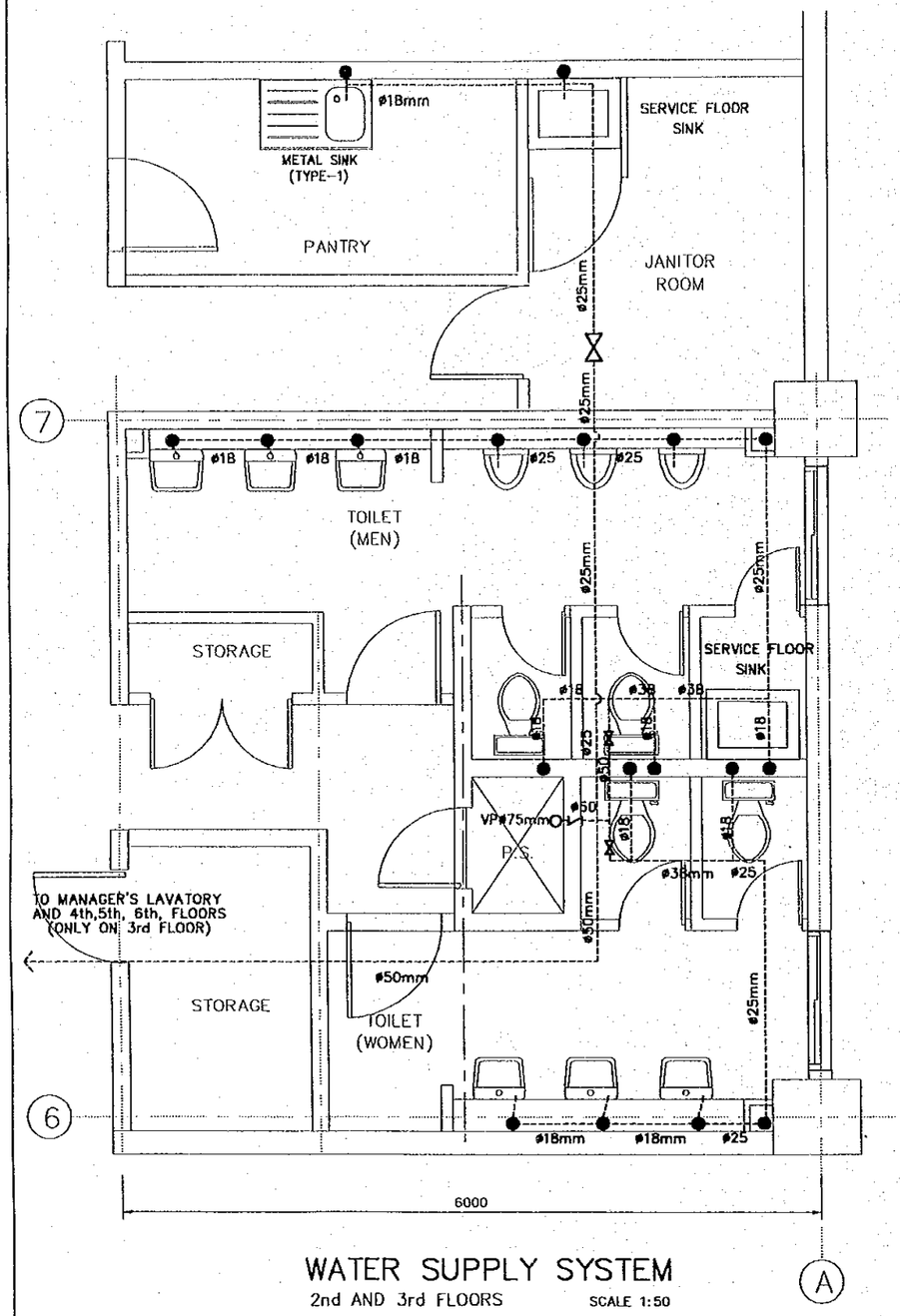
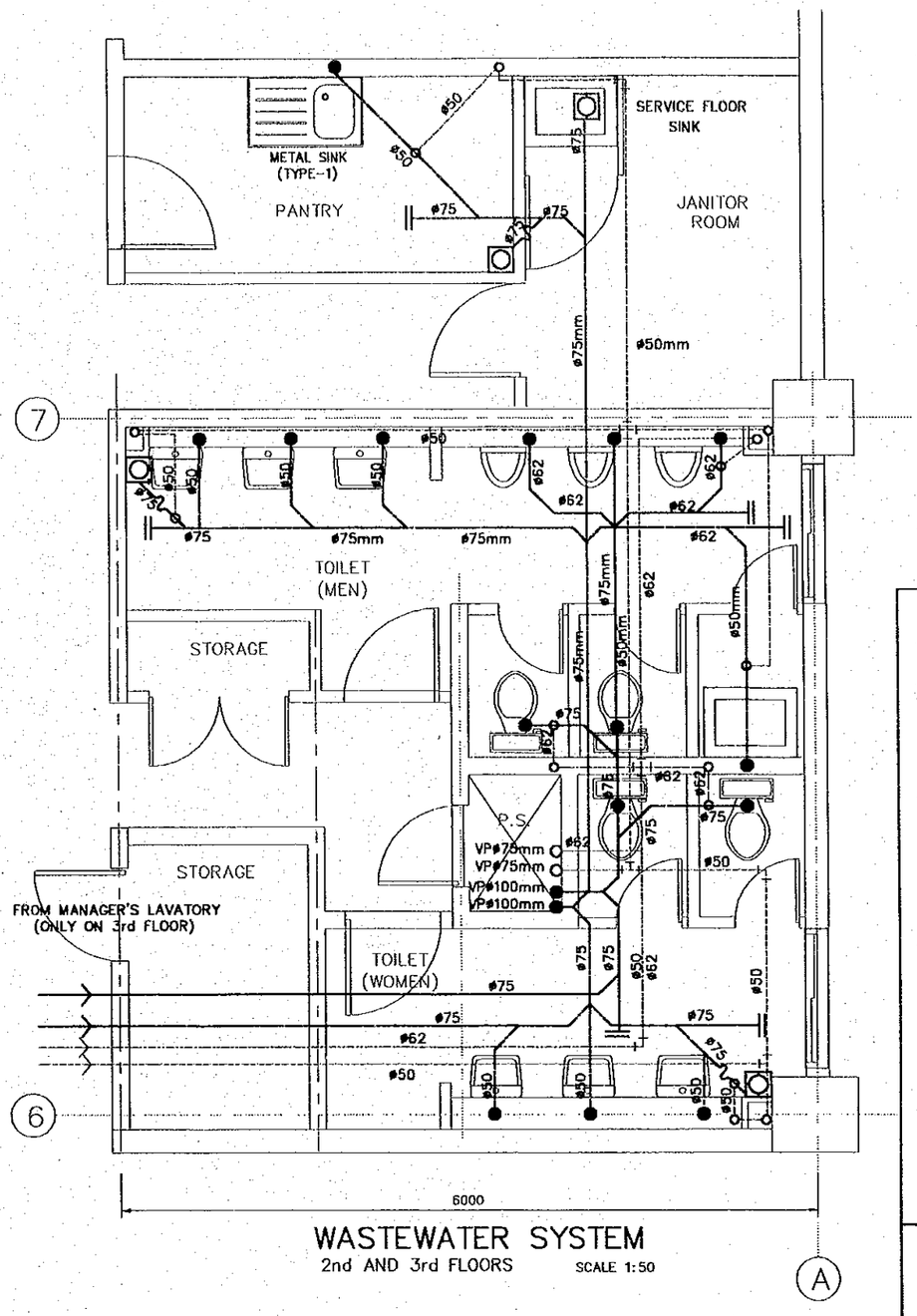


WATER SUPPLY SYSTEM

2nd AND 3rd FLOORS SCALE 1:50



WASTEWATER SYSTEM

2nd AND 3rd FLOORS SCALE 1:50

PLUMBING SYMBOLS

- VERTICAL PIPE DOWN
- VERTICAL PIPE UP
- METER INSIDE PIT
- CHECK VALVE
- SHUT OFF VALVE
- FLOOR/SHOWER DRAIN
- CLEAN OUT
- GREASE TRAP
- TRAP
- WATER SUPPLY PIPE (AT CEILING LEVEL)
- WASTE DRAINAGE PIPE (UNDER SLAB LEVEL)
- WASTE VENTILATION PIPE (AT CEILING LEVEL)
- SANITARY DRAINAGE PIPE (UNDER SLAB LEVEL)
- SANITARY DRAINAGE VENTILATION PIPE (AT CEILING LEVEL)

NOTES

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

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

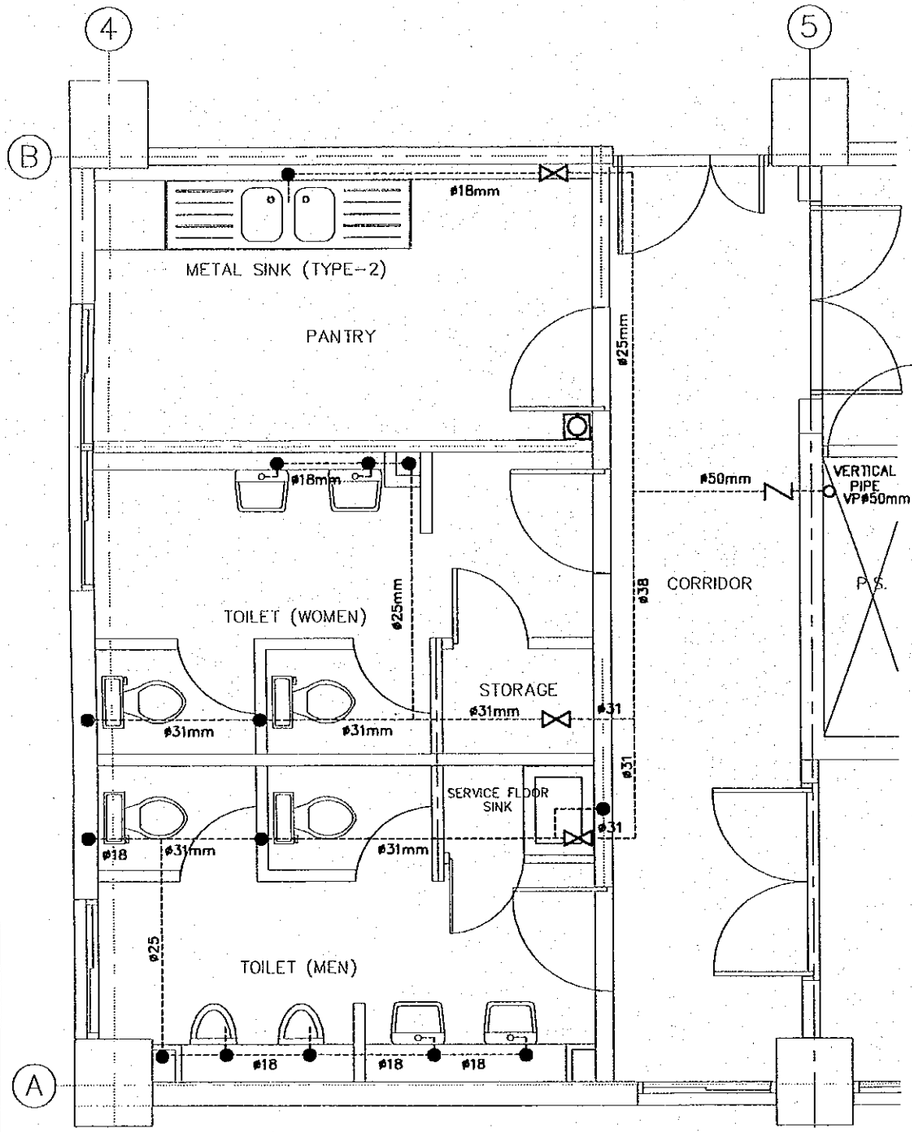
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : PLUMBING SYSTEM TOILET DETAIL-3

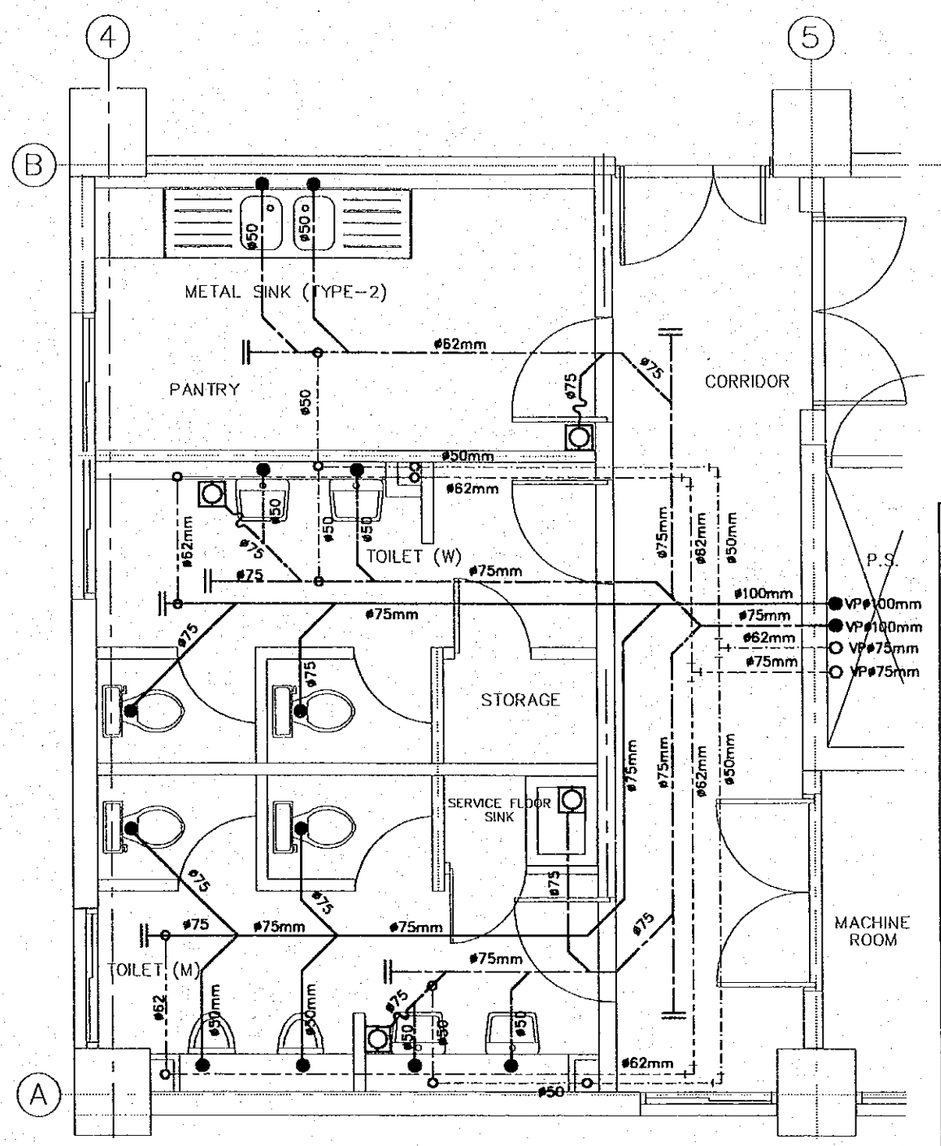
DATE : OCTOBER/2002

SCALE : 1 : 50

DRAWING NO: BD-01-077



WATER SUPPLY SYSTEM
FOURTH FLOOR SCALE 1:50



WASTEWATER SYSTEM
FOURTH FLOOR SCALE 1:50

PLUMBING SYMBOLS

- VERTICAL PIPE DOWN
- VERTICAL PIPE UP
- METER INSIDE PIT
- CHECK VALVE
- SHUT OFF VALVE
- FLOOR/SHOWER DRAIN
- CLEAN OUT
- GREASE TRAP
- TRAP
- WATER SUPPLY PIPE (AT CEILING LEVEL)
- WASTE DRAINAGE PIPE (UNDER SLAB LEVEL)
- WASTE VENTILATION PIPE (AT CEILING LEVEL)
- SANITARY DRAINAGE PIPE (UNDER SLAB LEVEL)
- SANITARY DRAINAGE VENTILATION PIPE (AT CEILING LEVEL)

NOTES

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

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

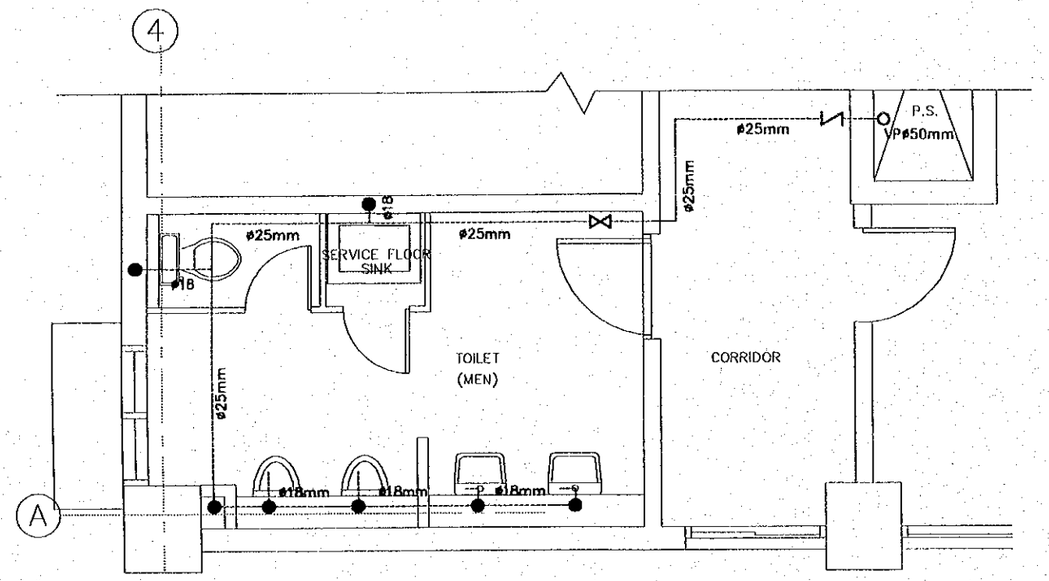
THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

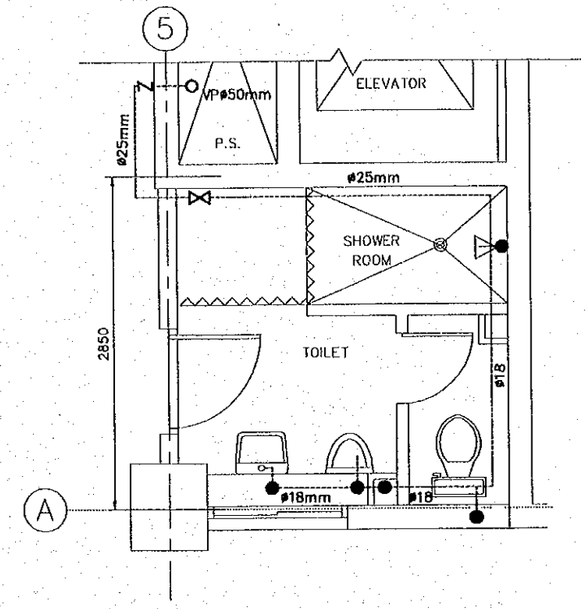
DESIGNED BY :
CHECKED BY :
APPROVED BY :

SECTION : BUILDING WORK
SUB-SECTION : PORT ADMINISTRATION BUILDING
TITLE : PLUMBING SYSTEM TOILET DETAIL-4

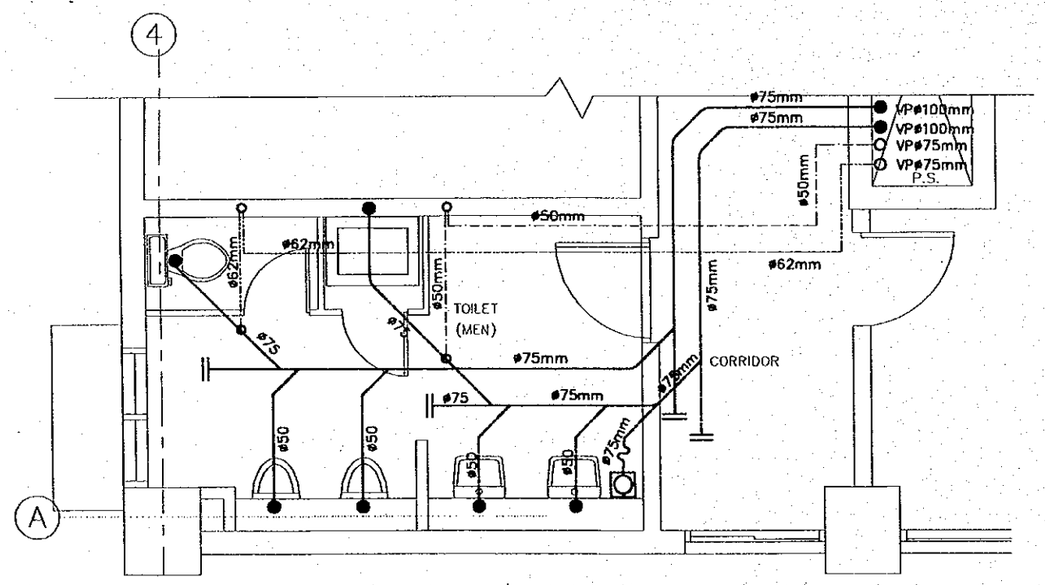
DATE : OCTOBER/2002
SCALE : 1 : 50
DRAWING NO: BD-01-078



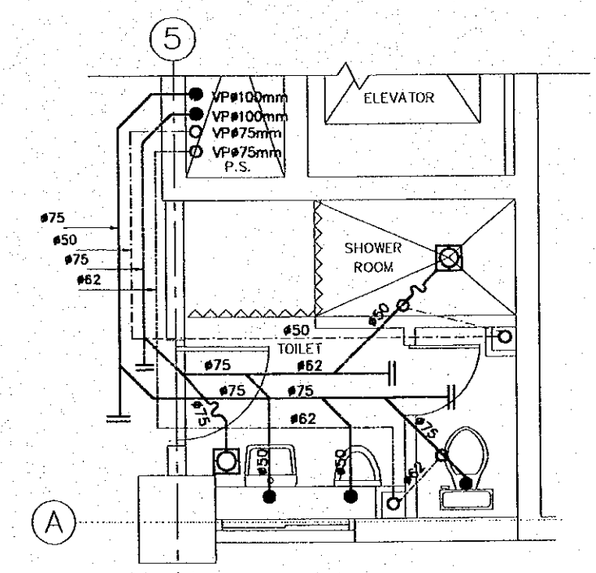
WATER SUPPLY SYSTEM
LAVATORY FIFTH FLOOR SCALE 1:50



WATER SUPPLY SYSTEM
LAVATORY SIXTH FLOOR SCALE 1:50



WASTEWATER SYSTEM
LAVATORY FIFTH FLOOR SCALE 1:50



WASTEWATER SYSTEM
LAVATORY SIXTH FLOOR SCALE 1:50

PLUMBING SYMBOLS

- VERTICAL PIPE DOWN
- VERTICAL PIPE UP
- TRAP
- SHOWER HEAD
- SHUT OFF VALVE
- FLOOR/SHOWER DRAIN
- CLEAN OUT
- CHECK VALVE
- WATER SUPPLY PIPE (AT CEILING LEVEL)
- WASTE DRAINAGE PIPE (UNDER SLAB LEVEL)
- WASTE VENTILATION PIPE (AT CEILING LEVEL)
- SANITARY DRAINAGE PIPE (UNDER SLAB LEVEL)
- SANITARY DRAINAGE VENTILATION PIPE (AT CEILING LEVEL)

NOTES

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

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

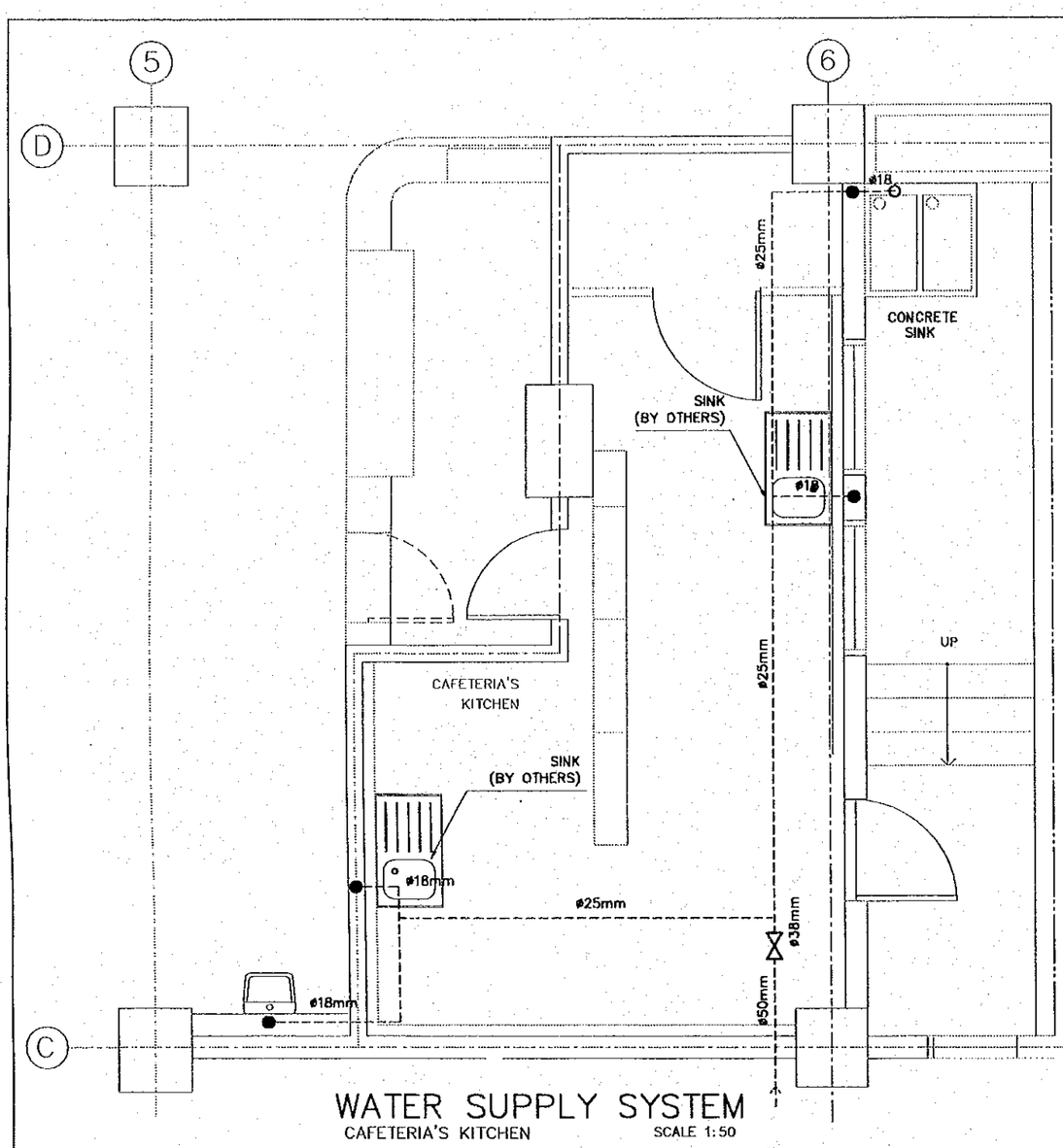
THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

DESIGNED BY :
CHECKED BY :
APPROVED BY :

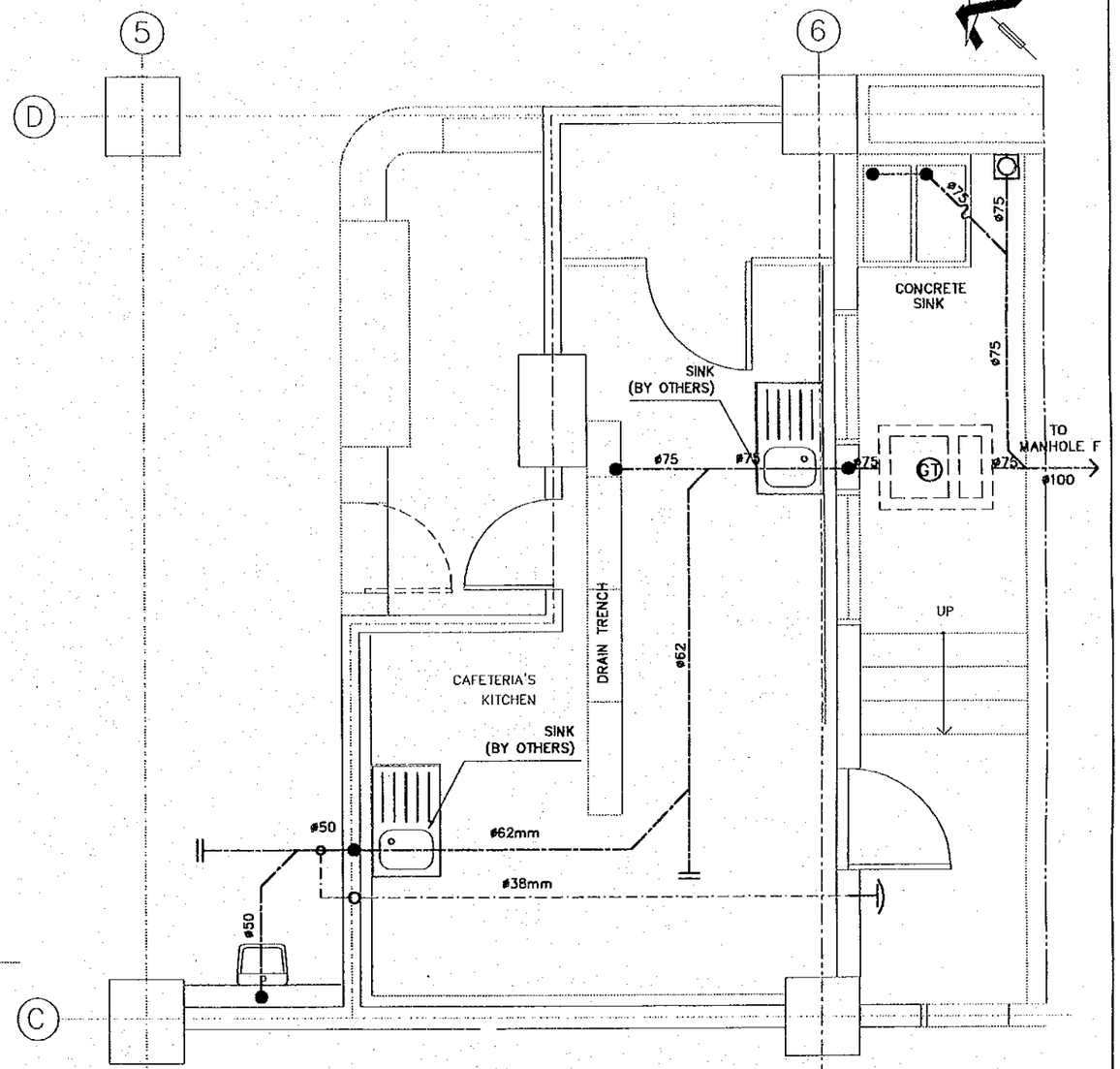
SECTION : BUILDING WORK
SUB-SECTION : PORT ADMINISTRATION BUILDING
TITLE : PLUMBING SYSTEM TOILET DETAIL-5

DATE : OCTOBER/2002
SCALE : 1 : 50
DRAWING NO: BD-01-079



WATER SUPPLY SYSTEM

CAFETERIA'S KITCHEN SCALE 1:50



WASTEWATER SYSTEM

CAFETERIA'S KITCHEN SCALE 1:50

PLUMBING SYMBOLS

- VERTICAL PIPE DOWN
- VERTICAL PIPE UP
- TRAP
- SHUT OFF VALVE
- FLOOR/SHOWER DRAIN
- CLEAN OUT
- GREASE TRAP
- VENT OUTLET COVER
- WATER SUPPLY PIPE (AT CEILING LEVEL)
- WASTE DRAINAGE PIPE (UNDER SLAB LEVEL)
- WASTE VENTILATION PIPE (AT CEILING LEVEL)
- SANITARY DRAINAGE PIPE (UNDER SLAB LEVEL)
- SANITARY DRAINAGE VENTILATION PIPE (AT CEILING LEVEL)

NOTES

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

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 : PORT ADMINISTRATION BUILDING
TITLE :

PLUMBING SYSTEM KITCHEN DETAIL

DATE : OCTOBER/2002
SCALE : 1 : 50
DRAWING NO: BD-01-080

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

NIPPON KOEI CO., LTD.

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 : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM PIPING DIAGRAM

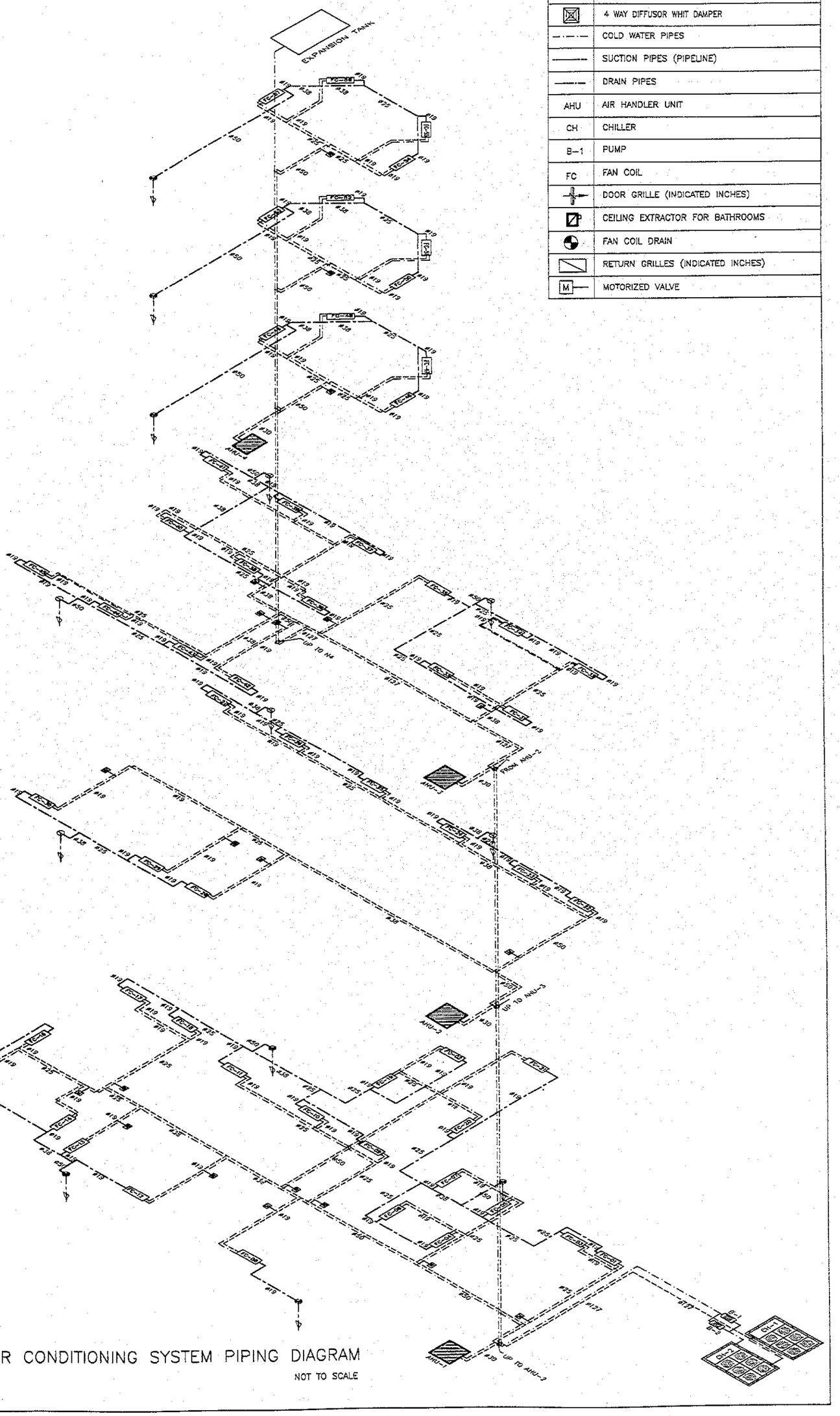
DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO. BD-01-081

SIMBOLOGY CHART

SIMBOLOGY	DESCRIPTION
	4 WAY DIFFUSOR WHIT DAMPER
	COLD WATER PIPES
	SUCTION PIPES (PIPELINE)
	DRAIN PIPES
AHU	AIR HANDLER UNIT
CH	CHILLER
B-1	PUMP
FC	FAN COIL
	DOOR GRILLE (INDICATED INCHES)
	CEILING EXTRACTOR FOR BATHROOMS
	FAN COIL DRAIN
	RETURN GRILLES (INDICATED INCHES)
M	MOTORIZED VALVE



AIR CONDITIONING SYSTEM PIPING DIAGRAM

NOT TO SCALE

EQUIPMENT SCHEDULE

EQP. No.	DESCRIPTION	QTY	CAPACITY	ELECTRICAL DATA			AIR DATA		
				VOLTAGE	PHASE	KW	RETURN AIR	FRESH AIR	AIR MIXTURE
CHILLER	Air Cooled water chiller	2	Total Cooling capacity: 62 KW Compressors: 4 LRA / RLA : 220 A / 44 A Step Modulation: 25,50,75,100 % Refrigerant: R – 22 No. of fans: 6 Water connections: 4" FLG	460	3				
AHU–01	Air Handling Unit (First Floor)	1	Supply Air Flow Rate (L/s):350.4 Total Cooling Capacity: 27.3 KW Sensible Cooling Capacity: 19.3 KW Inlet (DB/WB): 26.6°C / 19.4°C Outlet (DB/WB): 12.6°C / 12.4°C Face Velocity : 0.04 m/sStatic Pressure: 135 Pa	208 / 230	3	1.12	Air Flow:230 l/s Air Temp: 21.1°C	Air Flow:120 l/s Air Temp: 35°C	Air Flow:350 l/s Air Temp: 26.6°C
AHU–02	Air Handling Unit (Second Floor)	1	Supply Air Flow Rate (L/s):613.2 Total Cooling Capacity: 50.1 KW Sensible Cooling Capacity: 34.1 KW Inlet (DB/WB): 26.6°C / 19.4°C Outlet (DB/WB): 12.5°C / 12.1°C Face Velocity : 0.04 m/s Static Pressure: 115 Pa	208 / 230	3	3.73	Air Flow:400 l/s Air Temp: 21.1°C	Air Flow:210 l/s Air Temp: 35°C	Air Flow: 610 l/s Air Temp: 26.6°C
AHU–03	Air Handling Unit (Third Floor)	1	Supply Air Flow Rate (L/s): 613.2 Total Cooling Capacity: 50.1 KW Sensible Cooling Capacity: 34.1 KW Inlet (DB/WB): 26.6°C / 19.4°C Outlet (DB/WB): 12.5°C / 12.1°C Face Velocity : 0.04 m/s Static Pressure: 115 Pa	208 / 230	3	3.73	Air Flow:400 l/s Air Temp: 21.1°C	Air Flow:210 l/s Air Temp: 35°C	Air Flow: 610 l/s Air Temp: 26.6°C
AHU–04	Air Handling Unit (Fourth Floor)	1	Supply Air Flow Rate (L/s): 525.6 Total Cooling Capacity: 43.6 KW Sensible Cooling Capacity: 29.8 KW Inlet (DB/WB): 26.6°C / 19.4°C Outlet (DB/WB): 12.2°C / 12.1°C Face Velocity : 0.04 m/s Static Pressure: 140 Pa	208 / 230	3	2.24	Air Flow:340 l/s Air Temp: 21.1°C	Air Flow:185 l/s Air Temp: 35°C	Air Flow:525 l/s Air Temp: 26.6°C
FCU	Fan Coil Unit	57	Supply Air Flow Rate (L/s): 51.6 Total Cooling Capacity: 3.52 KW Sensible Cooling Capacity: 2.85 KW Inlet (DB/WB): 26.6°C / 19.4°C Outlet (DB): 15.1°C Static Pressure: 125 Pa	115	1	0.09	NA	NA	NA
E–1	Ceiling Exhaust Fan	10	Exhaust Capacity: 75 L/s Static Pressure: 60 Pa Fan RPM: 1,080 Grille Size: 400 x 480	115	1	0.285	NA	NA	NA
E–2	Belt Drive Upblast Centrifugal Roof Exhaust Fan	2	Exhaust Capacity: 120 L/s Static Pressure: 180 Pa Fan RPM: 1,685 Roof Opening: 300 x 300	115	1	0.17	NA	NA	NA
E–3	Direct Drive Centrifugal Sidewall Exhaust Fan	1	Exhaust Capacity: 24 L/s Static Pressure: 25 Pa Fan RPM: 1,550 Grille Size: 200 x 200	115	1	0.01	NA	NA	NA
E–4	Direct Drive Centrifugal Sidewall Exhaust Fan	1	Exhaust Capacity: 120 L/s Static Pressure: 180 Pa Fan RPM: 1,685 Grille Size: 300 x 300	115	1	0.2	NA	NA	NA

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 : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM EQUIPMWNT SCHEDULE–01

DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO: BD–01–082

GRILLES AND DIFFUSERS SCHEDULE

LEVEL 1		SUPPLY					RETURN				EXHAUST			
ROOM NAME	ROOM No.	FLOW RATE	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.
CAFETERIA	1	60	4W	203 x 203	3	50		457.2 x 304.8	4				
		60	4W	300 x 300	3								
KITCHEN	2									100	Sidewall	203 x 203	1
IMMIGRATION	3	60	4W	203 x 203	2	50		457.2 x 304.8	4				
		60	4W	300 x 300	2								
CUSTOM	4	30	4W	203 x 203	2	50		457.2 x 304.8	4				
		60	4W	300 x 300	3								
WAITING AREA	5	30	4W	203 x 203	4			457.2 x 304.8					
		60	4W	300 x 300	2								
BANKS	6	30	4W	203 x 203	3			457.2 x 304.8					
GUARANTINE / OIRSA	7	30	4W	203 x 203	2	50		457.2 x 304.8	4				
		60	4W	300 x 300	4								
FIRST AID	8												
POLICE	9	30	4W	203 x 203	1	50		457.2 x 304.8	2				
		60	4W	300 x 300	1								
INFORMATION	10	60	4W	300 x 300	1								
GUARD ROOM	11	60	4W	300 x 300	1								
STORAGE	12	60	4W	300 x 300	1	50		457.2 x 304.8	2				
TOILETS WOMEN	13a									80	Ceiling	400 x 480	1
TOILETS MEN	13b									80	Ceiling	400 x 480	1
KITCHEN	14									40	Hood	NA	1
JANITOR ROOM	15												
MACHINE ROOM	16												

LEVEL 2		SUPPLY					RETURN				EXHAUST			
ROOM NAME	ROOM No.	FLOW RATE	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.
CONCESSIONARIES OFFICES	1	60	4W	300 x 300	6	50		457.2 x 304.8	12				
		60	4W	254 x 254	6								
		30	4W	203 x 203	6								
CORRIDOR	2												
SECURITY DIVISION	3	60	4W	300 x 300	1	50		457.2 x 304.8	4				
		30	4W	203 x 203	2								
STORAGE	4	60	4W	300 x 300	1	50		457.2 x 304.8	2				
		30	4W	203 x 203	1								
METEREOLOGY	5	60	4W	300 x 300	1	50		457.2 x 304.8	2				
		30	4W	203 x 203	1								
TOILETS WOMEN	6a									80	Ceiling	400 x 480	1
TOILETS MEN	6b									80	Ceiling	400 x 480	1
KITCHEN	7									40	Hood	NA	1
JANITOR ROOM	8												
MACHINE ROOM	9												

LEVEL 3		SUPPLY					RETURN				EXHAUST			
ROOM NAME	ROOM No.	FLOW RATE	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.
AUDITORIUM	1	60	4W	300 x 300	6	50		457.2 x 304.8	6				
		60	4W	254 x 254	12								
MANAGER'S ROOM	2	60	4W	300 x 300	1	50		457.2 x 304.8	2				
		30	4W	254 x 254	1								
SECRETARY	3	30	4W	203 x 203	1								
TOILETS	4									40	Ceiling	400 x 480	1
TOILETS WOMEN	4a									80	Ceiling	400 x 480	1
TOILETS MEN	4b									80	Ceiling	400 x 480	1
ADMINISTRATION OFFICES	5	60	4W	300 x 300	4	50		457.2 x 304.8	4				
		30	4W	254 x 254	4								
MAINTENANCE DEPT.	6	60	4W	300 x 300	6	50		457.2 x 304.8	6				
STORAGE	7												
KITCHEN	8									40	Hood	NA	1
JANITOR ROOM	9												
MACHINE ROOM	10												
STORAGE	11	30	4W	203 x 203	1								

LEVEL 4		SUPPLY					RETURN				EXHAUST			
ROOM NAME	ROOM No.	FLOW RATE	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.
YARD CONTROLER ROOM	1	60	4W	254 x 254	3	50		457.2 x 304.8	2				
		60	4W	300 x 300	4								
STACK ROOM	2												
HALL	3	60	4W	254 x 254	1								
TOILETS WOMEN	4a									80	Ceiling	400 x 480	1
TOILETS MEN	4b									80	Ceiling	400 x 480	1
MULTIPURPOSE ROOM	5												

LEVEL 5 & 6		SUPPLY					RETURN				EXHAUST			
ROOM NAME	ROOM No.	FLOW RATE	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.	FLOW RATE L/S	TYPE	SIZE(MM)	QTY.
MEETING ROOM	1	60	4W	254 x 254	3	50		457.2 x 304.8	2				
		60	4W	300 x 300	4								
	2												
	3												
HALL	4												
TOILETS	5									80	Ceiling	400 x 480	2
STORAGE	6	60	4W	254 x 254	3	50		457.2 x 304.8	2				
PORT NAVIGATION		60	4W	300 x 300	4								
HARBOR MASTER ROOM	7	30	4W	254 x 254	1	50		457.2 x 304.8	2				
BEDROOM	8	30	4W	254 x 254	1	50		457.2 x 304.8	2				
CORRIDOR	9												

THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR	DESIGNED BY :	SECTION : BUILDING WORK	DATE : OCTOBER/2002
	CHECKED BY :	SUB-SECTION : PORT ADMINISTRATION BUILDING	SCALE : NOT TO SCALE
NIPPON KOEI CO., LTD.	APPROVED BY :	TITLE : AIR CONDITIONING SYSTEM EQUIPMENT SCHEDULE-02	DRAWING NO. BD-01-083

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

PIPING

FLOOR	DIAMETER (MM)	LENGTH (M)x2	MATERIAL	SCHD	SUPORTS	INSULATION (MM)
1st	DN 125	12	Black Steel	40	every 5 m	12.5
	DN 50	24	Black Steel	40	every 3 m	12.5
	DN 40	8	Black Steel	40	every 3 m	12.5
	DN 25	10	Black Steel	40	every 2.5 m	12.5
	DN 20	70	Black Steel	40	every 2 m	12.5
2nd	DN 75	4	Black Steel	40	every 5 m	12.5
	DN 50	12	Black Steel	40	every 3 m	12.5
	DN 40	12	Black Steel	40	every 3 m	12.5
	DN 25	10	Black Steel	40	every 2.5 m	12.5
	DN 20	60	Black Steel	40	every 2 m	12.5
3rd	DN 75	18	Black Steel	40	every 5 m	12.5
	DN 40	18	Black Steel	40	every 3 m	12.5
	DN 25	18	Black Steel	40	every 2.5 m	12.5
	DN 20	30	Black Steel	40	every 2 m	12.5
4th	DN 40	10	Black Steel	40	every 3 m	12.5
	DN 25	6	Black Steel	40	every 2.5 m	12.5
	DN 20	10	Black Steel	40	every 2 m	12.5
5th	DN 40	6	Black Steel	40	every 3 m	12.5
	DN 25	6	Black Steel	40	every 2.5 m	12.5
	DN 20	10	Black Steel	40	every 2 m	12.5
6th	DN 40	6	Black Steel	40	every 3 m	12.5
	DN 25	6	Black Steel	40	every 2.5 m	12.5
	DN 20	10	Black Steel	40	every 2 m	12.5

DUCTWORKS

FLOOR	DUCT SIZE (MM)	LENGTH (M)	MATERIAL	GAGE	REINFORCEMENT (MM) (HxBxT)
					Every 3 meters
1st	508 x 457.2	12	Galvanized steel	24	Channel (19 x 76.2 x 18ga.)
	508 x 355.6	9	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	355.6 x 304	15	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	330.2 x 254	3	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	279.4 x 203.2	21	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	228.6 x 152.4	37	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	165.1 x 127	45	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
2nd	635 x 406.4	12	Galvanized steel	24	Channel (19 x 76.2 x 18ga.)
	508 x 457.2	10	Galvanized steel	24	Channel (19 x 76.2 x 18ga.)
	482.6 x 381	10	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	381 x 381	6	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	381 x 254	6	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 254	30	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	228.6 x 203.2	8	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	165.1 x 165.1	46	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	165.1 x 127	8	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
3rd	685.8 x 508	12	Galvanized steel	24	Channel (19 x 76.2 x 18ga.)
	508 x 508	12	Galvanized steel	24	Channel (19 x 76.2 x 18ga.)
	431.8 x 381	6	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	381 x 355.6	6	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	381 x 254	18	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 254	24	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 190.5	42	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	165.1 x 165.1	5	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
4th	381 x 355.6	8	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 190.5	11	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
5th	355.6 x 304.8	11	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 190.5	14	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
6th	355.6 x 304.8	7	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)
	254 x 190.5	20	Galvanized steel	26	Channel (19 x 76.2 x 18ga.)

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

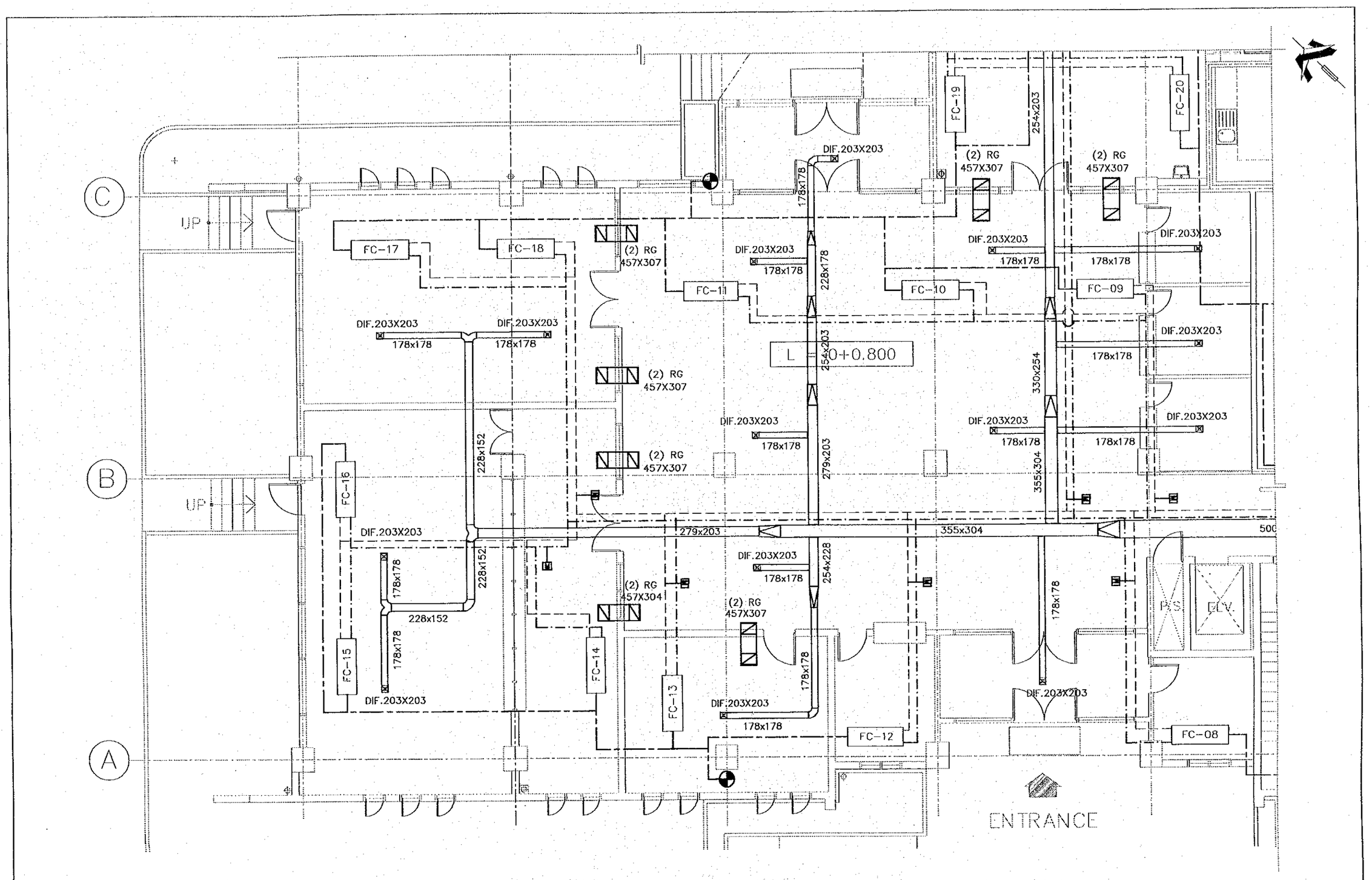
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM EQUIPMWNT SCHEDULE-03

DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO: BD-01-084



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

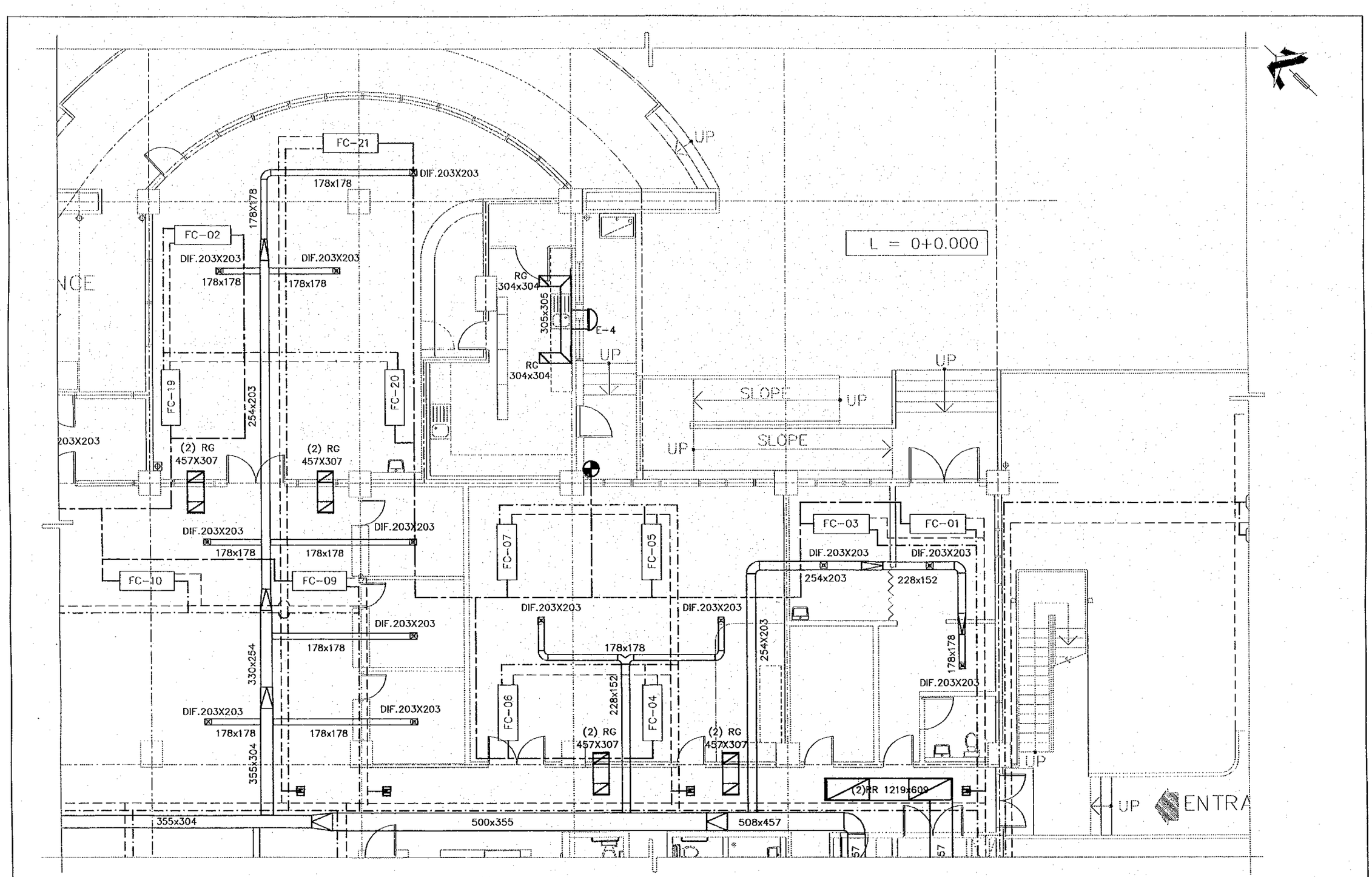
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM FIRST FLOOR PLAN (PART--1)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD--01--085



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

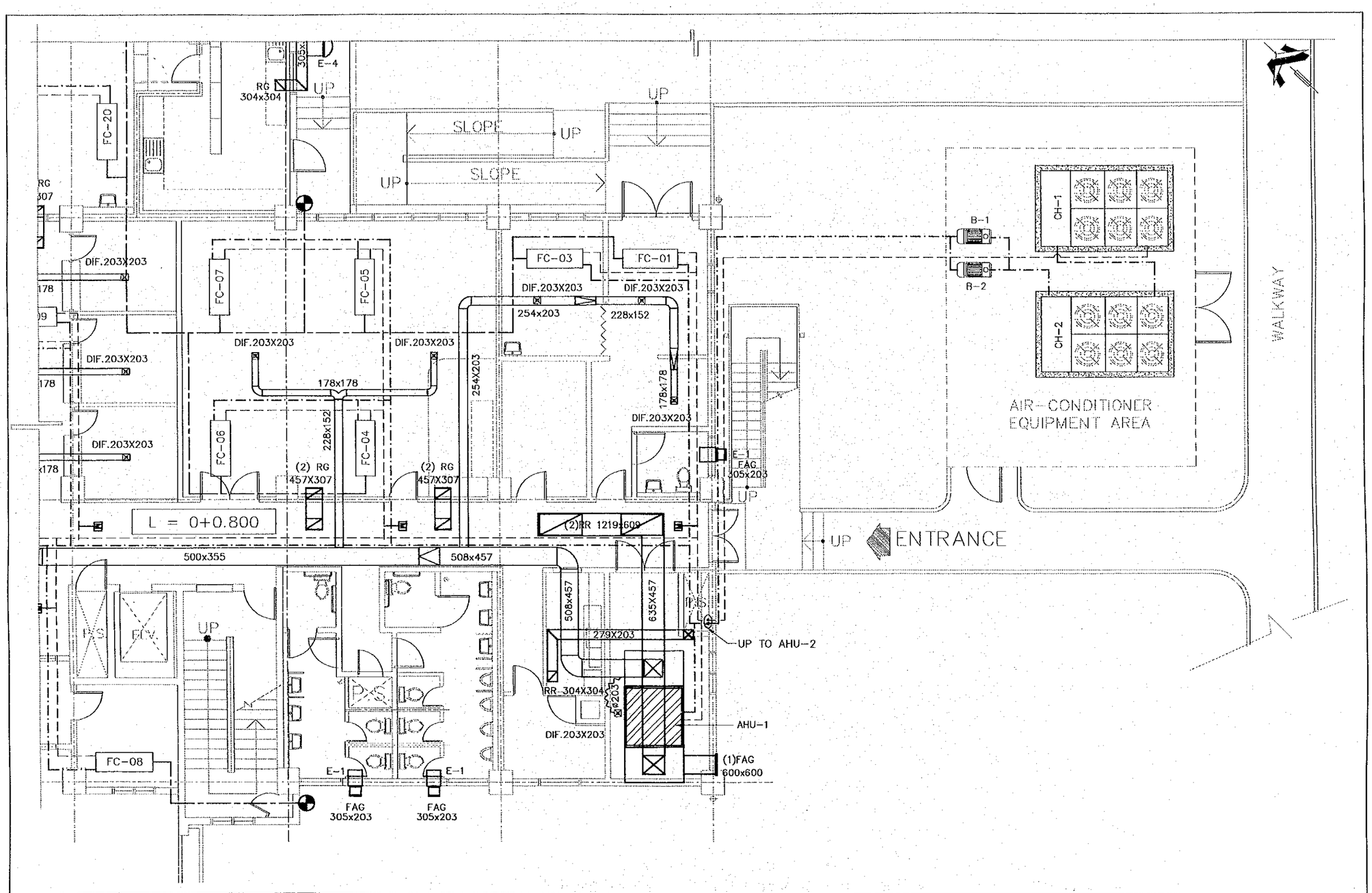
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM FIRST FLOOR PLAN (PART-2)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: 80-01-086



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

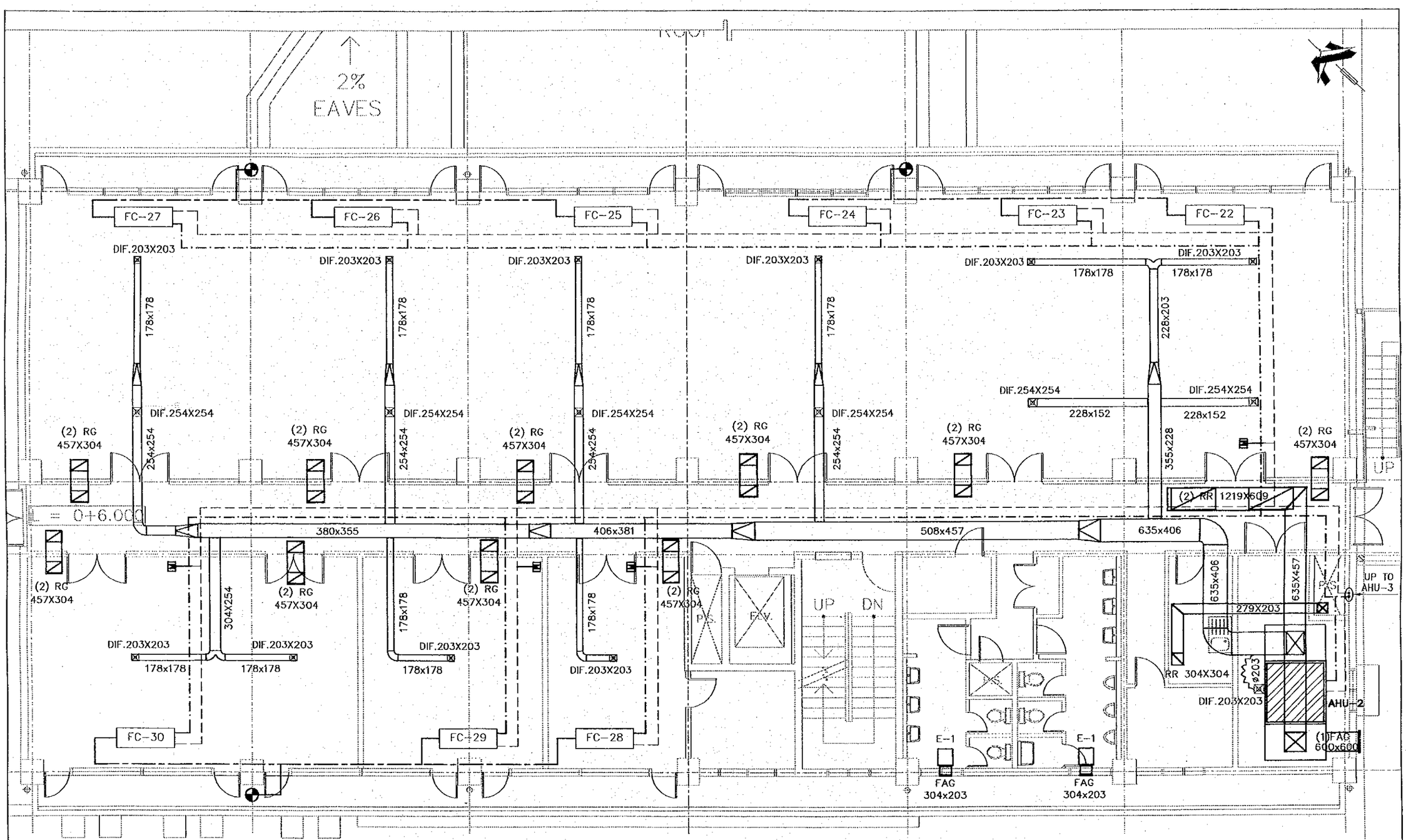
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM FIRST FLOOR PLAN (PART-3)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD-01-087



AIR CONDITIONING SYSTEM

SCALE 1: 100

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

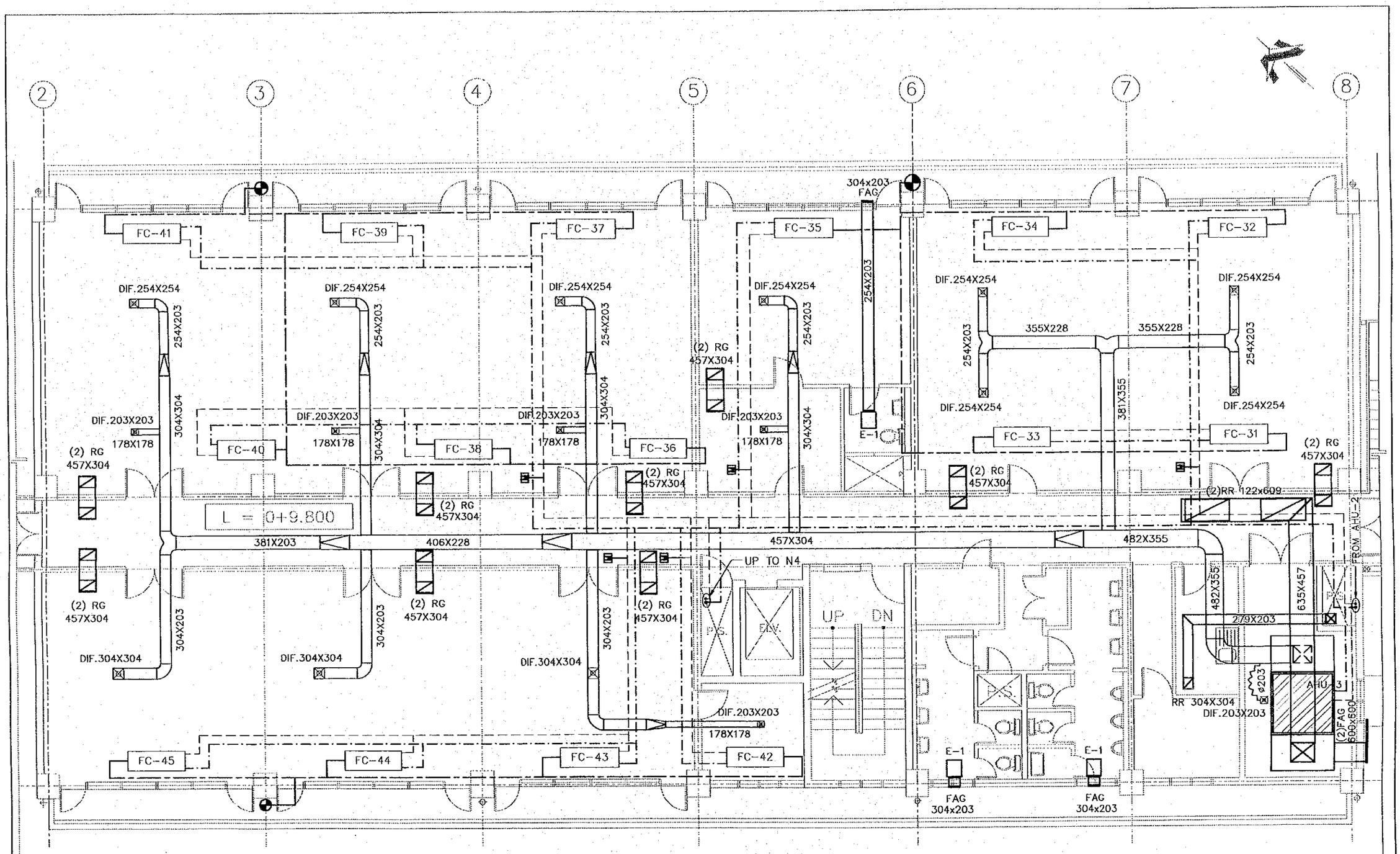
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM SECOND FLOOR PLAN

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD-01-088



AIR CONDITIONING SYSTEM

SCALE 1: 100

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

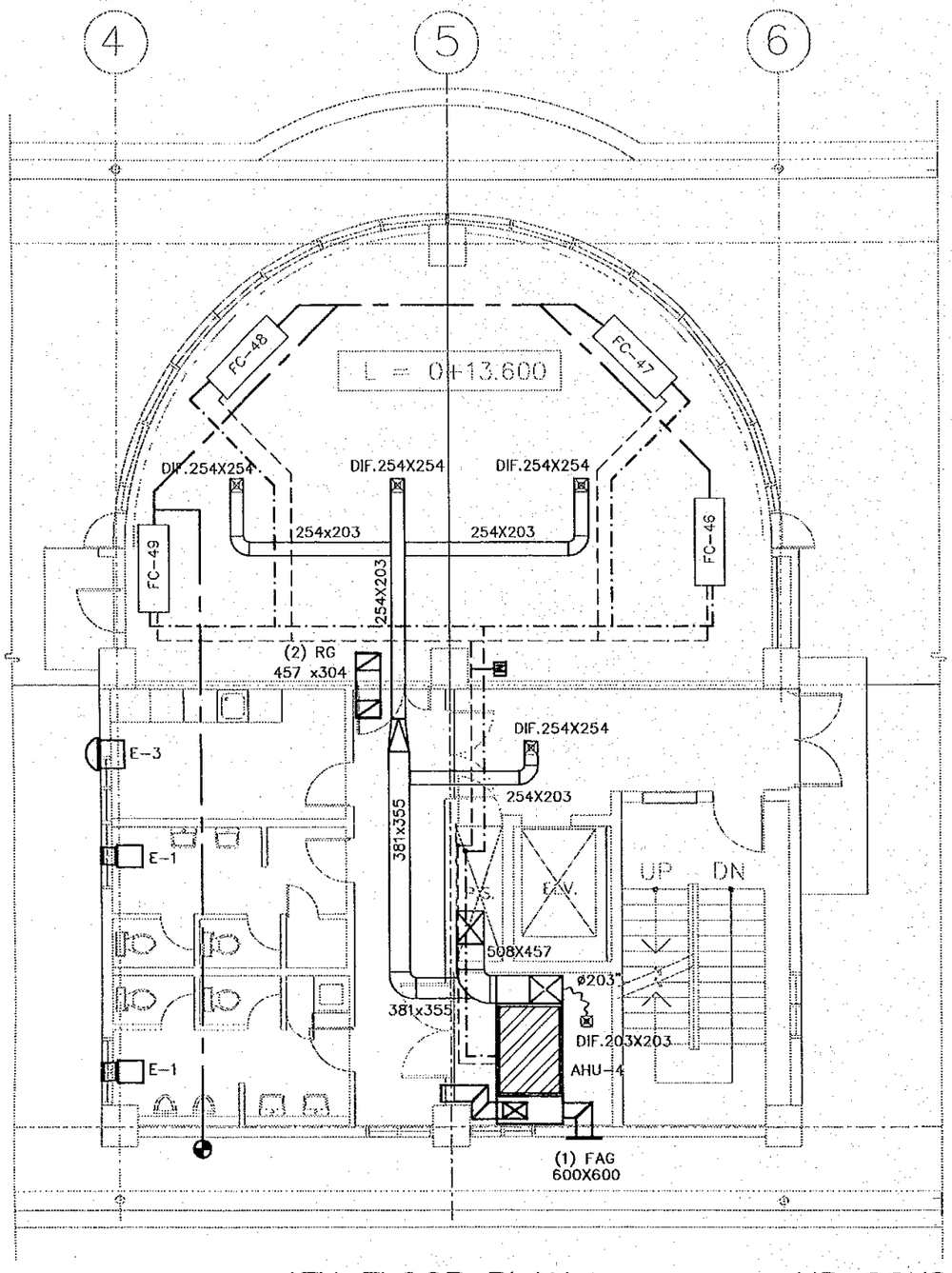
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM THIRD FLOOR PLAN

DATE : OCTOBER/2002

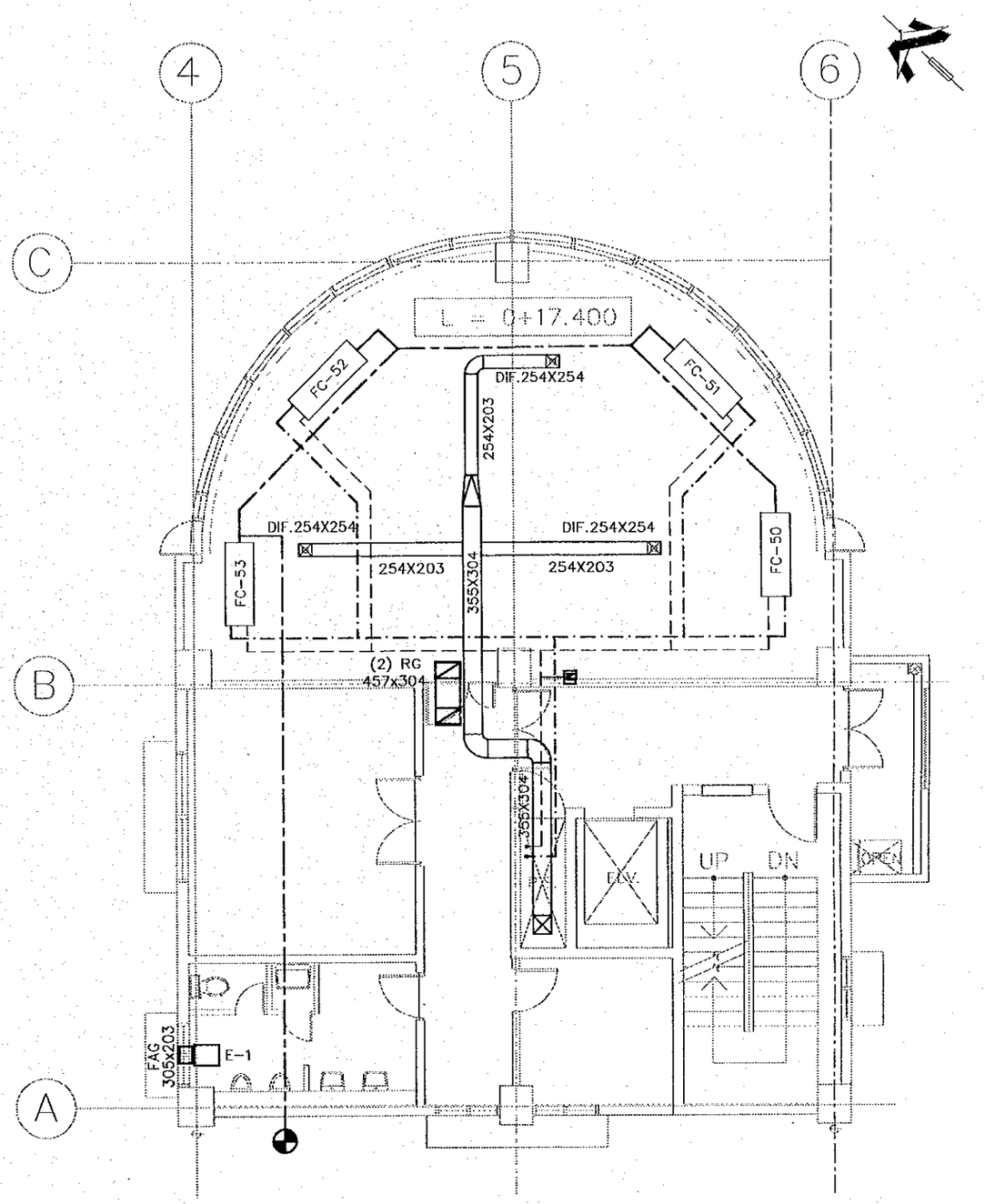
SCALE : 1 : 100

DRAWING NO: BD-01-089



4TH FLOOR PLAN

SCALE 1: 100



5TH FLOOR PLAN

SCALE 1: 100

AIR CONDITIONING SYSTEM

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

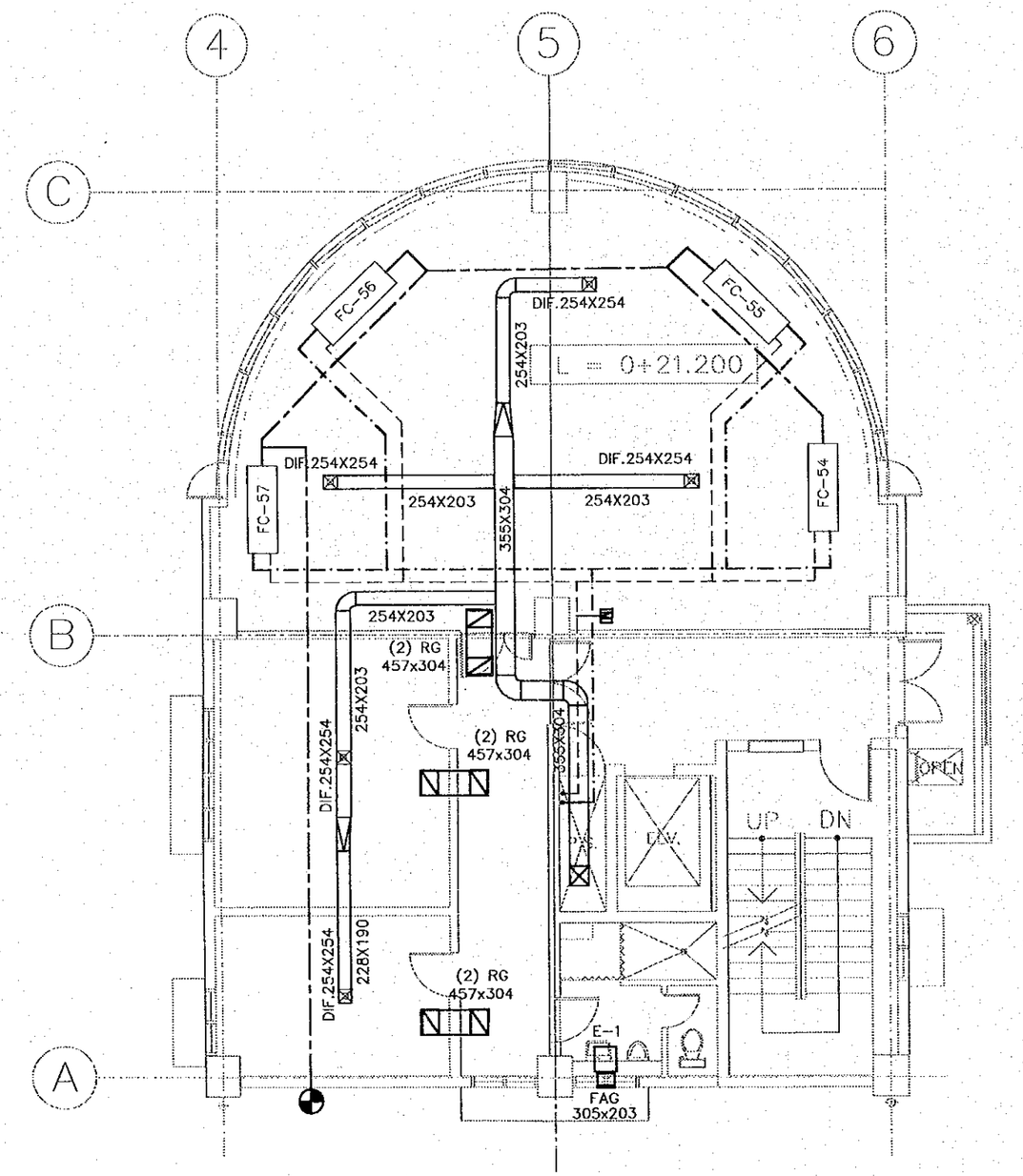
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM 4TH & 5TH FLOOR PLANS

DATE : OCTOBER/2002

SCALE : 1 : 100

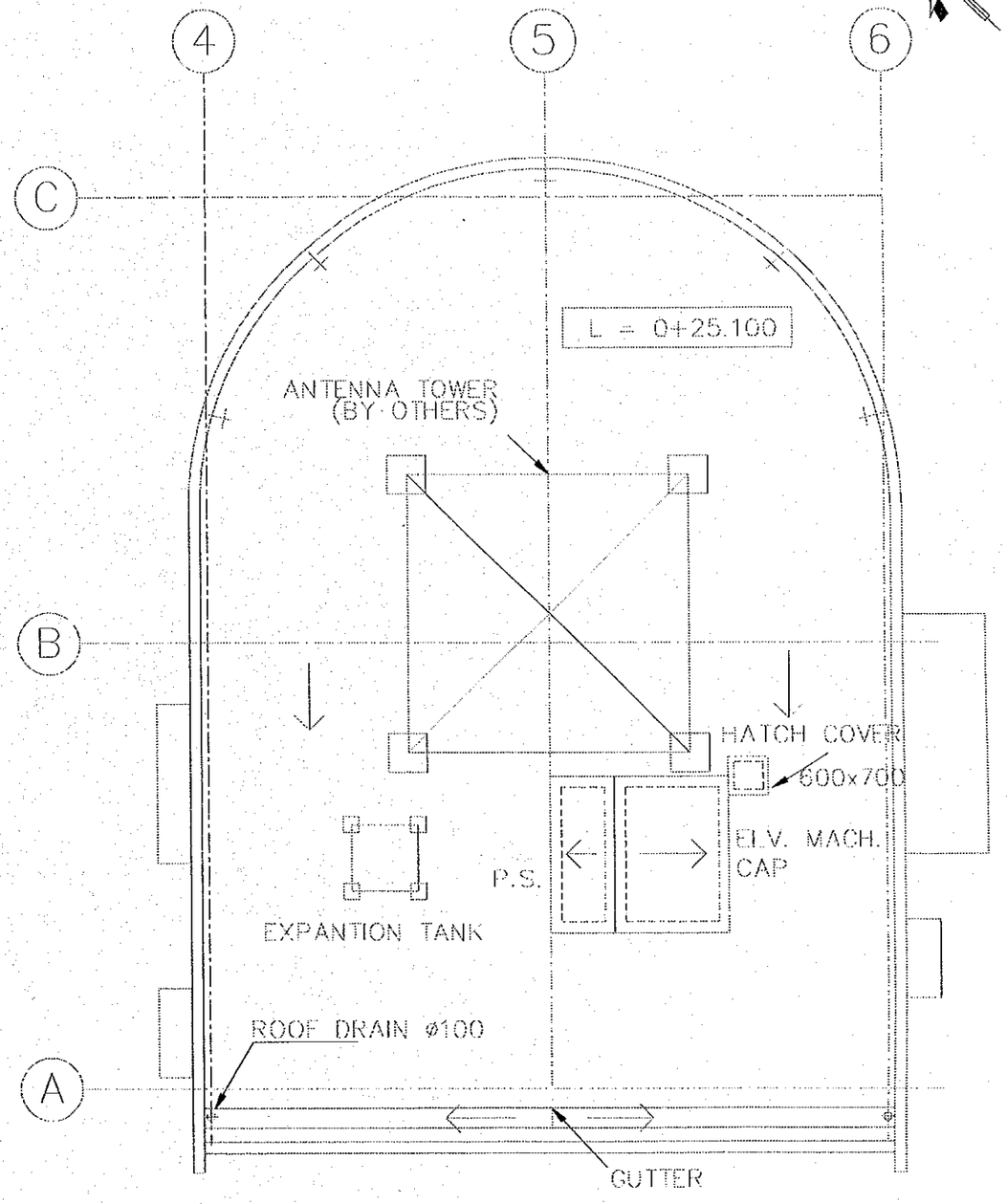
DRAWING NO: BD-01-090



6TH FLOOR PLAN

SCALE 1: 100

AIR CONDITIONING SYSTEM



ROOF PLAN

SCALE 1: 100

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

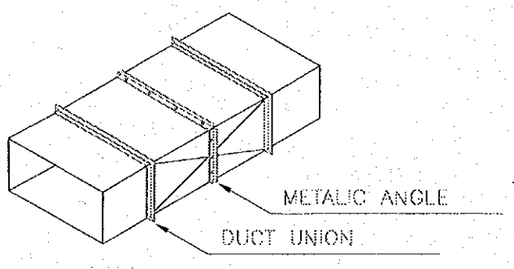
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM 6TH & ROOF FLOOR PLANS

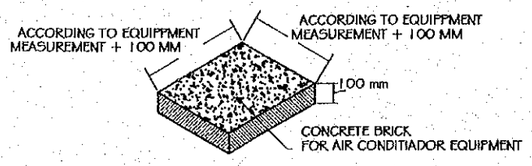
DATE : OCTOBER/2002

SCALE : 1 : 100

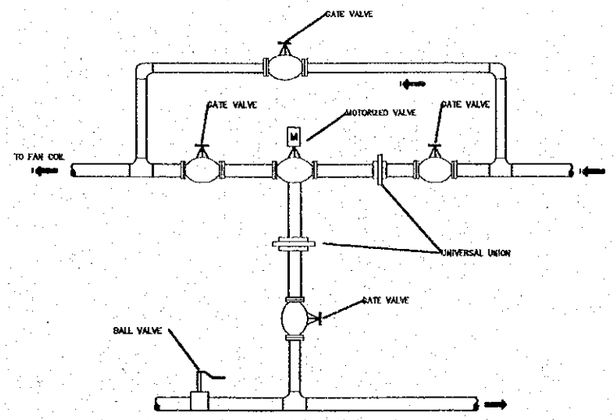
DRAWING NO: BD-01-091



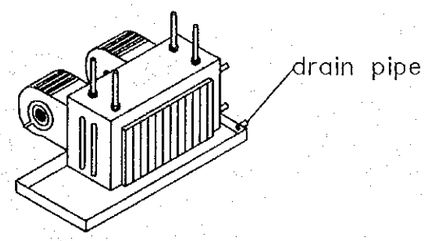
DETAIL OF DUCT SUPPORTERIE
AIR CONDITIONER EQUIPMENT



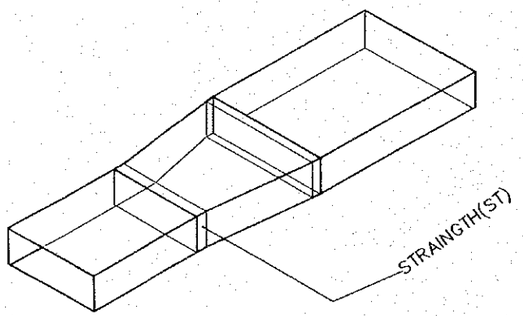
DETAIL OF CONCRET BASE
AIR CONDITIONER EQUIPMENT
NO SCALE



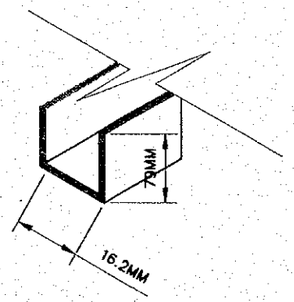
TIPICAL CONECTIONS OF WATER SUPPLY
NO SCALE



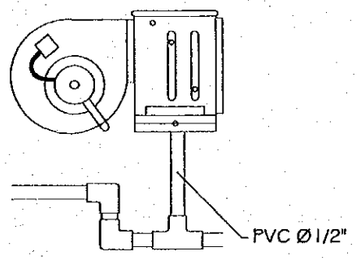
CONCEALED TYPE FAN COIL UNIT
NO SCALE



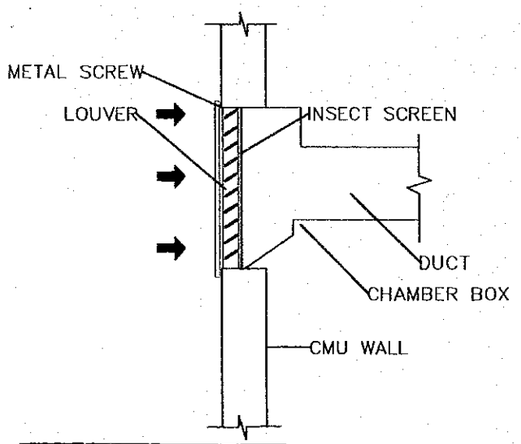
TAPEREDE DUCT DETAIL
NO SCALE



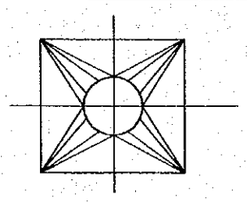
DETAIL OF RECTANGULAR DUCT REINFORRAMENT
NONE SCALE



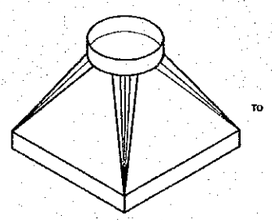
DETAIL OF DRAIN PIPE
NO SCALE



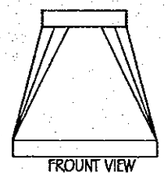
FRESH AIR INTAKE
NO SCALE



TOP VIEW
NO SCALE



ISOMETRIC
NO SCALE



FROUNT VIEW
NO SCALE

TAPERED DUCT DETAIL
NO SCALE

SIMBOLOGY CHART

SIMBOLOGY	DESCRIPTION
	4 WAY DIFFUSOR WHIT DAMPER
	COLD WATER PIPES
	SUCTION PIPES (PIPELINE)
	DRAIN PIPES
AHU	AIR HANDLING UNIT
CH	CHILLER
B-1	PUMP
FC	FAN COIL
	DOOR GRILLE (INDICATE INCHS)
	CEILING EXTRACTOR FOR BATHROOMS
	FAN COIL DRAIN
	RETURN GRILLES (INDICATED INCHS)

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

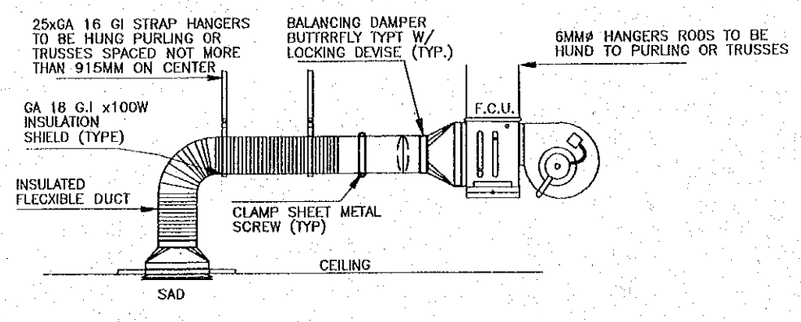
THE DETAILED DESIGN
ON PORT REACTIVATION PROJECT
IN LA UNION PROVINCE
OF THE REPUBLIC OF EL SALVADOR

NIPPON KOEI CO., LTD.

DESIGNED BY :
CHECKED BY :
APPROVED BY :

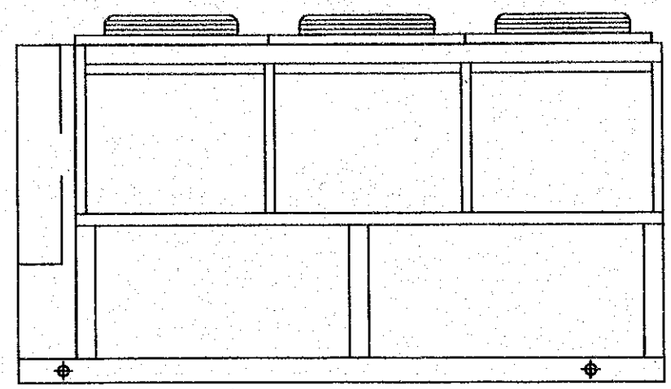
SECTION : BUILDING WORK
SUB-SECTION : PORT ADMINISTRATION BUILDING
TITLE : AIR CONDITIONING SYSTEM DETAIL-01

DATE : OCTOBER/2002
SCALE : NO SCALE
DRAWING NO: BD-01-092



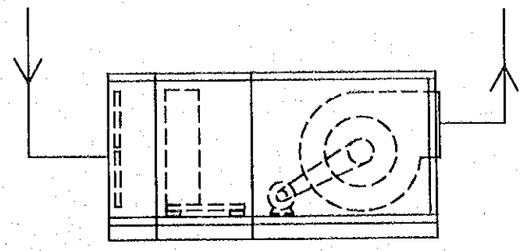
FAN COIL UNIT INSTALATION DETAIL

NO SCALE



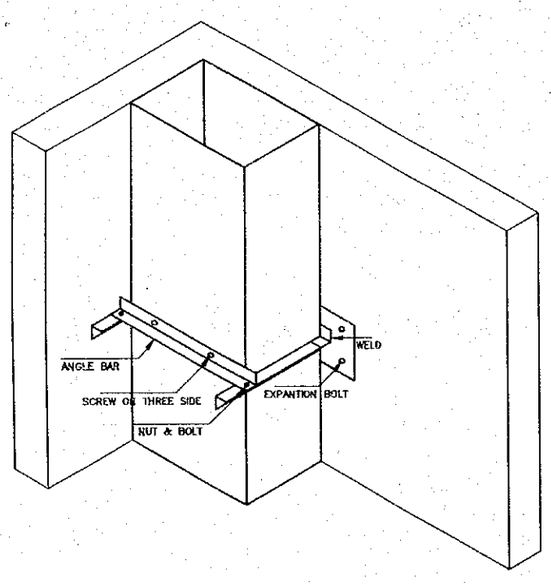
AIR COOLED WATER CHILLER

NO SCALE



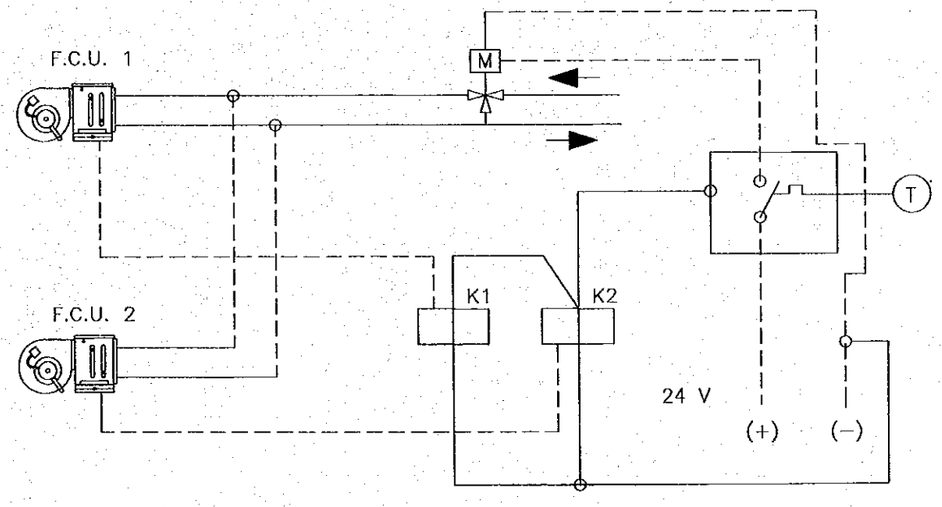
AIR HANDLING UNIT

NO SCALE



RISER SUPPORT - FROM WALL DETAIL

NO SCALE



CONTROL DIAGRAM

NO SCALE

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 : PPORT ADMINISTRATION BUILDING

TITLE : AIR CONDITIONING SYSTEM DETAIL-02

DATE : OCTOBER/2002

SCALE : NO SCALE

DRAWING NO: BD-01-093

PANELBOARD SCHEDULE

PANEL ST--AAE 3ø, 4 WIRE SURFACE MOUNTED 250 AMPERE MAIN

LOCATION 1st. FLOOR (MACHINE ROOM) 480 VOLT 400 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	3x13.3mm²	21.0			Chiller--1 (CH--1)	3	90		3	125	Pump--1 (B--1)	34.0			3x13.3mm²	2
3			21.0										34.0			4
5				21.0										34.0		6
7	3x13.3mm²	21.0			Chiller--2 (CH--2)	3	90		3	125	Pump--2 (B--2)	34.0			3x13.3mm²	8
9			21.0										34.0			10
11				21.0										34.0		12
13	3x5.3mm²	3.30			AHU--1 (1st. Floor)	3	15		3	40	AHU--2 (2nd. Floor)	7.60			3x5.3mm²	14
15			3.30										7.60			16
17				3.30										7.60		18
19	3x5.3mm²	7.60			AHU--3 (3rd. Floor)	3	40		3	20	AHU--4 (4th. Floor)	4.80			3x5.3mm²	20
21			7.60										4.80			22
23				7.60										4.80		24

133.3	TOTAL A/øA
133.3	TOTAL A/øB
133.3	TOTAL A/øC
123,080	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST--AAN 3ø, 4 WIRE SURFACE MOUNTED 200 AMPERE MAIN

LOCATION 1st. FLOOR (MACHINE ROOM) 120/208 VOLT 250 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	3x13.3mm²	18.9			ST--AA1	3	90		3	125	ST--AA2	8.10			3x13.3mm²	2
3			18.9										8.10			4
5				18.9										8.10		6
7	3x13.3mm²	13.5			ST--AA3						ST--AA4	10.8			3x13.3mm²	8
9			13.5										10.8			10
11				13.5										10.8		12
13																14
15																16
17																18
19																20
21																22
23																24

51.3	TOTAL A/øA
51.3	TOTAL A/øB
51.3	TOTAL A/øC
32,015	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 :

CHECKED BY :

APPROVED BY :

SECTION : BUILDING WORK

SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : PANELBOARD SCHEDULE-01

DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO: BD-01-094

PANELBOARD SCHEDULE

PANEL ST-A1 3ø, 4 WIRE SURFACE MOUNTED 150 AMPERE MAIN

LOCATION 1st. FLOOR (PIPE SHOP) 120/208 VOLT 200 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	7.90			Inmigration	1	15		1	15	Corridor	5.20			2x5.3mm²	2
3	2x5.3mm²		7.20		Custom office	1	15		1	15	Entrance		5.20		2x5.3mm²	4
5	2x5.3mm²			6.70	Stairs	1	15		1	15	Toilets-mach room			6.50	2x5.3mm²	6
7	2x5.3mm²	9.50			Waiting area	1	15		1	15	Bank	5.00			2x5.3mm²	8
9	2x5.3mm²		12.0		Entrance canopy	1	15		1	15	Bank		5.00		2x5.3mm²	10
11	2x5.3mm²			9.20	Quarantine-first aid	1	15		1	15	Bank			5.00	2x5.3mm²	12
13	3x5.3mm²	8.90			Police-Information	1	15		1	20	Information-vestibule	11.7			3x5.3mm²	14
15	3x5.3mm²		10.0		Police	1	20		1	20	Custom office		11.7		3x5.3mm²	16
17	3x5.3mm²			10.0	Kitchen-mach room	1	20		1	20	Inmigration			11.7	3x5.3mm²	18
19	3x5.3mm²	13.3			Firts aid	1	20		1	20	Hand dryer	15.0			3x5.3mm²	20
21	3x5.3mm²		13.3		Quarantine	1	20		1	20	Hand dryer		15.0		3x5.3mm²	22
23	3x5.3mm²			15.0	Hand dryer	1	20		1	20	Hand dryer			15.0	3x5.3mm²	24
25	3x5.3mm²	10.0			Bank	1	20		3	70	ST-C (cafeteria)	52.4			4x21.2mm²	26
27	3x5.3mm²		10.0		Bank	1	20						52.0			28
29	3x5.3mm²			10.0	Bank	1	20							13.3		30
31																32
33																34
35	3x5.3mm²			15.0	Hand dryer	1										36
37																38
39																40
41																42

138,9	TOTAL A/øA
141,4	TOTAL A/øB
117,4	TOTAL A/øC
47,724	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST-A2 3ø, 4 WIRE SURFACE MOUNTED 100 AMPERE MAIN

LOCATION 2nd. FLOOR (PIPE SHOP) 120/208 VOLT 150 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	7.80			Security-metereology	1	15		1	15	Conc. office-light	10.0			2x5.3mm²	2
3	2x5.3mm²		7.70		Corridor	1	15		1	15	Conc. office-light		10.0		2x5.3mm²	4
5	2x5.3mm²			6.00	Toilets, mach. room	1	15		1	15	Conc. office-light			10.0	2x5.3mm²	6
7	2x5.3mm²	10.0			Conc. office	1	15		1	15	Conc. office-light	10.0			2x5.3mm²	8
9	3x5.3mm²		10.0		Conc. office-outlets	1	20		1	15	Verandah		10.0		2x5.3mm²	10
11	3x5.3mm²			10.0	Conc. office-outlets	1	20		1	20	Conc. office-outlets			12.0	3x5.3mm²	12
13	3x5.3mm²	6.70			Conc. office-outlets	1	20		1	20	Conc. office-outlets	12.0			3x5.3mm²	14
15	3x5.3mm²		6.70		Conc. office-outlets	1	20		1	20	Conc. office-outlets		10.0		3x5.3mm²	16
17	3x5.3mm²			6.70	Conc. office-outlets	1	20		1	20	Conc. office-outlets			15.0	3x5.3mm²	18
19	3x5.3mm²	12.0			Conc. office-outlets	1	20		1	20	Conc. office	12.0			3x5.3mm²	20
21	3x5.3mm²		12.0		Conc. office-outlets	1	20		1	20	Conc. office		12.0		3x5.3mm²	22
23	3x5.3mm²			13.3	Security-metereology	1	20		1	20	Conc. office-outlets			6.70	3x5.3mm²	24
25	3x5.3mm²	5.00			Mach room	1	20		1	20	Kitchen	3.30			3x5.3mm²	26
27	3x5.3mm²		15.0		Hand dryer	1	20						10.0		3x5.3mm²	28
29	3x5.3mm²			15.0	Hand dryer	1	20							10.0	3x5.3mm²	30
31																32
33																34
35																36
37																38
39																40
41																42

86,8	TOTAL A/øA
93,4	TOTAL A/øB
94,7	TOTAL A/øC
32,988	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST-C 3ø, 4 WIRE SURFACE MOUNTED 70 AMPERE MAIN

LOCATION CAFETERIA-1st FLOOR 120/208 VOLT 100 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	7.40			Cafeteria lights	1	15		1	20	Outlets	1.70			3x5.3mm²	2
3	2x5.3mm²		8.60		Kitchen lights	1	15		1	20	Outlets		1.70		3x5.3mm²	4
5	3x5.3mm²			8.30	Outlets-cafeteria	1	20		1	20	Outlets			1.70	3x5.3mm²	6
7	3x5.3mm²	3.30			Outlets	1	20		2	50	Range	40.0			3x8.4mm²	8
9	3x5.3mm²		1.70		Outlets	1	20						40.0			10
11	3x5.3mm²			3.30	Outlets	1	20				Junction box-ceiling			5.00	2x5.3mm²	12

52,4	TOTAL A/øA
52,0	TOTAL A/øB
18,3	TOTAL A/øC
14,724	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST-A4 3ø, 4 WIRE SURFACE MOUNTED 40 AMPERE MAIN

LOCATION 4th. FLOOR (PIPE SHOP) 120/208 VOLT 100 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	11.0			Meeting room	1	15		1	15	Roof lights	4.30			2x5.3mm²	2
3	2x5.3mm²		4.20		Toilets	1	15		1	15	Roof lights		8.70		2x5.3mm²	4
5	2x5.3mm²			4.10	Corridor	1	15		1	15	Roof lights			8.70	2x5.3mm²	6
7	3x5.3mm²	8.30			Meeting room	1	20		1	20	Outdoor outlets	5.00			3x5.3mm²	8
9	3x5.3mm²		8.30		Meeting room	1	20		1	20	Hand dryer		15.0		3x5.3mm²	10
11	3x5.3mm²			8.30	Kitchen	1	20		1	20	Hand dryer			15.0	3x5.3mm²	12
13	3x5.3mm²	5.00			Outdoor outlets	1	20								3x5.3mm²	14

33,6	TOTAL A/øA
36,2	TOTAL A/øB
36,1	TOTAL A/øC
12,708	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 :

CHECKED BY :

APPROVED BY :

SECTION : BUILDING WORK

SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : PANELBOARD SCHEDULE-02

DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO: BD-01-095

PANELBOARD SCHEDULE

PANEL ST–A3 3ø, 4 WIRE SURFACE MOUNTED 100 AMPERE MAIN

LOCATION 3rd. FLOOR (PIPE SHOP) 120/208 VOLT 200 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	7.10			Auditorium light	1	15		1	15	Manager–secretary	5.80			2x5.3mm²	2
3	2x5.3mm²		7.10		Auditorium light	1	15		1	15	Corridor		8.30		2x5.3mm²	4
5	2x5.3mm²			9.50	Administration office	1	15		1	15	Maintenance dept–l			10.3	2x5.3mm²	6
7	2x5.3mm²	6.20			Toilets–Mach. room	1	15		1	20	Maintenance dept–o	6.70			3x5.3mm²	8
9	2x5.3mm²		10.0		Veranda	1	15		1	20	Maintenance dept–o		6.70		3x5.3mm²	10
11	2x5.3mm²			8.30	Kitchen–mach. room	1	20		1	20	Maintenance dept–o			6.70	3x5.3mm²	12
13	3x5.3mm²	10.0			Secretary–outlets	1	20		1	20	Adm. office–oulets	11.7			3x5.3mm²	14
15	3x5.3mm²		10.0		manager's room–outlets	1	20		1	20	Auditorium–outlets		15.0		3x5.3mm²	16
17	3x5.3mm²			10.0	Administration office–o	1	20		1	20	Hand dryer			15.0	3x5.3mm²	18
19	3x5.3mm²	15.0			Hand dryer	1	20		2	20	Maint. dept. 208/120v	10.0			3x5.3mm²	20
21	3x5.3mm²		10.0		Telephone room	1	20						10.0			22
23	3x5.3mm²			10.0	Telephone room	1	20		2	20	Maint. dept. 208/120v			10.0	3x5.3mm²	24
25	3x5.3mm²	10.0			Main. dept. 3ø outlets	3	30					10.0				26
27			10.0													28
29				10.0												30
31																32
33																34
35																36
37																38
39																40
41																42

92,5	TOTAL A/øA
87,1	TOTAL A/øB
87,8	TOTAL A/øC
32,328	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST–A5 3ø, 4 WIRE SURFACE MOUNTED 30 AMPERE MAIN

LOCATION 5sth. FLOOR (PIPE SHOP) 120/208 VOLT 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	11.0			Yard cont. room	1	15		1	20	Yard cont. room	8.30			3x5.3mm²	2
3	2x5.3mm²		3.40		Stack room	1	15		1	20	Yard cont. room		8.30		3x5.3mm²	4
5	2x5.3mm²			4.10	Corridor	1	15		1	20	Hand dryer			15.0	3x5.3mm²	6
7																8
9	3x5.3mm²		10.0		Stack room	1	20									10
11																12
13																14
15																16
17																18
19																20
21																22
23																24

19,3	TOTAL A/øA
21,7	TOTAL A/øB
19,1	TOTAL A/øC
7,212	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST–A6 3ø, 4 WIRE SURFACE MOUNTED 30 AMPERE MAIN

LOCATION 6th. FLOOR (PIPE SHOP) 120/208 VOLT 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3mm²	11.0			Navigation cont. room	1	15		1	20	Navigation cont. room	8.30			3x5.3mm²	2
3	2x5.3mm²		3.70		Harbor master room	1	15		1	20	Navigation cont. room		8.30		3x5.3mm²	4
5	2x5.3mm²			4.20	Corridor	1	15		1	20	Harbor master room			8.30	3x5.3mm²	6
7	2x5.3mm²	1.00			Obstruction light	1	15									8
9	3x5.3mm²		15.0		Hand dryer	1	20									10
11	3x5.3mm²			5.00	outlets on roof	1	20									12
13																14
15																16
17																18
19																20

20,3	TOTAL A/øA
27,0	TOTAL A/øB
17,5	TOTAL A/øC
7,776	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 :

CHECKED BY :

APPROVED BY :

SECTION : BUILDING WORK

SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : PANELBOARD SCHEDULE–03

DATE : OCTOBER/2002

SCALE : NOT TO SCALE

DRAWING NO: BD–01–096

PANELBOARD SCHEDULE

PANEL ST–AA1 3ø, 4 WIRE SURFACE MOUNTED 40 AMPERE MAIN

LOCATION 1st. FLOOR (MACHINE ROOM) 120/208 VOLT 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3 mm²	2.70			FCU–01	1	15		1	15	FCU–02	2.70			2x5.3 mm²	2
3	2x5.3 mm²		2.70		FCU–03	1	15		1	15	FCU–04		2.70		2x5.3 mm²	4
5	2x5.3 mm²			2.70	FCU–05	1	15		1	15	FCU–06			2.70	2x5.3 mm²	6
7	2x5.3 mm²	2.70			FCU–07	1	15		1	15	FCU–08	2.70			2x5.3 mm²	8
9	2x5.3 mm²		2.70		FCU–09	1	15		1	15	FCU–10		2.70		2x5.3 mm²	10
11	2x5.3 mm²			2.70	FCU–11	1	15		1	15	FCU–12			2.70	2x5.3 mm²	12
13	2x5.3 mm²	2.70			FCU–13	1	15		1	15	FCU–14	2.70			2x5.3 mm²	14
15	2x5.3 mm²		2.70		FCU–15	1	15		1	15	FCU–16		2.70		2x5.3 mm²	16
17	2x5.3 mm²			2.70	FCU–17	1	15		1	15	FCU–18			2.70	2x5.3 mm²	18
19	2x5.3 mm²	2.70			FCU–19	1	15		1	15	EXHAUST FAN	2.40			2x5.3 mm²	20
21	2x5.3 mm²		2.70		FCU–20	1	15		1	15	EXHAUST FAN		2.40		2x5.3 mm²	22
23	2x5.3 mm²			2.70	FCU–21	1	15		1	15	EXHAUST FAN			2.40	2x5.3 mm²	24

21.3	TOTAL A/øA
21.3	TOTAL A/øB
22.4	TOTAL A/øC
7,800	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST–AA3 3ø, 4 WIRE SURFACE MOUNTED 30 AMPERE MAIN

LOCATION 3st. FLOOR (MACHINE ROOM) 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3 mm²	2.70			FCU–31	1	15		1	15	FCU–32	2.70			2x5.3 mm²	2
3	2x5.3 mm²		2.70		FCU–33	1	15		1	15	FCU–34		2.70		2x5.3 mm²	4
5	2x5.3 mm²			2.70	FCU–35	1	15		1	15	FCU–36			2.70	2x5.3 mm²	6
7	2x5.3 mm²	2.70			FCU–37	1	15		1	15	FCU–38	2.70			2x5.3 mm²	8
9	2x5.3 mm²		2.70		FCU–39	1	15		1	15	FCU–40		2.70		2x5.3 mm²	10
11	2x5.3 mm²			2.70	FCU–41	1	15		1	15	FCU–42			2.70	2x5.3 mm²	12
13	2x5.3 mm²	2.70			FCU–43	1	15		1	15	Exhaust	2.40			2x5.3 mm²	14
15	2x5.3 mm²		2.70		FCU–44	1	15									16
17	2x5.3 mm²			2.70	FCU–45	1	15		1	15	Exhaust			2.40	2x5.3 mm²	18

15.9	TOTAL A/øA
13.5	TOTAL A/øB
15.9	TOTAL A/øC
5,436	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST–AA2 3ø, 4 WIRE SURFACE MOUNTED 30 AMPERE MAIN

LOCATION 2st. FLOOR (MACHINE ROOM) 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3 mm²	2.70			FCU–22	1	15		1	15	FCU–23	2.70			2x5.3 mm²	2
3	2x5.3 mm²		2.70		FCU–24	1	15		1	15	FCU–25		2.70		2x5.3 mm²	4
5	2x5.3 mm²			2.70	FCU–26	1	15		1	15	FCU–27			2.70	2x5.3 mm²	6
7	2x5.3 mm²	2.70			FCU–28	1	15		1	15	Exhaust	2.40			2x5.3 mm²	8
9	2x5.3 mm²		2.70		FCU–29	1	15		1	15	Exhaust		2.40		2x5.3 mm²	10
11	2x5.3 mm²			2.70	FCU–30	1	15								2x5.3 mm²	12

10.5	TOTAL A/øA
10.5	TOTAL A/øB
8.1	TOTAL A/øC
3,492	TOTAL VA

PANELBOARD SCHEDULE

PANEL ST–AA4 3ø, 4 WIRE SURFACE MOUNTED 40 AMPERE MAIN

LOCATION 4th. FLOOR (MACHINE ROOM) 120/208 VOLT 70 AMPERE BUS

CT No.	WIRING	AMPERE øA	AMPERE øB	AMPERE øC	DESCRIPTION	CB Pole	CB AIC	PHASE A B C	CB Pole	CB AIC	DESCRIPTION	AMPERE øA	AMPERE øB	AMPERE øC	WIRING	CT No.
1	2x5.3 mm²	2.70			FCU–46	1	15		1	15	FCU–47	2.70			2x5.3 mm²	2
3	2x5.3 mm²		2.70		FCU–48	1	15		1	15	FCU–49		2.70		2x5.3 mm²	4
5	2x5.3 mm²			2.70	FCU–50	1	15		1	15	FCU–51			2.70	2x5.3 mm²	6
7	2x5.3 mm²	2.70			FCU–52	1	15		1	15	FCU–53	2.70			2x5.3 mm²	8
9	2x5.3 mm²		2.70		FCU–54	1	15		1	15	FCU–55		2.70		2x5.3 mm²	10
11	2x5.3 mm²			2.70	FCU–56	1	15		1	15	FCU–57			2.70	2x5.3 mm²	12
13	2x5.3 mm²	2.40			Exhaust toilet	1	15		1	15	Exhaust (5th floor)	2.40			2x5.3 mm²	14
15	2x5.3 mm²		2.40		Exhaust toilet	1	15		1	15	Exhaust (6th floor)		2.40		2x5.3 mm²	16
17	2x5.3 mm²			6.50	Exhaust kitchen	1	15		1	15	Exhaust (roof)			2.40	2x5.3 mm²	18
19																20
21																22
23																24

15,6	TOTAL A/øA
15,6	TOTAL A/øB
19,7	TOTAL A/øC
6,108	TOTAL VA

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

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NIPPON KOEI CO., LTD.

DESIGNED BY :

CHECKED BY :

APPROVED BY :

SECTION : BUILDING WORK

SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : PANELBOARD SCHEDULE–04

DATE : OCTOBER/2002

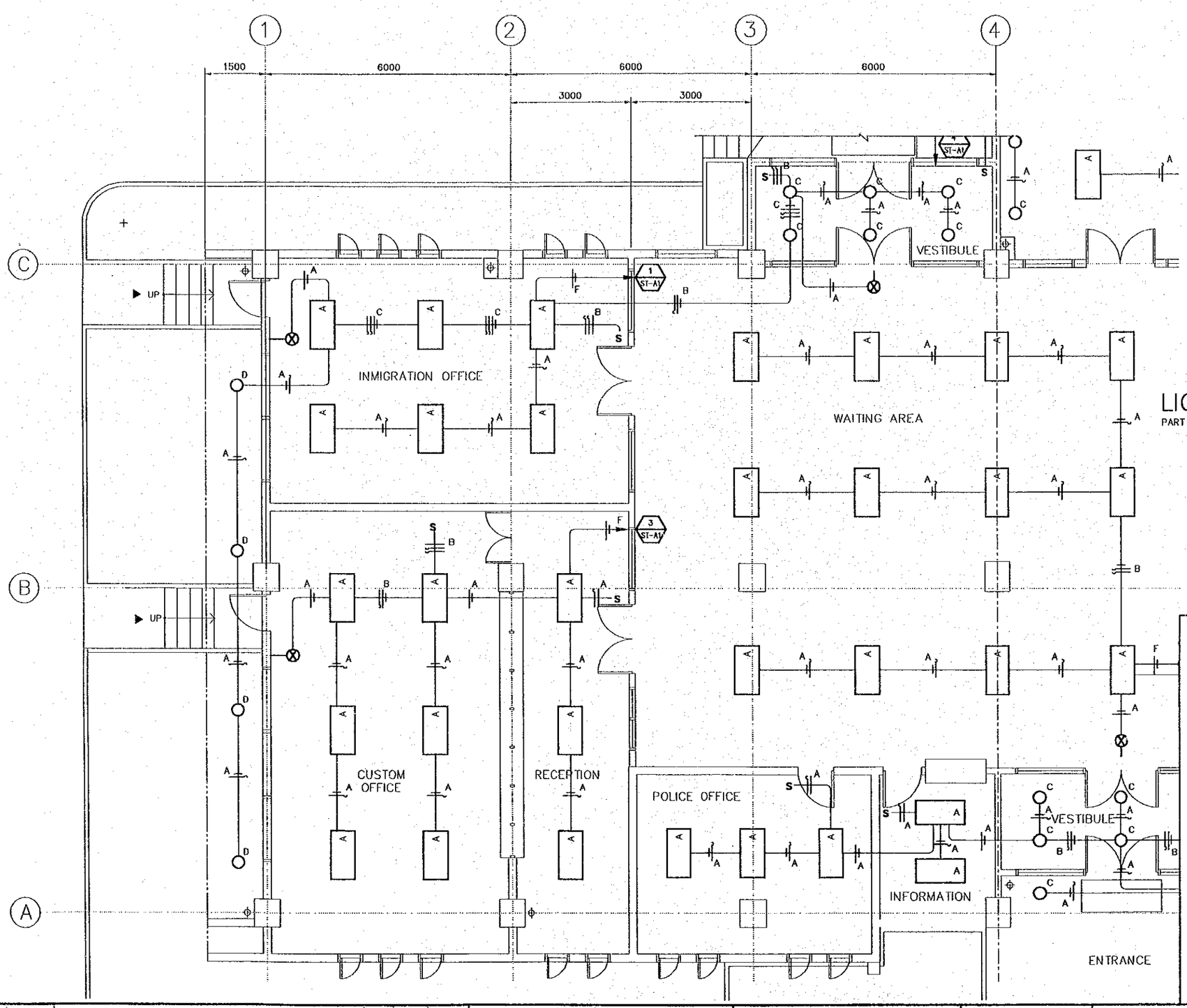
SCALE : NOT TO SCALE

DRAWING NO: BD–01–097

LIGTHING FIRST FLOOR PLAN

PART 1

SCALE 1:100



WIRING SYMBOLOGY

SYMBOL	WIRING/DUCTING
A	2 – 2.1 mm² ø 13mm
B	3 – 2.1 mm² ø 13mm
C	4 – 2.1 mm² ø 13mm
F	2 – 5.3 mm² ø 19mm

SYMBOLS

- 1 ST-A — CIRCUIT NUMBER 1 FROM PANELBOARD ST-A
- A — FLUORESCENT FIXTURE 4'x2', 3x32 WATTS RECESSED IN CEILING
- B — FLUORESCENT FIXTURE 2'x2', 2x22 WATTS RECESSED IN CEILING
- C — FLUORESCENT DOWNLIGHT 2x26 WATTS
- D — FLUORESCENT ROUND SURFACE MOUNTED
- EXIT LIGHT
- S — SWITCH
- ELECTRICAL WIRING CONCEALED IN CEILING
- PANELBOARD
- NEUTRAL, PHASE, SWITCH LEG
- JUNCTION BOX (120v)
- CIRCUIT FEEDER

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

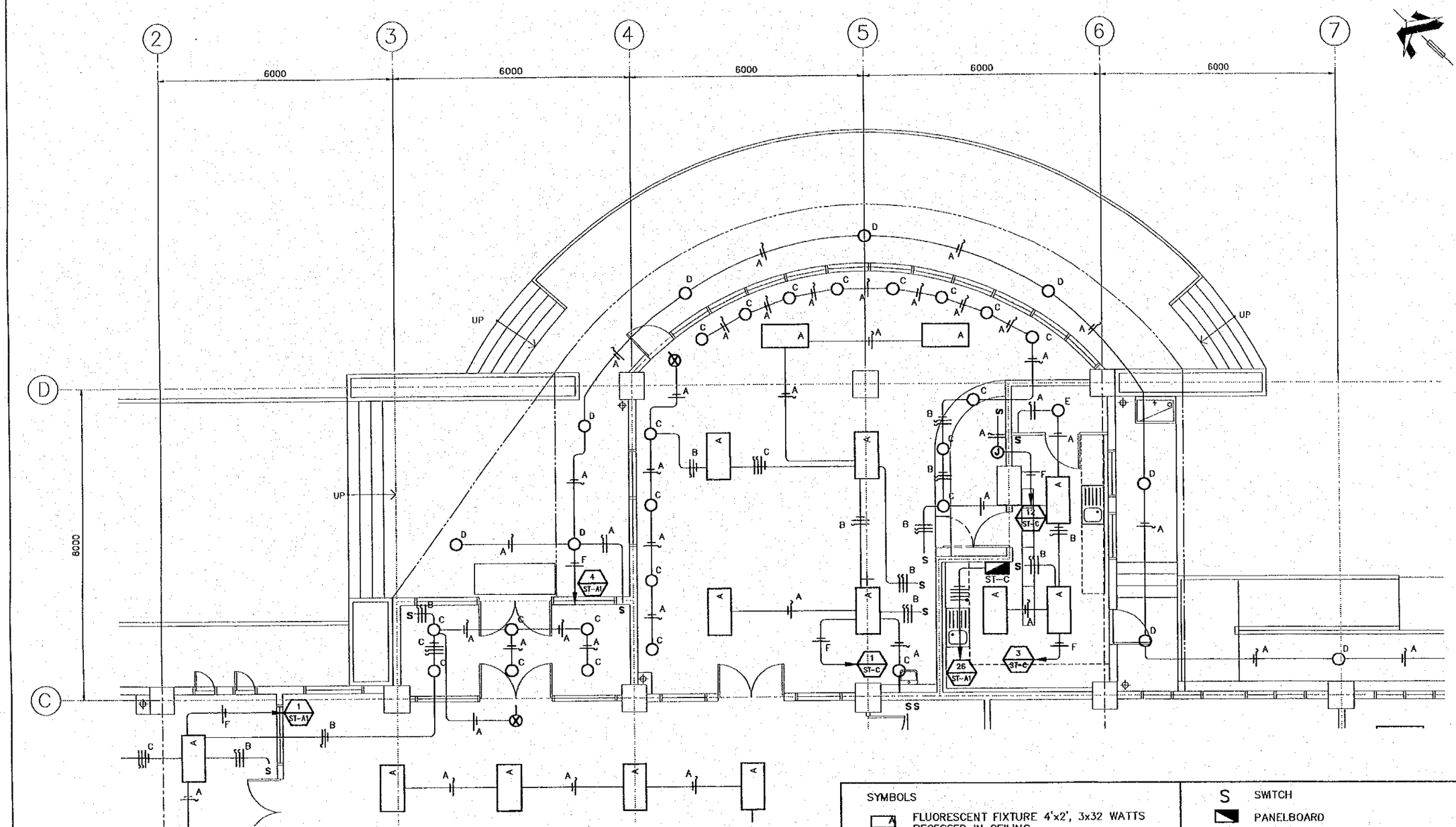
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : LIGHTING FIRST FLOOR PLAN (PART 1)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD-01-098



LIGTHING FIRST FLOOR PLAN

PART 2

SCALE 1:100

WIRING SYMBOLOGY	
SYMBOL	WIRING/DUCTING
A	2 – 2.1 mm² ø 13mm
B	3 – 2.1 mm² ø 13mm
C	4 – 2.1 mm² ø 13mm
F	2 – 5.3 mm² ø 19mm

SYMBOLS

- A — FLUORESCENT FIXTURE 4'x2', 3x32 WATTS RECESSED IN CEILING
- B — FLUORESCENT FIXTURE 2'x2', 2x22 WATTS RECESSED IN CEILING
- C — FLUORESCENT DOWNLIGHT 2x26 WATTS
- D — FLOURESCENT ROUND SURFACE MOUNTED
- E — INCANDESCENT FIXTURE 1x60 WATTS
- EXIT LIGHT

- S — SWITCH
- PANELBOARD
- ELECTRICAL WIRING CONCEALED IN CEILING
- NEUTRAL, PHASE, SWITCH LEG
- 1 ST-A — CIRCUIT NUMBER 1 FROM PANELBOARD ST-A
- JUNCTION BOX (120v)
- CIRCUIT FEEDER

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

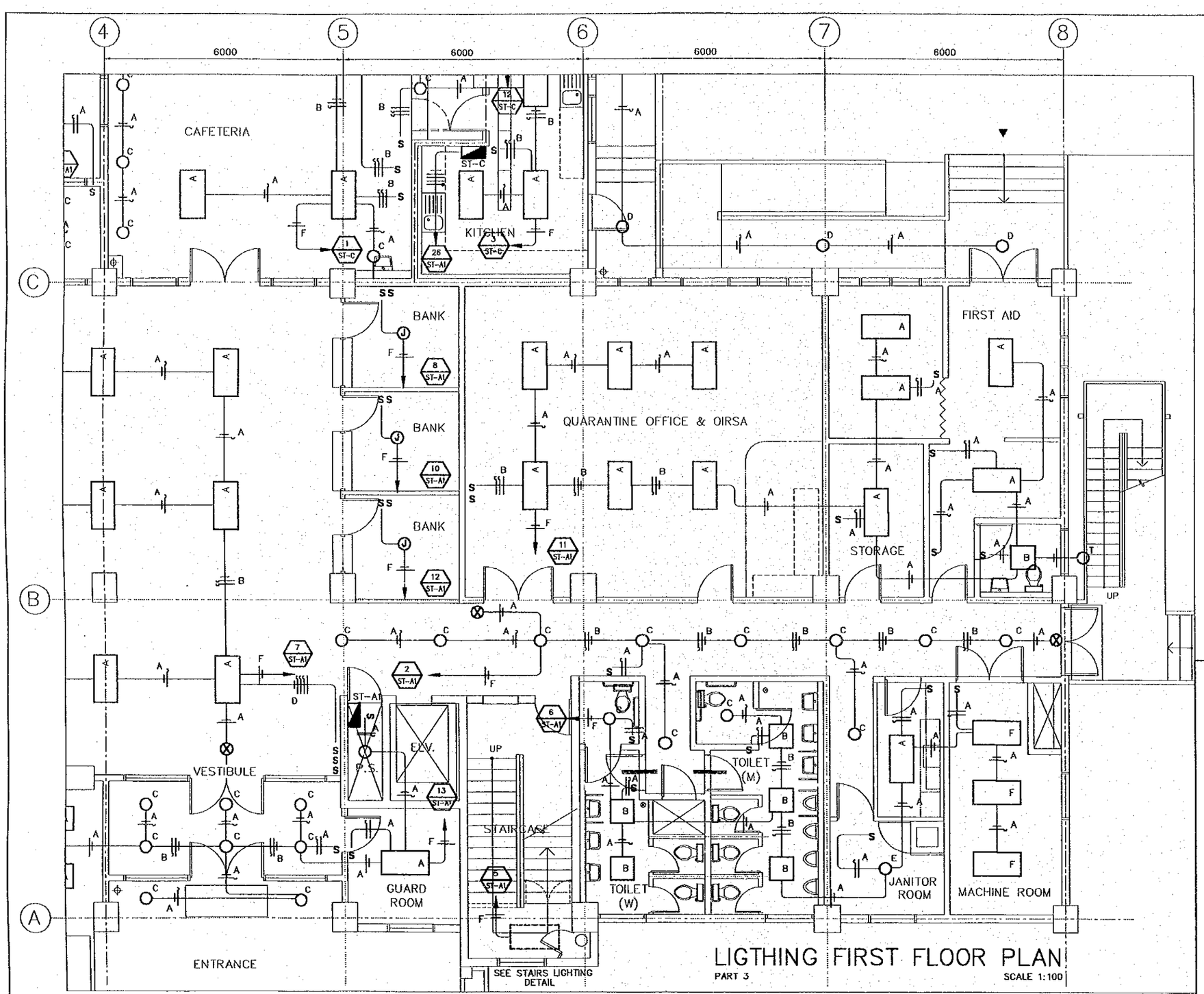
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : LIGHTING FIRST FLOOR PLAN (PART 2)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD-01-099



LIGTHING FIRST FLOOR PLAN

PART 3

SCALE 1:100

WIRING SYMBOLOGY

SYMBOL	WIRING/DUCTING
A	2 – 2.1 mm² ø 13mm
B	3 – 2.1 mm² ø 13mm
C	4 – 2.1 mm² ø 13mm
F	2 – 5.3 mm² ø 19mm

SYMBOLS

- A — FLUORESCENT FIXTURE 4'x2', 3x32 WATTS RECESSED IN CEILING
- B — FLUORESCENT FIXTURE 2'x2', 2x22 WATTS RECESSED IN CEILING
- C — FLUORESCENT DOWNLIGHT 2x26 WATTS
- D — FLUORESCENT ROUNDED SURFACE MOUNTED
- E — INCANDESCENT FIXTURE 1x60 WATTS
- T — WALL MOUNTED LIGHT
- EXIT LIGHT
- S — SWITCH
- ELECTRICAL WIRING CONCEALED IN CEILING
- 1 / ST-A — CIRCUIT NUMBER 1 FROM PANELBOARD ST-A
- NEUTRAL, PHASE, SWITCH LEG
- PANELBOARD
- J — JUNCTION BOX (120v)
- CIRCUIT FEEDER

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

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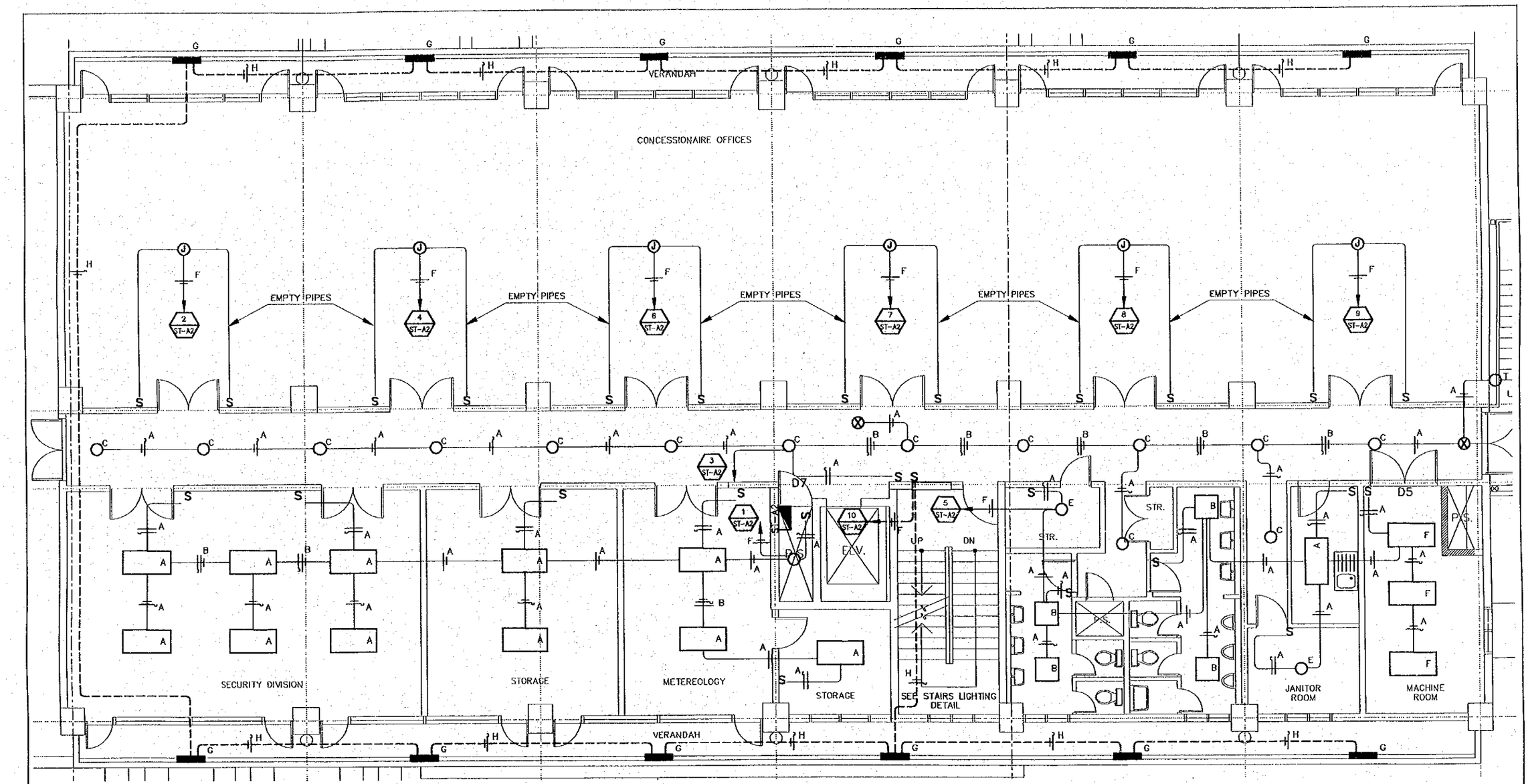
SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : LIGHTING FIRST FLOOR PLAN (PART 3)

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD-01-100



LIGHTING SECOND FLOOR PLAN

SCALE 1:100

WIRING SYMBOLOGY

SYMBOL	WIRING/DUCTING
A	2 – 2.1mm² ø 13mm
B	3 – 2.1mm² ø 13mm
C	4 – 2.1mm² ø 13mm
F	2 – 5.3mm² ø 19mm

SYMBOLS

- A — FLUORESCENT FIXTURE 4'x2', 3x32 WATTS RECESSED IN CEILING
- B — FLUORESCENT FIXTURE 2'x2', 2x22 WATTS RECESSED IN CEILING
- C — FLUORESCENT DOWNLIGHT 2x26 WATTS
- D — FLUORESCENT ROUND SURFACE MOUNTED
- E — INCANDESCENT FIXTURE 1x60 WATTS
- SUB–PANEL
- EXIT LIGHT
- S — SWITCH
- ELECTRICAL WIRING CONCEALED IN CEILING
- NEUTRAL, PHASE, SWITCH LEG
- CIRCUIT NUMBER 1 FROM PANELBOARD ST–A
- G — WALL RECESSED LIGHT
- J — JUNCTION BOX (120v)
- CIRCUIT FEEDER

REV. NO.	DATE	COORDINATE	BY	APPROVED	DATE

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NIPPON KOEI CO., LTD.

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CHECKED BY :

APPROVED BY :

SECTION : BUILDING WORK

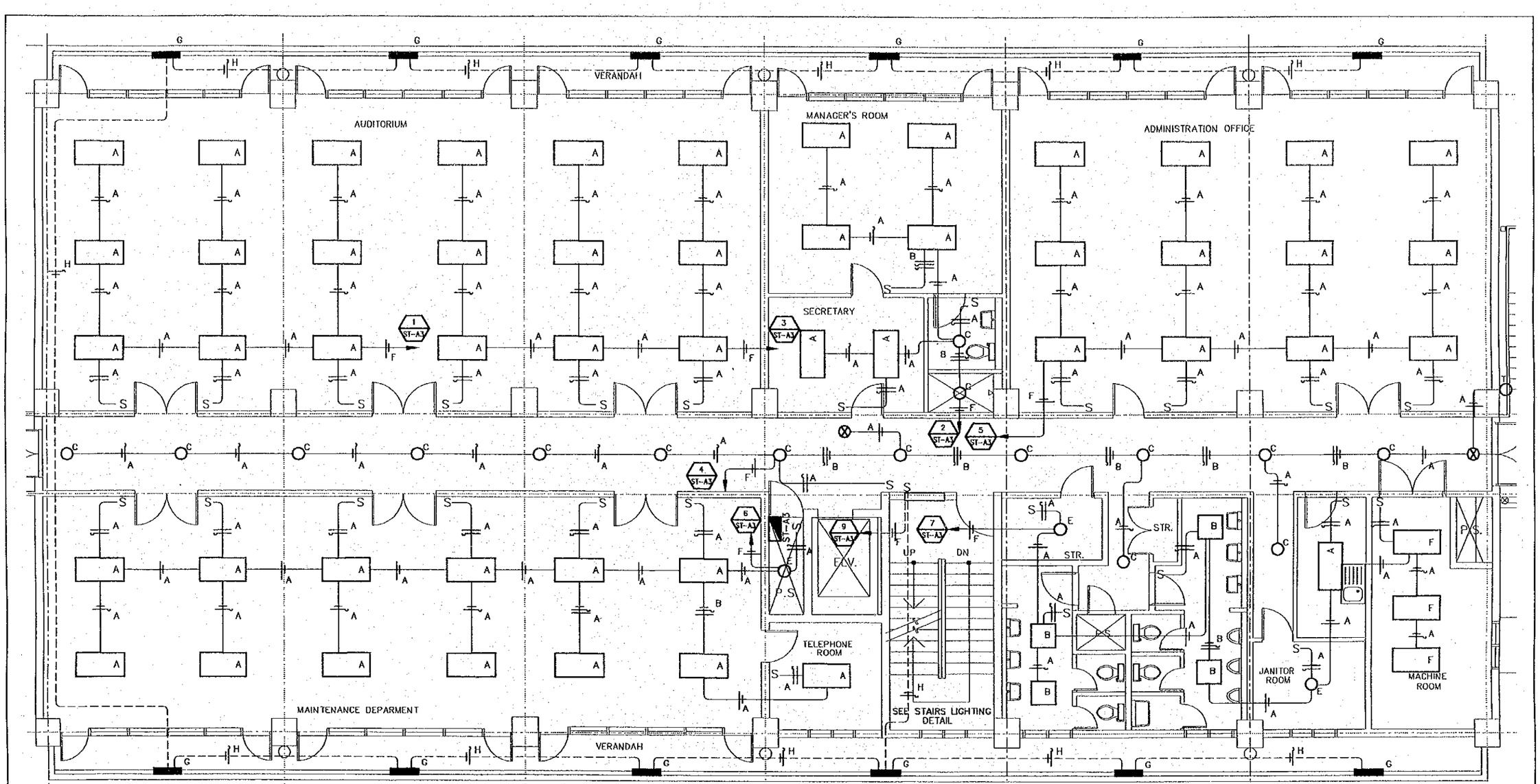
SUB–SECTION : PORT ADMINISTRATION BUILDING

TITLE : LIGHTING SECOND FLOOR PLAN

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD–01–101

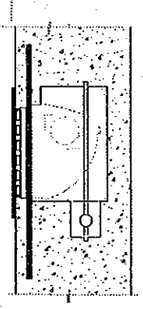


LIGHTING THIRD FLOOR PLAN

SCALE 1:100

RECESSED WALL LIGHT h=500 MOUNTING DETAIL

NOT TO SCALE



WIRING SYMBOLOGY

SYMBOL	WIRING/DUCTING
A	2 – 2.1 mm² ø 13mm
B	3 – 2.1 mm² ø 13mm
C	4 – 2.1 mm² ø 13mm
F	2 – 5.3 mm² ø 19mm

SYMBOLS

- 1 ST-A — CIRCUIT NUMBER 1 FROM PANELBOARD ST--A
- ST- — PANELBOARD
- G — RECESSED WALL LIGHT h=500
- A — FLUORESCENT FIXTURE 4'x2', 3x32 WATTS RECESSED IN CEILING
- B — FLUORESCENT FIXTURE 2'x2', 2x22 WATTS RECESSED IN CEILING
- C — FLUORESCENT DOWNLIGHT 2x26 WATTS
- E — INCANDESCENT FIXTURE 1x60 WATTS
- T — FLUORESCENT OUTDOOR 1X32 WATTS
- EXIT LIGHT
- S — SWITCH
- ELECTRICAL WIRING CONCEALED IN CEILING
- NEUTRAL, PHASE, SWITCH LEG
- J — JUNCTION BOX (120v)
- CIRCUIT FEEDER

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APPROVED BY :

SECTION : BUILDING WORK

SUB-SECTION : PORT ADMINISTRATION BUILDING

TITLE : LIGHTING THIRD FLOOR PLAN

DATE : OCTOBER/2002

SCALE : 1 : 100

DRAWING NO: BD--01--102