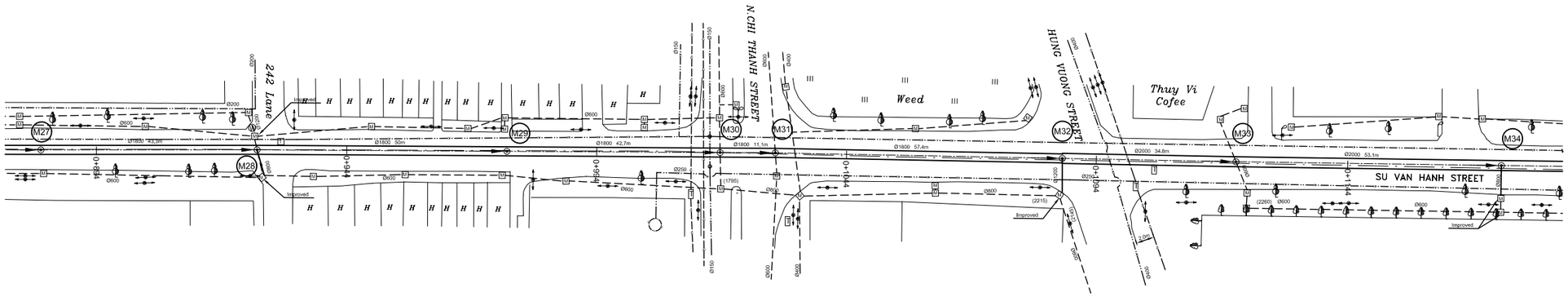
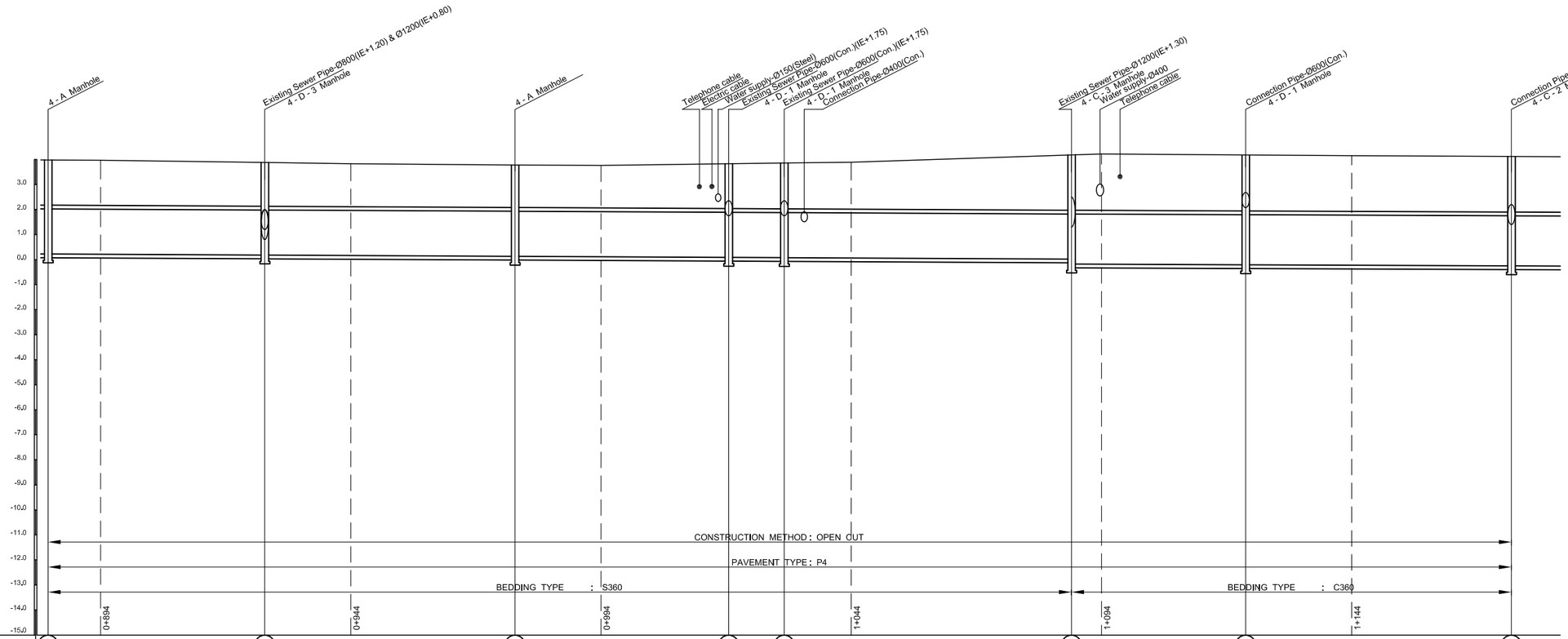
PLAN S = 1/500

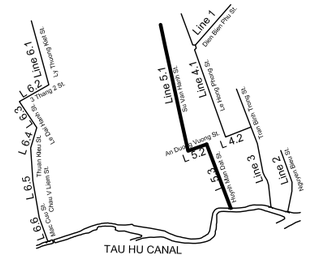


PROFILE SH = 1/500, SV = 1/100



Manhole Number	M27		M28		M29		M30	M31		M32		M33		M34
Diameter (mm)	Ø1800		Ø1800		Ø1800		Ø1800		Ø1800		Ø2000		Ø2000	
Gradient (‰)	1.00		1.00		1.00		1.00		1.00		0.80		0.80	
Length (m)	43.3		50		42.7		11.1		57.4		34.8		53.1	
Existing Ground Elevation (m)	3.98	3.97	3.88	3.83	3.78	3.76	3.83	3.86	3.89	4.18	4.22	4.18	4.15	4.12
Earth Covering (m)	1.81		1.76		1.71		1.80	1.84		2.22		2.24		2.23
Invert Elevation (m)	0.22	0.21	0.17	0.15	0.13	0.11	0.08	0.07	0.05	0.01 -0.19	-0.19	-0.21	-0.23	-0.26
Total Accumulation Length (m)	868.5	879.0	911.8	929.0	961.8	979.0	1004.5	1015.6	1029.0	1073.0	1079.0	1107.8	1129.0	1160.9

KEYMAP



LEGEND

- Sewer Line
- Sewer Line
- Planded 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 5.1 (4)

SCALE : As Shown

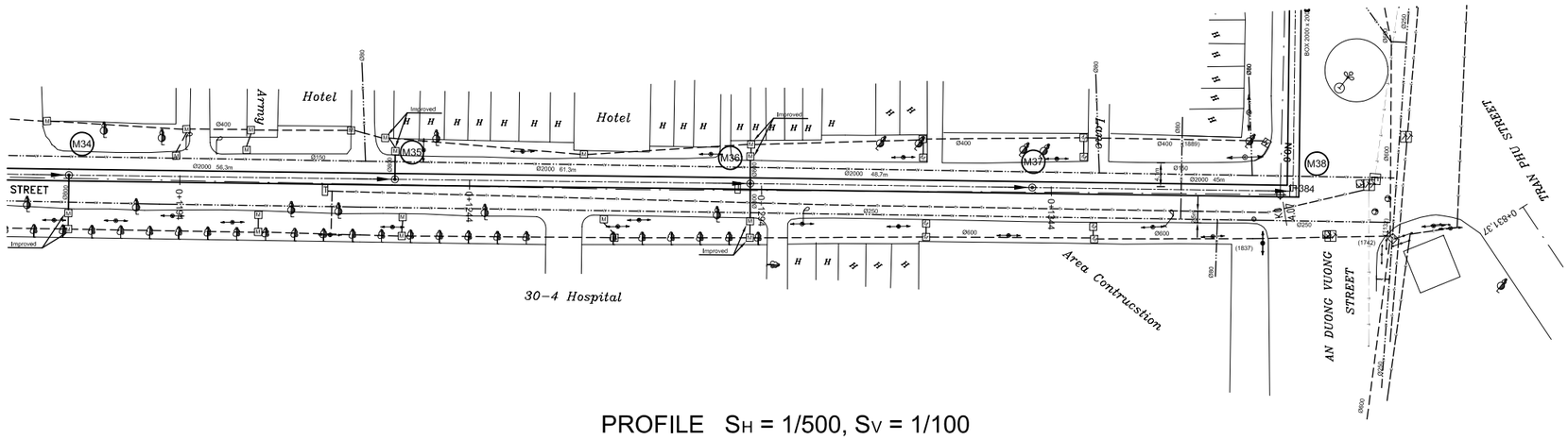
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	CHECKED
KATSUKI TAKAAKI	KONDO MASAMI

DATE : JUNE 2001 | DWG. No. PD - ECSI - 221

PLAN S = 1/500

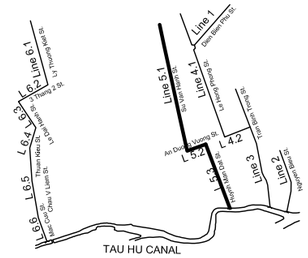


PROFILE SH = 1/500, SV = 1/100

Manhole Number	M34	M35	M36	M37	M38
Diameter (mm)	Ø2000	Ø2000	Ø2000	Ø2000	Box 2000 x 2000
Gradient (‰)	0.80	0.80	0.80	0.80	0.60
Length (m)	56,3	55	55	45	54,9

Existing Ground Elevation (m)	4.12	4.10	4.13	4.14	4.16	4.16	4.04	4.04	4.07	4.06
Earth Covering (m)	2.23		2.28		2.36		2.28		2.34	
Invert Elevation (m)	-0.26	-0.27	-0.30	-0.31	-0.35	-0.35	-0.39	-0.39	-0.43	-0.43
Total Accumulation Length (m)	1160.9	1179.0	1217.2	1229.0	1272.2	1272.7	1327.2	1329.0	1369.0	1372.2

KEYMAP



LEGEND

- Sewer Line
- Sewer Line
- Planded Sewer
- Existing Sewer
- Telephone Cable
- Electric Cable
- Water Pipe
- Outlet Without Flap Gate
- Outlet With Flap Gate
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- 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
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- 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 5.1 - 5.2 (5)

SCALE : As Shown

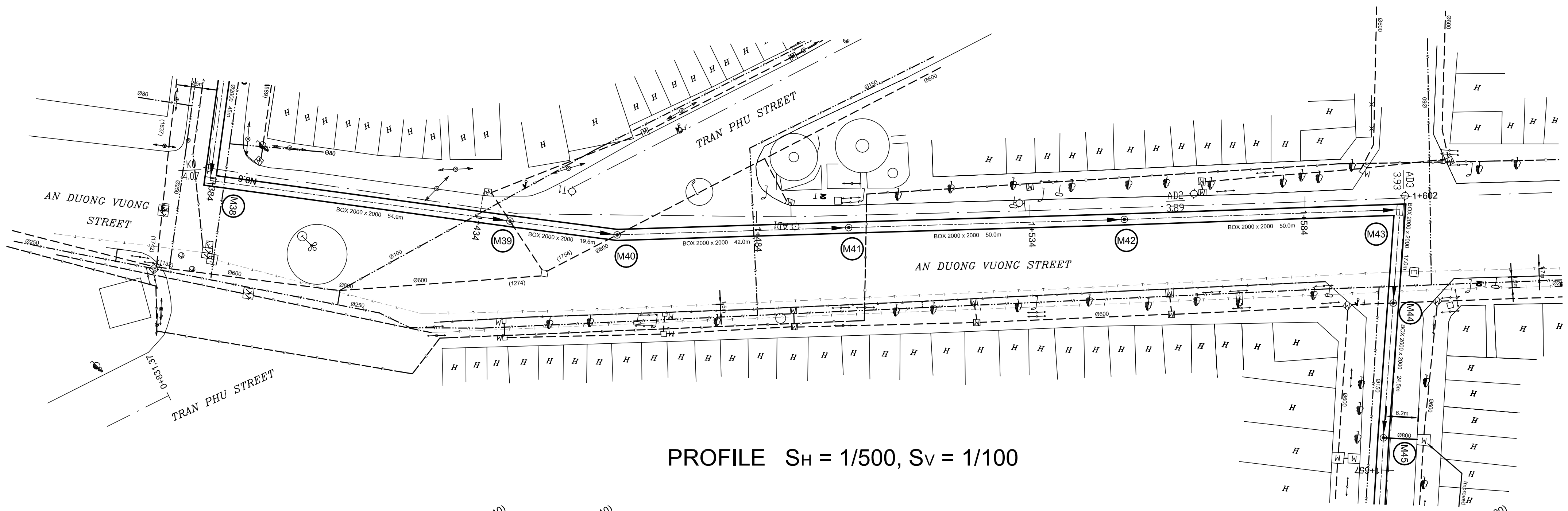
JICA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

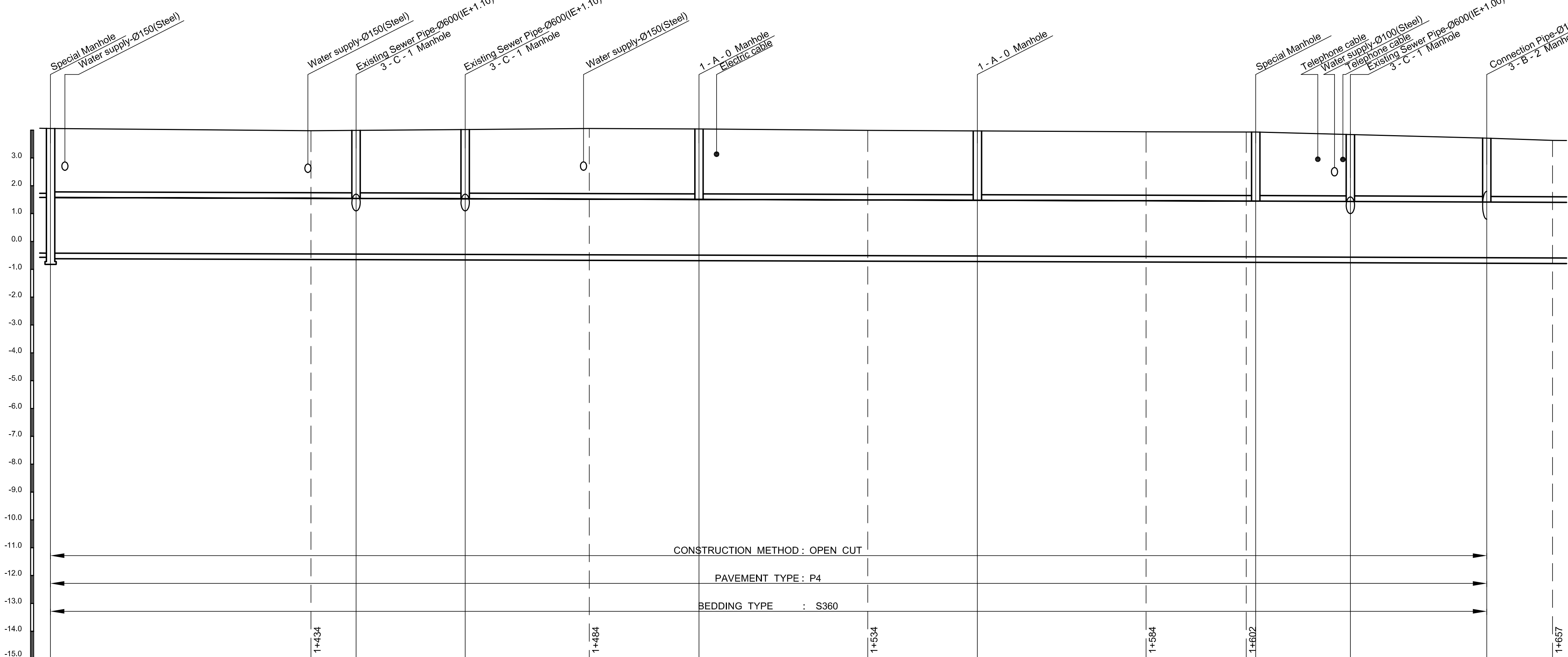
DESIGNED	CHECKED
KATSUKI TAKAAKI	KONDO MASAMI

DATE : JUNE 2001 | DWG. No. PD - ECSI - 222

PLAN S = 1/500



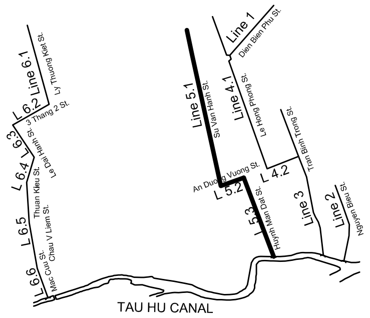
PROFILE SH = 1/500, SV = 1/100



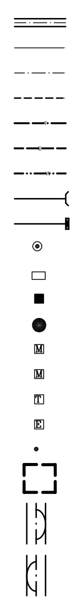
Manhole Number	Diameter (mm)	Gradient (‰)	Length (m)
M38 – M39	Box 2000 x 2000	0.60	54.9
M39 – M40	Box 2000 x 2000	0.60	19.6
M40 – M41	Box 2000 x 2000	0.60	42
M41 – M42	Box 2000 x 2000	0.60	50
M42 – M43	Box 2000 x 2000	0.60	50
M43 – M44	Box 2000 x 2000	0.80	17.0
M44 – M45	Box 2000 x 2000	0.80	24.5

Point	Existing Ground Elevation (m)	Earth Covering (m)	Invert Elevation (m)	Total Accumulation Length (m)
M38	4.06	2.34	-0.43	1372.2
1+434	3.98		-0.45	1419.0
M39	3.99	2.25	-0.46	1427.1
M40	4.02	2.29	-0.47	1446.7
1+484	4.06		-0.49	1469.0
M41	4.04	2.34	-0.50	1488.7
1+534	3.99		-0.52	1519.0
M42	3.97	2.30	-0.53	1538.7
1+584	3.94		-0.55	1569.0
1+602 / M43	3.93 3.93	2.29	-0.56 -0.56	1587.0 1588.7
M44	3.84	2.21	-0.57	1605.7
M45	3.71	2.09	-0.58	1630.2
1+657	3.63		-0.59	1642.0

KEYMAP



LEGEND



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- Existing Inlet
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- Electric Cable Inspection Chamber
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REVISIONS

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HO CHI MINH CITY
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IN THE SOCIALIST REPUBLIC OF VIET NAM

PACKAGE D
EXISTING COMBINED SEWER IMPROVEMENT

PLAN AND PROFILE
ECSI - LINE 5.2 - 5.3 (6)

SCALE : As Shown

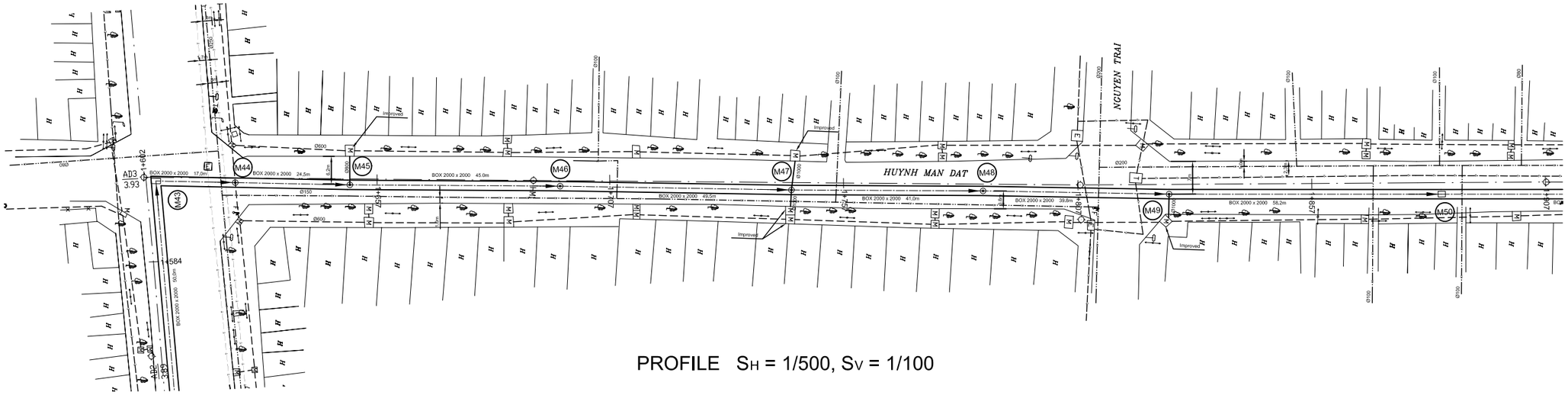
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

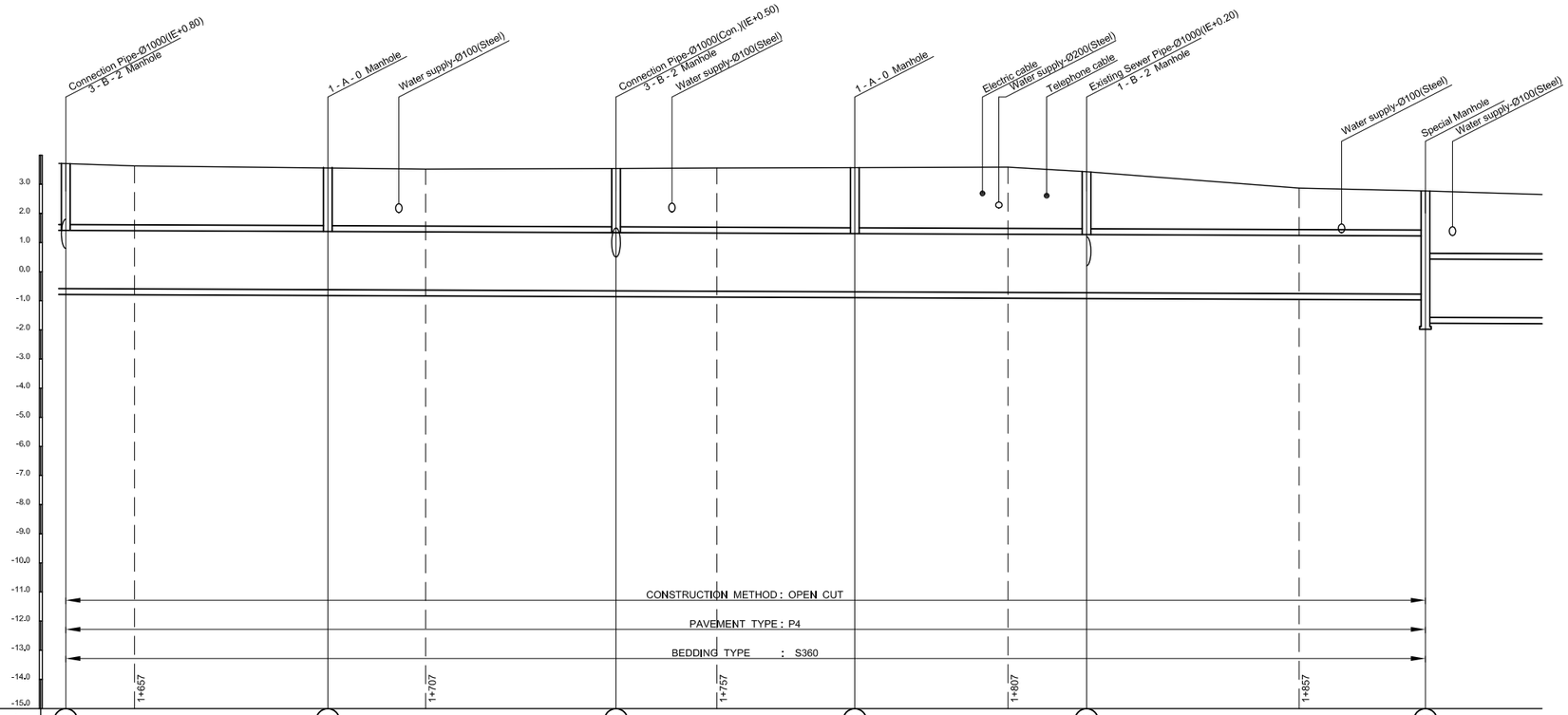
DESIGNED	CHECKED
KATSUKI TAKAAKI	KONDO MASAMI

DATE : JUNE 2001 | DWG. No. PD - ECSI - 223

PLAN S = 1/500

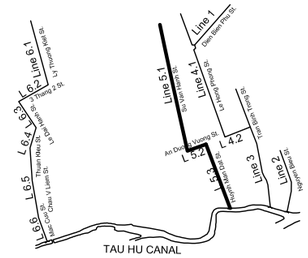


PROFILE SH = 1/500, SV = 1/100



Manhole Number	M45		M46		M47		M48		M49		M50
Diameter (mm)		Box 2000 x 2000		Box 2000 x 2000		Box 2000 x 2000		Box 2000 x 2000		Box 2000 x 2000	
Gradient (‰)		0.80		0.80		0.80		0.80		0.80	
Length (m)		45		49.5		41		39.8		58.2	
Existing Ground Elevation (m)	3.71	3.63	3.56	3.52	3.54	3.56	3.57	3.59	3.43	2.87	2.77
Earth Covering (m)	2.09		1.97		1.98		2.03		1.92		1.29 2.17
Invert Elevation (m)	-0.58	-0.59	-0.61	-0.62	-0.64	-0.65	-0.66	-0.68	-0.69	-0.71	-0.72 -1.60
Total Accumulation Length (m)	1630.2	1642.0	1675.2	1692.0	1724.7	1742.0	1765.7	1792.0	1805.5	1842.0	1863.7

KEYMAP



LEGEND

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PROJECT MANAGEMENT UNIT FOR
HO CHI MINH CITY
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THE DETAILED DESIGN ON HO CHI MINH CITY
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PACKAGE D
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PLAN AND PROFILE
ECSI - LINE 5.3 (7)

SCALE : As Shown

JICA — JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED	CHECKED
KATSUKI TAKAAKI	KONDO MASAMI

DATE : JUNE 2001 | DWG. No. PD - ECSI - 224