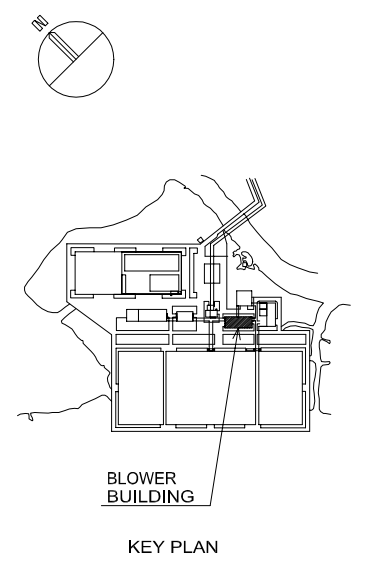
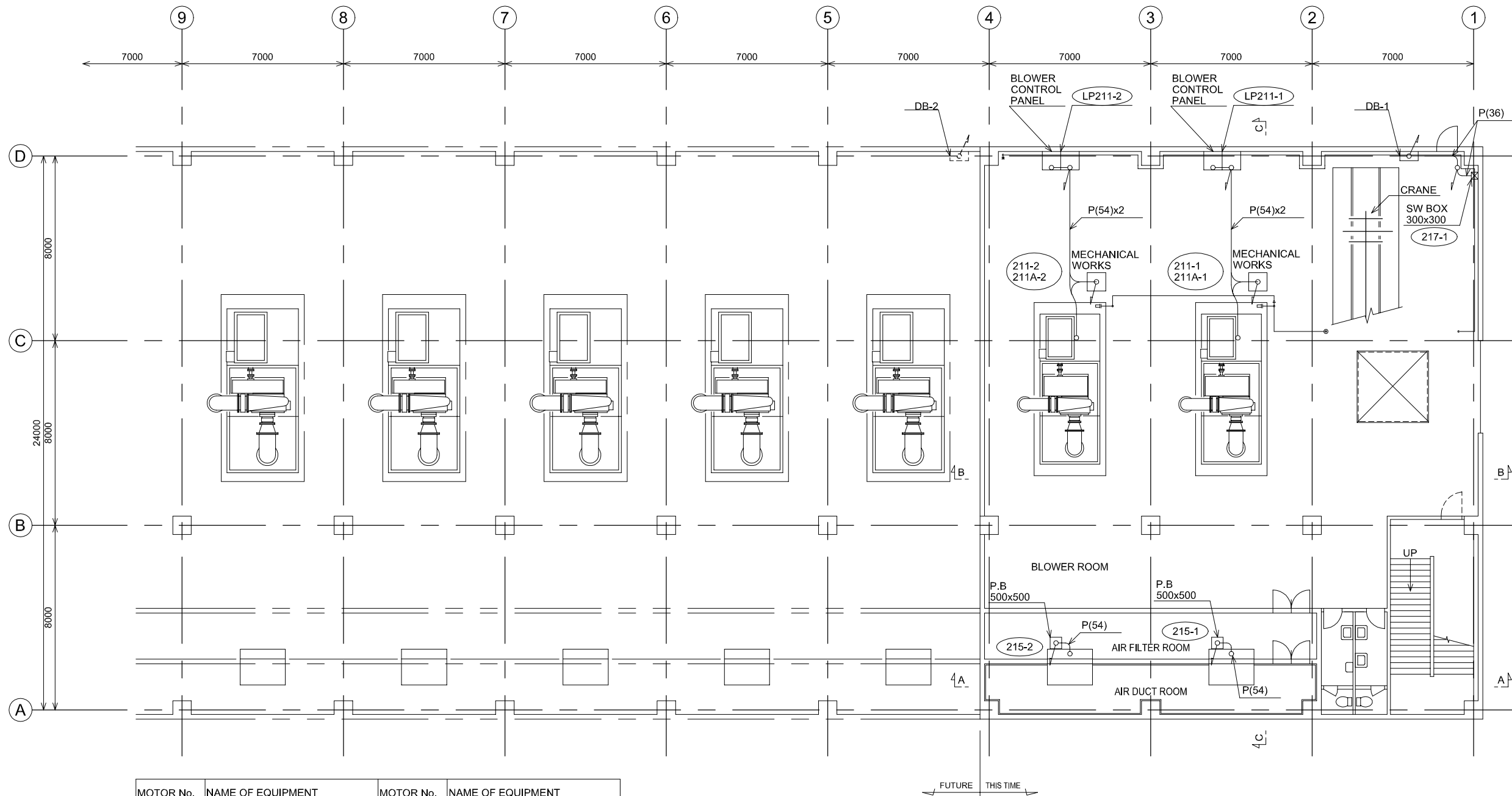


MOTOR No.	NAME OF EQUIPMENT	MOTOR No.	NAME OF EQUIPMENT
211-1	BLOWER (1-1)		(FROM LIFT PUMPING STATION)
211-2	BLOWER (1-2)	125-4	FLOOR DRAINAGE PUMP
211A-1	BLOWER (1-1) AUX. PANEL	125-11	FLOOR DRAINAGE PUMP
211A-2	BLOWER (1-2) AUX. PANEL		
213-1	DISCHARGE VALVE (1-1)	ITEM No.	INSTRUMENTATION EQUIPMENT
213-2	DISCHARGE VALVE (1-2)	FIQ-201-1,2	BLOWER SUCTION AIR FLOW OFFICE METER
215-1	AIR FILTER		
215-2	AIR FILTER		
217-1	CRANE		

**BLOWER ROOM B1 FLOOR PLAN**

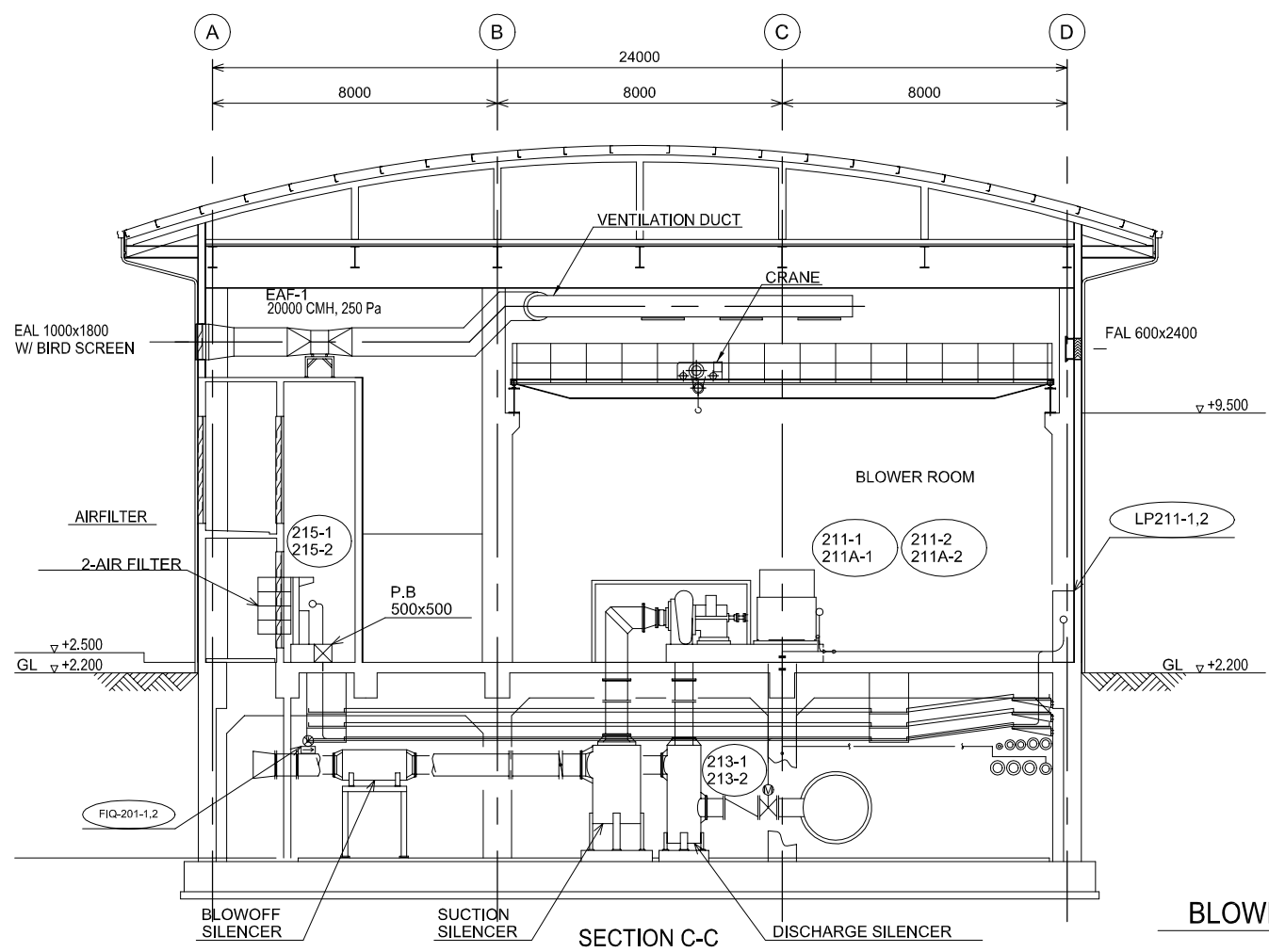
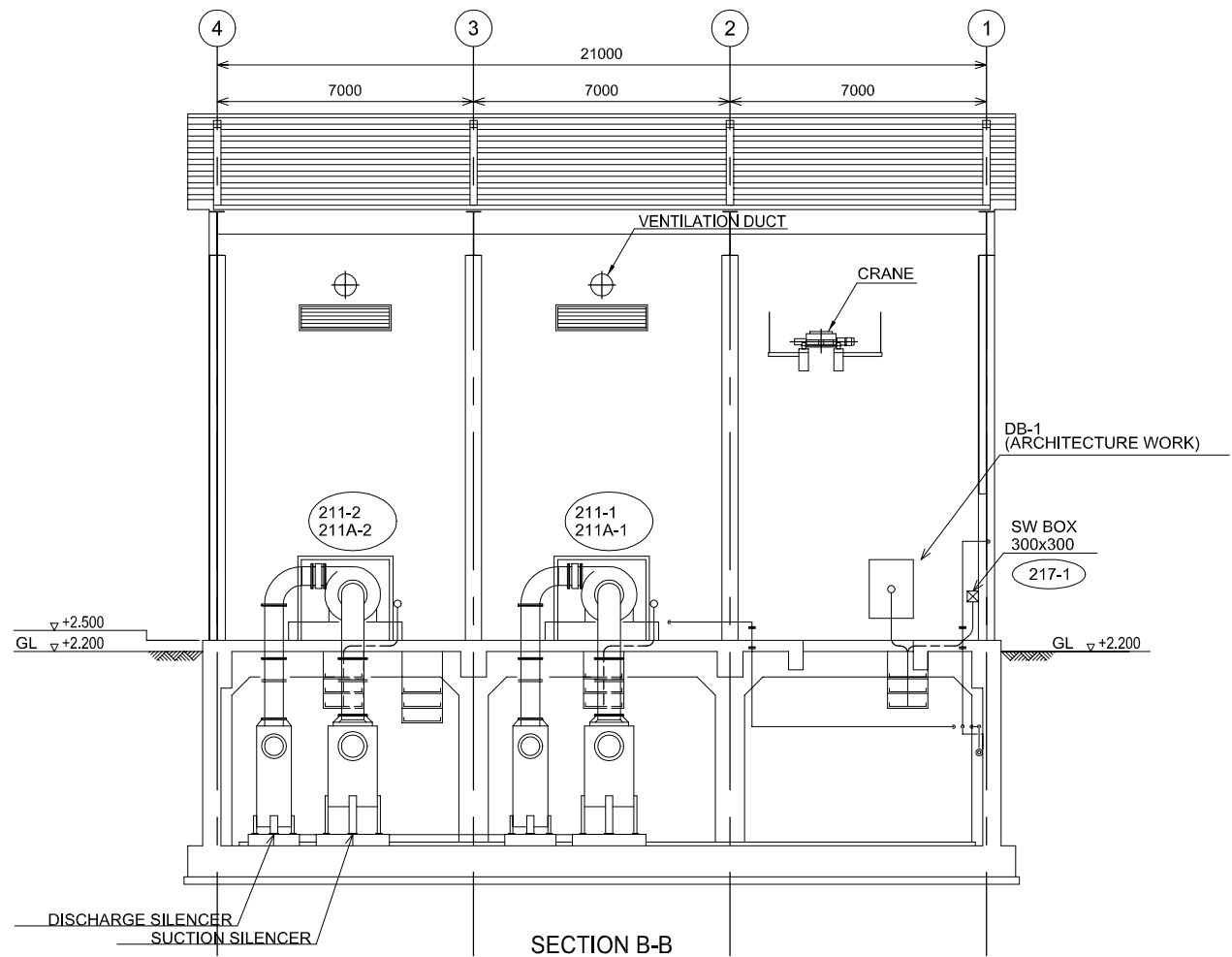
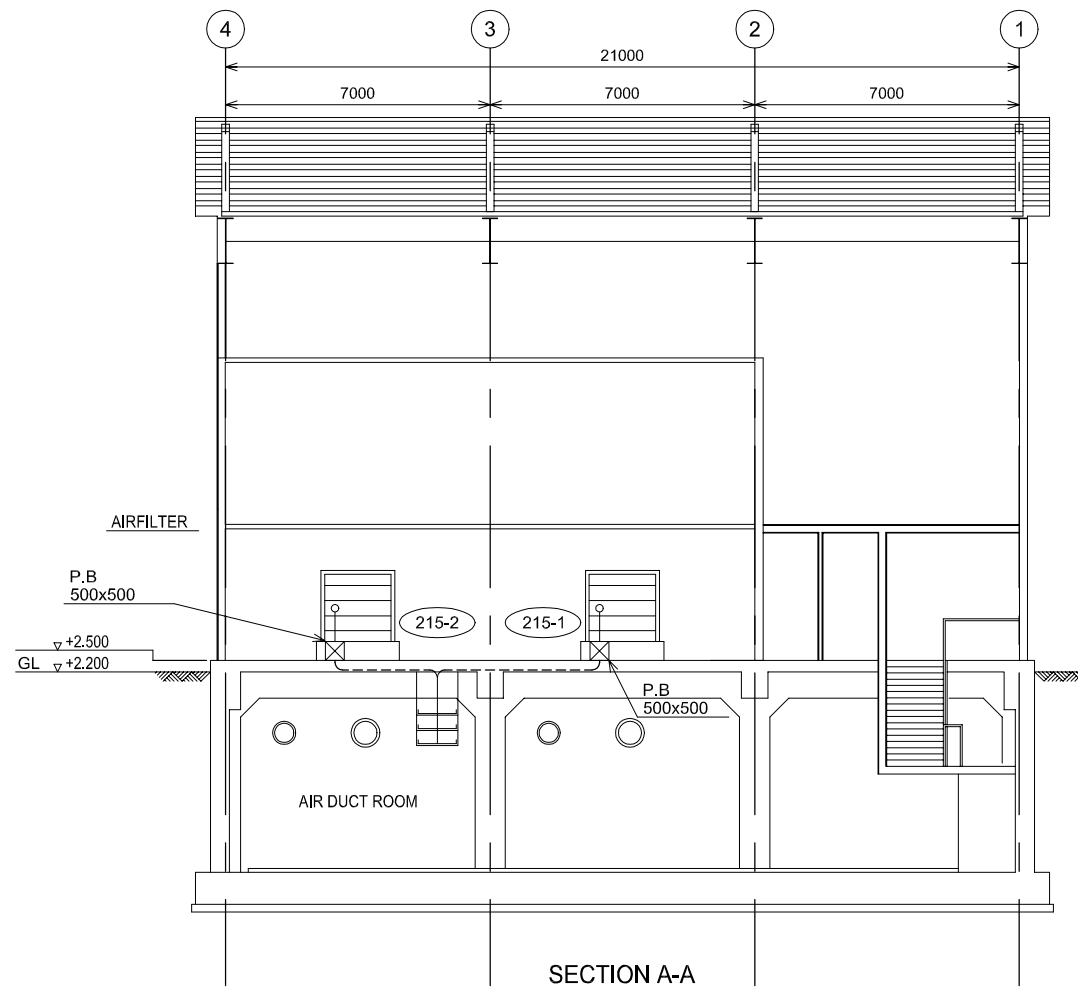
NO.	DATE	DESCRIPTIONS	BY	APPRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT				
WIRING & PIPING PLAN FOR BLOWER BUILDING (1/3)				
SCALE : 1/100				
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KOMIYA NOBUO		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE - WWTP - 537-01		



MOTOR No.	NAME OF EQUIPMENT	MOTOR No.	NAME OF EQUIPMENT
211-1	BLOWER (1-1)	DB-1	DB-1 PANEL (ARCHITECTURE WORK)
211-2	BLOWER (1-2)	DB-2	DB-2 PANEL (ARCHITECTURE WORK)
211A-1	BLOWER (1-1) AUX. PANEL		
211A-2	BLOWER (1-2) AUX. PANEL	ITEM No.	INSTRUMENTATION EQUIPMENT
213-1	DISCHARGE VALVE (1-1)	FIQ-201 -1,2	BLOWER SUCTION AIR FLOW OFFICE METER
213-2	DISCHARGE VALVE (1-2)		
215-1	AIR FILTER		
215-2	AIR FILTER		
217-1	CRANE		

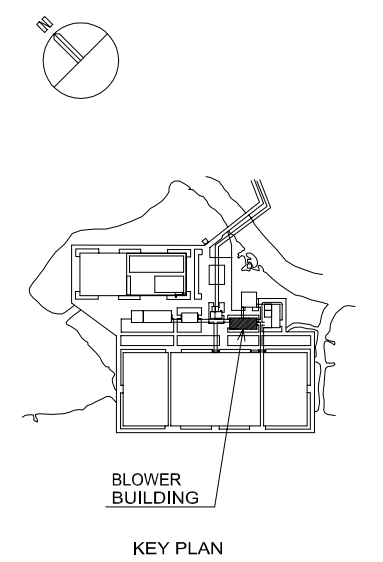
**BLOWER ROOM 1ST FLOOR PLAN**

NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT				
WIRING & PIPING PLAN FOR BLOWER BUILDING (2/3)				
SCALE : 1/100				
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KOMIYA NOBUO		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE - WWTP - 537-02		



BLOWER ROOM 1ST FLOOR PLAN

MOTOR No.	NAME OF EQUIPMENT	MOTOR No.	NAME OF EQUIPMENT
211-1	BLOWER (1-1)	215-2	AIR FILTER
211-2	BLOWER (1-2)	216-1	FLOOR DRAINAGE PUMP
211A-1	BLOWER (1-1) AUX. PANEL	216-2	FLOOR DRAINAGE PUMP
211A-2	BLOWER (1-2) AUX. PANEL	217-1	CRANE
213-1	DISCHARGE VALVE (1-1)		
213-2	DISCHARGE VALVE (1-2)	ITEM No.	INSTRUMENTATION EQUIPMENT
215-1	AIR FILTER	FIQ-201 -1,2	BLOWER SUCTION AIR FLOW OFFICE METER



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING & PIPING PLAN FOR  
BLOWER BUILDING  
(3/3)

SCALE : 1/100

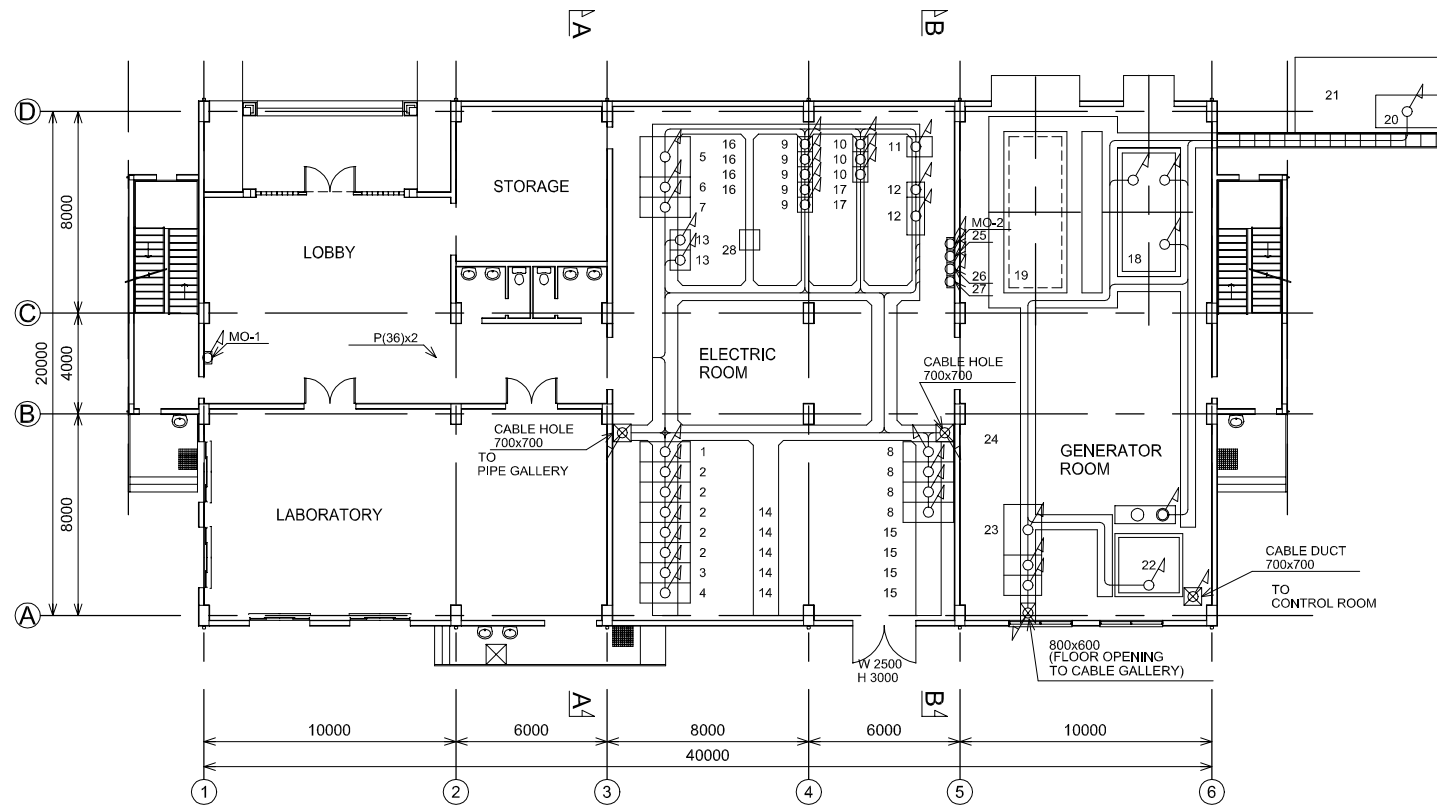
JICA JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

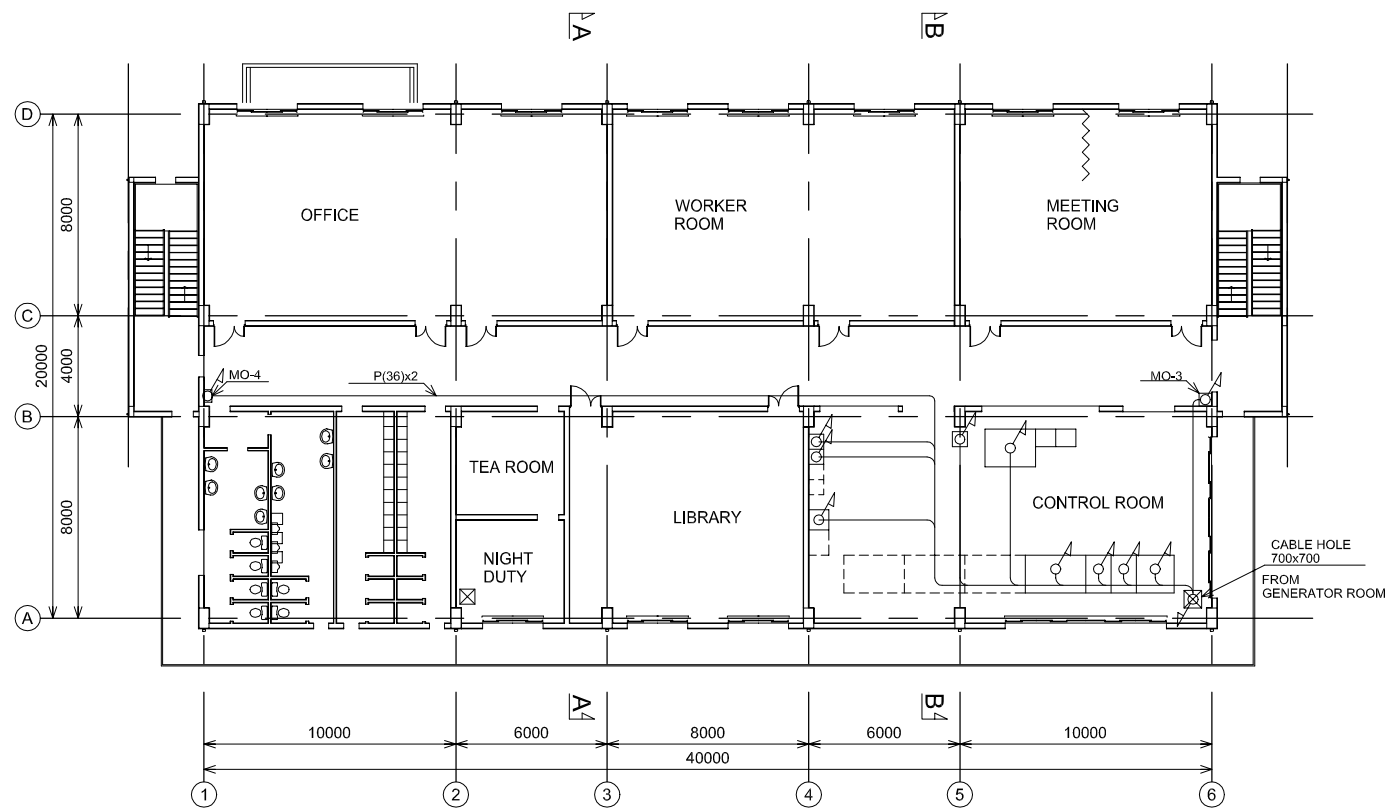
DESIGNED  
KOMIYA NOBUO

CHECKED  
KONDO MASAMI

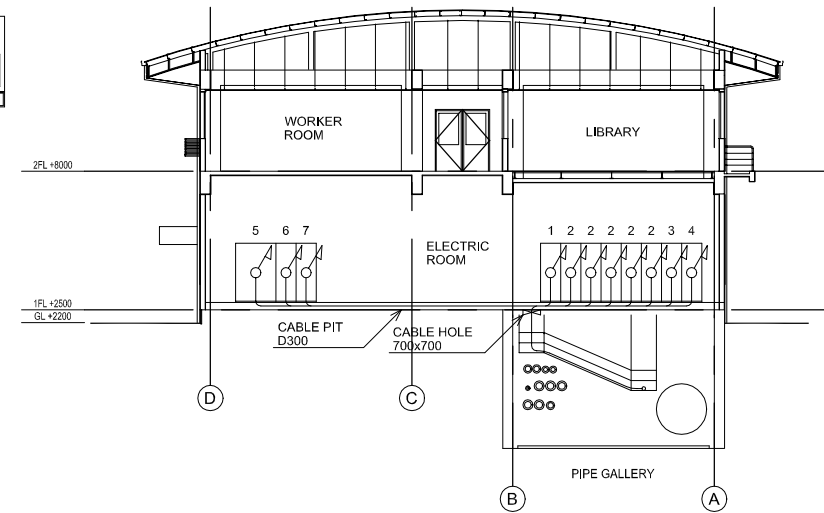
DATE : JUNE 2001 DWG. No. PE - WWTP - 537-03



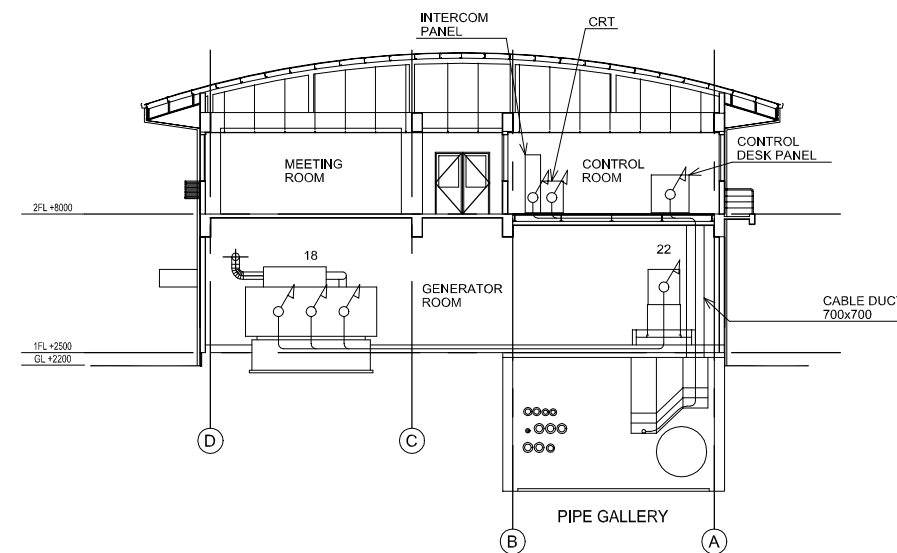
1ST FLOOR PLAN



2ND FLOOR PLAN

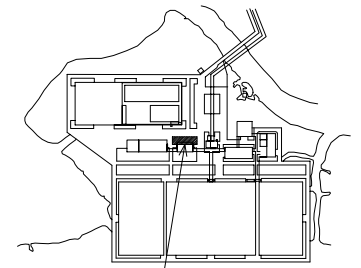
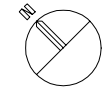


SECTION A-A



SECTION B-B

No.	PANEL TYPE	No.	PANEL TYPE
1	3.3kV INCOMING PANEL	17	Ry-2(PHASE-2)
2	3.3kV FEEDER SWG	18	750kVA EMERGENCY GENERATOR
3	FDS PANEL	19	1500kVA EMERGENCY GENERATOR(PHASE-2)
4	SECTION PANEL	20	COOLING UNIT
5	750kVA TR PANEL	21	COOLING UNIT(PHASE-2)
6	LOW VOLTAGE SWG	22	FUEL TANK
7	AC DISTRIBUTION BOARD	23	DEG PANEL
8	CAPACITOR PANEL	24	DEG PANEL(PHASE-2)
9	CC-200-1	25	OUTDOOR LIGHTING DISTRIBUTION BOARD
10	Ry-1	26	PIPE GALLERY LIGHTING DISTRIBUTION BOARD
11	DC POWER SUPPLY SYSTEM	27	VENTILATION FAN CONTROL SWITCH
12	UPS	28	OLTC CONTROL PANEL
13	22kV CONTROL & PROTECTION		
14	3.3kV FEEDER SWG(PHASE-2)		
15	CAPACITOR PANEL(PHASE-2)		
16	CC-200-2(PHASE-2)		



MAIN BUILDING  
KEY PLAN

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING & PIPING PLAN  
FOR  
MAIN BUILDING

SCALE : 1/200

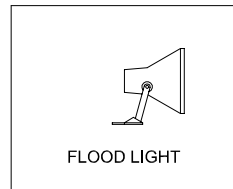
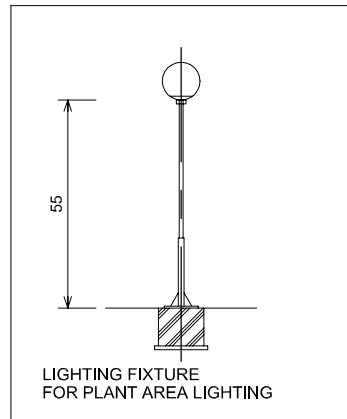
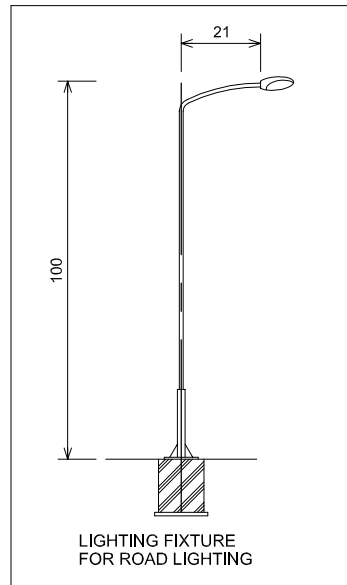
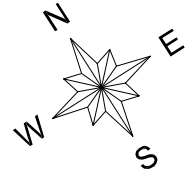
JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED  
KOMIYA NOBUO

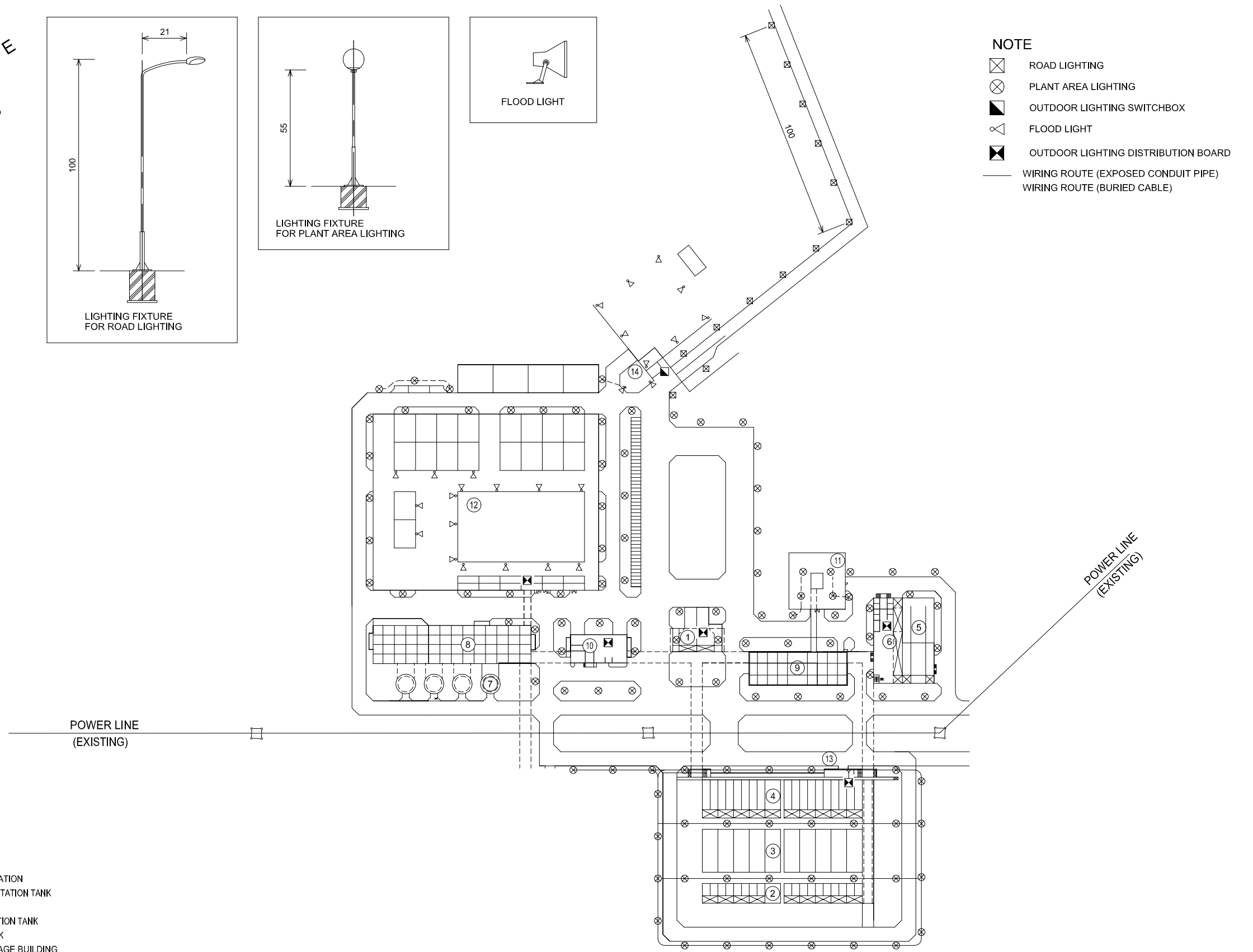
CHECKED  
KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE - WWTP - 538



**NOTE**

- ☒ ROAD LIGHTING
- ⊗ PLANT AREA LIGHTING
- ▣ OUTDOOR LIGHTING SWITCHBOX
- △ FLOOD LIGHT
- ⊠ OUTDOOR LIGHTING DISTRIBUTION BOARD
- WIRING ROUTE (EXPOSED CONDUIT PIPE)
- WIRING ROUTE (BURIED CABLE)



**LEGEND**

- ① LIFT PUMPING STATION
- ② PRIMARY SEDIMENTATION TANK
- ③ AERATION TANK
- ④ FINAL SEDIMENTATION TANK
- ⑤ DISINFECTION TANK
- ⑥ CHLORINE STORAGE BUILDING
- ⑦ GRAVITY THICKENER
- ⑧ DEWATERING & CENTRIFUGAL THICKENER BUILDING
- ⑨ BLOWER BUILDING
- ⑩ MAIN BUILDING
- ⑪ MAIN SUBSTATION
- ⑫ COMPOST PLANT FACILITY
- ⑬ WATER TREATMENT ELECTRIC ROOM
- ⑭ GUARD HOUSE


NO.	DATE	DESCRIPTIONS	BY	APRO.
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REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING PLAN  
FOR  
OUTDOOR LIGHTING SYSTEM

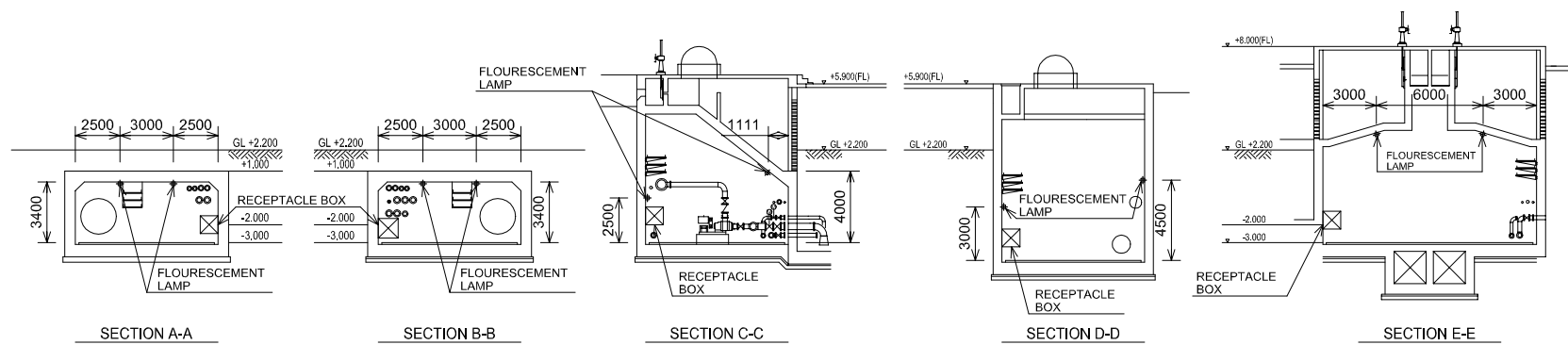
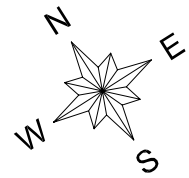
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JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

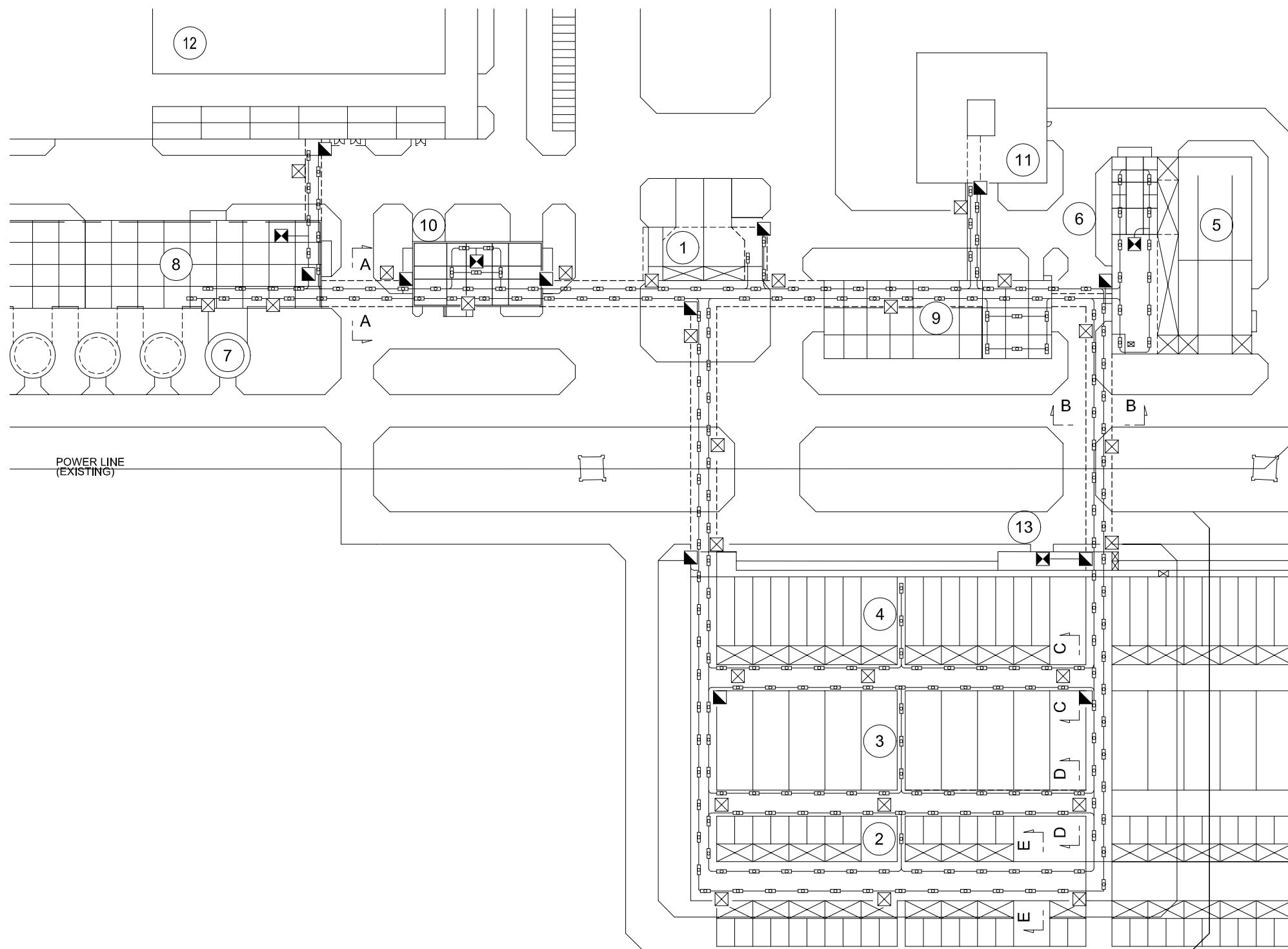
DESIGNED KOMIYA NOBUO	CHECKED KONDO MASAMI
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DATE : JUNE 2001      DWG. No. PE - WWTP - 539



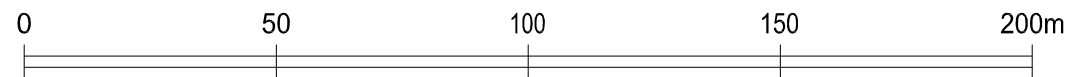
**NOTE**

- FLOURESCEMENT LAMP(20W)
- ▣ LIGHTING SWITCH BOX
- ⊗ EMERGENCY LAMP (WITH BATTERY)
- ⊙ EXIT SIGN LAMP (WITH BATTERY)
- ⊠ RECEPTACLE BOX (1-PHASEx3,3-PHASEx2)
- ⊞ PIPE GALLERY LIGHTING DISTRIBUTIO BOARD
- WIRING & PIPING ROUTE



**LEGEND**

- ① LIFT PUMPING STATION
- ② PRIMARY SEDIMENTATION TANK
- ③ AERATION TANK
- ④ FINAL SEDIMENTATION TANK
- ⑤ DISINFECTION TANK
- ⑥ CHLORINE STORAGE BUILDING
- ⑦ GRAVITY THICKENER
- ⑧ DEWATERING & CENTRIFUGAL THICKENER BUILDING
- ⑨ BLOWER BUILDING
- ⑩ MAIN BUILDING
- ⑪ MAIN SUBSTATION
- ⑫ COMPOST PLANT FACILITY
- ⑬ WATER TREATMENT ELECTRIC ROOM



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING & PIPING PLAN FOR  
PIPE GALLERY LIGHTING SYSTEM  
(1/2)

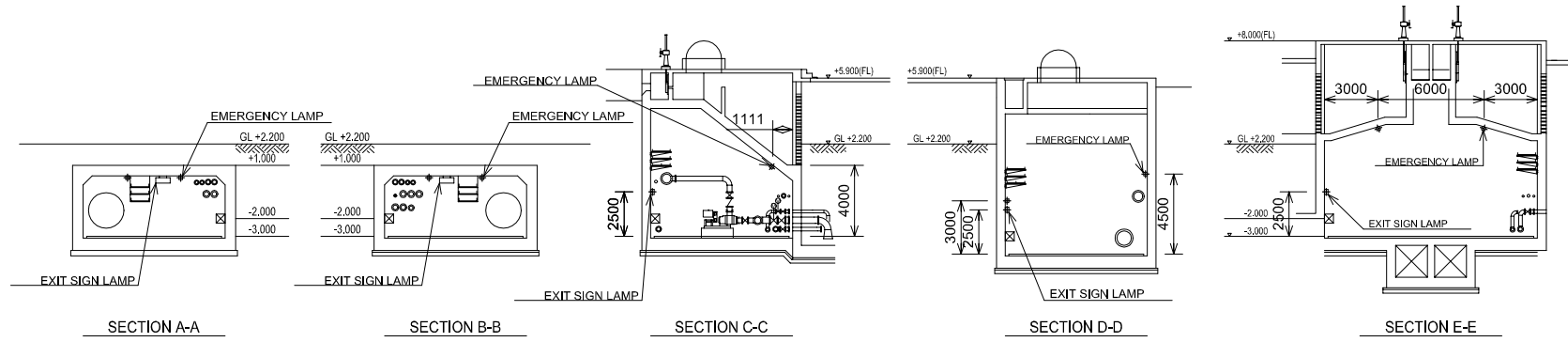
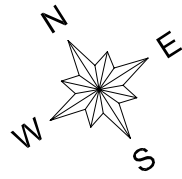
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JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

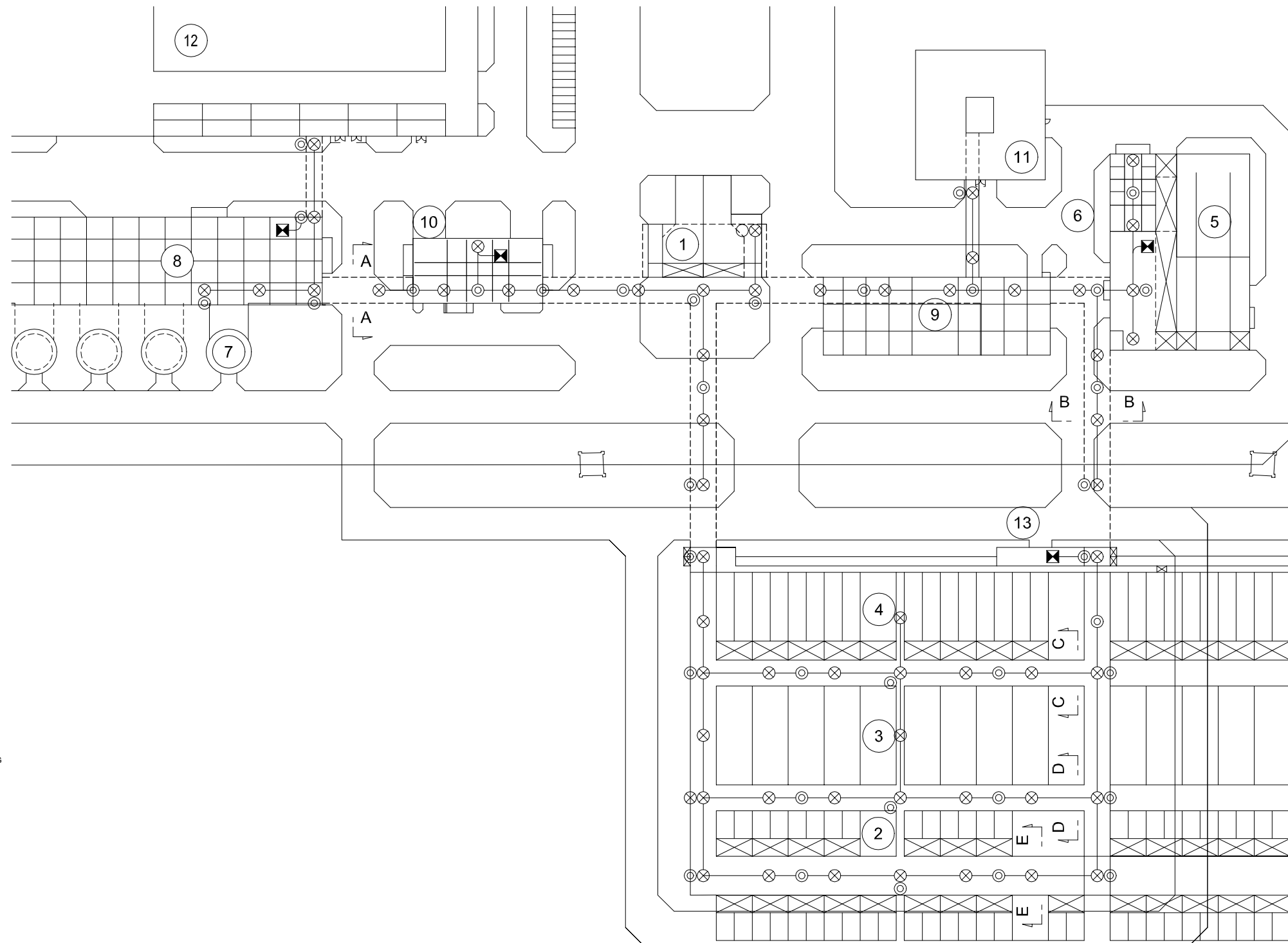
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DATE : JUNE 2001      DWG. No. PE - WWTP - 540-01



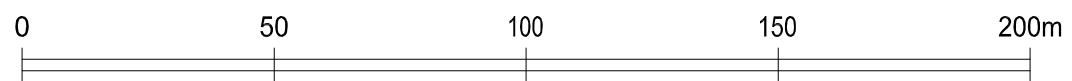
**NOTE**

- FLOURESCEMET LAMP(20W)
- ▣ LIGHTING SWITCH BOX
- ⊗ EMERGENCY LAMP (WITH BATTERY)
- ⊙ EXIT SIGN LAMP (WITH BATTERY)
- ⊠ RECEPTACLE BOX (1-PHASEx3,3-PHASEx2)
- ▣ PIPE GALLERY LIGHTING DISTRIBUTIO BOARD
- WIRING & PIPING ROUTE



**LEGEND**

- ① LIFT PUMPING STATION
- ② PRIMARY SEDIMENTATION TANK
- ③ AERATION TANK
- ④ FINAL SEDIMENTATION TANK
- ⑤ DISINFECTION TANK
- ⑥ CHLORINE STORAGE BUILDING
- ⑦ GRAVITY THICKENER
- ⑧ DEWATERING & CENTRIFUGAL THICKENER BUILDING
- ⑨ BLOWER BUILDING
- ⑩ MAIN BUILDING
- ⑪ MAIN SUBSTATION
- ⑫ COMPOST PLANT FACILITY
- ⑬ WATER TREATMENT ELECTRIC ROOM



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING & PIPING PLAN FOR  
PIPE GALLERY LIGHTING SYSTEM  
(2/2)

SCALE : 1/750

JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

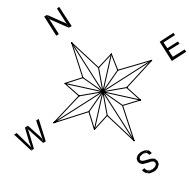
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DESIGNED  
KOMIYA NOBUO

CHECKED  
KONDO MASAMI

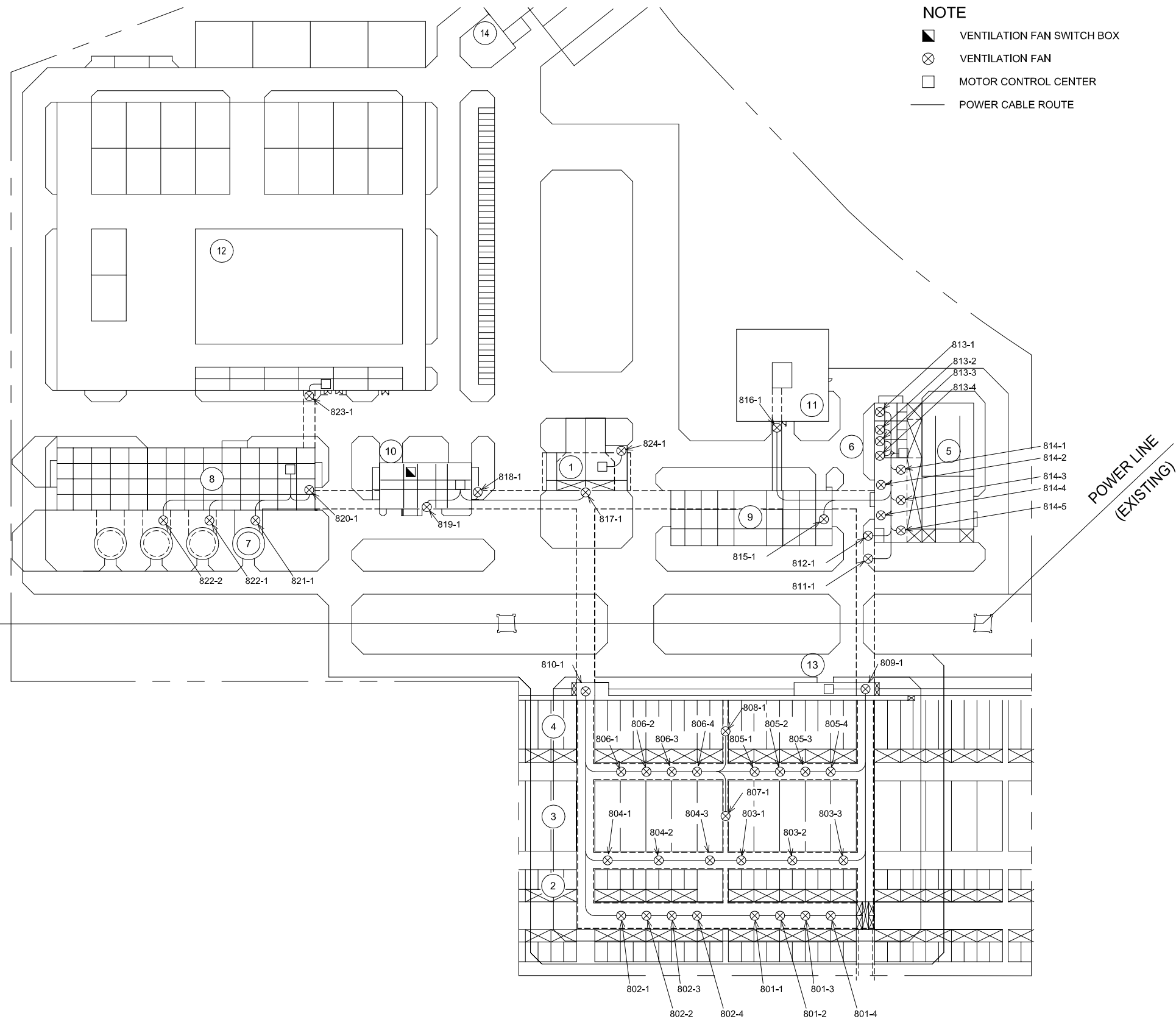
DATE : JUNE 2001 DWG. No. PE - WWTP - 540-02





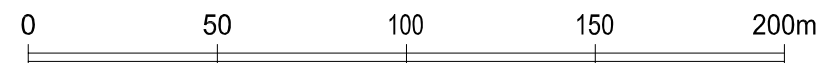
**NOTE**

- VENTILATION FAN SWITCH BOX
- ⊗ VENTILATION FAN
- MOTOR CONTROL CENTER
- POWER CABLE ROUTE



**LEGEND**

- ① LIFT PUMPING STATION
- ② PRIMARY SEDIMENTATION TANK
- ③ AERATION TANK
- ④ FINAL SEDIMENTATION TANK
- ⑤ DISINFECTION TANK
- ⑥ CHLORINE STORAGE BUILDING
- ⑦ GRAVITY THICKENER
- ⑧ DEWATERING & CENTRIFUGAL THICKENER BUILDING
- ⑨ BLOWER BUILDING
- ⑩ MAIN BUILDING
- ⑪ MAIN SUBSTATION
- ⑫ COMPOST PLANT FACILITY
- ⑬ WATER TREATMENT ELECTRIC ROOM
- ⑭ GUARD HOUSE



NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

WIRING & PIPING PLAN  
FOR  
CABLE GALLERY VENTILATION SYSTEM

SCALE : 1/1000

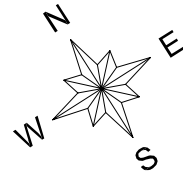
JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KOMIYA NOBUO	CHECKED KONDO MASAMI
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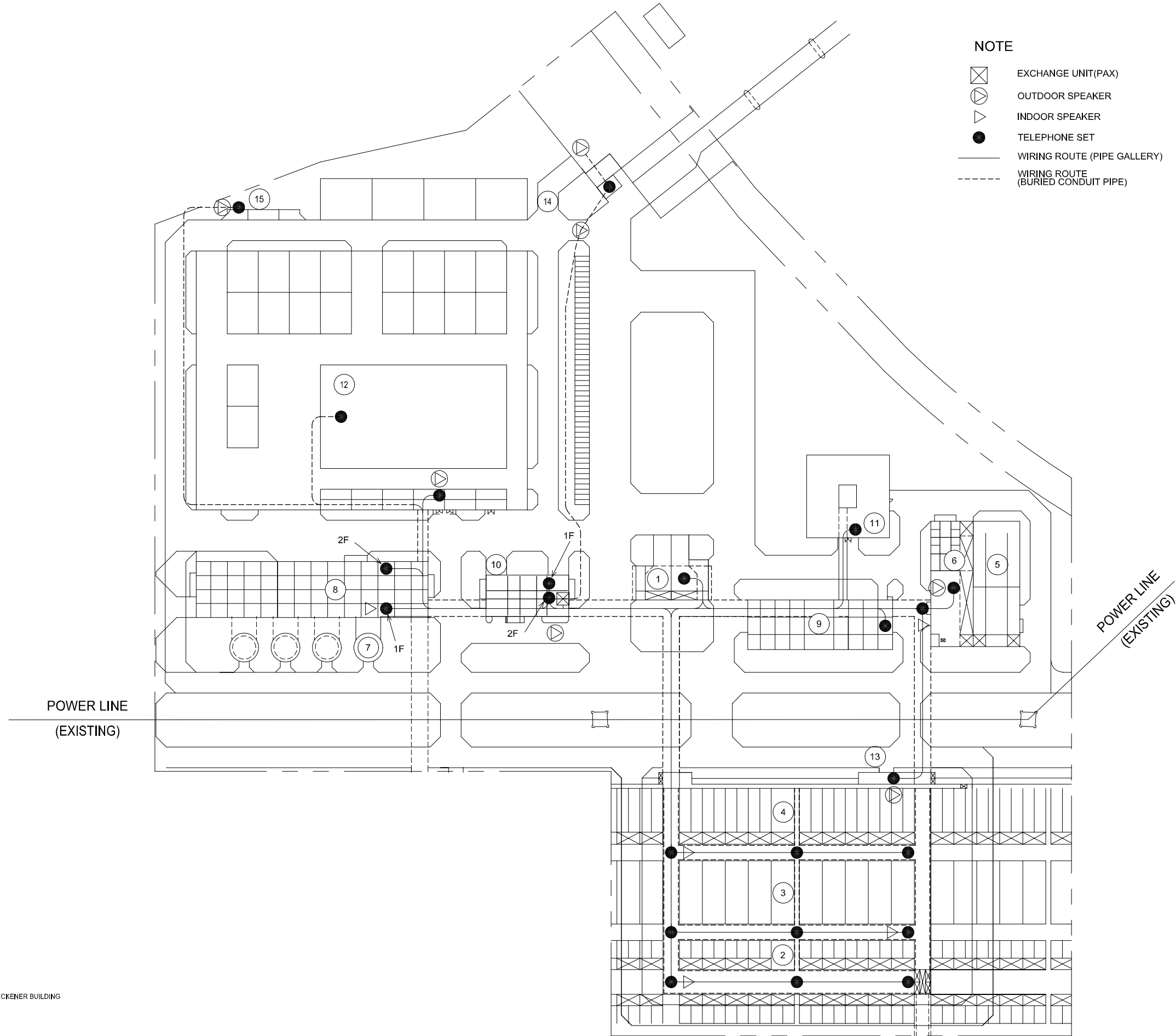
DATE : JUNE 2001      DWG. No. PE - WWTP - 541





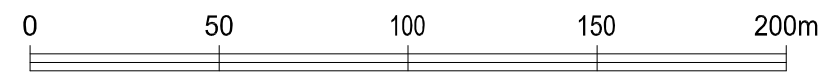
**NOTE**

- ⊠ EXCHANGE UNIT(PAX)
- ⊙ OUTDOOR SPEAKER
- ▽ INDOOR SPEAKER
- TELEPHONE SET
- WIRING ROUTE (PIPE GALLERY)
- - - WIRING ROUTE (BURIED CONDUIT PIPE)



**LEGEND**

- ① LIFT PUMPING STATION
- ② PRIMARY SEDIMENTATION TANK
- ③ AERATION TANK
- ④ FINAL SEDIMENTATION TANK
- ⑤ DISINFECTION TANK
- ⑥ CHLORINE STORAGE BUILDING
- ⑦ GRAVITY THICKENER
- ⑧ DEWATERING & CENTRIFUGAL THICKENER BUILDING
- ⑨ BLOWER BUILDING
- ⑩ MAIN BUILDING
- ⑪ MAIN SUBSTATION
- ⑫ COMPOST PLANT FACILITY
- ⑬ WATER TREATMENT ELECTRIC ROOM
- ⑭ GUARD HOUSE



NO.	DATE	DESCRIPTIONS	BY	APRO.

**REVISIONS**

PROJECT MANAGEMENT UNIT FOR  
HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT

THE DETAILED DESIGN ON HO CHI MINH CITY  
WATER ENVIRONMENT IMPROVEMENT PROJECT  
IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE E  
WASTEWATER TREATMENT PLANT

**WIRING PLAN  
FOR  
COMMUNICATION SYSTEM**

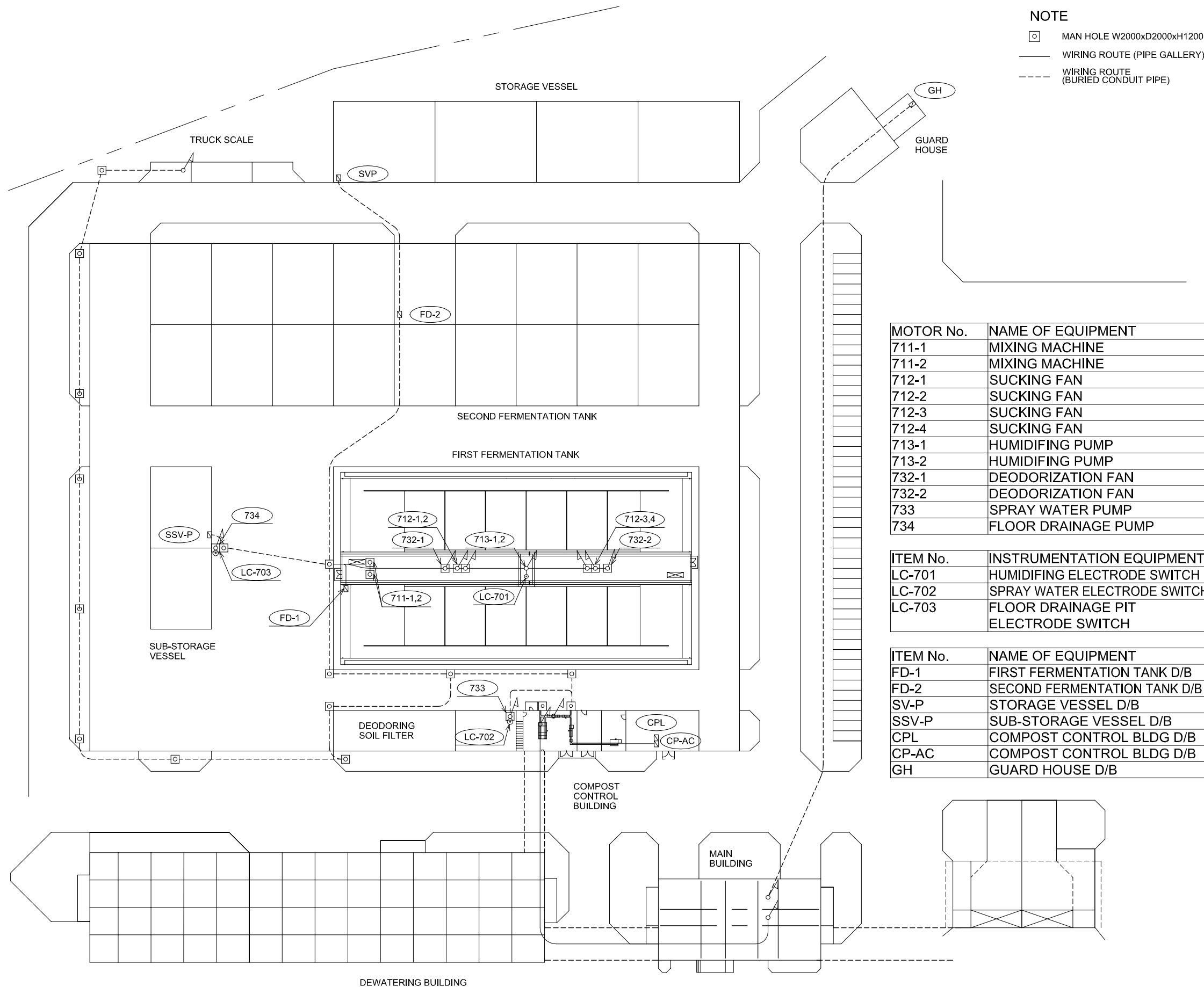
SCALE : 1/1500

JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KOMIYA NOBUO	CHECKED KONDO MASAMI
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DATE : JUNE 2001      DWG. No. PE - WWTP - 542



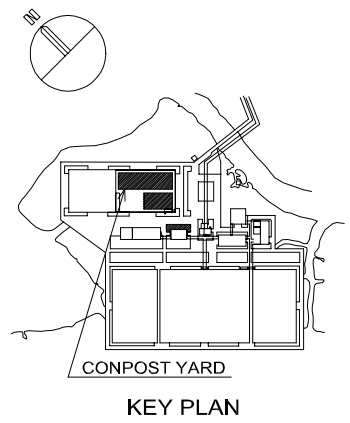
**NOTE**

- MAN HOLE W2000xD2000xH1200
- WIRING ROUTE (PIPE GALLERY)
- - - WIRING ROUTE (BURIED CONDUIT PIPE)

MOTOR No.	NAME OF EQUIPMENT
711-1	MIXING MACHINE
711-2	MIXING MACHINE
712-1	SUCKING FAN
712-2	SUCKING FAN
712-3	SUCKING FAN
712-4	SUCKING FAN
713-1	HUMIDIFYING PUMP
713-2	HUMIDIFYING PUMP
732-1	DEODORIZATION FAN
732-2	DEODORIZATION FAN
733	SPRAY WATER PUMP
734	FLOOR DRAINAGE PUMP

ITEM No.	INSTRUMENTATION EQUIPMENT
LC-701	HUMIDIFYING ELECTRODE SWITCH
LC-702	SPRAY WATER ELECTRODE SWITCH
LC-703	FLOOR DRAINAGE PIT ELECTRODE SWITCH

ITEM No.	NAME OF EQUIPMENT
FD-1	FIRST FERMENTATION TANK D/B
FD-2	SECOND FERMENTATION TANK D/B
SV-P	STORAGE VESSEL D/B
SSV-P	SUB-STORAGE VESSEL D/B
CPL	COMPOST CONTROL BLDG D/B
CP-AC	COMPOST CONTROL BLDG D/B
GH	GUARD HOUSE D/B



NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE E WASTEWATER TREATMENT PLANT				
WIRING & PIPING PLAN FOR COMPOST PLANT				
SCALE : 1/500				
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KOMIYA NOBUO		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PE - WWTP - 543		