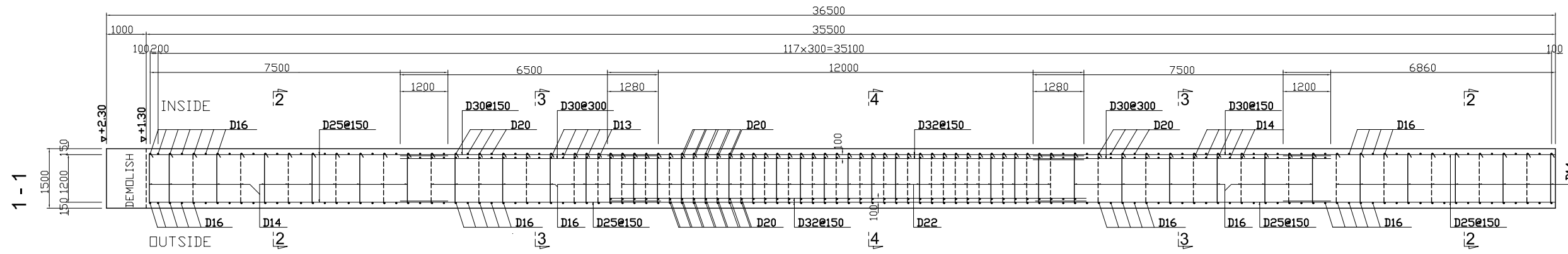


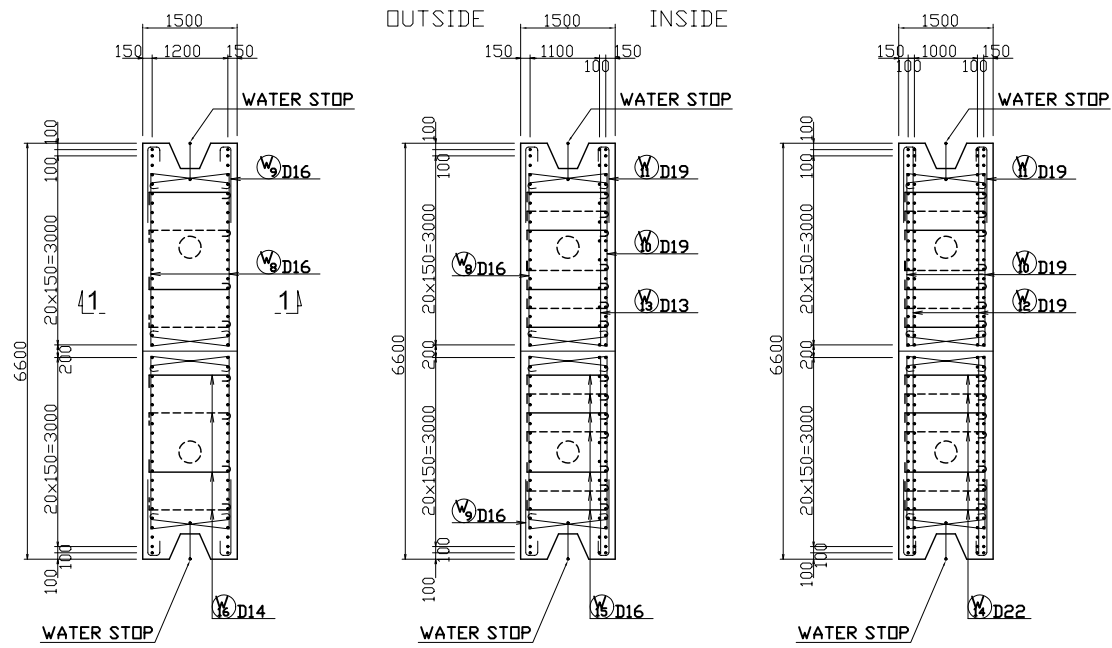
S : 1/60



2 - 2

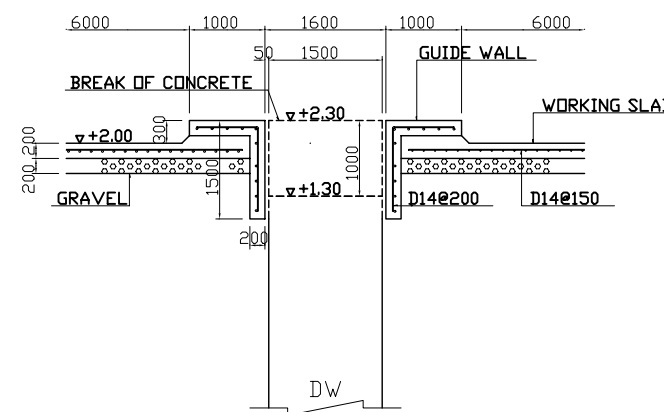
3 - 3

4 - 4



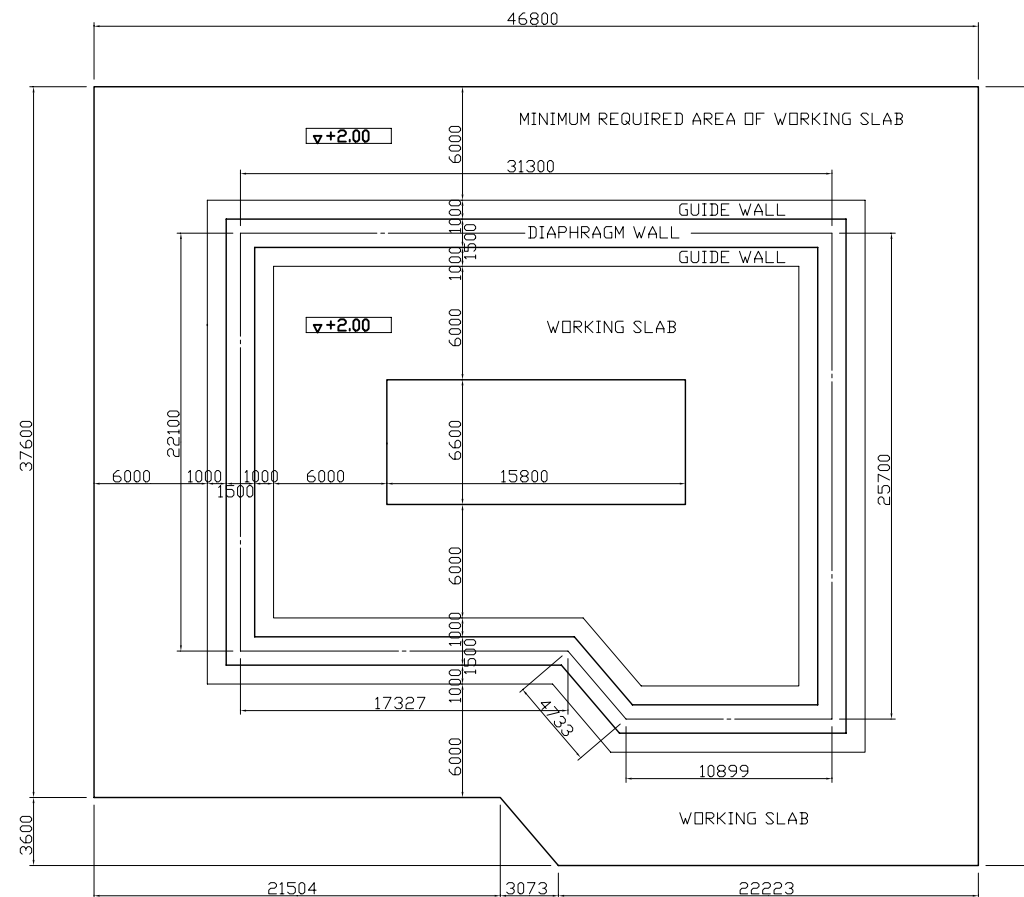
DETAIL OF GUIDE WALL

S : 1/50



PLAN OF WORKING YARD

S : 1/200



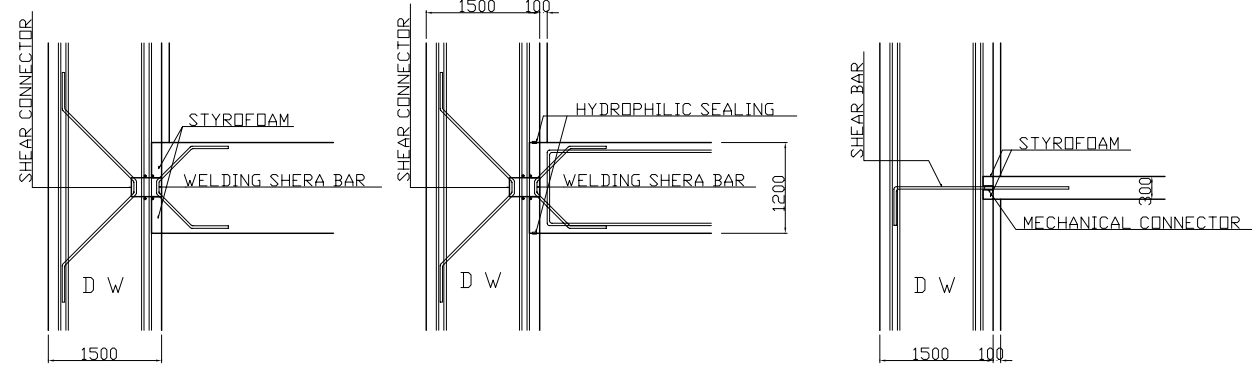
CONNECTION OF DIAPFRAGM WALL

S : 1/50

BASE SLAB  
STEP 1  
CONSTRUCTION OF DW

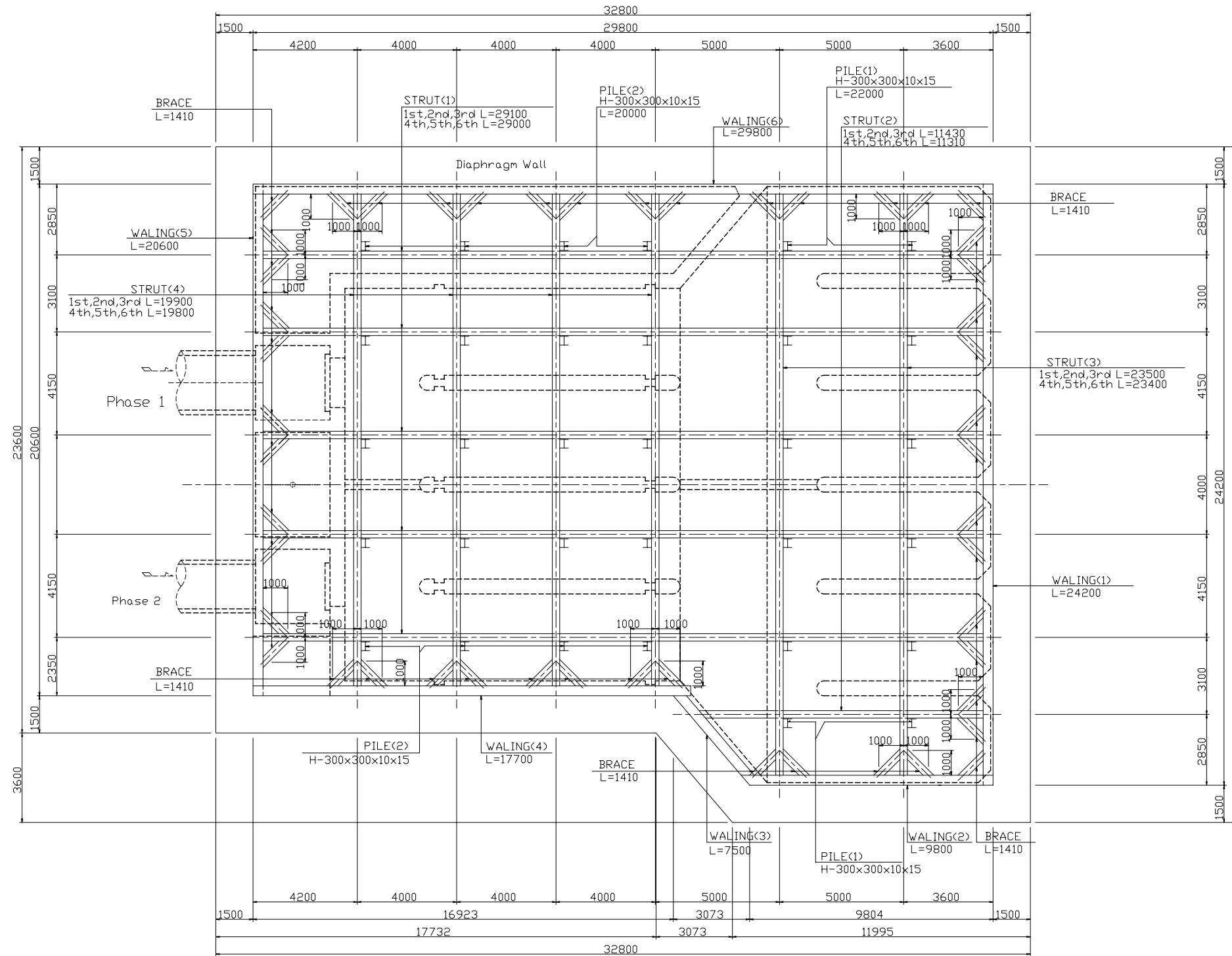
CONSTRUCTION OF BASE

MIDDLE SLAB  
STEP 1  
CONSTRUCTION OF DW

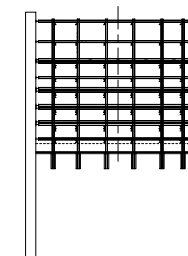


NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE C INTERMEDIATE WASTEWATER PUMPING STATION				
BAR ARRANGEMENT OF DIAPHRAM WALL				
SCALE : 1/60, 1/50, 1/200				
DESIGNED		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PC - IWPS - 216		

PLAN



KEY MAP



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 C  
INTERMEDIATE WASTEWATER PUMPING STATION  
INTERMEDIATE PUMPING STATION  
TEMPORARY SUPPORTING PLAN

SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

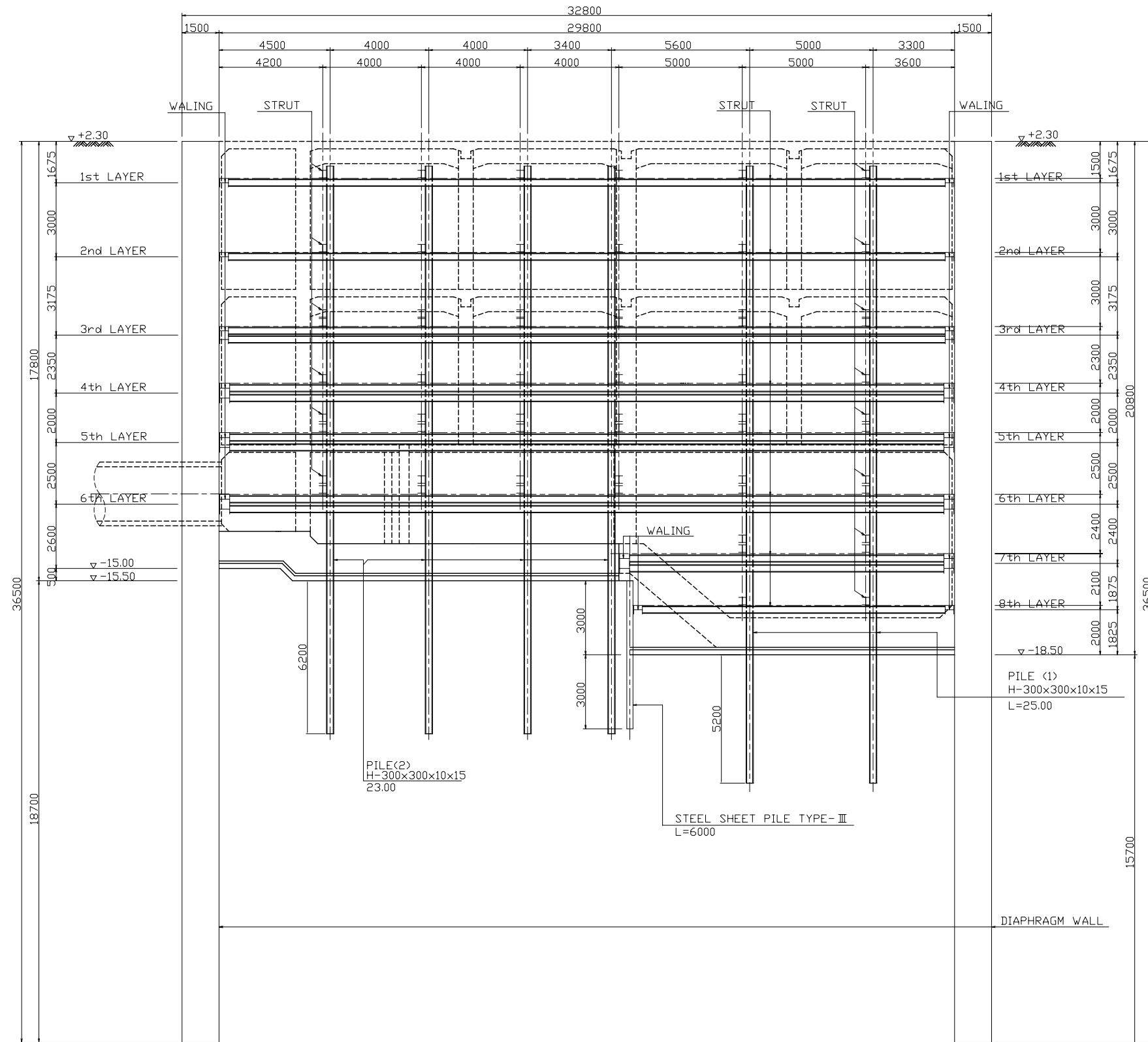
DESIGNED  
KIMURA TORU

CHECKED  
KONDO MASAMI

DATE : JUNE 2001

DWG. No. PC - IWPS - 217

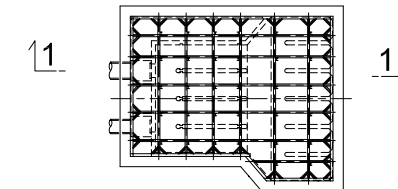
1 - 1



MATERIAL

LAYER	WALE	STRUT	BRACE	REMARKS
1st	H-350x350x12x19	H-300x300x10x15	H-300x300x10x15	
2nd	H-350x350x12x19	H-300x300x10x15	H-300x300x10x15	
3rd	2H-350x350x12x19	2H-300x300x10x15	2H-300x300x10x15	
4th	H-400x400x13x21	H-300x300x10x15	H-300x300x10x15	
5th	2H-400x400x13x21	2H-300x300x10x15	2H-300x300x10x15	
6th	2H-400x400x13x21	2H-300x300x10x15	2H-300x300x10x15	
7th	2H-400x400x13x21	2H-300x300x10x15	2H-300x300x10x15	
8th	H-350x350x12x19	H-300x300x10x15	H-300x300x10x15	

KEY MAP



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 C  
INTERMEDIATE WASTEWATER PUMPING STATION  
INTERMEDIATE PUMPING STATION  
TEMPORARY SUPPORTING SECTION (1)

SCALE : 1/100

JICA JAPAN INTERNATIONAL COOPERATION  
AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

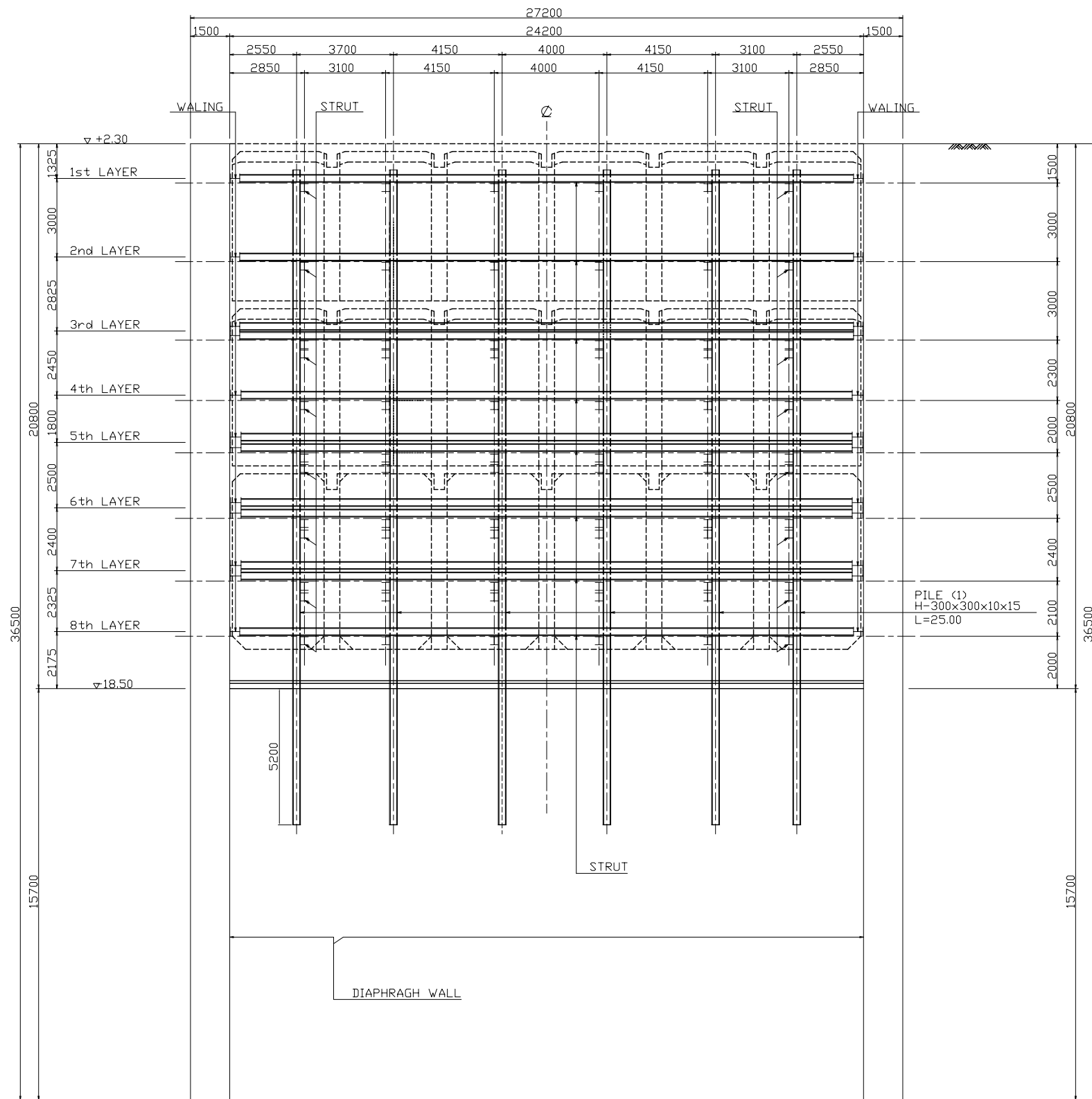
DESIGNED  
KIMURA TORU

CHECKED  
KONDO MASAMI

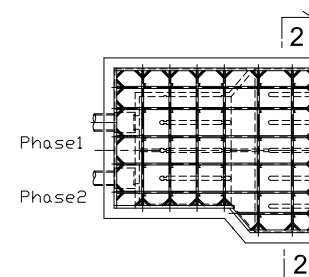
DATE : JUNE 2001

DWG. No. PC - IWPS - 218

2-2



KEY MAP




NO.	DATE	DESCRIPTIONS	BY	APRO.
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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 C  
INTERMEDIATE WASTEWATER PUMPING STATION  
INTERMEDIATE PUMPING STATION  
TEMPORARY SUPPORTING SECTION (2)

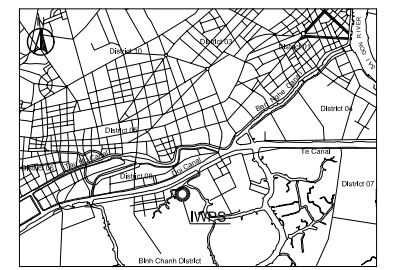
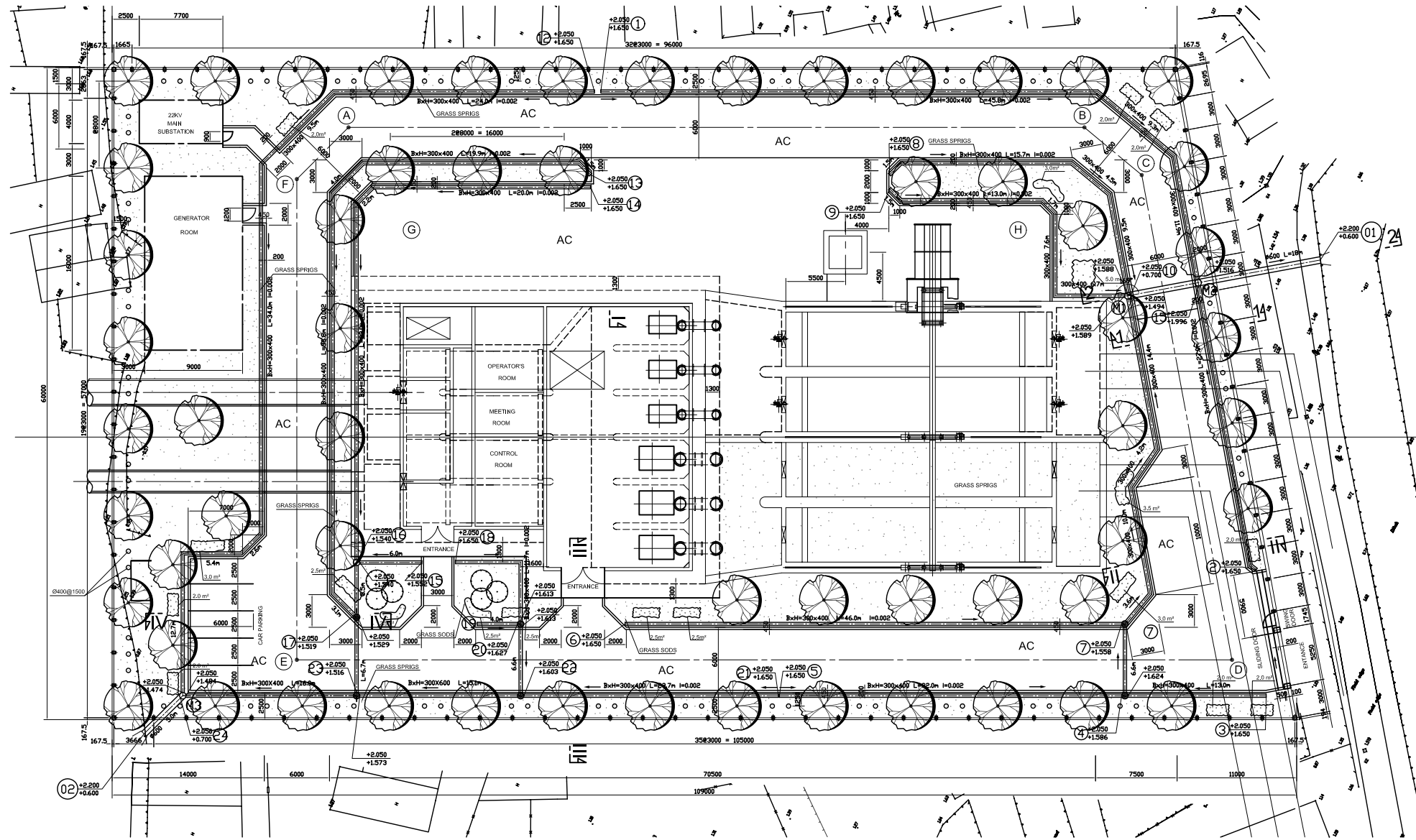
SCALE = 1 : 100

JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIMURA TORU	CHECKED KONDO MASAMI
-------------------------	-------------------------

DATE : JUNE 2001      DWG. No. PC - IWPS - 219

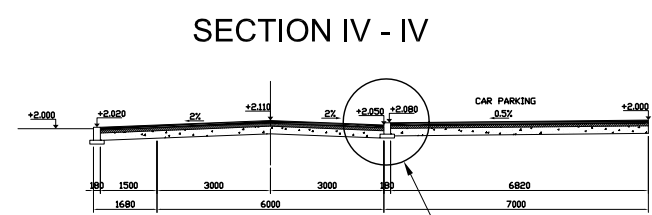
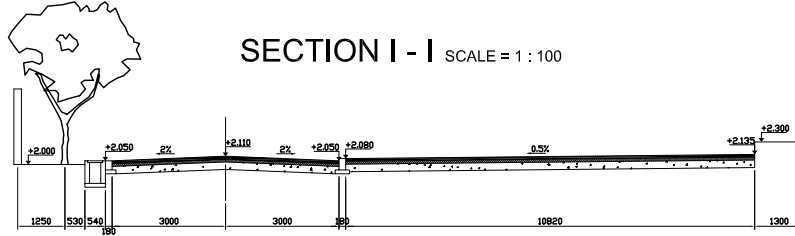


**LEGEND**

- MANHOLE TYPE 1
- MANHOLE TYPE 2
- +2.050 / -0.600 ELEVATION ON TOP/BOTTOM
- CURB CAST IN SITU
- AC : ASPHALT CONCRETE PAVEMENT
- +2.000 AVERAGE DESIGN LEVEL OF EMBANKMENT

**DRAINAGE QUANTITY**

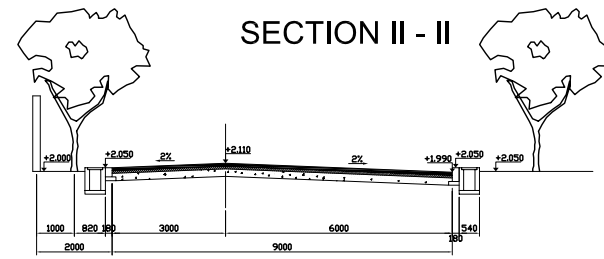
- DITCH 300x400 = 597m
- Ø600 = 23m
- MANHOLE TYPE 1 = 7 units
- MANHOLE TYPE 2 = 3 units



**PAVEMENT STRUCTURE TYPE P2**

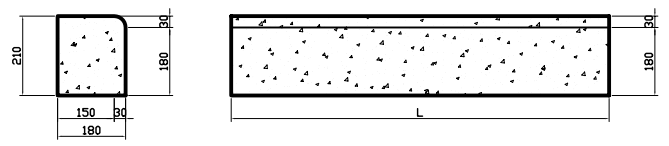
DEMAND ELASTIC MODULUS  $E_{yc} = 1300 \text{ Kg/cm}^2$

- 9cm asphalt concrete pavement
- Emulsified asphalt prime coat 1.0 ~ 2.0 l/m<sup>2</sup>
- 10cm base course, crushed aggregate
- 20cm subbase course, aggregate 4 ~ 6cm (or red gravel grading)
- $E_o = 350 \text{ Kg/cm}^2$  39 cm IS TOTAL THICKNESS OF PAVEMENT



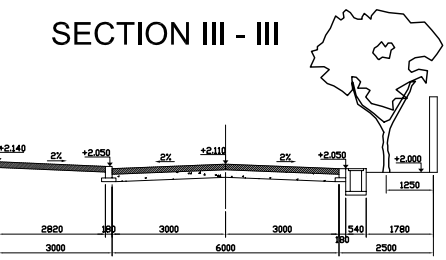
**CURB TYPE 1, CONCRET TYPE E, CAST IN SITU**

SCALE = 1 : 10



**PAVEMENT QUANTITY OF INSIDE ROAD OF INTERMEDIATE PUMPING STATION**

No	Name of road	Design wide (m)			Length of curb (m)	Detail Quantity of Pavement (m <sup>3</sup> )				Pavement area (m <sup>2</sup> )
		Road bed	Pavement	Side walk		A.C Wearing	A.C Binder	Agg. 2-4 Base	Agg. 4-6 Subbase	
1	A - B - D - E G - H	8.50	6.00	0.00	632	0.00	213.00	237.00	473.00	2365



NO.	DATE	DESCRIPTIONS	BY	APPRO.

**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 C  
INTERMEDIATE WASTEWATER  
PUMPING STATION  
INNER ROAD AND  
STORMWATER DRAINAGE PLAN

SCALE = 1 : 250

JICA JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

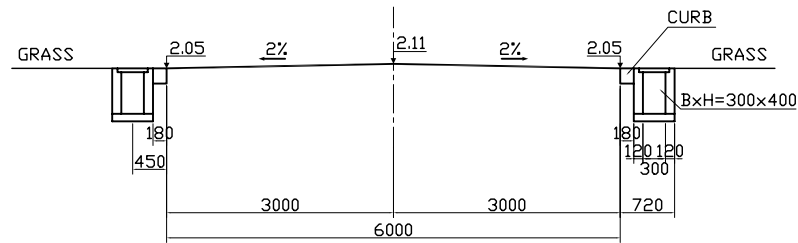
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED: KIMURA TORU  
CHECKED: KONDO MASAMI

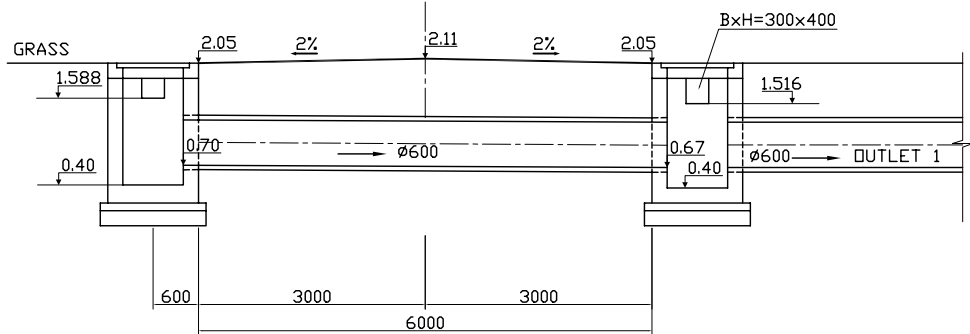
DATE : JUNE 2001 DWG. No. PC - IWPS - 220



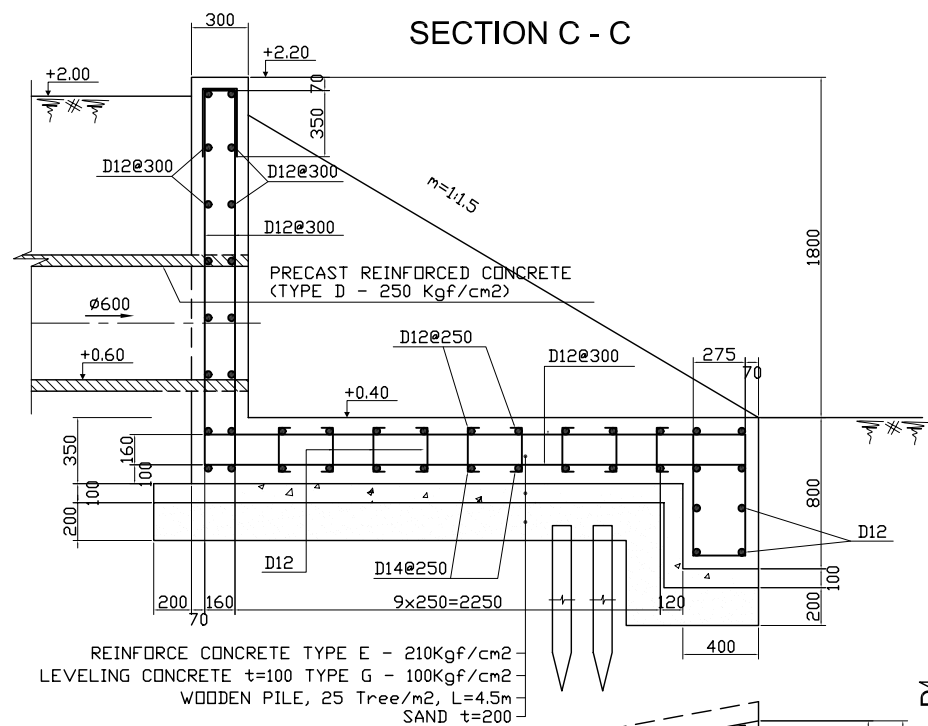
SECTION 1 - 1 S = 1:50



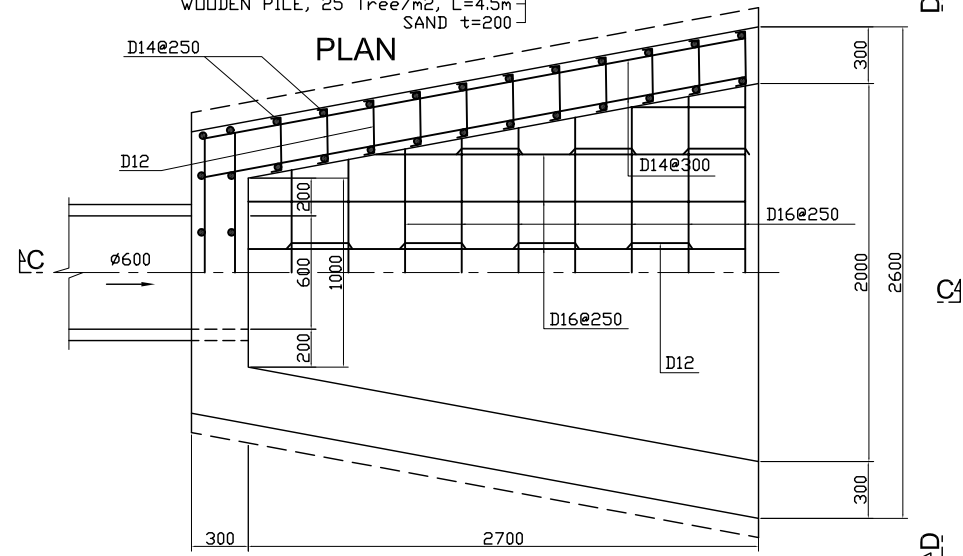
SECTION 2 - 2 S = 1:50



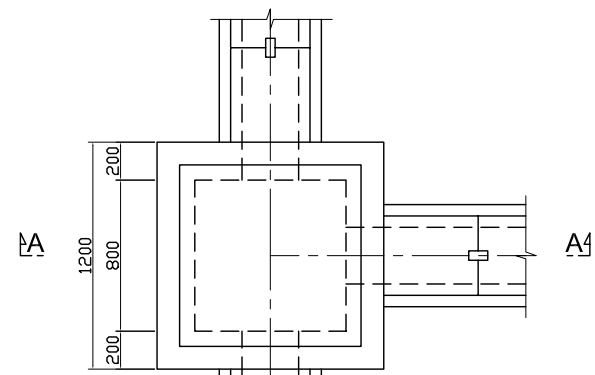
OUTLET DETAIL S=1:20



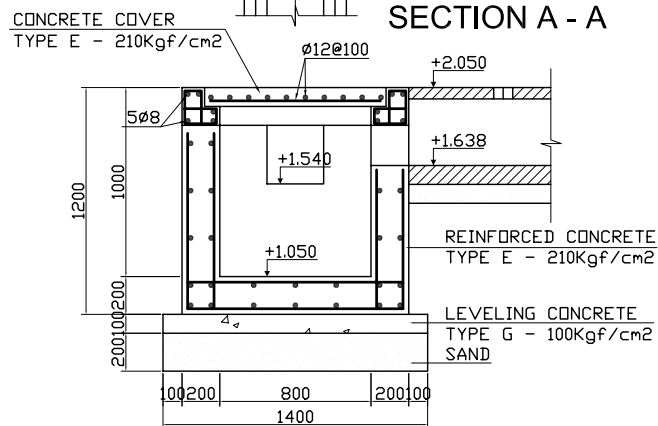
PLAN



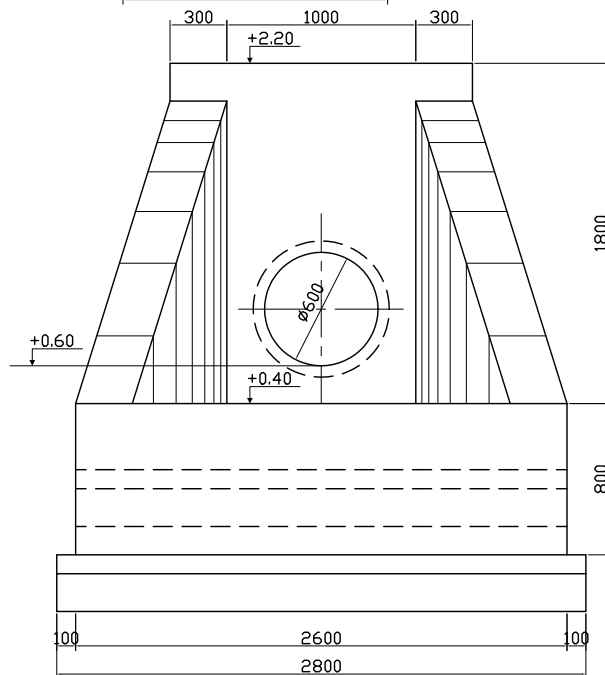
MANHOLE TYPE 1 S = 1:20



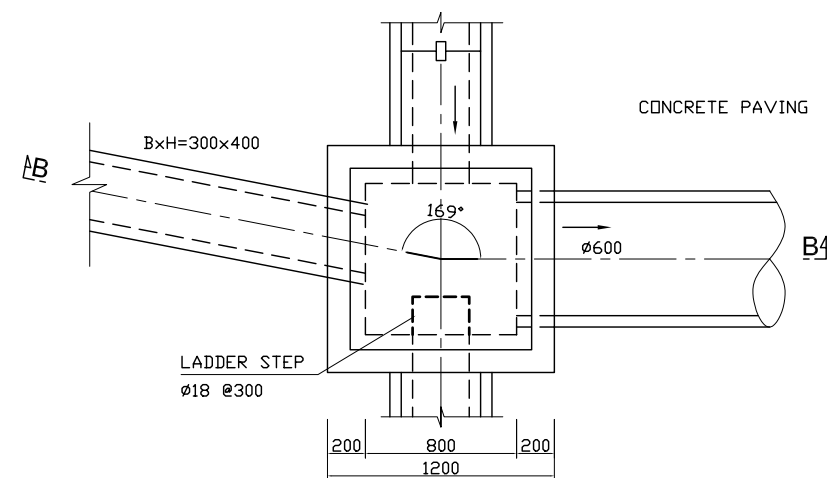
SECTION A - A



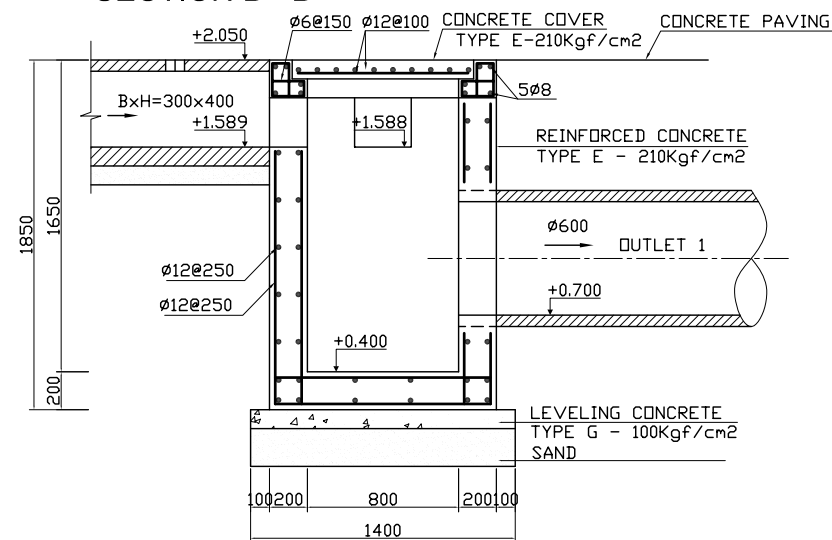
SECTION D - D



MANHOLE TYPE 2 S = 1:20

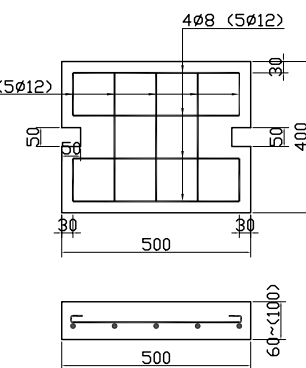


SECTION B - B

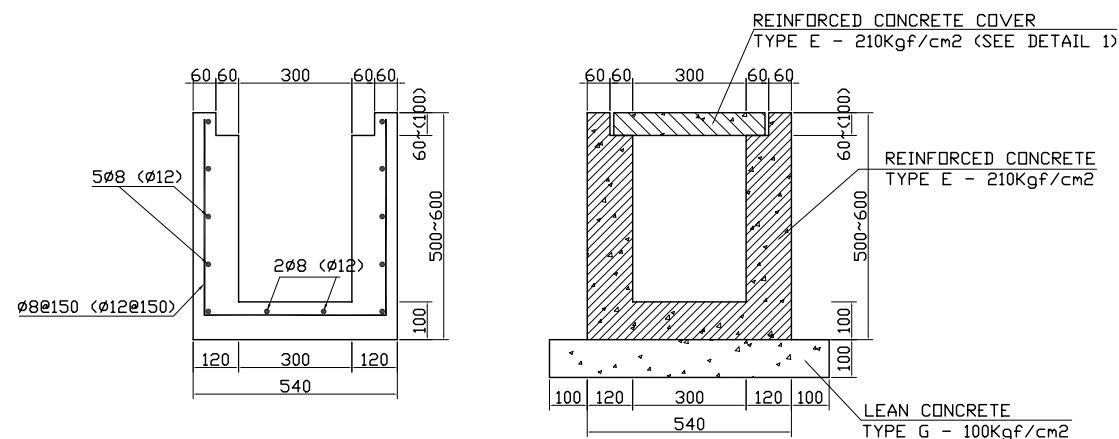


DETAIL 1 S = 1:10

NOTE  
( ) USED FOR THE U DITCH CROSSING  
THE ROAD (7-4, 20-22, 17-23)

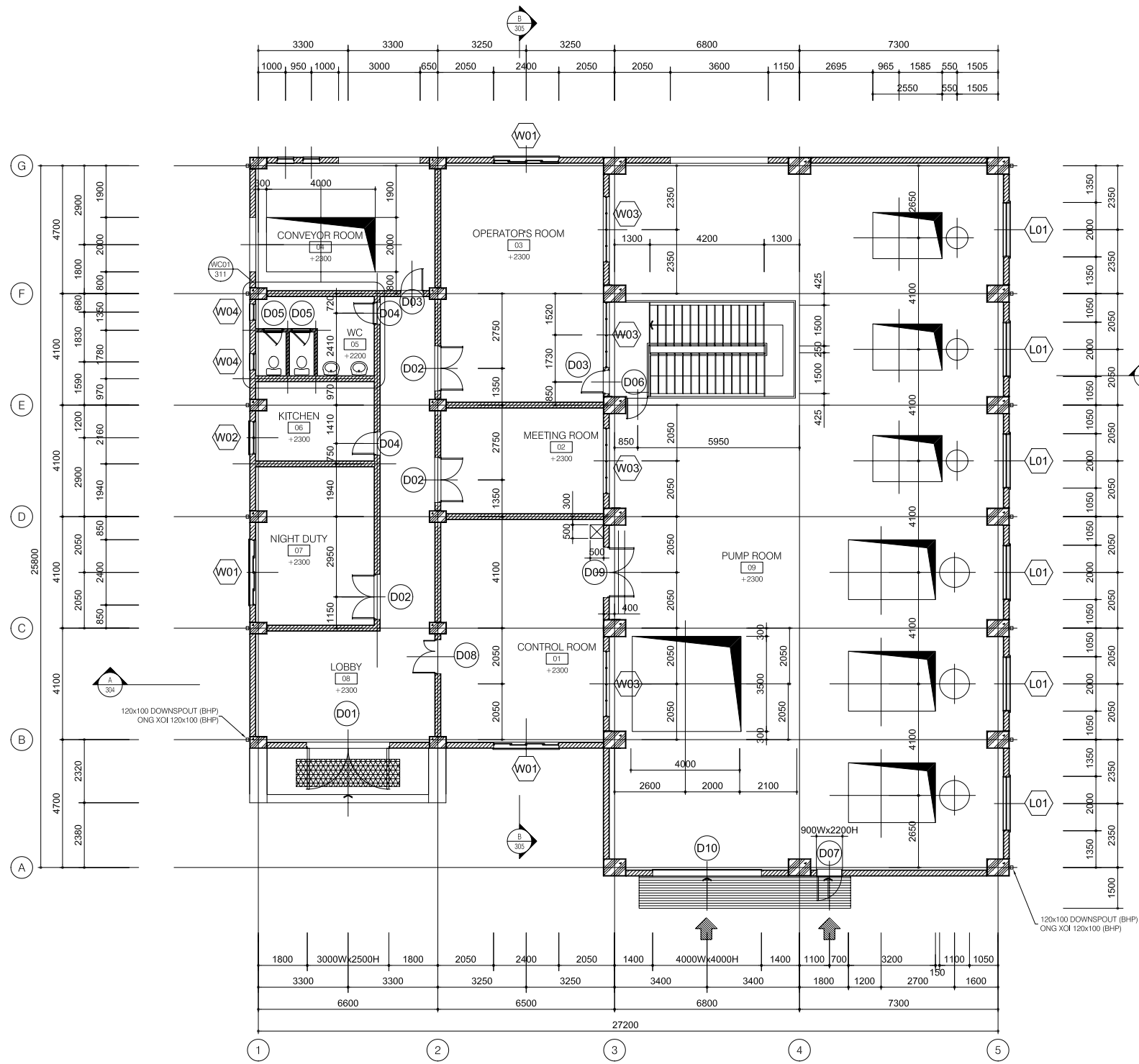


STRUCTURE OF DITCH S = 1:10



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 C INTERMEDIATE WASTEWATER PUMPING STATION PLAN AND SECTION OF MANHOLE AND OUTLET				
SCALE = AS SHOWN				
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KIMURA TORU		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PC - IWPS - 221		

# ARCHITECTURAL WORK



**GROUND FLOOR PLAN**

**LEGEND**

- 190mm THK. BRICK WALL, 20THK CEM./SAND RENDERING ON SURFACE / TUONG GACH DAY 190mm, TRAT VUA DAY 20 MOI MAT
- 90mm THK. BRICK WALL, 20THK CEM./SAND RENDERING ON SURFACE / TUONG GACH DAY 90mm, TRAT VUA DAY 20 MOI MAT

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  
 INTERMEDIATE WASTERWATER PUMPING STATION  
**PUMP HOUSE AND O/M OFFICE  
 GROUND FLOOR PLAN**

SCALE : 1/100

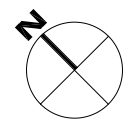
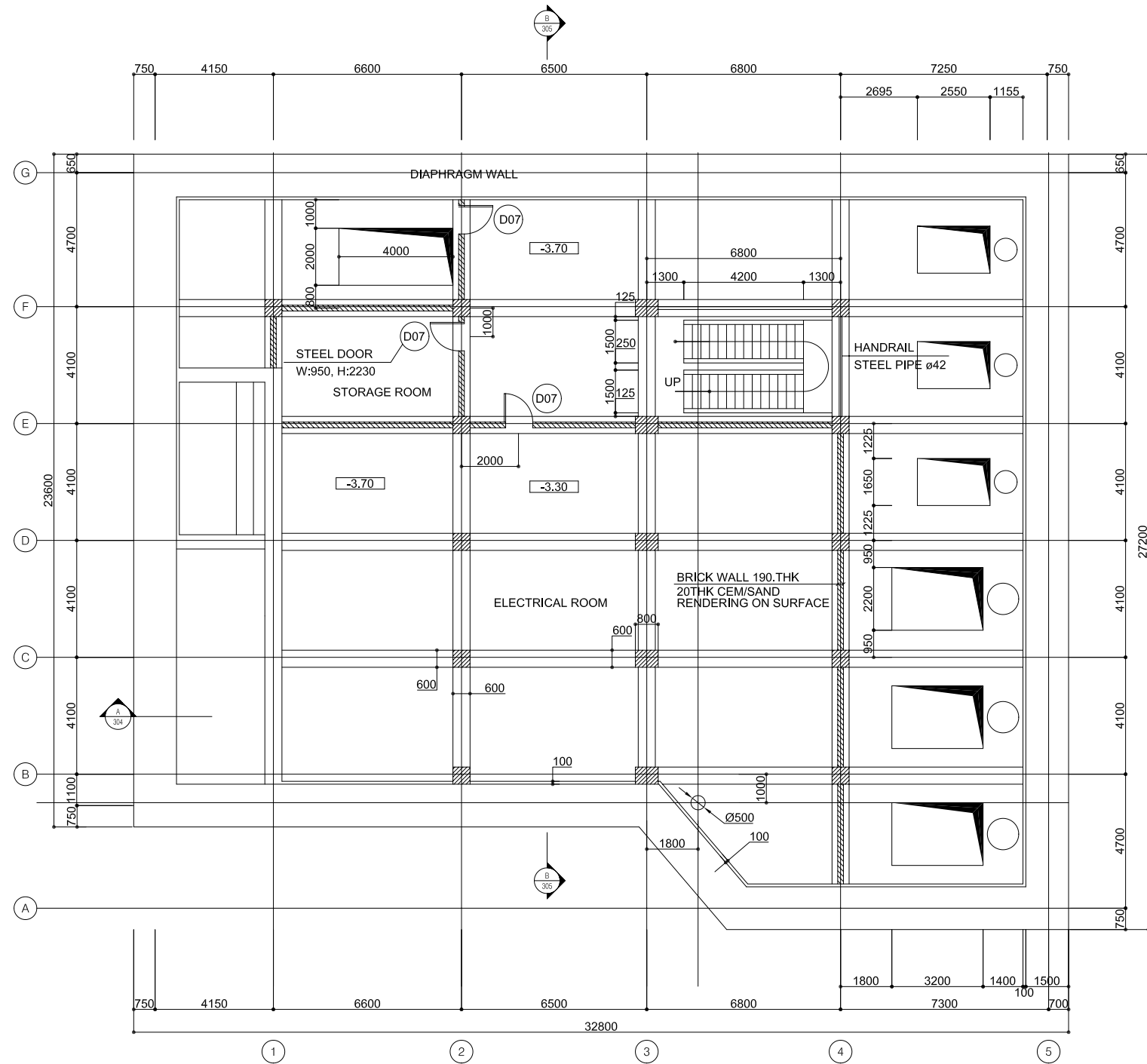
JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIMURA TORU	CHECKED KONDO MASAMI
-------------------------	-------------------------

DATE : JUNE 2001      DWG. No. PC-IWPS-301

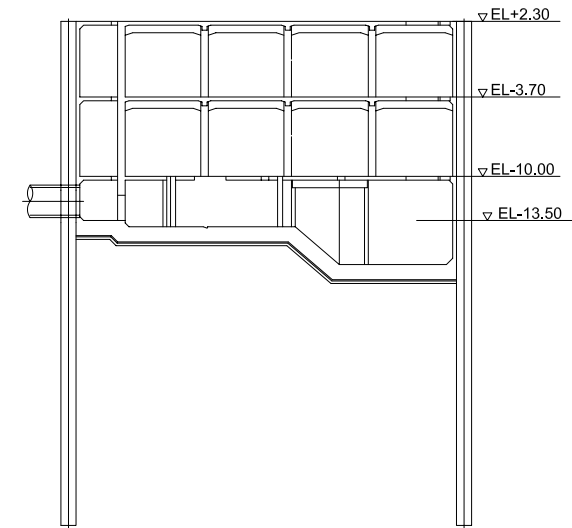




**BASEMENT 1 - FLOOR PLAN**



**KEY MAP**



**LEGEND**

- 190mm THK. BRICK WALL, 20THK CEM./SAND RENDERING ON SURFACE / TUONG GACH DAY 190mm, TRAT VUA DAY 20 MOI MAT
- 90mm THK. BRICK WALL, 20THK CEM./SAND RENDERING ON SURFACE / TUONG GACH DAY 90mm, TRAT VUA DAY 20 MOI MAT

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 C  
INTERMEDIATE WASTERWATER PUMPING STATION

**PUMP HOUSE AND O/M OFFICE  
BASEMENT 1 FLOOR PLAN  
(ELECTRIC AND STORAGE ROOMS)**

SCALE : 1/100

JAPAN INTERNATIONAL COOPERATION AGENCY ( JICA )

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED KIMURA TORU	CHECKED KONDO MASAMI
-------------------------	-------------------------

DATE : JUNE 2001     DWG. No. PC - IWPS - 302