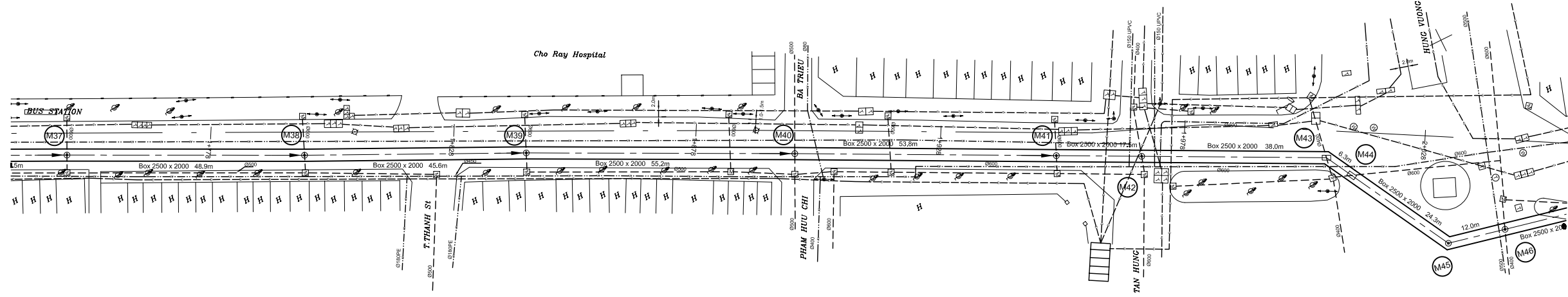
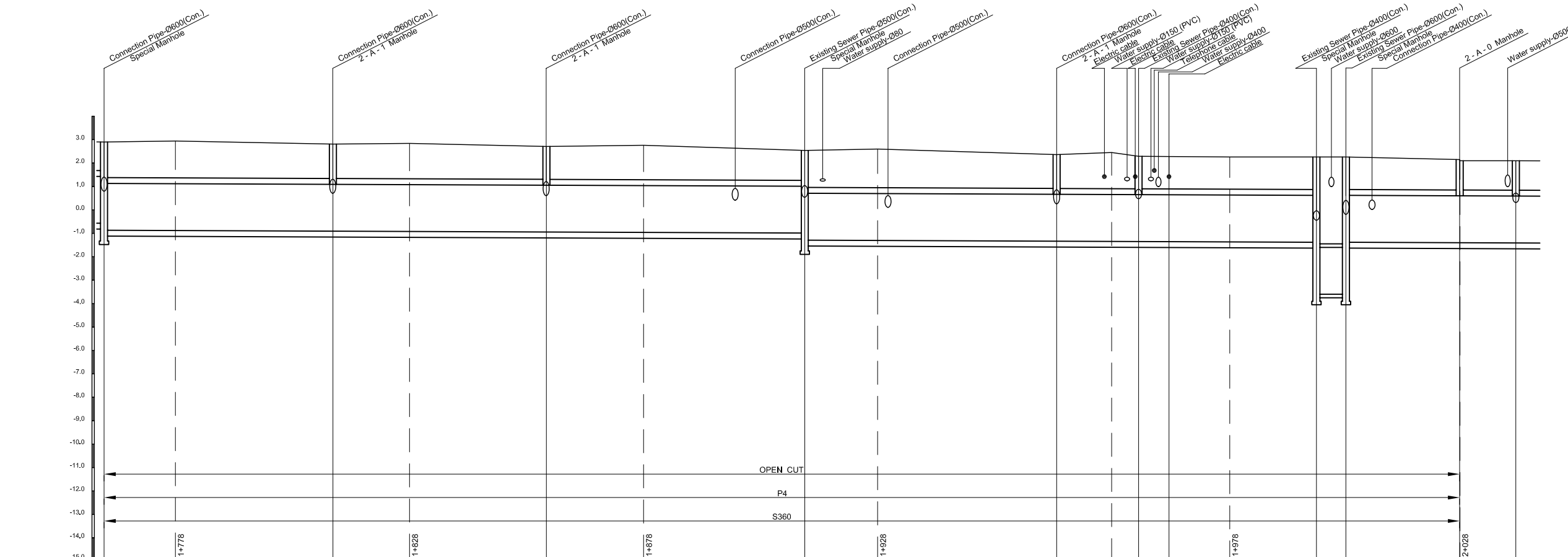


PLAN S = 1/500

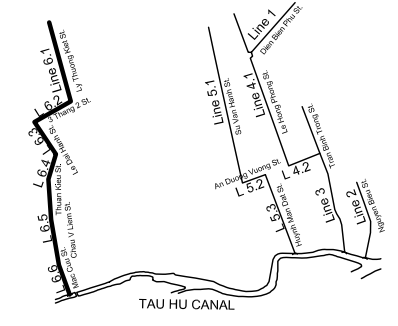


PROFILE S_H = 1/500, S_V = 1/100



Manhole Number	M37	M38	M39	M40	M41	M42	M43	M44	M45	M46						
Diameter (mm)	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000						
Gradient (%)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	0.80	0.80						
Length (m)	48.9	45.6	55.2	53.8	17.5	38.0	6.3	24.3	12.0							
Existing Ground Elevation (m)	2.90	2.94	2.81	2.84	2.71	2.76	2.54	2.60	2.36	2.45	2.29	2.26	2.26	2.15	2.10	
Earth Covering (m)	1.22		1.47		1.41		1.28		1.44		1.39		1.39	2.51	1.30	1.26
Invert Elevation (m)	-0.57	-0.88	-0.91	-0.92	-0.95	-0.96	-0.98	-1.09	-1.30	-1.33	-1.34	-1.35	-1.36	-1.38	-1.40	-1.41
Total Accumulation Length (m)	1730.4	1745.7	1779.3	1795.7	1824.9	1845.7	1895.7	1933.9	1945.7	1951.4	1970.9	1999.4	1995.7	2020.0	2032.0	

KEYMAP

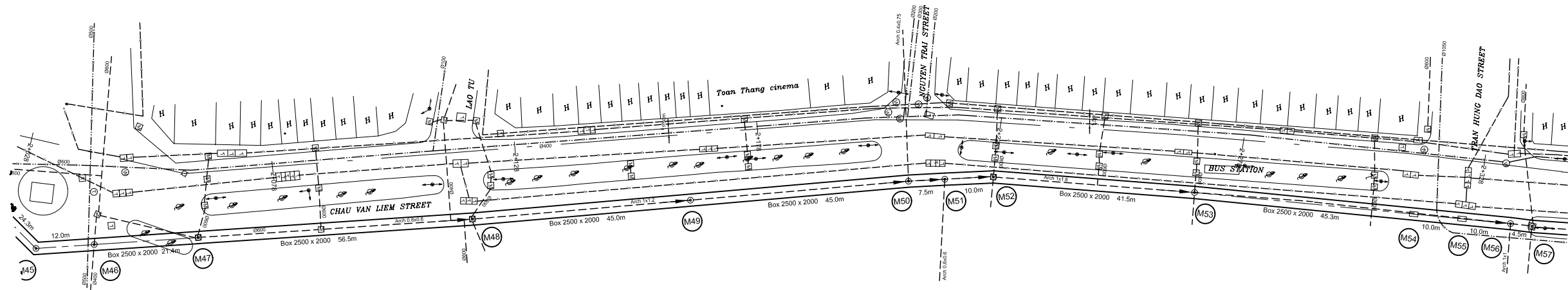


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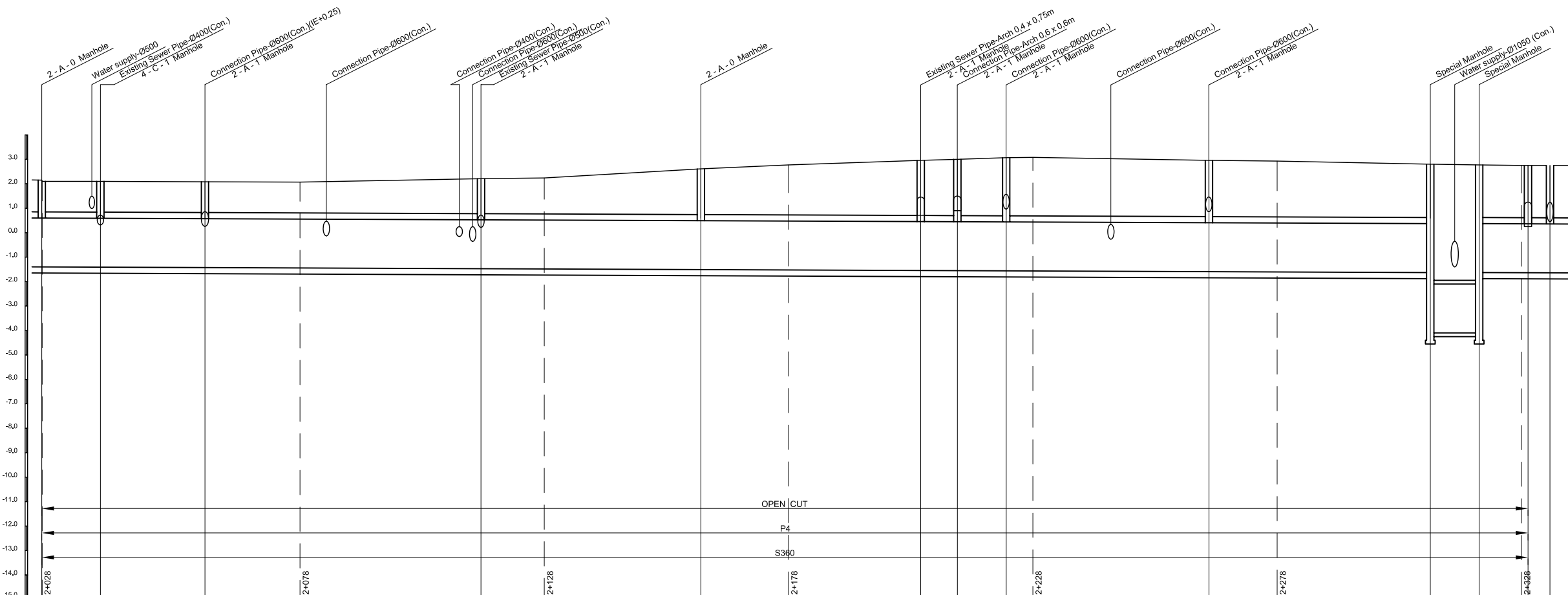
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

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 D EXISTING COMBINED SEWER IMPROVEMENT				
PLAN AND PROFILE ECSI - LINE 6.4 (7)				
SCALE : As Shown				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KATSUKI TAKAOKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PD - ECSI - 233		

PLAN S = 1/500

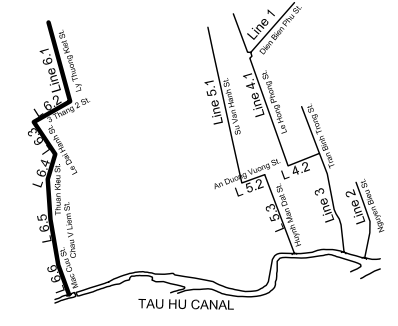


PROFILE S_H = 1/500, S_V = 1/100



Manhole Number	(M45)	(M46)	(M47)	(M48)	(M49)	(M50)	(M51)	(M52)	(M53)	(M54)	(M55)	(M56)	(M57)						
Diameter (mm)	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Ø2000	2500 x 2000						
Gradient (%)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	0.80						
Length (m)	12.0	21.4	56.5	45.0	45.0	7.5	10.0	41.5	45.3	10.0	10.0	4.5							
Existing Ground Elevation (m)	2.15 2.10	2.10	2.08	2.07	2.21	2.24	2.61	2.77	2.96	3.00	3.07	3.08	2.96	2.93	2.80	2.77	2.75	2.75	
Earth Covering (m)	1.30	1.26	1.26	1.43	1.87	2.25	2.30	2.38	2.30	2.18	4.72	2.14	2.14						
Invert Elevation (m)	-1.40 -1.41	-1.41	-1.43	-1.44	-1.47	-1.48	-1.51	-1.52	-1.54	-1.55	-1.56	-1.56	-1.59	-1.60	-1.63	-1.10	-1.63	-1.64	-1.64
Total Accumulation Length (m)	2020.0 2020.1	2032.0	2053.4	2072.9	2109.9	2122.9	2154.9	2172.9	2199.9	2207.4	2217.4	2222.9	2258.9	2272.9	2304.2	2314.2	2324.2	2324.2	2328.7

KEYMAP

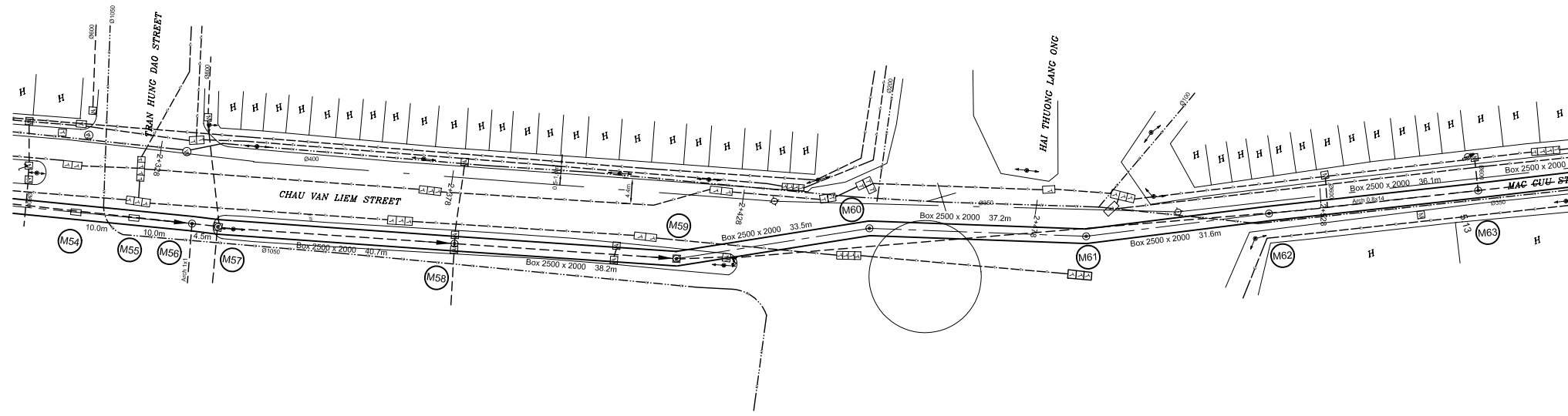


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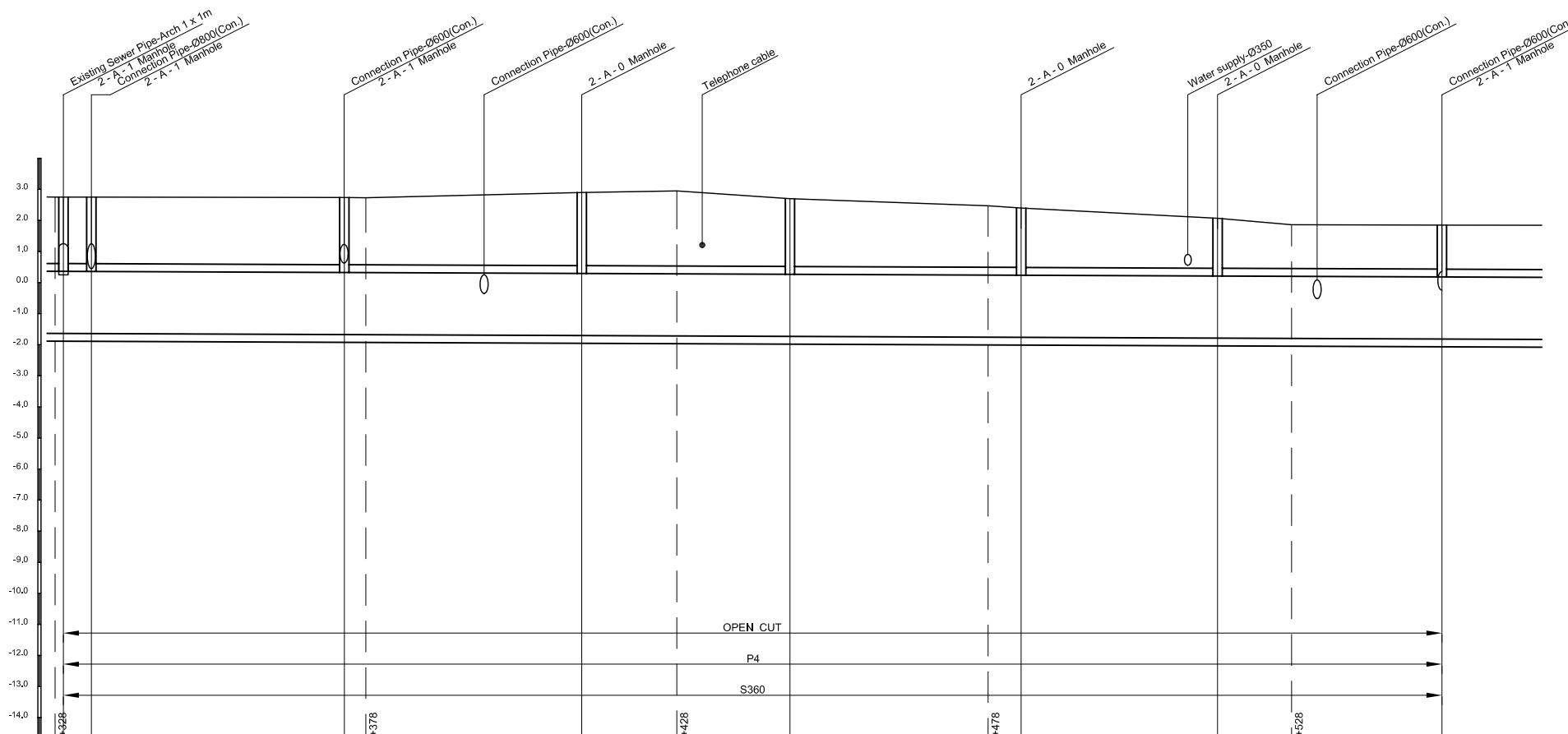
- Sewer Line
- Sewer Line
- Planted Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

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 D EXISTING COMBINED SEWER IMPROVEMENT				
PLAN AND PROFILE ECSI - LINE 6.5 (8)				
SCALE : As Shown				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)		PACIFIC CONSULTANTS INTERNATIONAL		
DESIGNED KATSUKI TAKAOKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PD - ECSI - 234		

PLAN S = 1/500

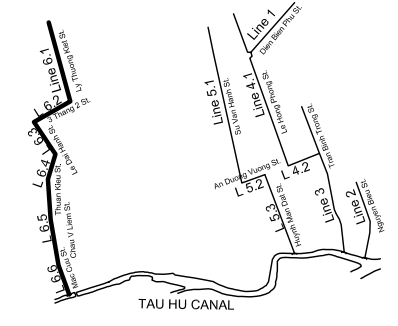


PROFILE S_H = 1/500, S_V = 1/100



Manhole Number	(M56)(M57)	(M58)	(M59)	(M60)	(M61)	(M62)	(M63)	
Diameter (mm)	Ø2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	Box 2500 x 2000	
Gradient (%)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	
Length (m)	4.5	40.7	38.2	33.5	37.2	31.6	36.1	
Existing Ground Elevation (m)	2.75 2.75	2.74 2.73	2.90	2.95	2.70	2.47 2.40	2.07 1.86	1.85
Earth Covering (m)	2.14 2.14	2.16	2.35	2.18	1.91	1.61	1.42	
Invert Elevation (m)	-1.64 -1.64	-1.67 -1.67	-1.70	-1.71	-1.73	-1.76 -1.76	-1.79 -1.80	-1.82
Total Accumulation Length (m)	2322.9 2324.2 2328.7	2369.4 2372.9	2407.6	2422.9	2441.1	2473.0 2478.3	2509.9 2521.8	2546.0

KEYMAP

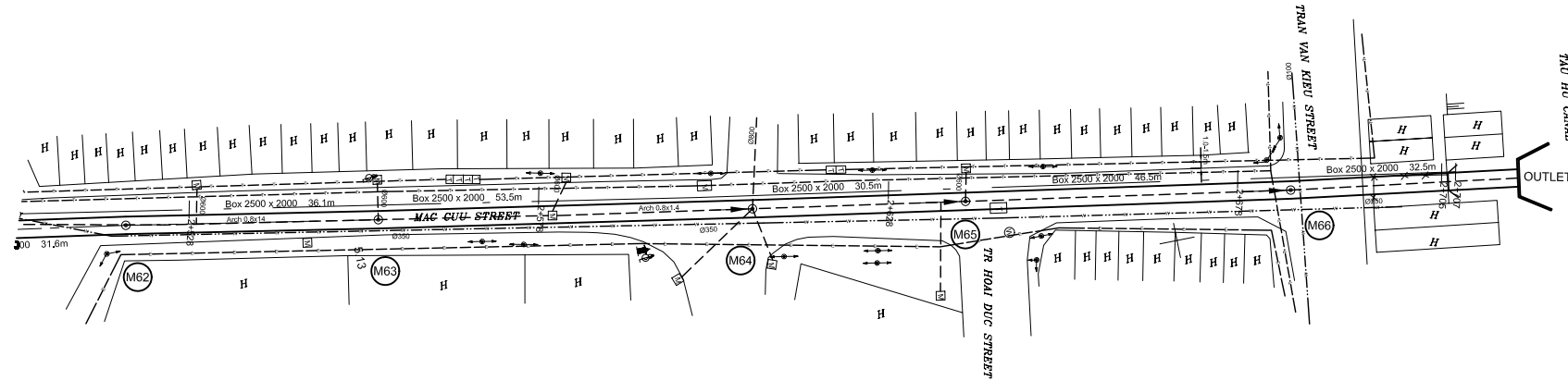


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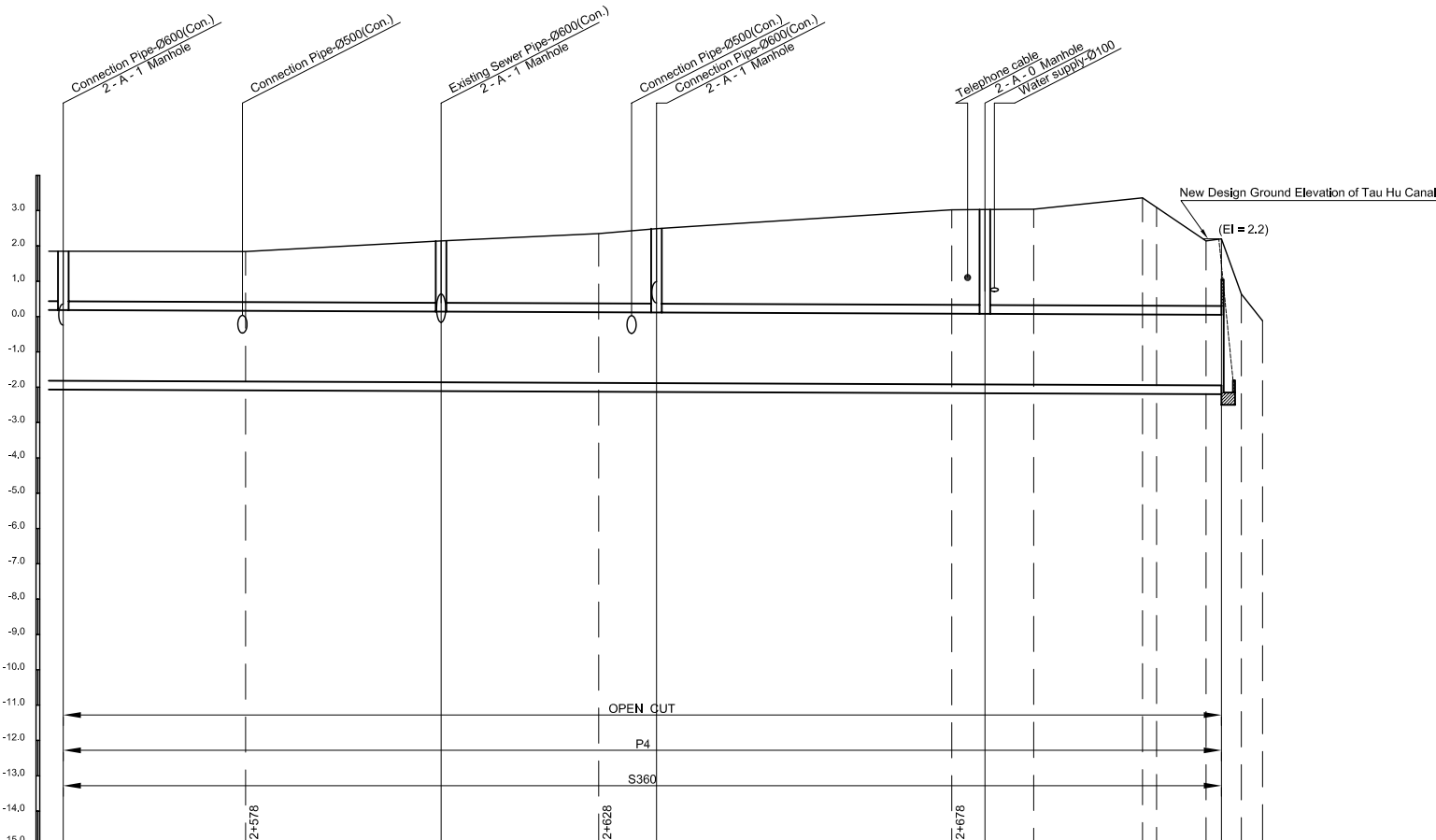
- Sewer Line
- Planned Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
- Manhole
- Special Manhole
- Diversion Chamber
- Diversion Chamber with Manhole
- Existing Manhole
- Existing Inlet
- Telephone Cable Inspection Chamber
- Electric Cable Inspection Chamber
- Fire Hydrant
- S4 - Area to be Required for Shaft
- Sewer Connected from The Right Side
- Sewer Connected from The Left Side

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 D EXISTING COMBINED SEWER IMPROVEMENT				
PLAN AND PROFILE ECSI - LINE 6.5 - 6.6 (9)				
SCALE : As Shown				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KATSUKI TAKAOKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PD - ECSI - 235		

PLAN S = 1/500

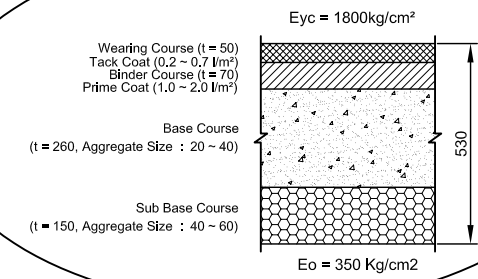


PROFILE $S_H = 1/500, S_V = 1/100$

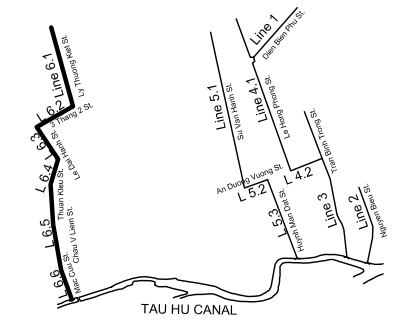


Manhole Number	M63	M64	M65	M66	OUTLET
Diameter (mm)	Box 2500 x 2000				
Gradient (%)	0.80				
Length (m)	53.5	30.5	46.5	33.5	
Existing Ground Elevation (m)	1.85	1.84	2.14	2.35	2.49
Earth Covering (m)	1.42	1.75	2.12	2.70	1.90
Invert Elevation (m)	-1.82	-1.84	-1.86	-1.87	-1.88
Total Accumulation Length (m)	2546.0	2571.8	2599.5	2621.8	2630.0
				2671.8	2676.5
				2683.4	2698.8
				2700.8	2707.8
				2710.0	2712.8
				2715.8	

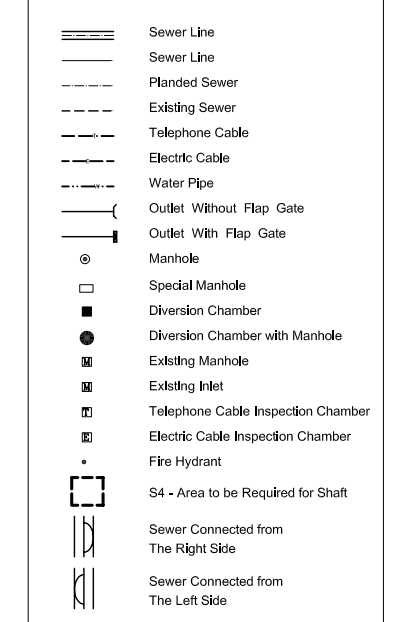
PAVEMENT TYPE P4



KEYMAP



LEGEND



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 D
EXISTING COMBINED SEWER IMPROVEMENT

PLAN AND PROFILE
ECSI - LINE 6.6 (10)

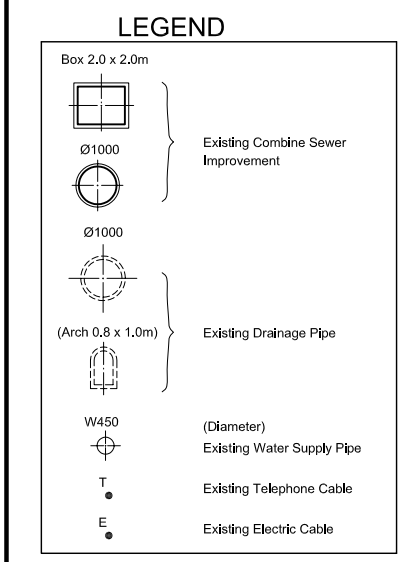
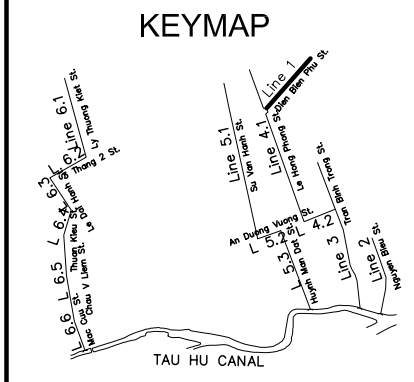
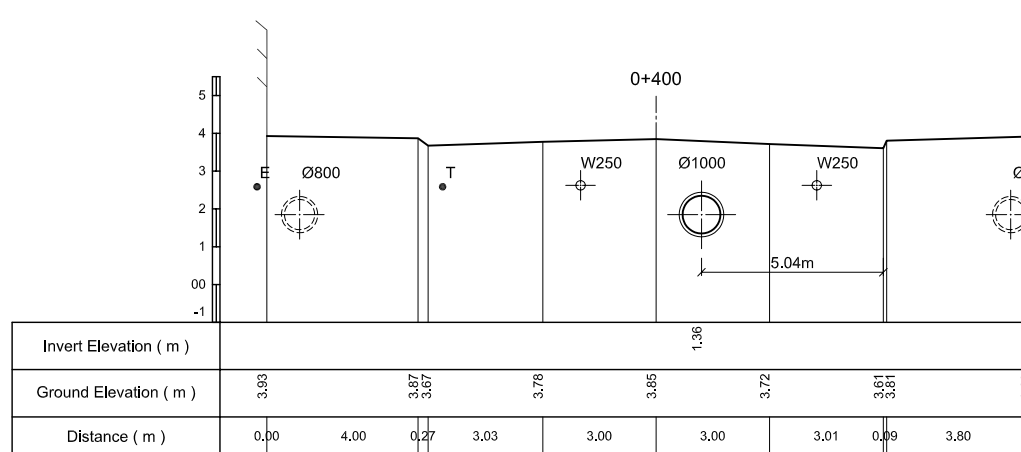
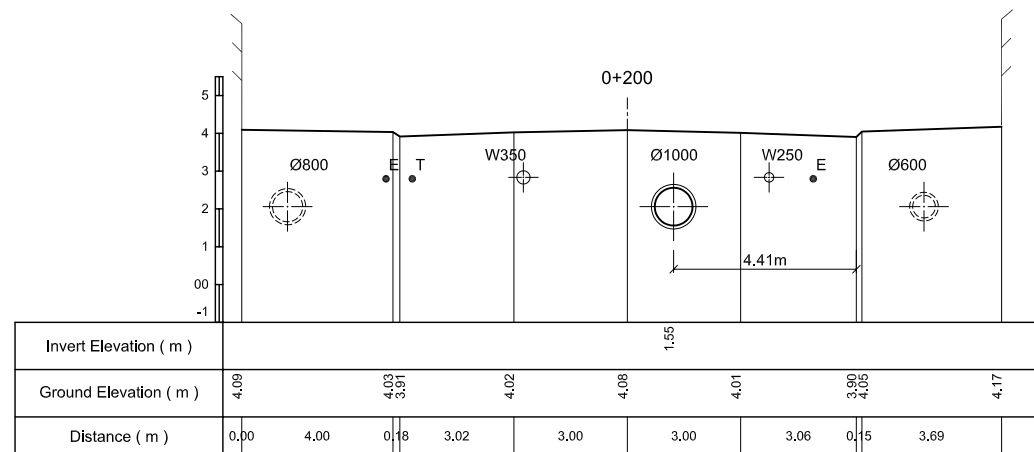
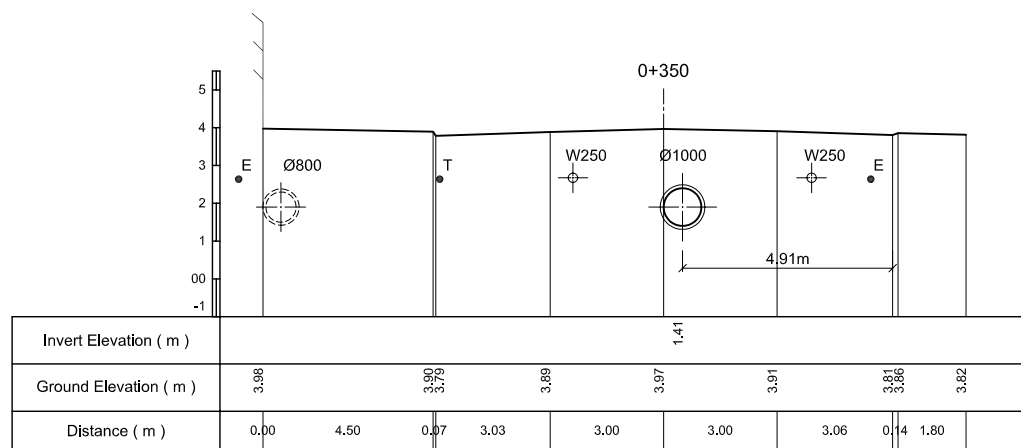
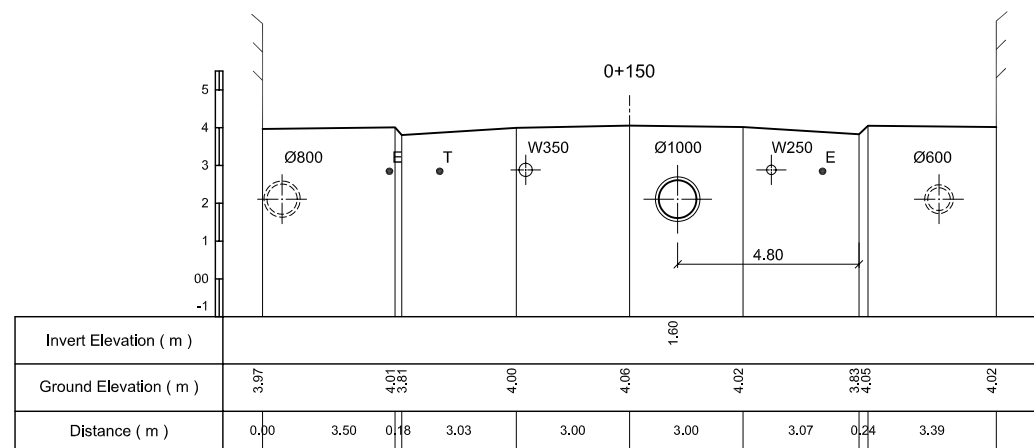
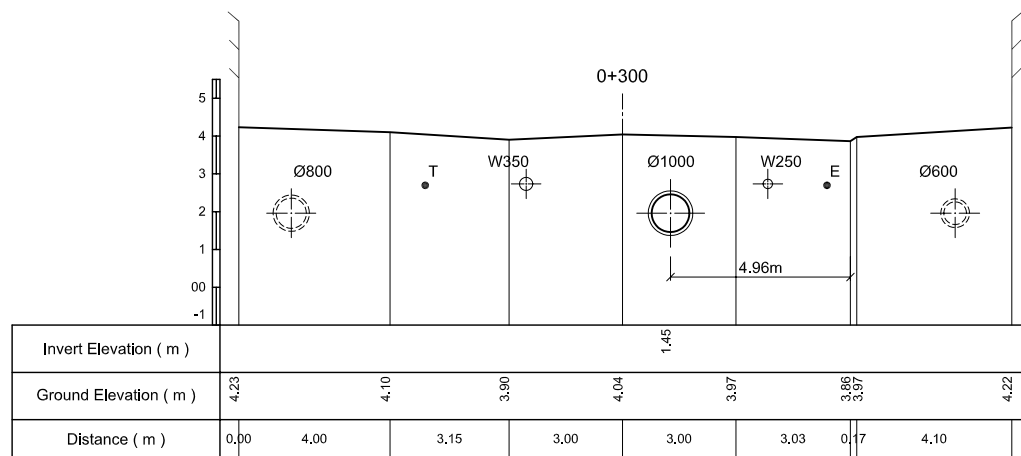
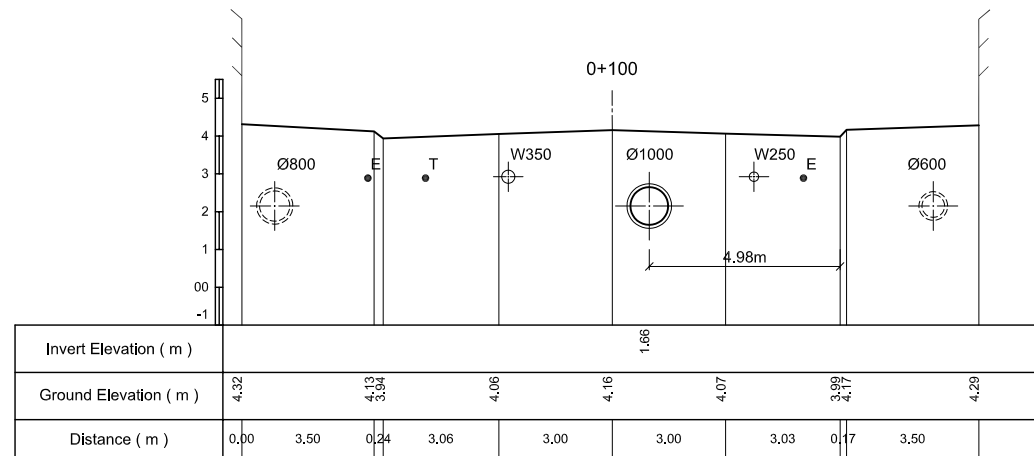
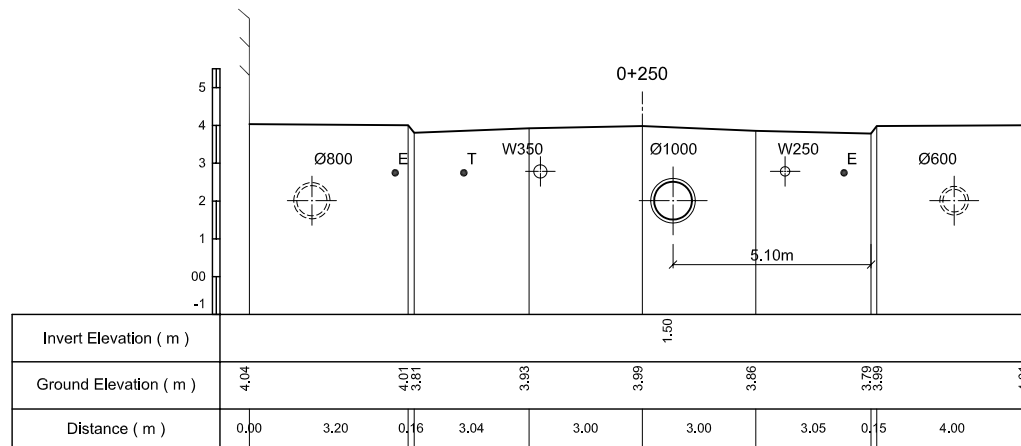
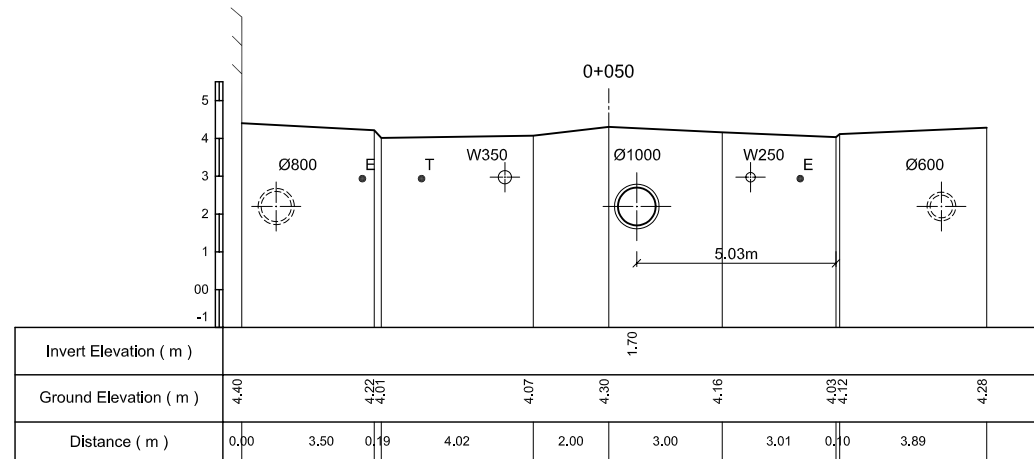
SCALE : As Shown

JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED: KATSUKI TAKAOKI
CHECKED: KONDO MASAMI

DATE : JUNE 2001 DWG. No. PD - ECSI - 236



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 D
EXISTING COMBINED SEWER IMPROVEMENT

CROSS SECTION
OF ECSI - LINE 1 (1)

SCALE : 1 / 100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KATSUKI TAKAAKI

CHECKED
KONDO MASAMI

DATE : JUNE 2001

DWG. No. PD - ECSI - 237