

List of Inlet Pit

Area	Sewer Line	Dia D (mm)	Type of Inlet	Type of Cover	Inlet No.	GL (m)	Invert Level I (m)	H (m)	h _i (m)
BM1	W1	400	1	D	I1	1.470	-0.288	2,638	2,158
BM1	W1	400	1	D	I2	1.390	-0.288	2,558	2,078
BM1	W1	400	1	D	I3	1.340	-0.288	2,508	2,028
BM1	W1	400	1	D	I4	1.340	-0.338	2,558	2,078
BM1	W1	400	1	D	I5	1.360	-0.338	2,578	2,098
BM1	W1	400	1	D	I6	1.370	-0.378	2,628	2,148
BM1	W1	400	1	D	I7	1.390	-0.388	2,658	2,178
BM1	W1	400	1	D	I8	1.430	-0.388	2,698	2,218
BM1	W1	400	1	D	I9	1.444	-0.388	2,712	2,232
BM1	W1	400	1	D	I10	1.426	-0.388	2,694	2,214
BM1	W1	400	1	D	I11	1.444	-0.188	2,512	2,032
BM1	W1	400	1	D	I12	1.480	-0.158	2,518	2,038
BM1	W1	400	1	D	I14	1.560	0.022	2,418	1,938
BM1	W1	400	1	D	I15	1.526	-0.028	2,434	1,954
BM1	W1	400	1	D	I16	1.480	-0.078	2,438	1,958
BM1	W1	400	1	D	I18	1.450	-0.058	2,388	1,908
BM1	W1	400	1	D	I18	1.450	-0.078	2,408	1,928
BM1	W1	400	1	D	I20	1.420	-0.128	2,428	1,948
BM1	W1	400	1	D	I21	1.400	-0.128	2,408	1,928
BM1	W1	400	1	D	I22	1.430	-0.128	2,438	1,958
BM1	W1	400	1	D	I23	1.470	-0.078	2,428	1,948
BM1	W1	400	1	D	I25	1.545	0.022	2,403	1,923
BM1	W1	400	1	D	I27	1.680	0.122	2,438	1,958
BM1	W1	400	1	D	I30	1.670	0.122	2,428	1,948
BM1	W1	400	1	D	I31	1.680	0.122	2,438	1,958
BM1	W1	400	1	D	I32	1.690	0.122	2,448	1,968
BM1	W1	400	1	D	I33	1.700	0.122	2,458	1,978
BM1	W1	400	1	D	I34	1.700	0.122	2,458	1,978
BM1	W1	400	1	D	I35	1.700	0.122	2,458	1,978
BM1	W1	400	1	D	I36	1.700	0.122	2,458	1,978
BM1	W1	400	1	D	I37	1.700	0.122	2,458	1,978
BM1	W1	400	1	D	I38	1.720	0.122	2,478	1,998
BM1	W1	400	1	D	I39	1.770	0.172	2,478	1,998
BM1	W1	400	1	D	I40	1.840	0.222	2,498	2,018
BM1	W1	400	1	D	I42	1.910	0.322	2,468	1,988
BM1	W1	600	1	D	I17	1.430	-0.328	2,638	2,158
BM1	W1	600	1	D	I19	1.435	-0.328	2,643	2,163
BM1	W1	600	1	D	I24	1.500	-0.228	2,608	2,128
BM1	W1	600	1	D	I26	1.610	-0.128	2,618	2,138
BM1	W1	600	1	D	I28	1.700	-0.028	2,608	2,128
BM1	W1	600	1	D	I29	1.710	-0.028	2,618	2,138
BM1	W1	600	1	D	I41	1.930	0.172	2,638	2,158
BM1	E3	400	1	D	I2	1.140	-0.466	2,486	2,006
BM1	E3	400	1	D	I3	1.180	-0.497	2,557	2,077
BM1	E3	400	1	D	I4	1.220	-0.528	2,628	2,148
BM1	E3	400	1	D	I5	1.260	-0.551	2,691	2,211
BM1	E3	400	1	D	I7	1.250	-0.558	2,688	2,208
BM1	E3	400	1	D	I8	1.240	-0.558	2,678	2,198
BM1	E3	400	1	D	I9	1.220	-0.608	2,708	2,228
BM1	E3	400	1	D	I10	1.170	-0.658	2,708	2,228
BM1	E3	400	1	D	I11	1.130	-0.708	2,718	2,238
BM1	E3	400	1	D	I12	1.140	-0.708	2,728	2,248
BM1	E3	400	1	D	I13	1.160	-0.708	2,748	2,268
BM1	E3	400	1	D	I16	1.120	-0.708	2,708	2,228
BM1	E3	400	1	D	I17	1.110	-0.708	2,698	2,218
BM1	E3	400	1	D	I21	1.285	-0.508	2,673	2,193
BM1	E3	400	1	D	I23	1.270	-0.508	2,658	2,178
BM1	E3	400	1	D	I24	1.300	-0.508	2,688	2,208
BM1	E3	400	1	D	I25	1.290	0.000	2,170	1,690
BM1	E3	600	1	D	I14	1.190	-0.808	2,878	2,398
BM1	E3	600	1	D	I15	1.160	-0.858	2,898	2,418
BM1	E3	600	1	D	I18	1.150	-0.858	2,888	2,408
BM1	E3	600	1	D	I19	1.220	-0.808	2,908	2,428
BM1	E3	600	1	D	I20	1.270	-0.758	2,908	2,428
BM1	E3	600	1	D	I22	1.270	-0.708	2,858	2,378
BM1	E3	600	1	D	I26	1.240	-0.758	2,878	2,398
BM1	E3	600	1	D	I27	1.670	-0.308	2,858	2,378
BM1	E1	400	1	D	I1	1.330	0.082	2,128	1,648

Area	Sewer Line	Dia D (mm)	Type of Inlet	Type of Cover	Inlet No.	GL (m)	Invert Level I (m)	H (m)	h _i (m)
BM1	E1	400	1	D	I2	1.330	0.082	2,128	1,648
BM1	E1	400	1	D	I3	1.330	0.082	2,128	1,648
BM1	E1	400	1	D	I4	1.330	0.032	2,178	1,698
BM1	E1	400	1	D	I4	1.330	-0.396	2,606	2,126
BM1	E1	400	1	D	I5	1.330	0.032	2,178	1,698
BM1	E1	400	1	D	I5	1.330	-0.429	2,639	2,159
BM1	E1	400	1	D	I6	1.310	0.032	2,158	1,678
BM1	E1	400	1	D	I6	1.310	-0.438	2,628	2,148
BM1	E1	400	1	D	I7	1.300	0.032	2,148	1,668
BM1	E1	400	1	D	I7	1.300	-0.438	2,618	2,138
BM1	E1	400	1	D	I8	1.300	0.032	2,148	1,668
BM1	E1	400	1	D	I10	1.350	0.082	2,148	1,668
BM1	E1	400	1	D	I10	1.350	-0.388	2,618	2,138
BM1	E1	400	1	D	I11	1.430	0.132	2,178	1,698
BM1	E1	400	1	D	I12	1.480	0.182	2,178	1,698
BM1	E1	400	1	D	I12	1.480	-0.288	2,648	2,168
BM1	E1	400	1	D	I13	1.520	0.232	2,168	1,688
BM1	E1	400	1	D	I13	1.520	-0.188	2,588	2,108
BM1	E1	400	1	D	I15	1.460	-0.478	2,618	2,338
BM1	E1	400	1	D	I16	1.390	-0.528	2,798	2,318
BM1	E1	400	1	D	I18	1.270	-0.478	2,628	2,148
BM1	E1	400	1	D	I20	1.255	-0.478	2,613	2,133
BM1	E1	400	1	D	I21	1.250	-0.478	2,608	2,128
BM1	E1	400	1	D	I23	1.210	-0.528	2,618	2,138
BM1	E1	400	1	D	I24	1.180	-0.578	2,638	2,158
BM1	E1	400	1	D	I26	1.300	-0.528	2,708	2,228
BM1	E1	400	1	D	I27	1.360	-0.478	2,718	2,238
BM1	E1	400	1	D	I28	1.440	0.152	2,168	1,688
BM1	E1	400	1	D	I28	1.440	-0.378	2,698	2,218
BM1	E1	400	1	D	I29	1.450	0.152	2,178	1,698
BM1	E1	400	1	D	I30	1.430	0.152	2,158	1,678
BM1	E1	400	1	D	I30	1.430	-0.378	2,688	2,208
BM1	E1	400	1	D	I31	1.400	0.202	2,078	1,598
BM1	E1	400	1	D	I31	1.400	-0.428	2,708	2,228
BM1	E1	400	1	D	I32	1.580	0.252	2,208	1,728
BM1	E1	400	1	D	I32	1.580	-0.228	2,688	2,208
BM1	E1	400	1	D	I33	1.820	0.452	2,248	1,768
BM1	E1	400	1	D	I33	1.820	-0.028	2,728	2,248
BM1	E1	600	1	D	I8	1.300	0.012	2,168	1,688
BM1	E1	600	1	D	I9	1.320	-0.544	2,744	2,264
BM1	E1	600	1	D	I11	1.430	-0.508	2,818	2,338
BM1	E1	600	1	D	I17	1.290	-0.628	2,798	2,318
BM1	E1	600	1	D	I19	1.270	-0.678	2,828	2,348
BM1	E1	600	1	D	I22	1.250	-0.678	2,808	2,328
BM1	E1	600	1	D	I29	1.450	-0.578	2,908	2,428
BM1	E1	1000	1	D	I34	1.920	-1.300	4,100	3,620
BM1	W2	400	1	D	I1	1.430	0.102	2,208	1,728
BM1	W2	400	1	D	I1	1.430	-0.522	2,832	2,352
BM1	W2	400	1	D	I2	1.160	-0.148	2,188	1,708
BM1	W2	400	1	D	I3	1.240	-0.048	2,168	1,688
BM1	W2	400	1	D	I4	1.250	-0.048	2,178	1,698
BM1	W2	400	1	D	I6	1.190	-0.752	2,822	2,342
BM1	W2	400	1	D	I7	1.170	-0.148	2,198	1,718
BM1	W2	400	1	D	I7	1.170	-0.802	2,852	2,372
BM1	W2	400	1	D	I8	1.170	-0.148	2,198	1,718
BM1	W2	400	1	D	I8	1.170	-0.802	2,852	2,372
BM1	W2	400	1	D	I9	1.210	-0.048	2,138	1,658
BM1	W2	400	1	D	I9	1.210	-0.752	2,842	2,362
BM1	W2	400	1	D	I10	1.216	-0.048	2,144	1,664
BM1	W2	400	1	D	I10	1.216	-0.752	2,848	2,368
BM1	W2	400	1	D	I11	1.240	-0.348	2,468	1,988
BM1	W2	400	1	D	I11	1.240	-0.678	2,798	2,318
BM1	W2	400	1	D	I12	1.140	-0.448	2,468	1,988
BM1	W2	400	1	D	I12	1.140	-0.778	2,798	2,318
BM1	W2	400	1	D	I13	1.110	-0.828	2,818	2,338
BM1	W2	400	1	D	I14	1.130	-0.448	2,458	1,978
BM1	W2	400	1	D	I14	1.130	-0.778	2,788	2,308

Area	Sewer Line	Dia D (mm)	Type of Inlet	Type of Cover	Inlet No.	GL (m)	Invert Level I (m)	H (m)	h _i (m)
BM1	W2	400	1	D	I15	1.140	-0.448	2,468	1,988
BM1	W2	400	1	D	I15	1.140	-0.778	2,798	2,318
BM1	W2	400	1	D	I16	1.140	-0.448	2,468	1,988
BM1	W2	400	1	D	I16	1.140	-0.778	2,798	2,318
BM1	W2	400	1	D	I17	1.160	-0.448	2,488	2,008
BM1	W2	400	1	D	I17	1.160	-0.778	2,818	2,338
BM1	W2								

PAVEMENT STRUCTURE OF ME COC 1,

GENERAL PLAN

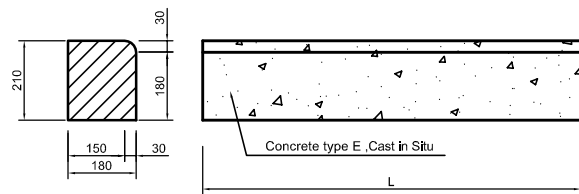
ME COC (1) AREA
Scale: 1:3500

No	Name of road	Existing wide (m)			Length of curb (m)	Detail Quantity of Pavement with 6m of wide in ME COC (1)						Pavement area (m ²)	RECONSTRUCTION PAVEMENT (LOCAL STREET)
		Road bed	Pavement (Existing)	Side walk		A.C Wearing (m ³ /ton)	A.C Binder (m ³ /ton)	Agg. 2-4 Base (m ³)	Agg. 4-6 Subbase (m ³)	Tack Coat (Litre)	Prime Coat (Litre)		
BEN ME COC 1													Type P3: demand elastic modulus Eyc = 1600kg/cm ²
1	W1	12.0~24.0	4.0 ~ 5.5	5.0 ~ 15.0	2x4055.0	1218.0/2680.0	1218.0/2680.0	4624.0	4864.0	12165.0	36495.0	24330.0	
2	W2	24.0~26.0	4.3 ~ 6.5	10.0~12.0	2x562.0	169.0/372.0	169.0/372.0	641.0	674.0	1686.0	5058.0	3372.0	
3	E3	10.0	5.0~6.0	1.5~2.2	2x817.0	245.0/539.0	245.0/539.0	932.0	980.0	2451.0	7353.0	4902.0	
4	E1	12.0~24.0	4.6~6.0	2.4~5.0	2x1022.0	307.0/675.0	307.0/675.0	1165.0	1226.0	3066.0	9198.0	6132.0	
5	E2	12.5	7.50	2.00+3.00	2x372.0	112.0/246.0	112.0/246.0	424.0	446.0	1116.0	3348.0	2232.0	

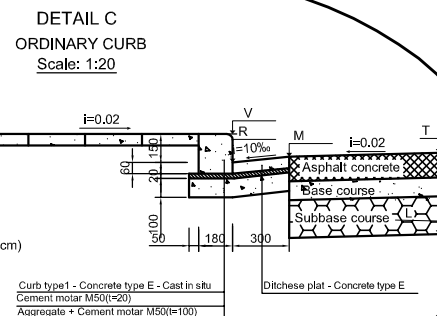
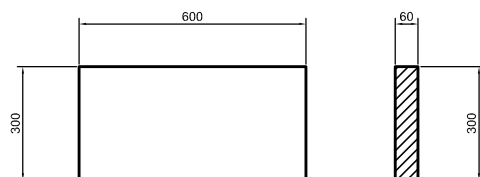
TYPICAL CROSS SECTION OF ROAD. Scale: 1:50



a) CURB Scale: 1:10
Type I (ordinary)

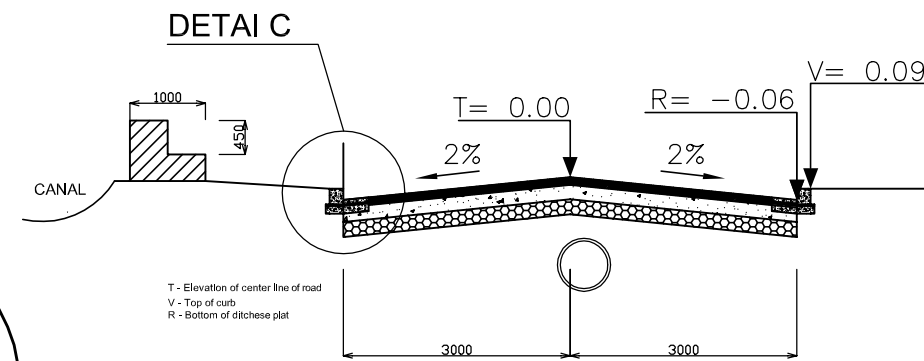


b) DITCHES PLATE (L DITCHES)

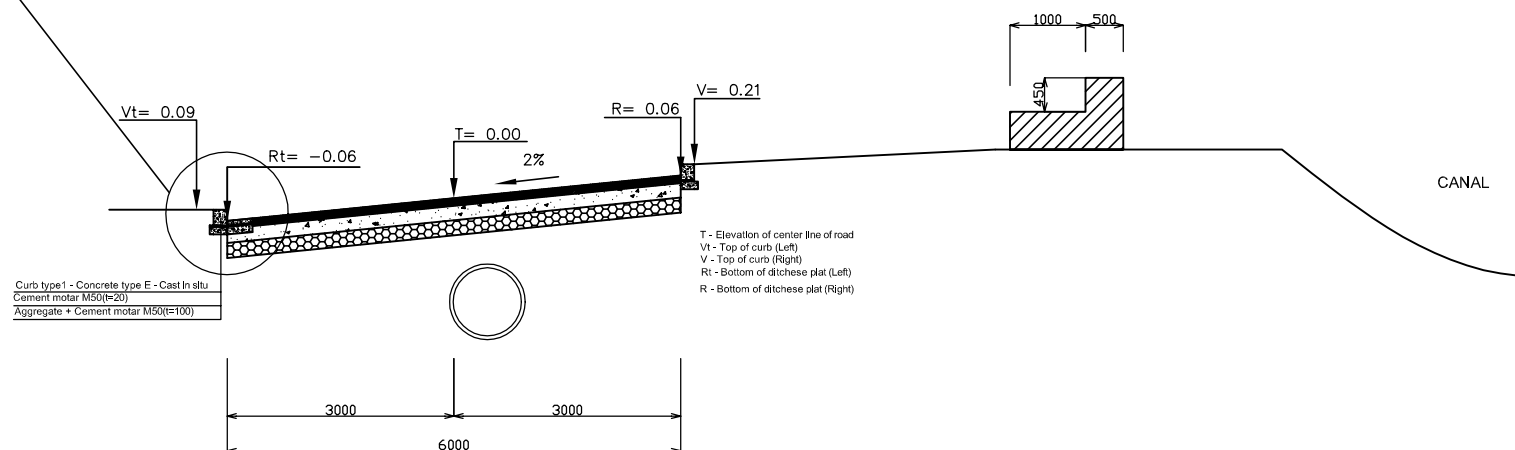


Curb type 1 - Concrete type E - Cast in situ
Cement mortar M50(=20)
Aggregate + Cement mortar M50(=100)
Ditch plate - Concrete type E

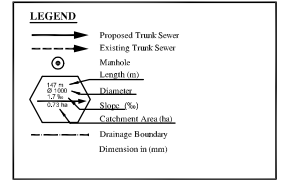
TYPICAL CROSS SECTION OF ROAD: S1



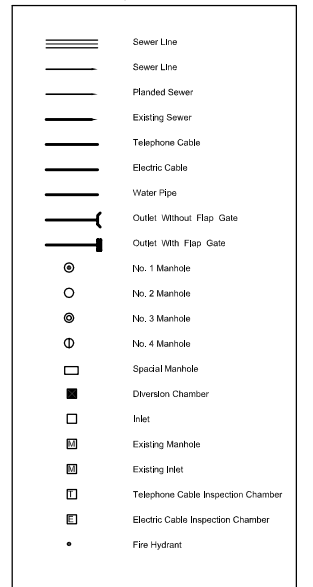
TYPICAL CROSS SECTION OF ROAD: S2



Curb type 1 - Concrete type E - Cast in situ
Cement mortar M50(=20)
Aggregate + Cement mortar M50(=100)
T - Elevation of center line of road
Vt - Top of curb (Left)
V - Top of curb (Right)
Rt - Bottom of ditch plate (Left)
R - Bottom of ditch plate (Right)



LEGEND



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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC (1) AREA
**ROAD WORKS IN
BEN ME COC (1) AREA**

SCALE : AS SHOWN

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

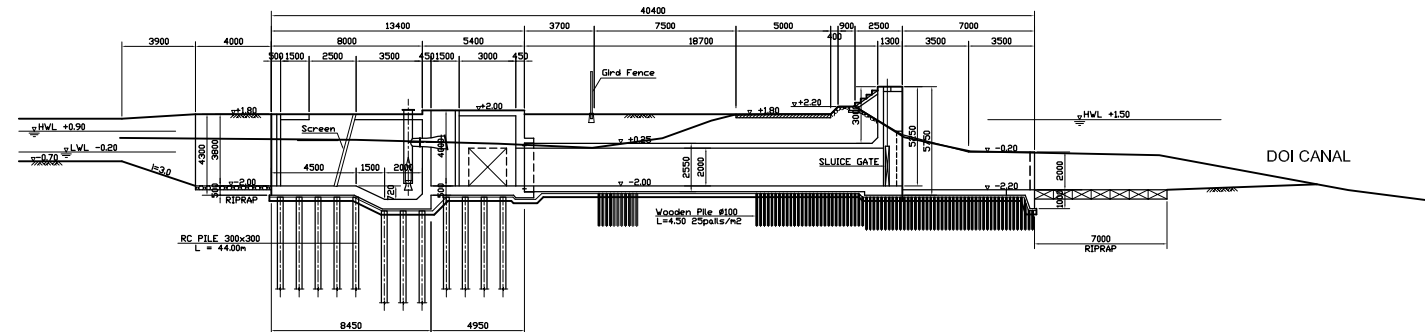
DESIGNED: TOKUMASU TOSHIAKI
CHECKED: KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1 - 253

PLAN S = 1 : 200



PROFILE OF PUMPING STATION



NO.	DATE	DESCRIPTIONS	BY

REVISIONS

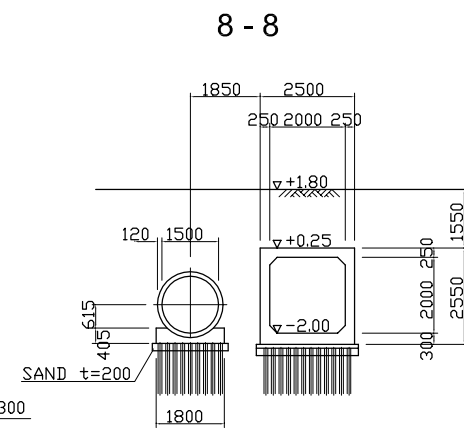
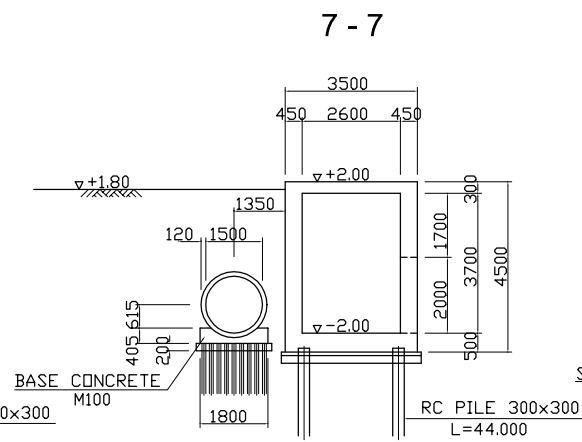
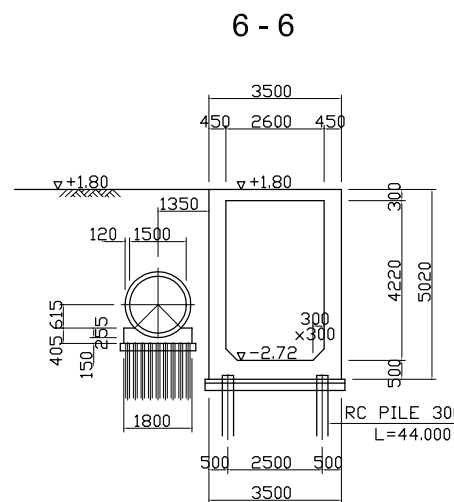
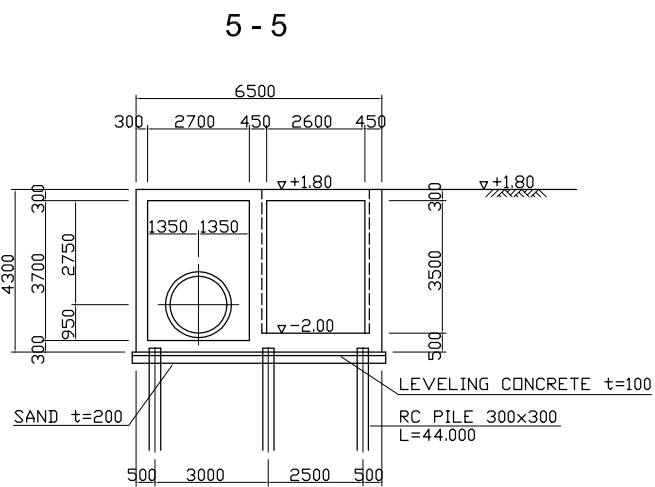
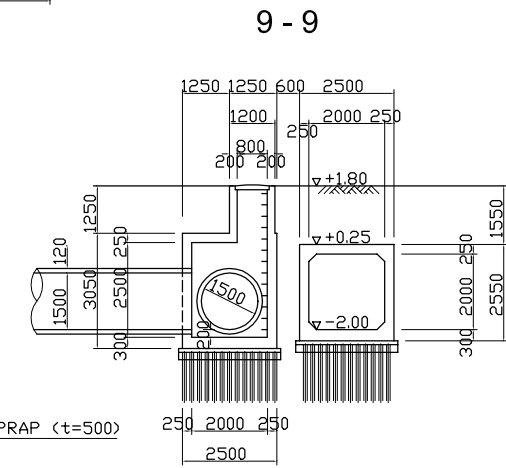
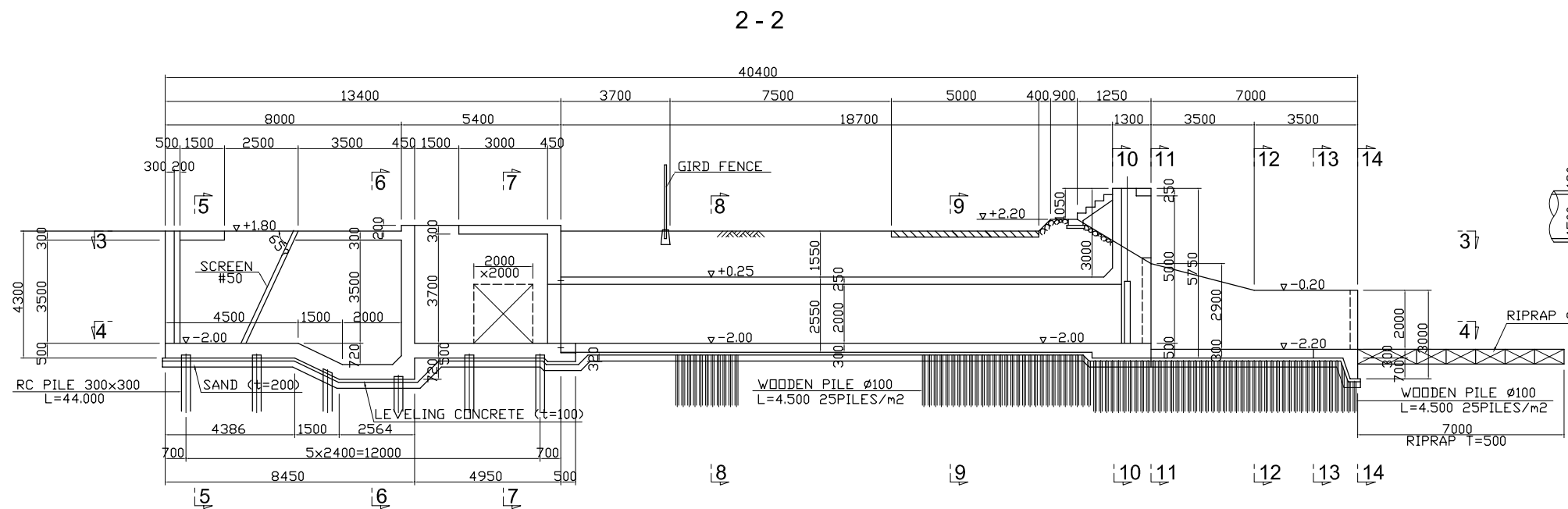
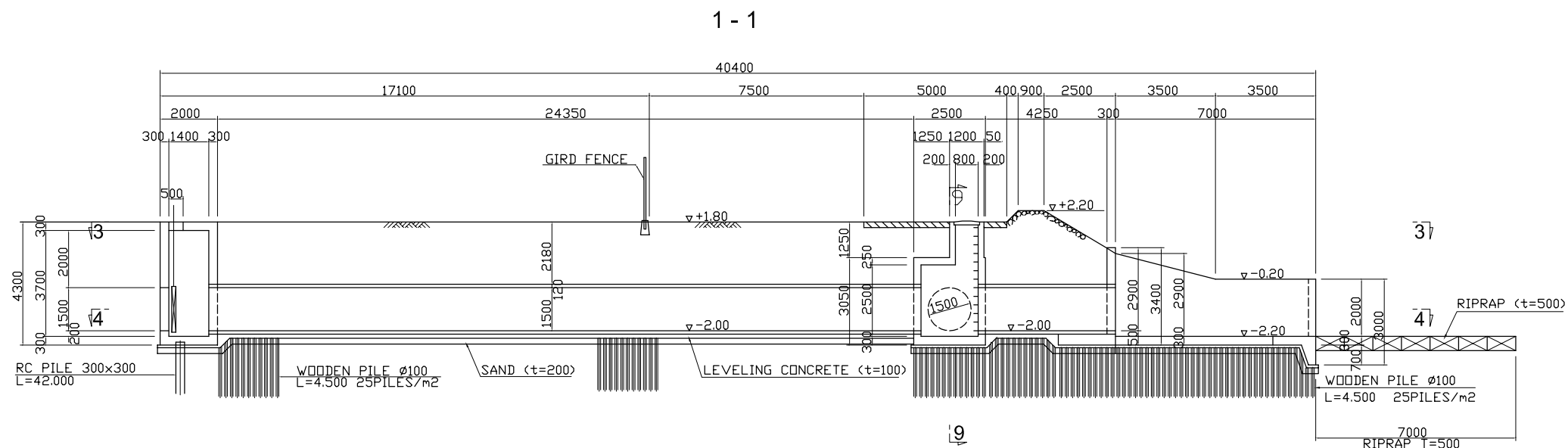
PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
WATER ENVIRONMENT IMPROVEMENT

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

PACKAGE B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC (1) PUMPING STATION

GENERAL LAYOUT OF BEN ME COC (1)
PUMPING STATION

SCALE = 1 : 200	
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	
PACIFIC CONSULTANTS INTERNATIONAL	
DESIGNED TOKUMASU TOSHIAKI	CHECKED KONDO MASAMI
DATE : JUNE 2001	DWG. No. PB - PDI - BMC1 - 254



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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC (1) PUMPING STATION
**PLAN AND SECTION OF PUM PIT,
DISCHARGE BASIN AND SLUICE WAY (1)**

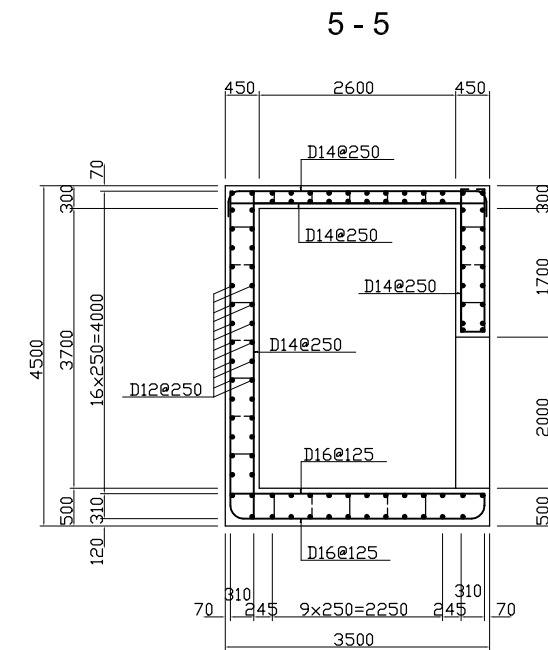
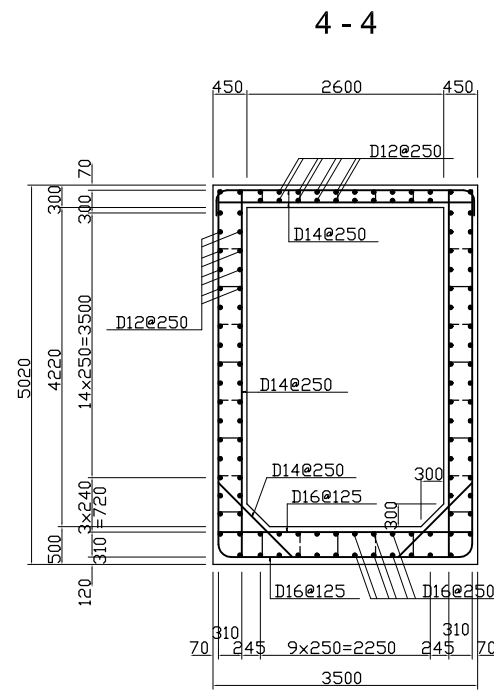
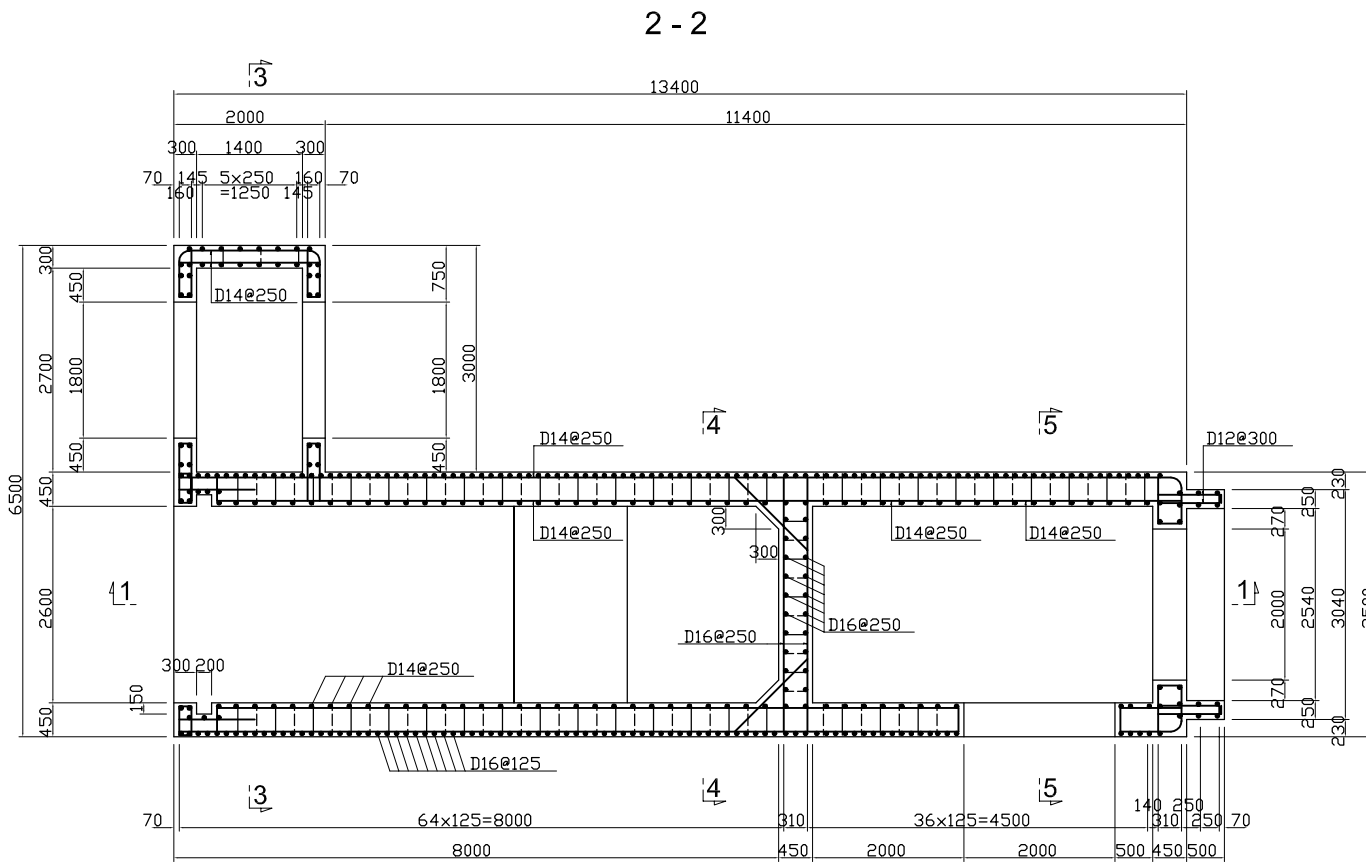
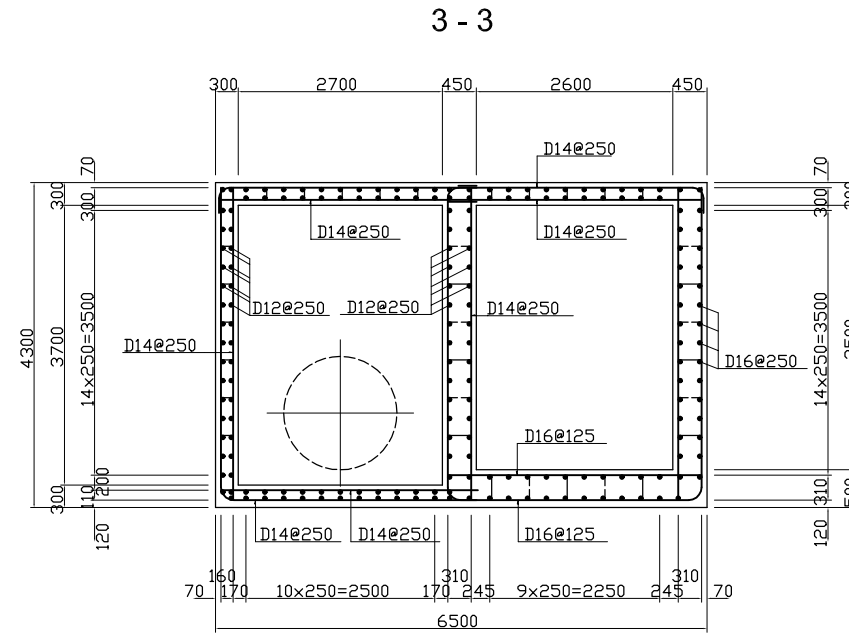
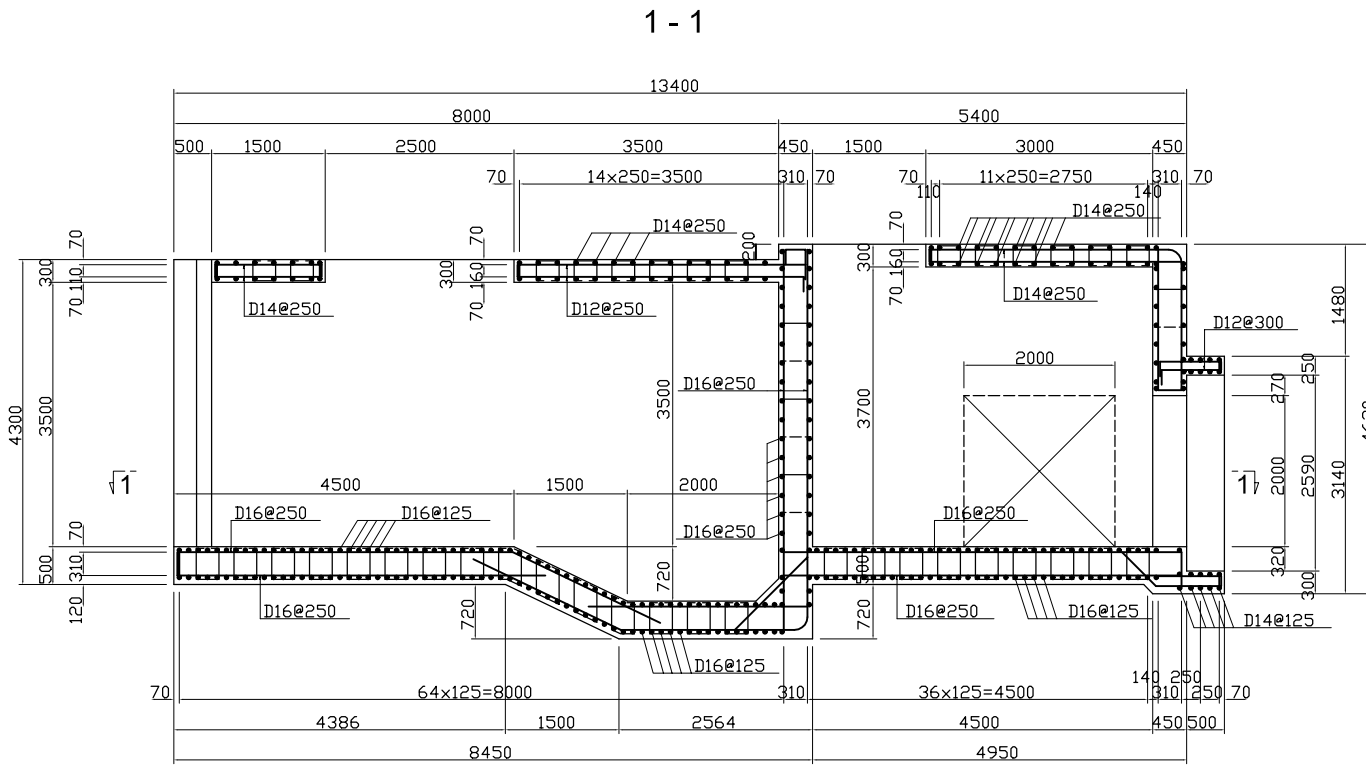
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JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIKI
CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1 - 255



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 B
PUMP DRAINAGE IMPROVEMENT
BEN ME COC (1) PUMPING STATION
BAR ARRANGEMENT OF
PUMP PIT AND DISCHARGE BASIN

SCALE = 1 : 50

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED TOKUMASU TOSHIAKI CHECKED KONDO MASAMI

DATE : JUNE 2001 DWG. No. PB - PDI - BMC1 - 257

