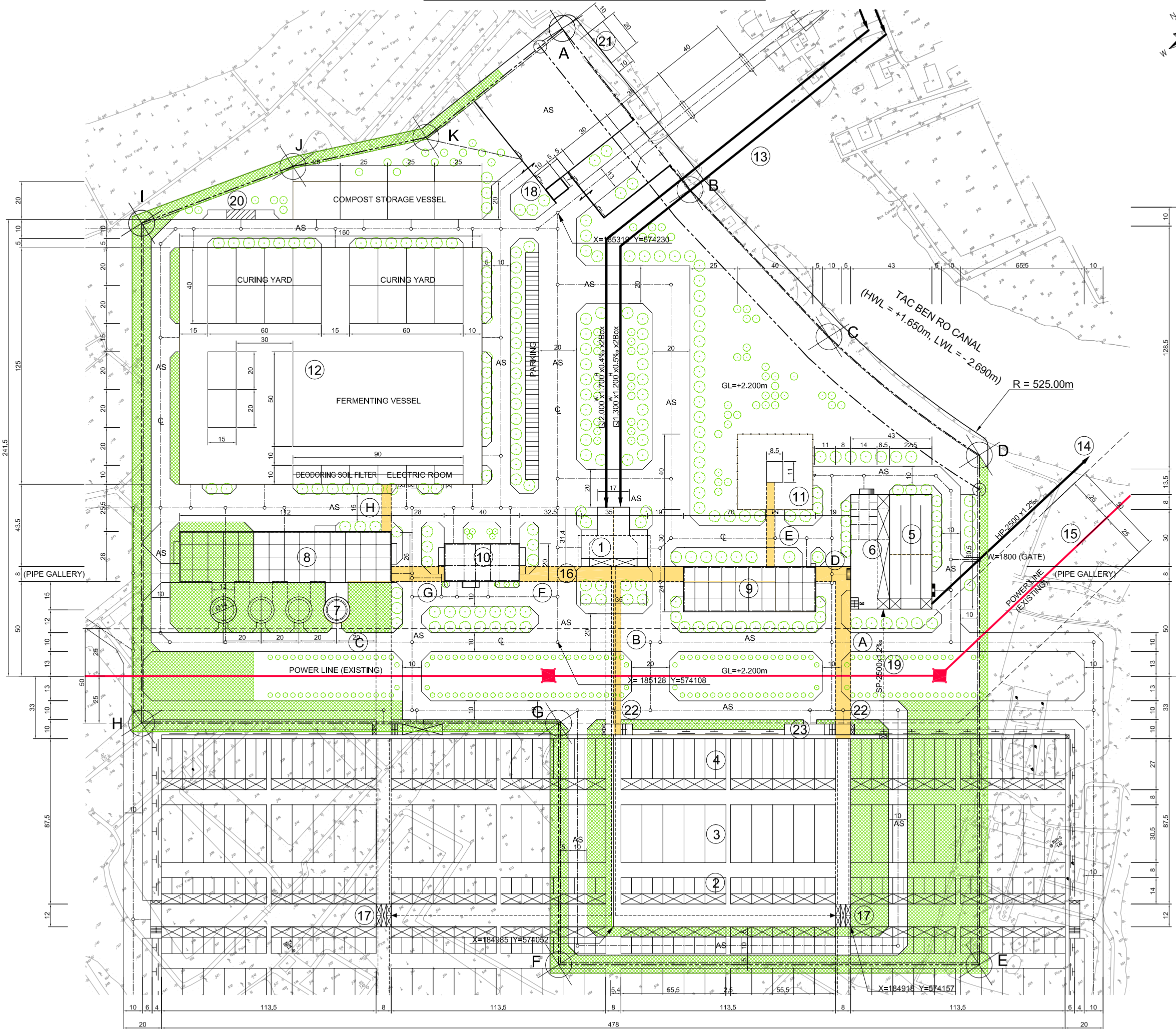
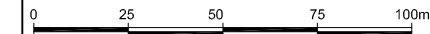


PIPE GALLERY LAYOUT PLAN Scale: 1/1000



- LEGEND**
- ① LIFT PUMPING STATION
 - ② PRIMARY SEDIMENTATION TANK (5.0m² x13.0m² x3.0m² x160 waterway 80 tank)
 - ③ AERATION TANK (10.5m² x28.0m² x5.5m² x80 tank)
 - ④ FINAL SEDIMENTATION TANK (5.0m² x26.0m² x3.5m² x160 waterway 80 tank)
 - ⑤ DISINFECTION TANK (5.0m² x54.0m² x5.0m² x3 bend 4 waterway 1 tank)
 - ⑥ CHLORINE STORAGE BUILDING
 - ⑦ SAND FILTRATION EFFLUENT TANK, SECONDARY TREATMENT TANK
 - ⑧ GRAVITY THICKENER (14.0m² x3.5m² x4 tank)
 - ⑨ DEWATERING & CENTRIFUGAL THICKENER BUILDING
 - ⑩ BLOWER BUILDING
 - ⑪ MAIN BUILDING (Control Room, Electrical Room, etc.)
 - ⑫ MAIN SUBSTATION
 - ⑬ COMPOST PLANT FACILITY
 - ⑭ INLET PIPE (Ø1,300 x1,200 x0.5% x2Box, Ø2,000 x1,700 x0.4% x2Box)
 - ⑮ EFFLUENT PIPE (Ø2,500mm x1.2%, HP)
 - ⑯ POWER LINE (EXISTING)
 - ⑰ PIPE GALLERY
 - ⑱ DISTRIBUTION TANK
 - ⑲ GUARD ROOM
 - ⑳ CONNECTION PIPE (Ø2,500mm x1.2%, SP)
 - ㉑ TRUCK SCALE
 - ㉒ JETTY
 - ㉓ STAIRCASE
 - ㉔ WWTP ELECTRICAL ROOM
 - AS: ASPHALT CONCRETE
 - : FUTURE

NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY LAYOUT PLAN
A~H

SCALE = 1 / 1000

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

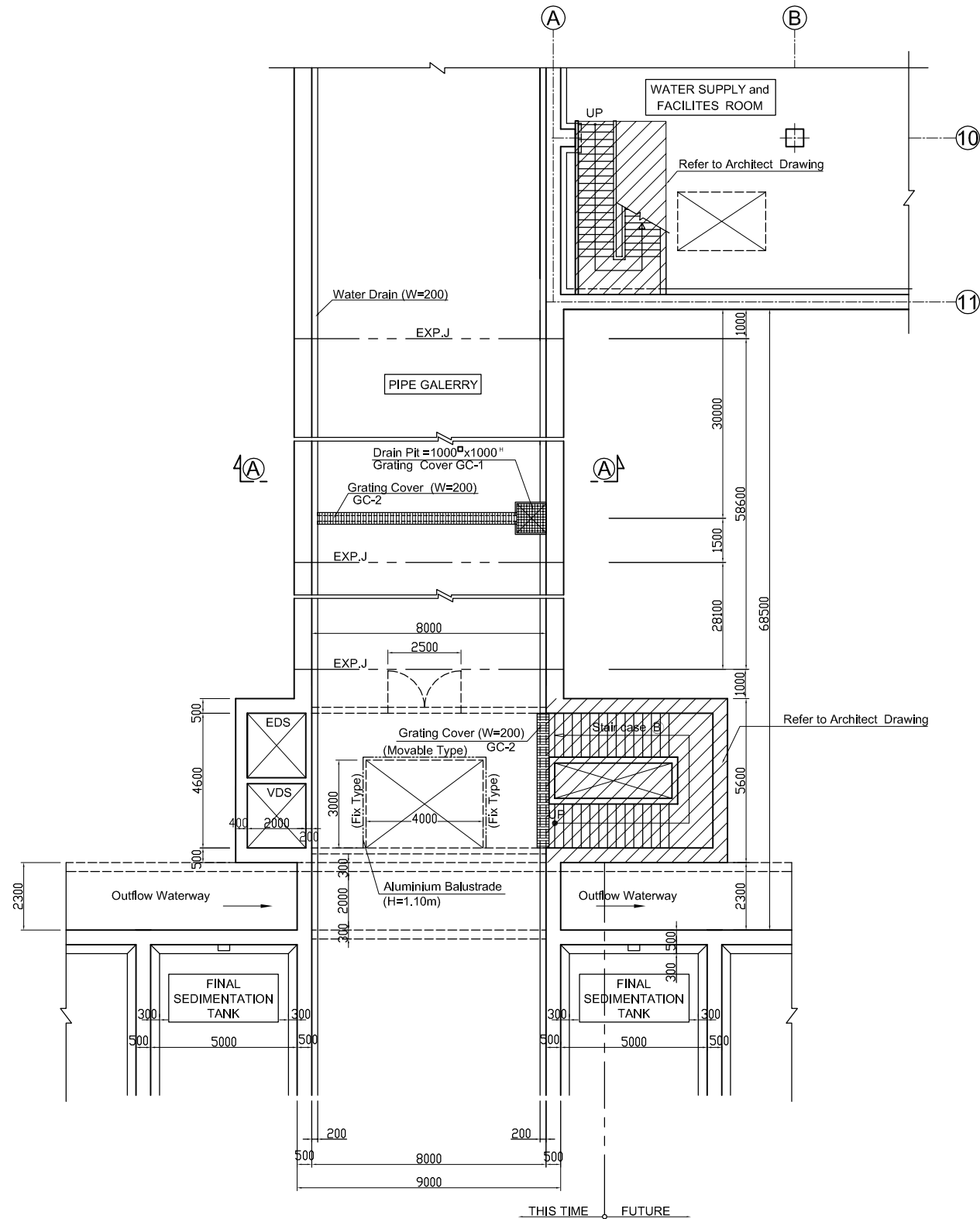
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIMURA TORU	CHECKED KONDO MASAMI
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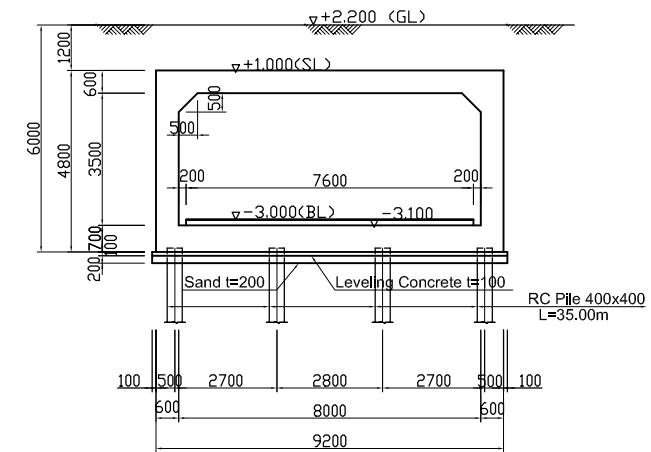
DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 01

PIPE GALLERY (A) PLAN and SECTION. Scale: 1/100

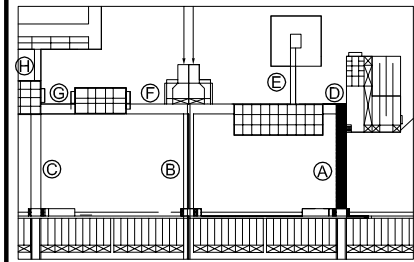
PLAN. Scale: 1/100



SECTION (A)- (A) Scale: 1/100



KEY PLAN



⊙ = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (A) PLAN and SECTION

SCALE : 1 / 100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KIMURA TORU

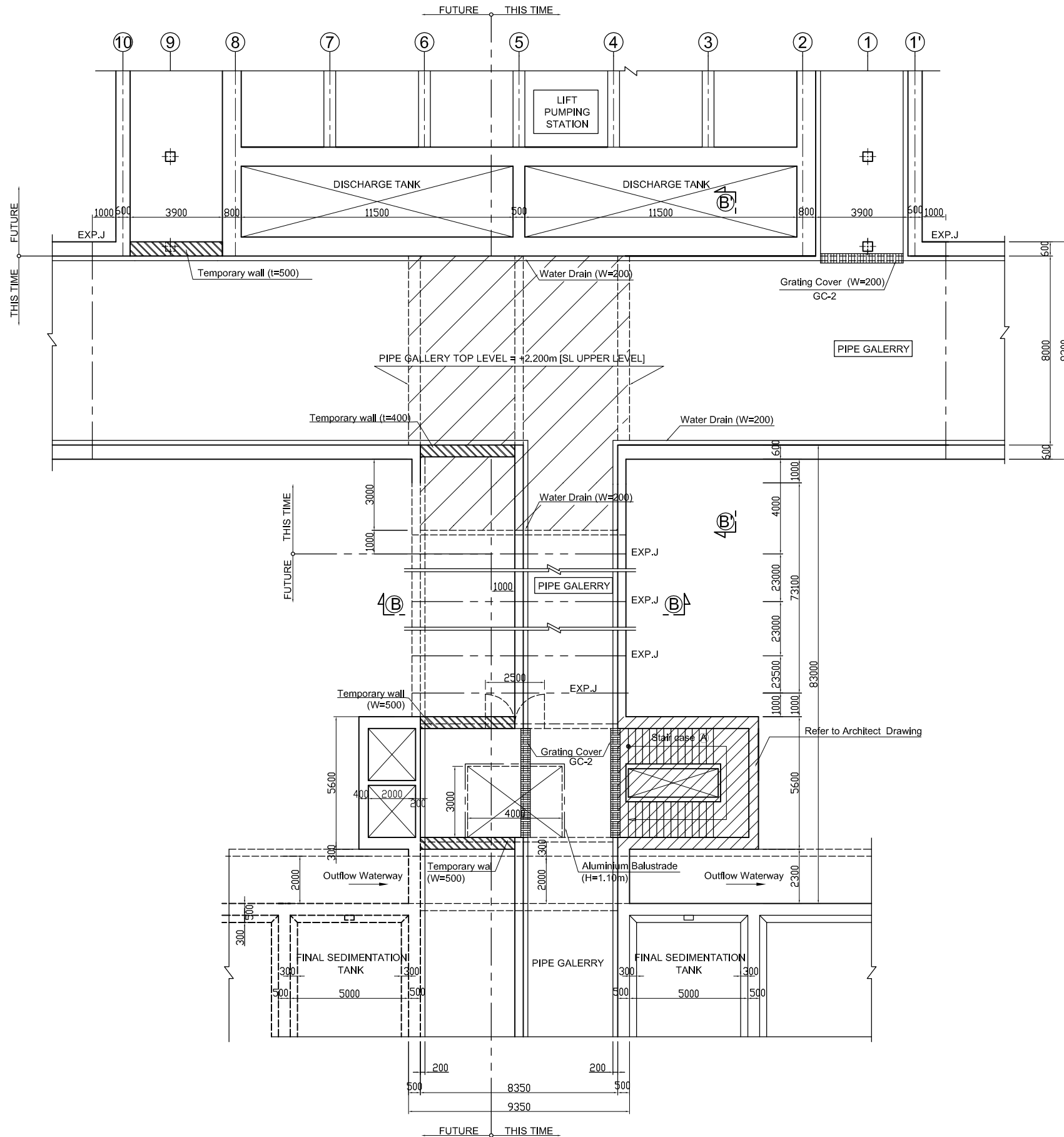
CHECKED
KONDO MASAMI

DATE : JUNE 2001

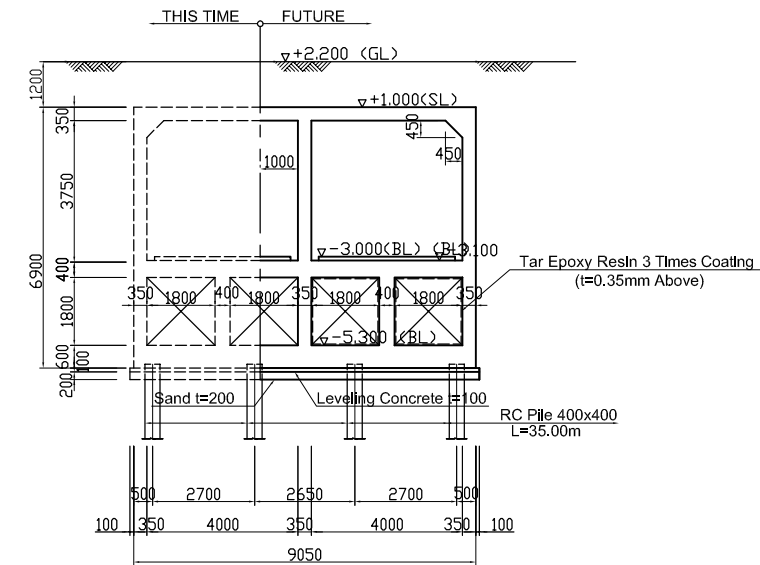
DWG. No. PE - WWTP - 209 - 02

PIPE GALLERY (B) PLAN and SECTION. Scale: 1/100

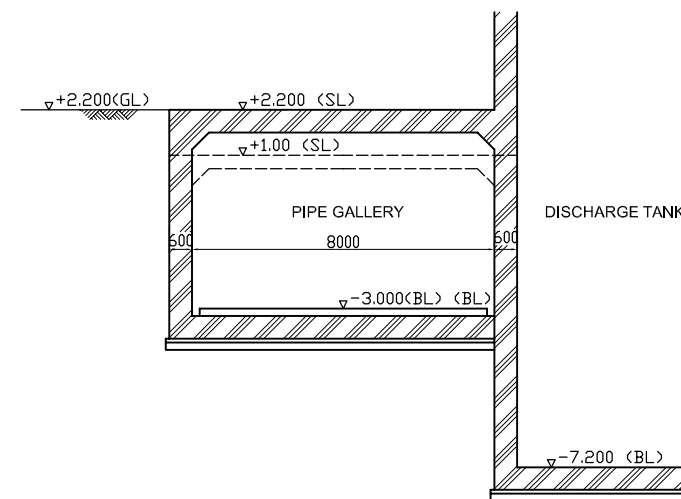
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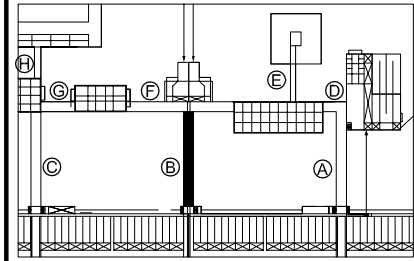
SECTION (B)-(B). Scale: 1/100



SECTION (B')-(B'). Scale: 1/100



KEY PLAN



© = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (B) PLAN and SECTION

SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

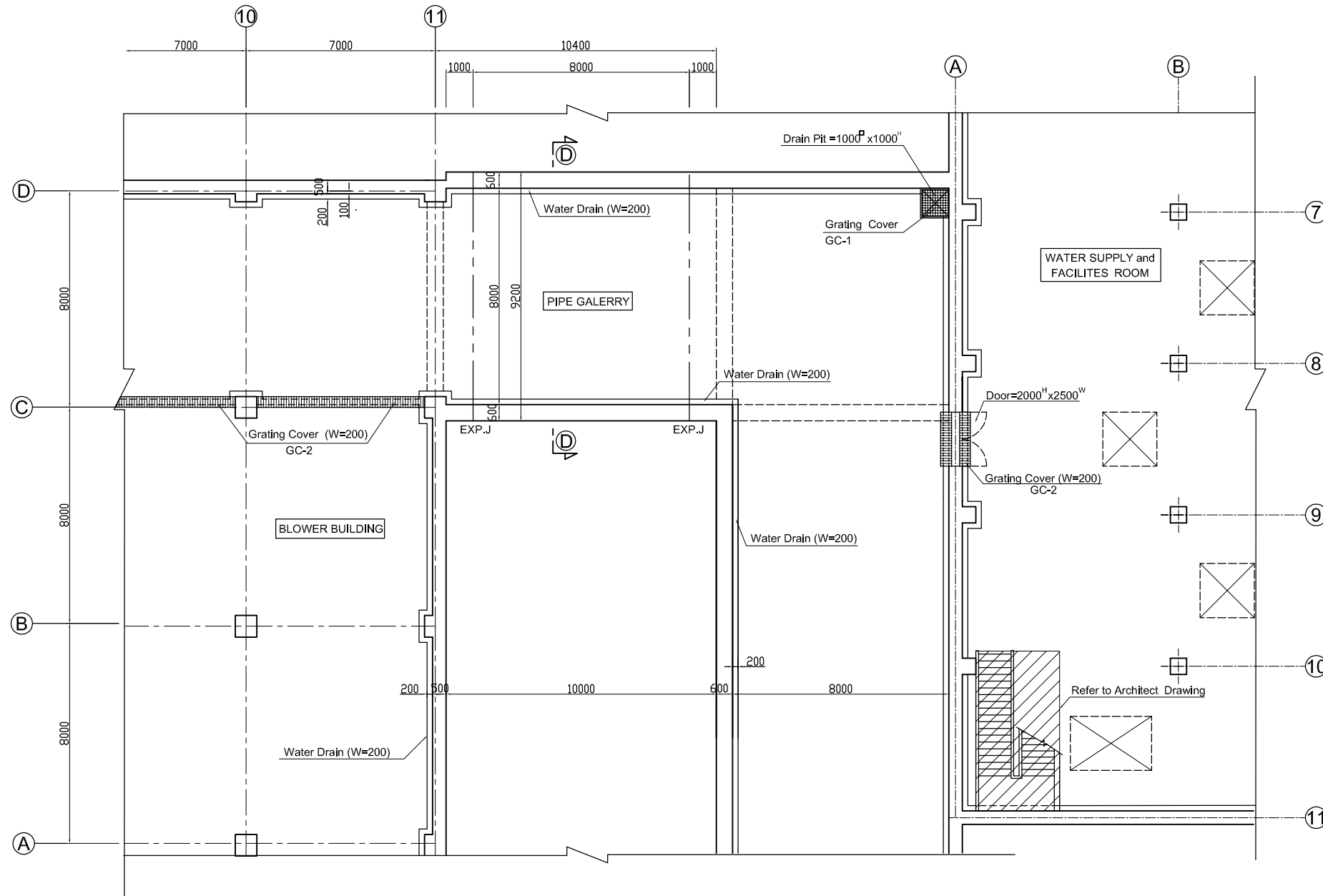
DESIGNED
KIMURA TORU

CHECKED
KONDO MASAMI

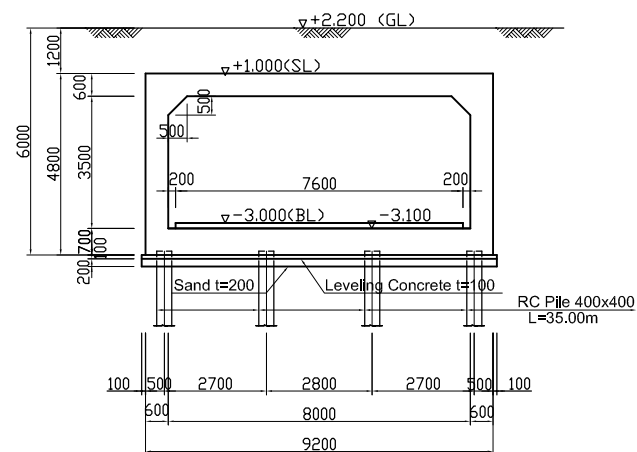
DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 03

PIPE GALLERY (D) PLAN and SECTION. Scale: 1/100

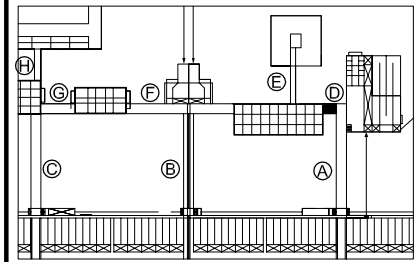
PLAN. Scale: 1/100



SECTION (D)-D Scale: 1/100



KEY PLAN



Ⓞ = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (D) PLAN and SECTION

SCALE : 1 / 100

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

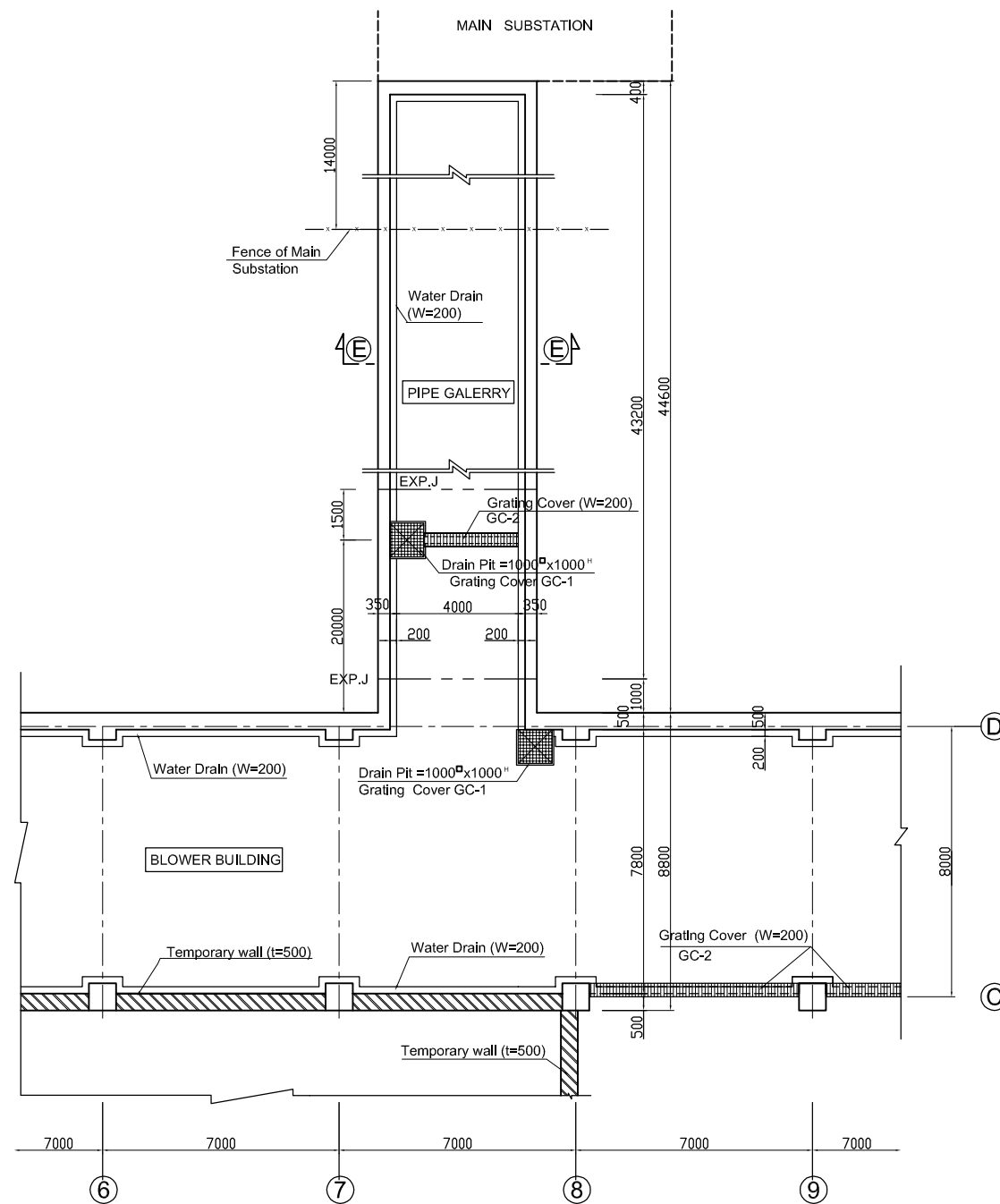
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIMURA TORU CHECKED KONDO MASAMI

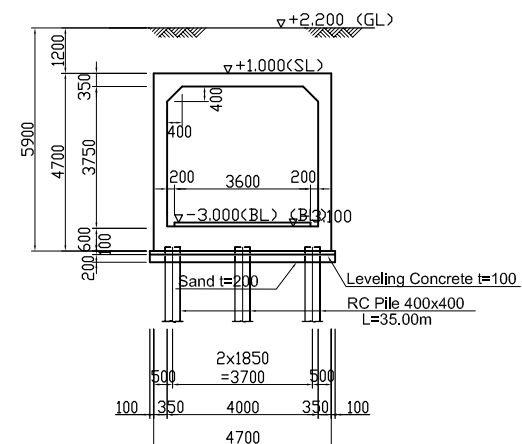
DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 04

PIPE GALLERY (E) PLAN and SECTION. Scale: 1/100

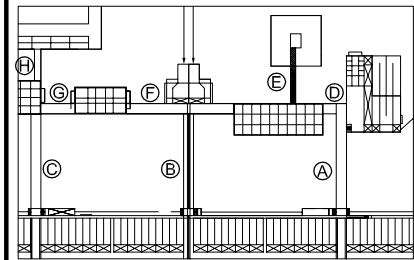
PLAN. Scale: 1/100



SECTION (E)-E. Scale: 1/100



KEY PLAN



© = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (E) PLAN and SECTION

SCALE : 1/100

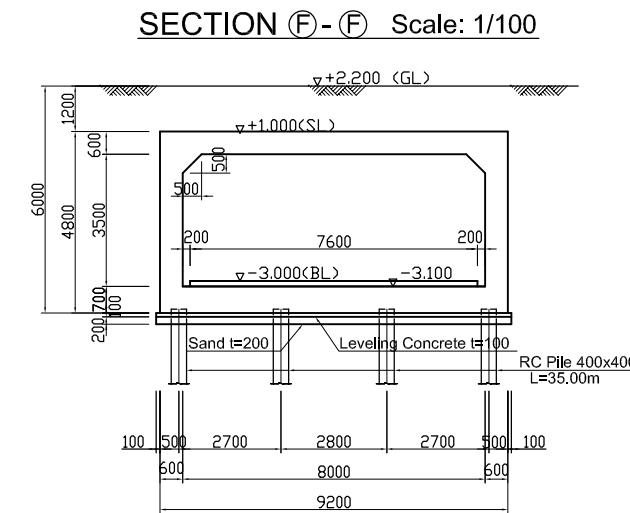
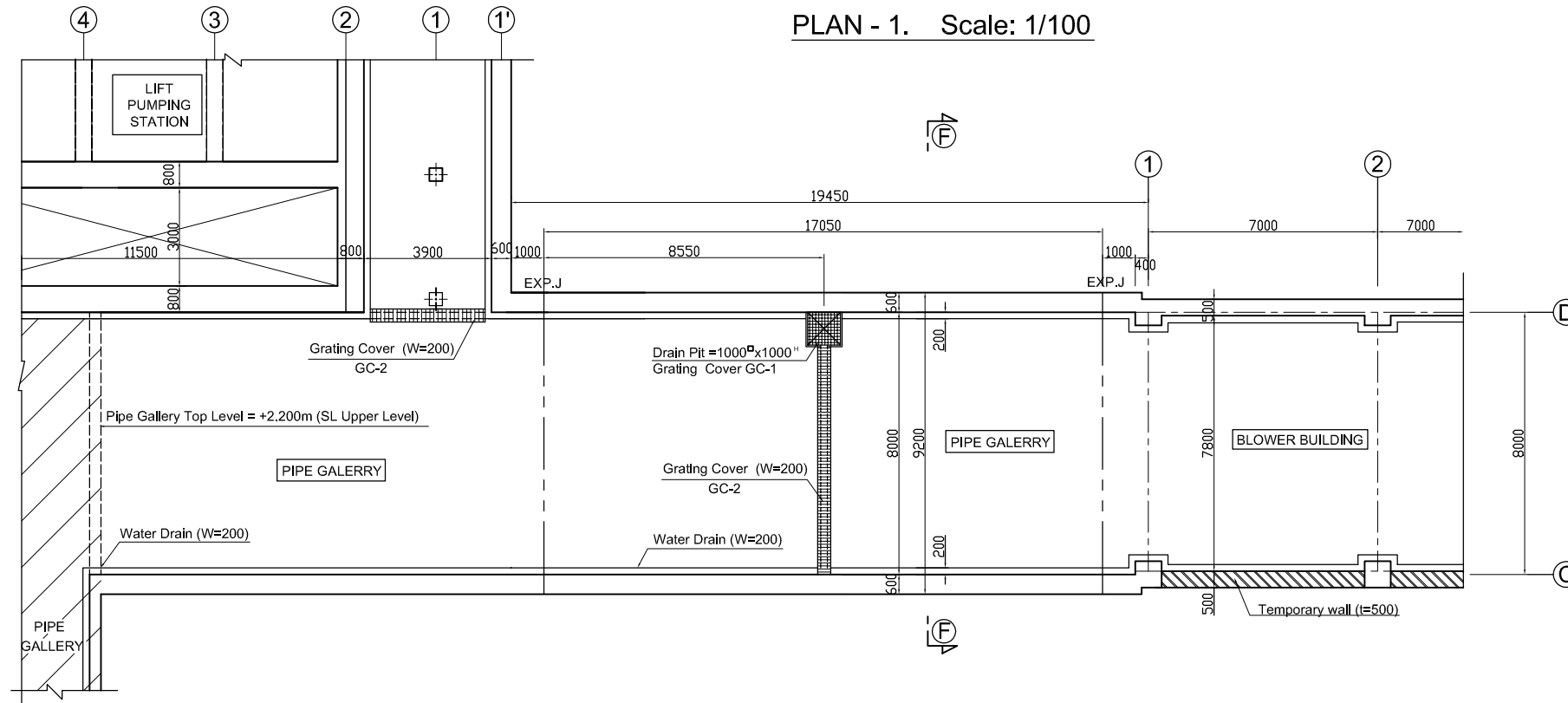
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

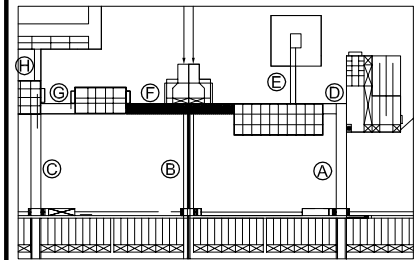
DESIGNED KIMURA TORU CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 05

PIPE GALLERY (F) PLAN and SECTION. Scale: 1/100



KEY PLAN



© = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR WATER ENVIRONMENT IMPROVEMENT FOR HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (F) PLAN and SECTION

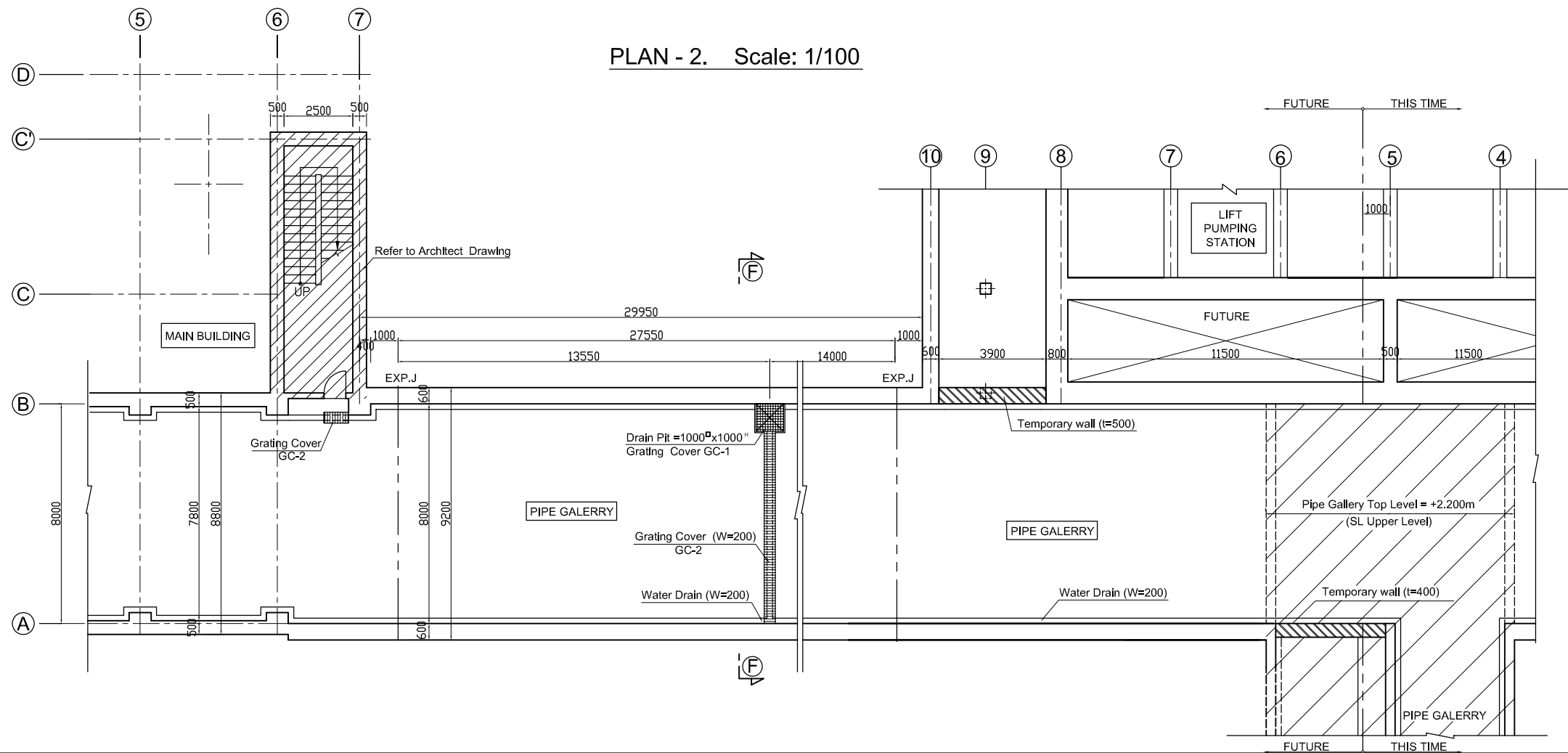
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JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

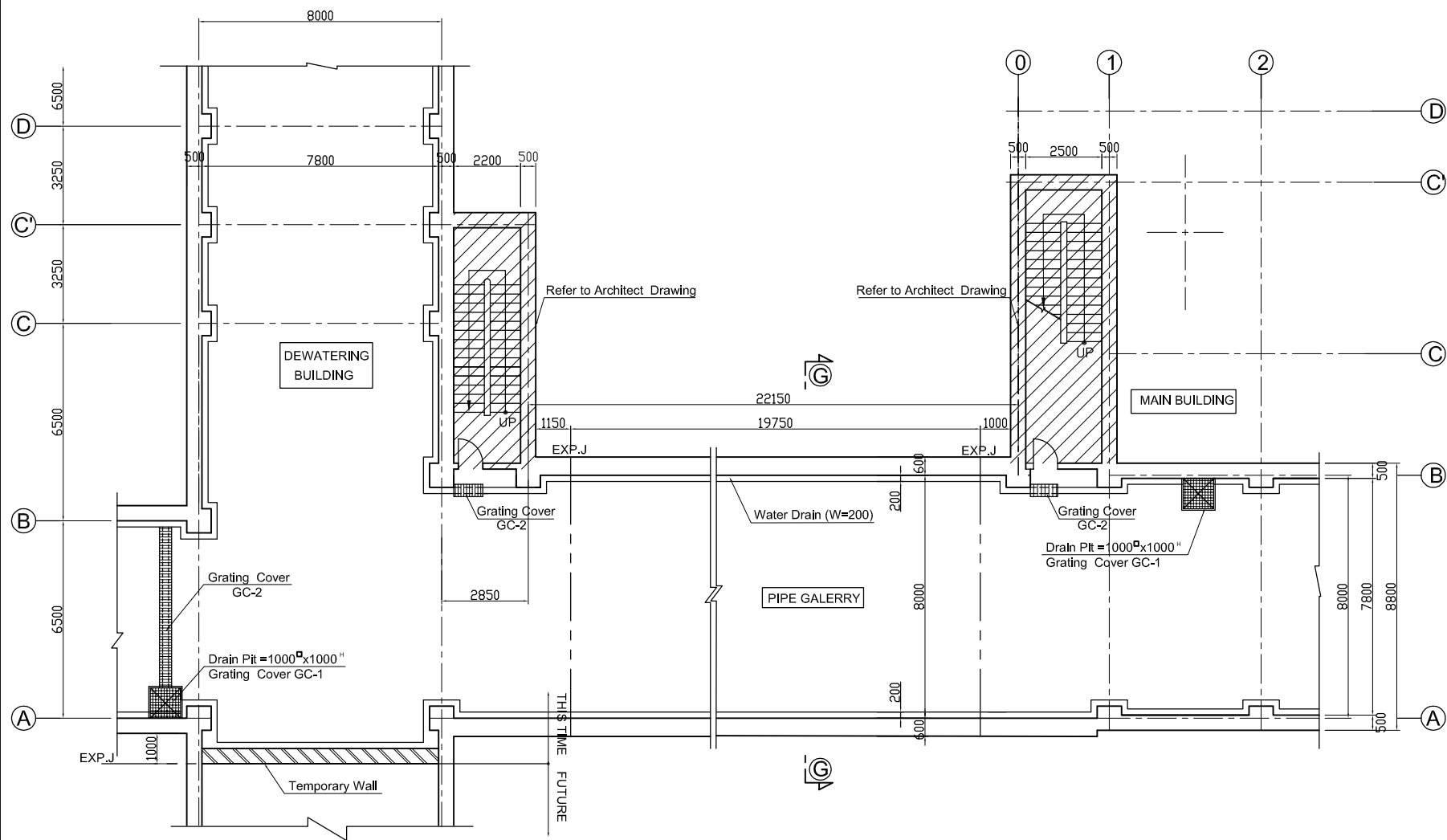
DESIGNED KIMURA TORU CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 06

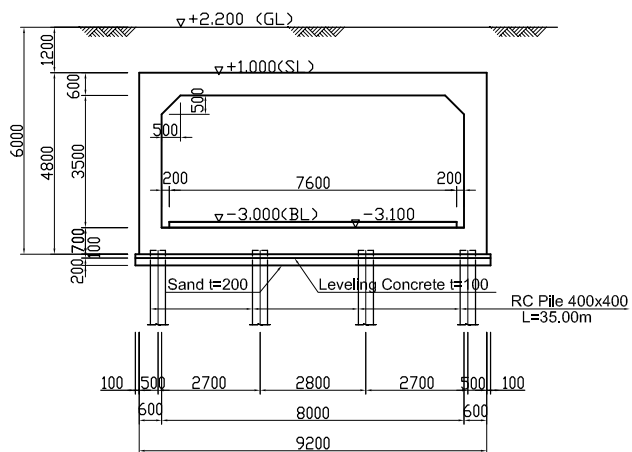


PIPE GALLERY (G) (H) PLAN and SECTION. Scale: 1/100

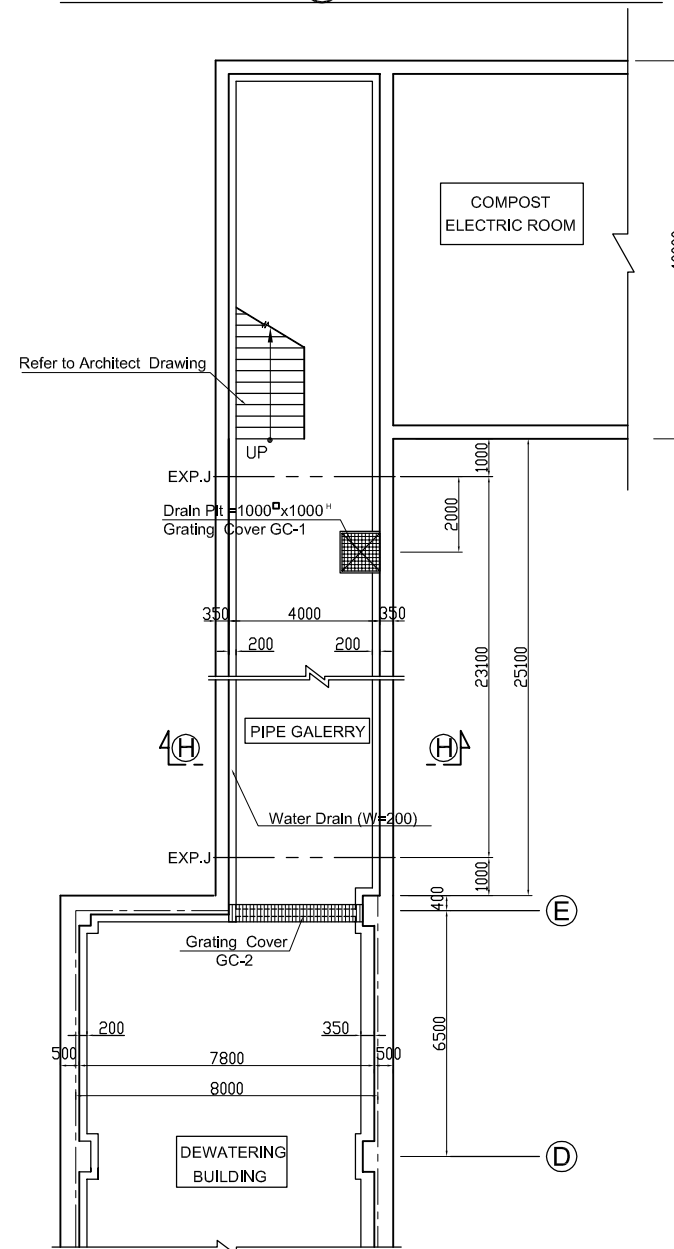
PIPE GALERRY (G) PLAN. Scale: 1/100



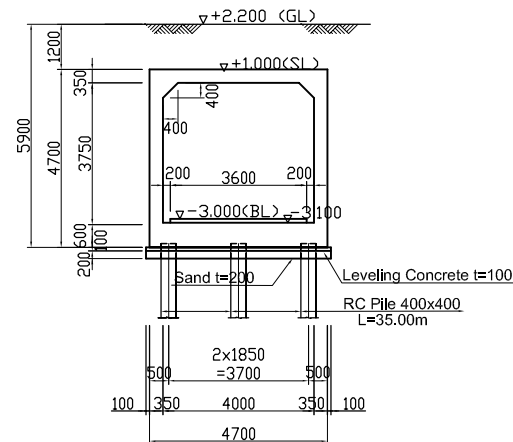
SECTION (G)-(G) Scale: 1/100



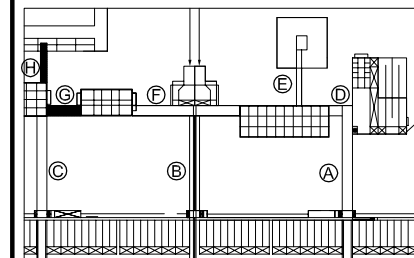
PIPE GALERRY (H) PLAN. Scale: 1/100



SECTION (H)-(H) Scale: 1/100



KEY PLAN



© = Future

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 255 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
PIPE GALLERY (G) (H)
PLAN and SECTION

SCALE : 1 / 100

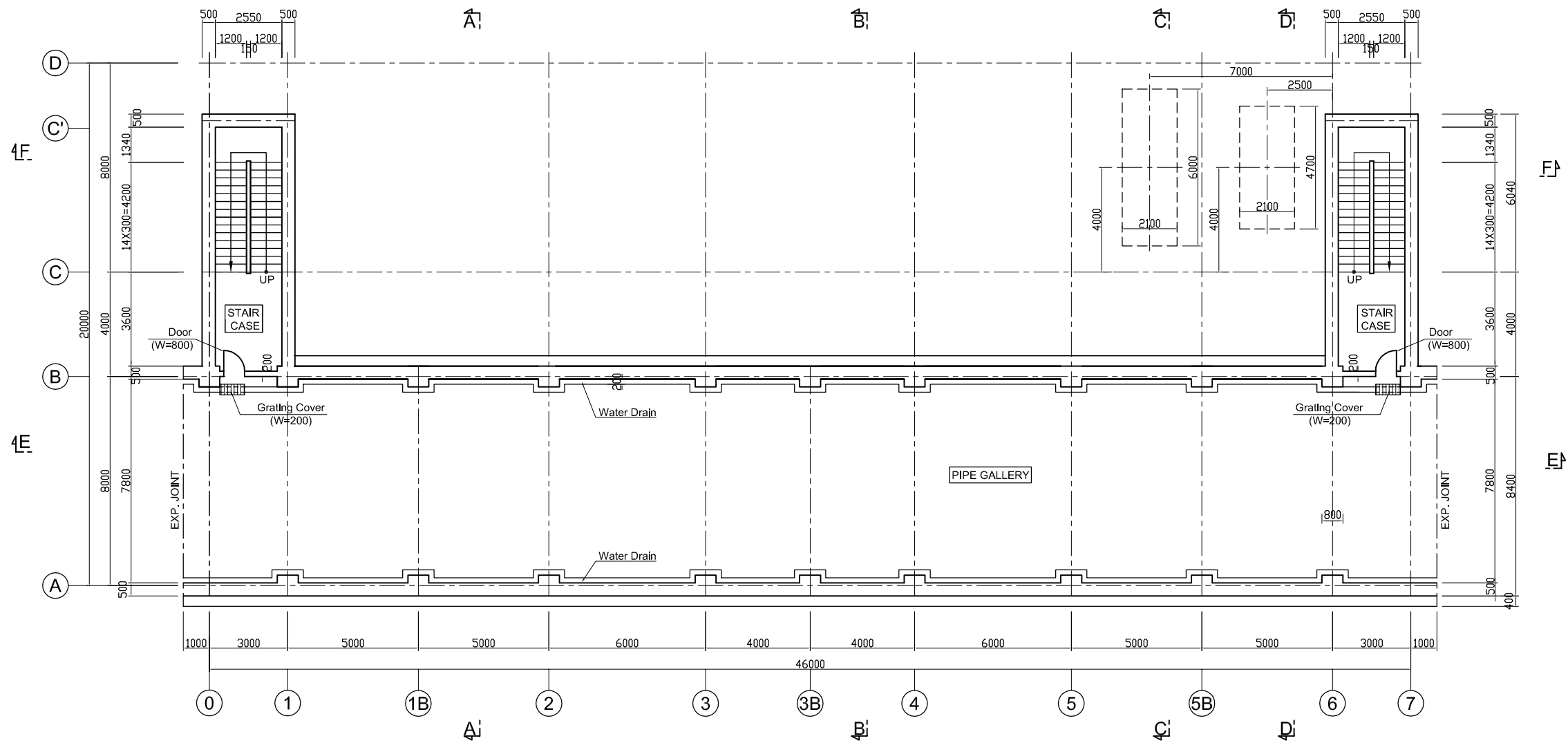
JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

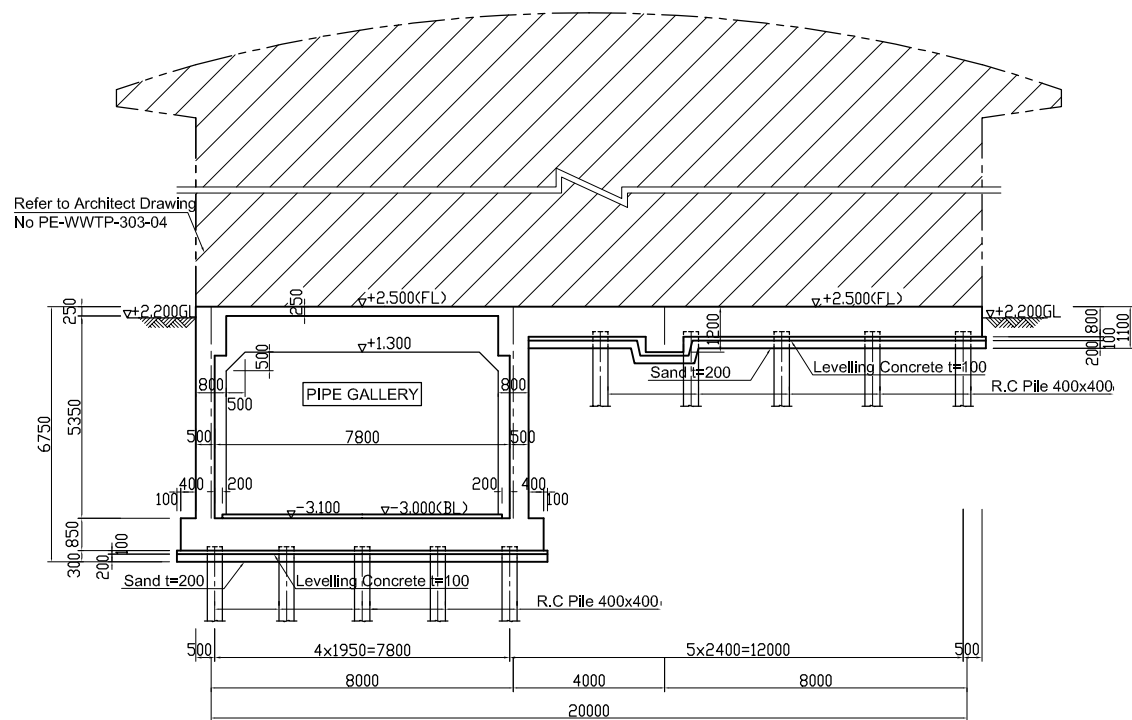
DESIGNED KIMURA TORU	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PE - WWTP - 209 - 07

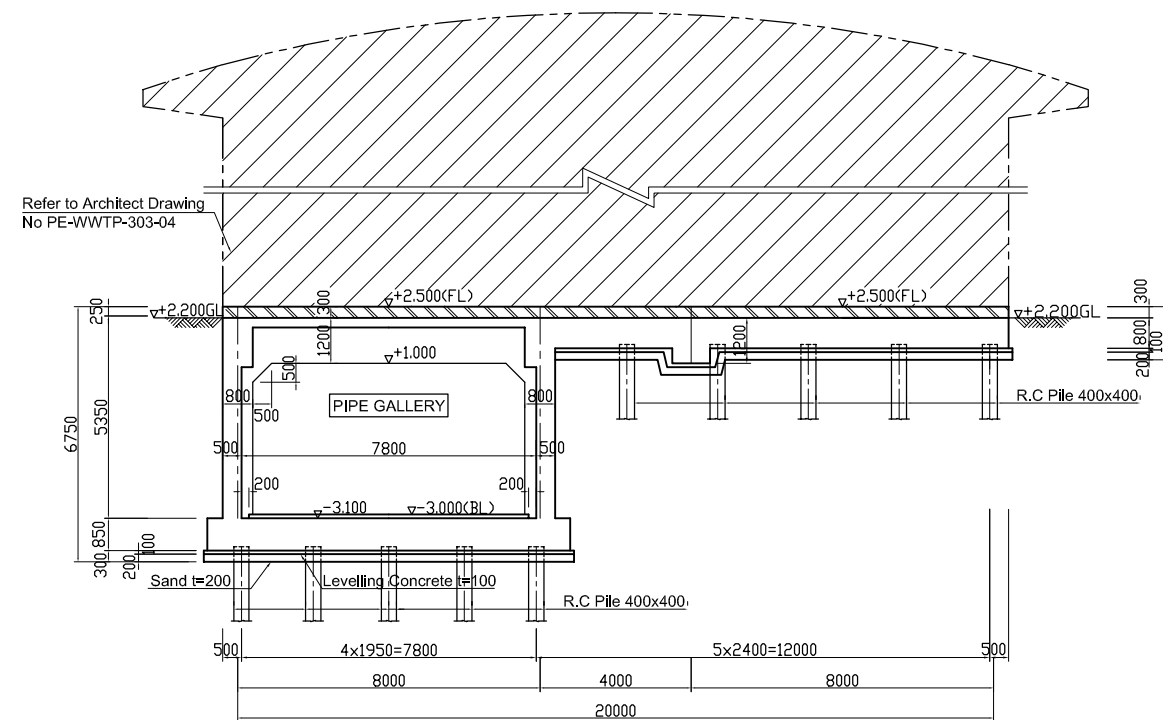
MAIN BUILDING PLAN and SECTION (1)



UNDER GROUND FLOOR PLAN Scale: 1/100

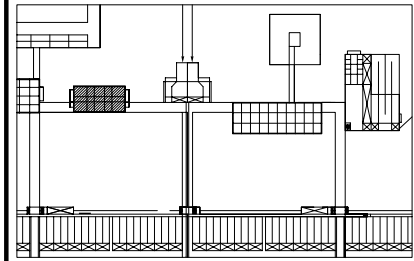


SECTION A-A Scale: 1/100



SECTION B-B Scale: 1/100

KEY PLAN

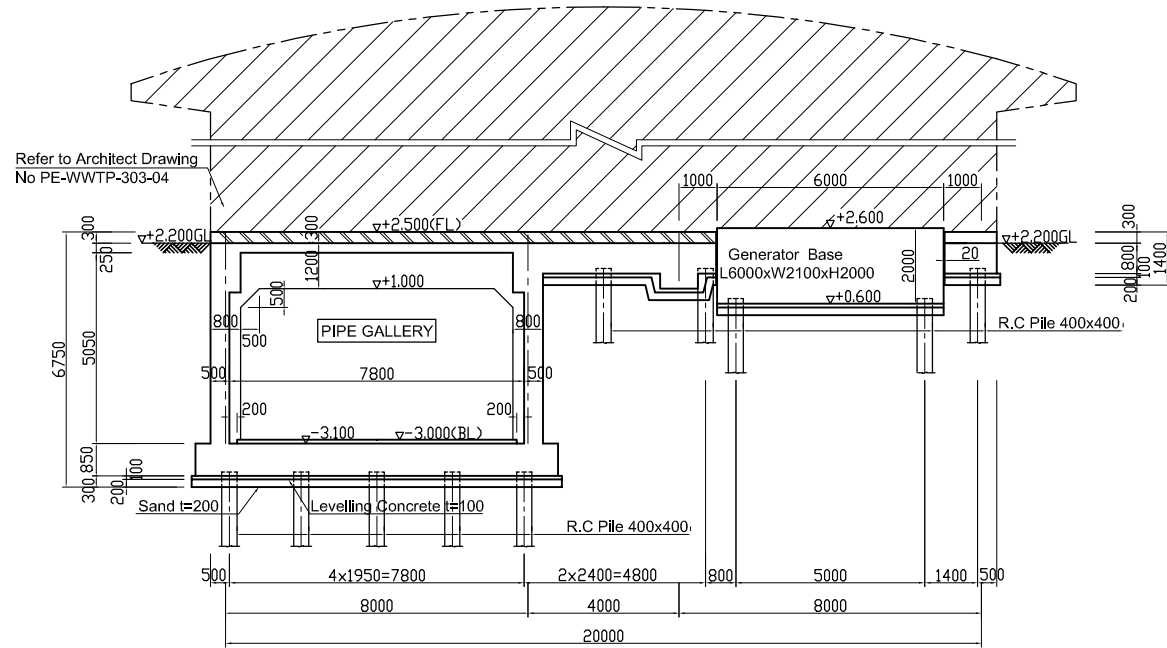


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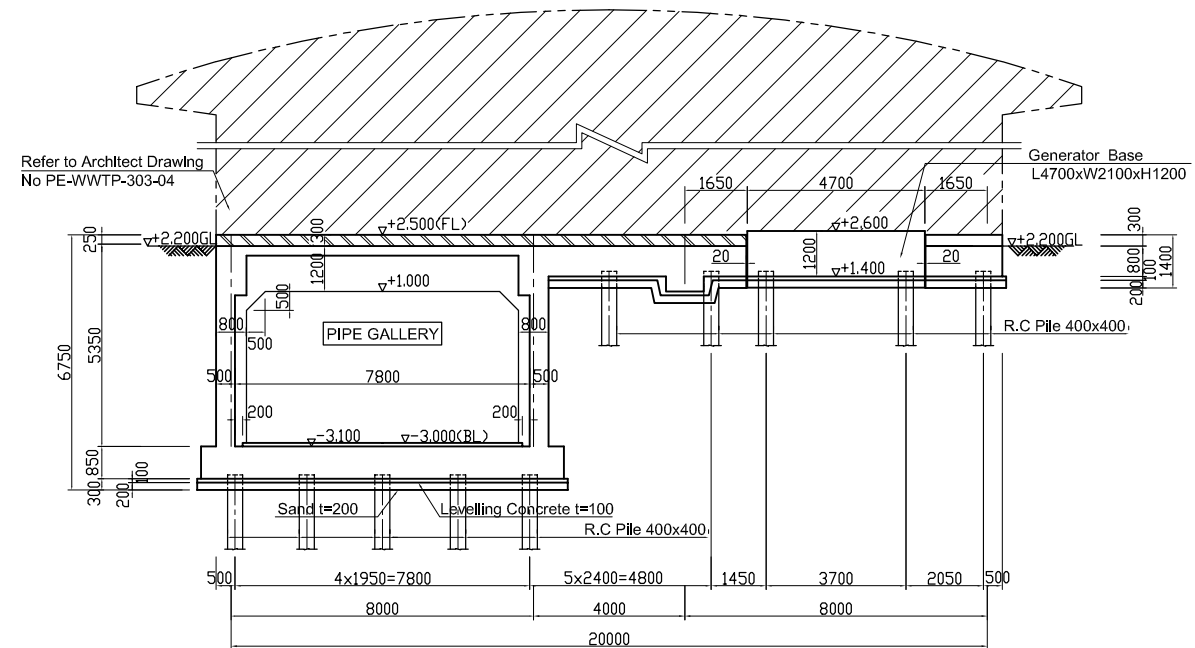
- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 257 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.
REVISIONS			
PROJECT MANAGEMENT UNIT FOR WATER ENVIRONMENT IMPROVEMENT FOR HO CHI MINH CITY			
THE DETAILED DESIGN ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM			
PACKAGE E WASTEWATER TREATMENT PLANT MAIN BUILDING PLAN and SECTION (No. 1)			
SCALE : 1 / 100			
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)			
PACIFIC CONSULTANTS INTERNATIONAL			
DESIGNED KIMURA TORU		CHECKED KONDO MASAMI	
DATE : JUNE 2001		DWG. No. PE - WWTP - 211 - 01	

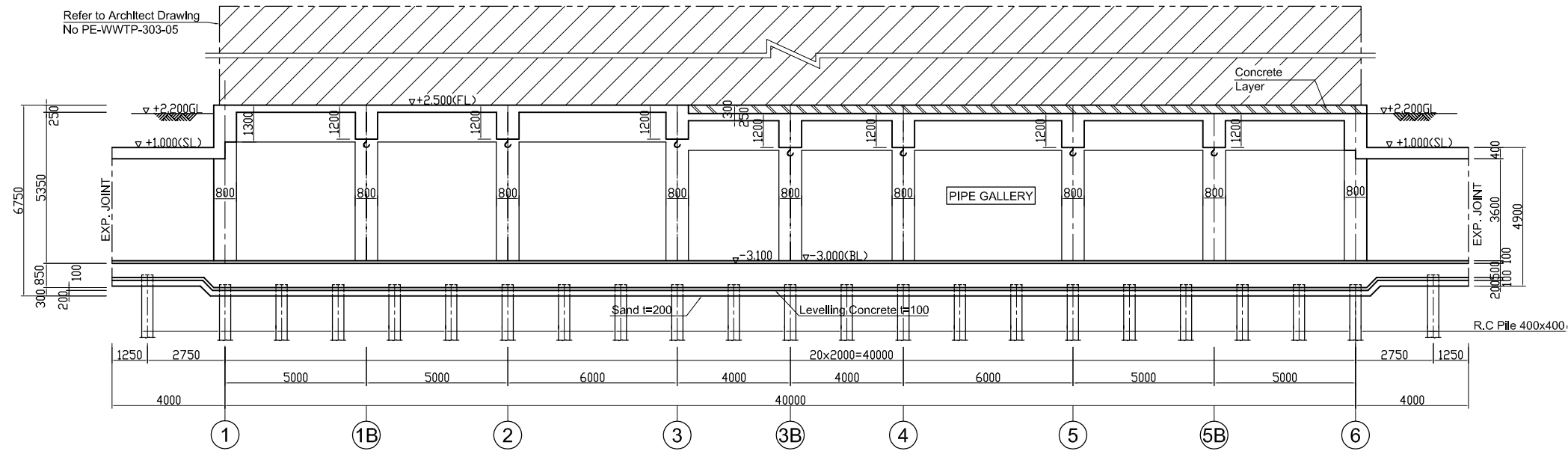
MAIN BUILDING PLAN and SECTION (2)



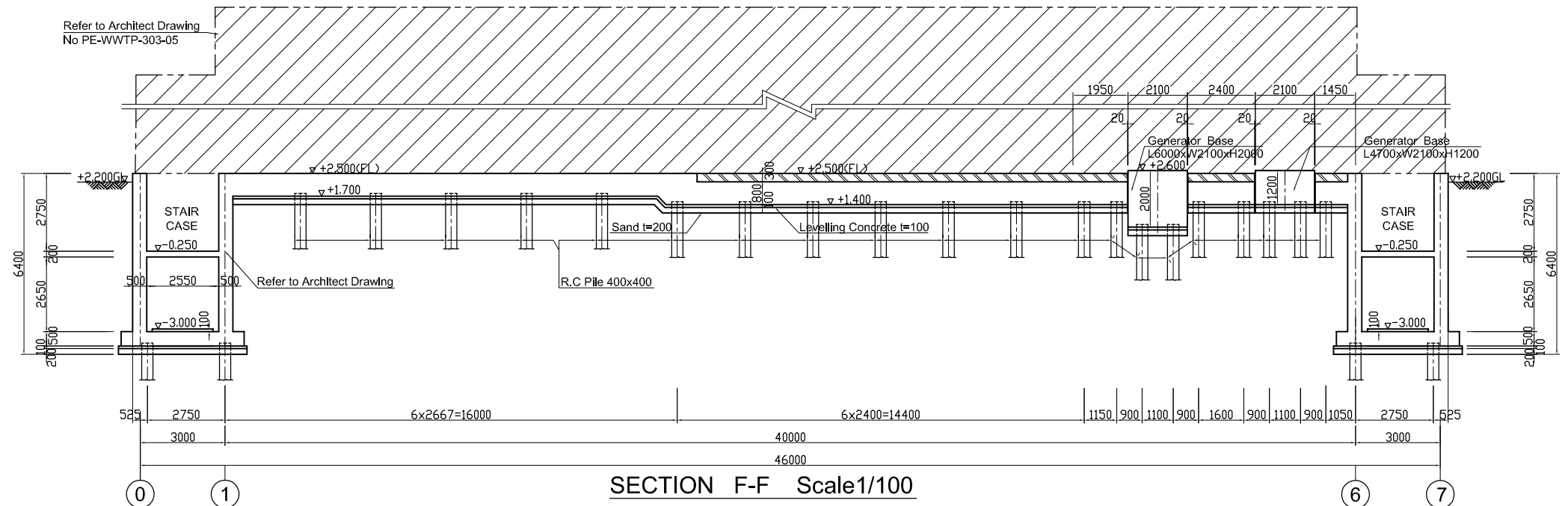
SECTION C-C Scale: 1/100



SECTION D-D Scale: 1/100

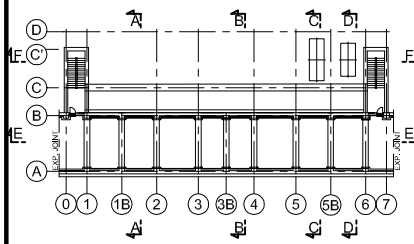


SECTION E-E Scale: 1/100



SECTION F-F Scale: 1/100

KEY PLAN



NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 257 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
WATER ENVIRONMENT IMPROVEMENT FOR
HO CHI MINH CITY

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

PACKAGE E
WASTEWATER TREATMENT PLANT
MAIN BUILDING PLAN and SECTION
(No. 2)

SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

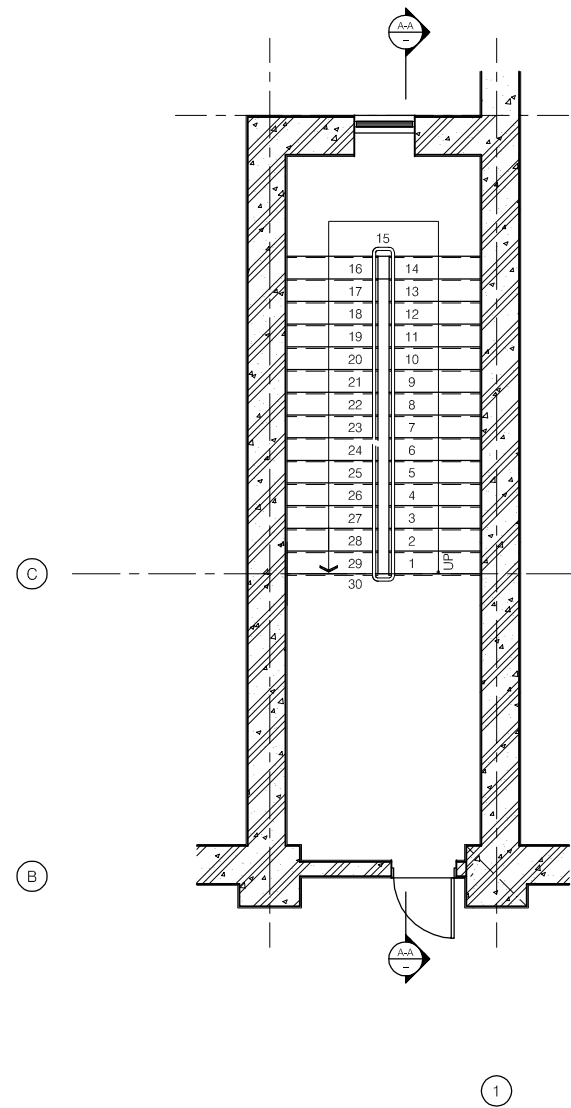
DESIGNED
KIMURA TORU

CHECKED
KONDO MASAMI

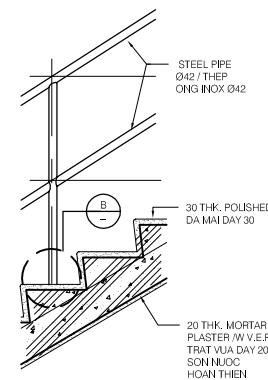
DATE : JUNE 2001

DWG. No. PE - WWTP - 211 - 02

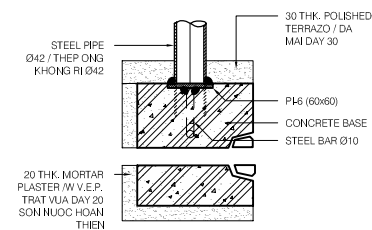
MAIN BUILDING STAIRCASE PLAN and SECTION



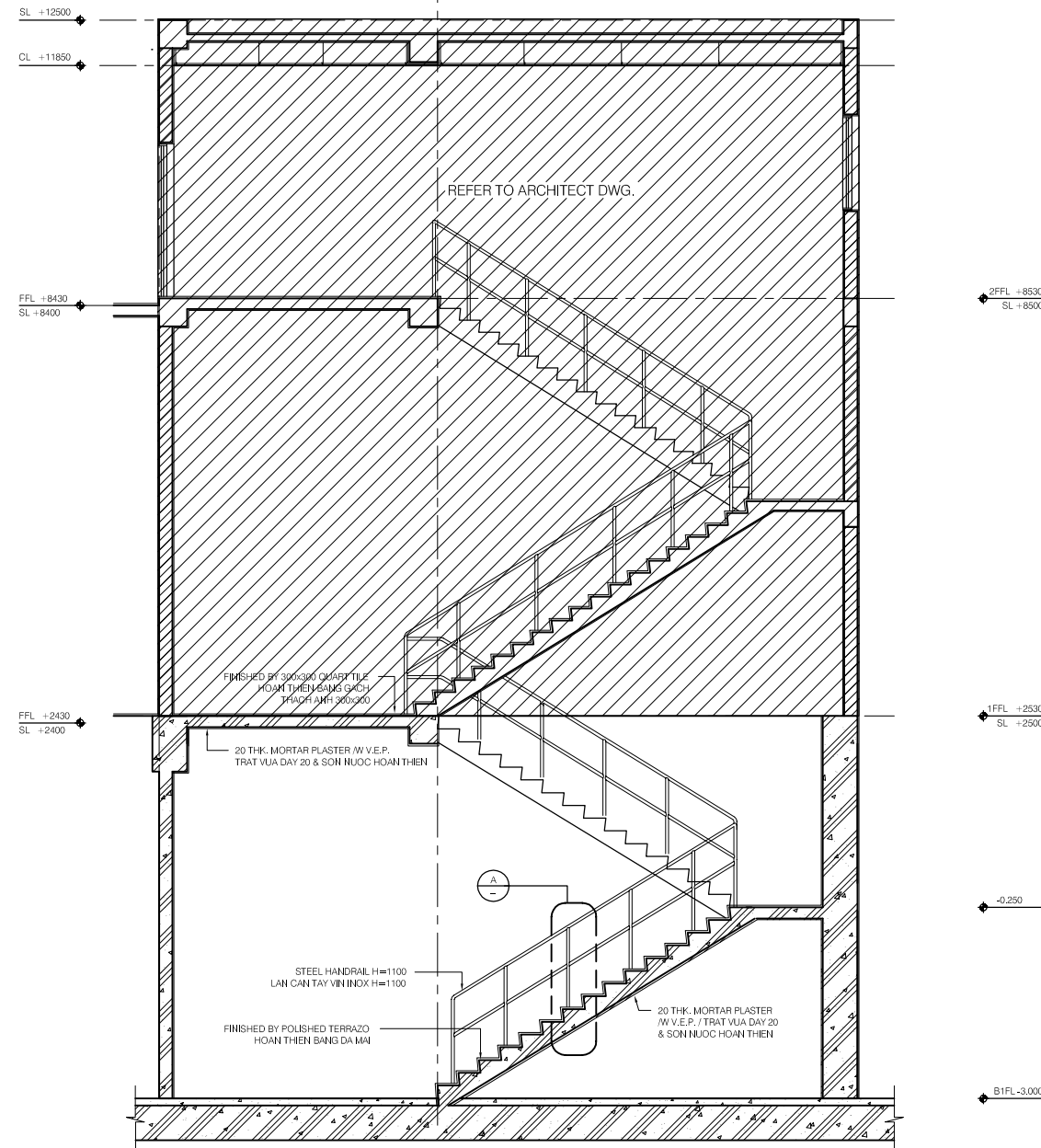
FLOOR PLAN Scale: 1/50



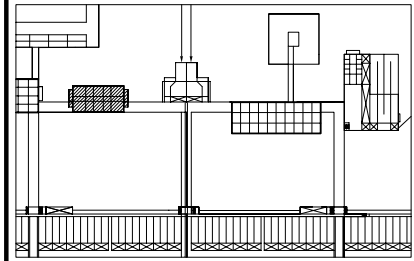
DETAIL A Scale: 1/20



DETAIL B Scale: 1/5



SECTION A-A Scale: 1/50



KEY PLAN

NOTES :

- ALL DIMENSIONS ARE MM UNLESS STATED OTHERWISE
- CONCRETE E21
- LEVELLING CONCRETE G10
- ALL REINFORCEMENT BARS ARE DEFORMED TYPE (CT5 OR EQUIVALENT AS INDICATED IN SPECIFICATION OF PACKAGE E)
- THE SPECIFICATION TO BE REFERRED FOR MORE INFORMATION OF MATERIAL GRADES
- PILE LOCATION SHOWN ON PILE ARRANGEMENT DWG. No. PE - WWTP - 257 - 01
- DETAILS OF R.C PILE SHOWN ON DWG. No. PE - WWTP - 265 - 01

NO.	DATE	DESCRIPTIONS	BY	APRO.

REVISIONS

PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE E
WASTEWATER TREATMENT PLANT
MAIN BUILDING STAIRCASE
PLAN and SECTION

SCALE : 1/5, 1/20, 1/50

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KIMURA TORU

CHECKED
KONDO MASAMI

DATE : JUNE 2001 DWG. No. PE-WWTP-211-03