND THICKNESS		H (mm) MINIMUM
		S1 (mm)	S2 (mm)	
50 TO 100	600	300	100	1000
125	650	300	100	1000
150 TO 200	700	300	100	1000
250	850	300	100	1000
300	900	300	100	1000

NOTES:

1. THE BLOCKS ARE APPLICABLE FOR GROUND BEARING PRESSURE OF 100 KN/M³
2. THE BEARING SURFACES OF THE BLOCKS SHOULD BUTT AGAINST UNDISTURBED FACE OF EXCAVATION
3. THE BLOCKS ARE TO BE MASS CONCRETE GRADE 20

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE	<p>JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)</p> <p>CEPA COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)</p>	<p>THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR</p> <p>NIPPON KOEI CO., LTD.</p>	DESIGNED BY :	SECTION : UTILITY WORK	DATE : OCTOBER/2002
								CHECKED BY :	SUB-SECTION : WATER SUPPLY AND FIRE FIGHTING SYSTEMS	SCALE : NOT TO SCALE
							APPROVED BY :	TITLE : DETAIL-1 OF WATER SUPPLY SYSTEM	DRAWING NO. : UT-02-008	

