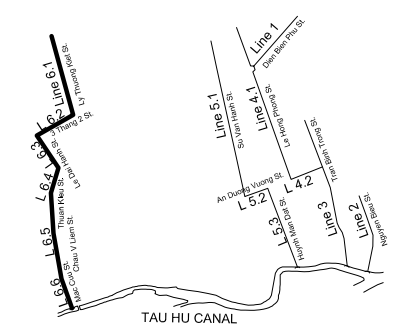
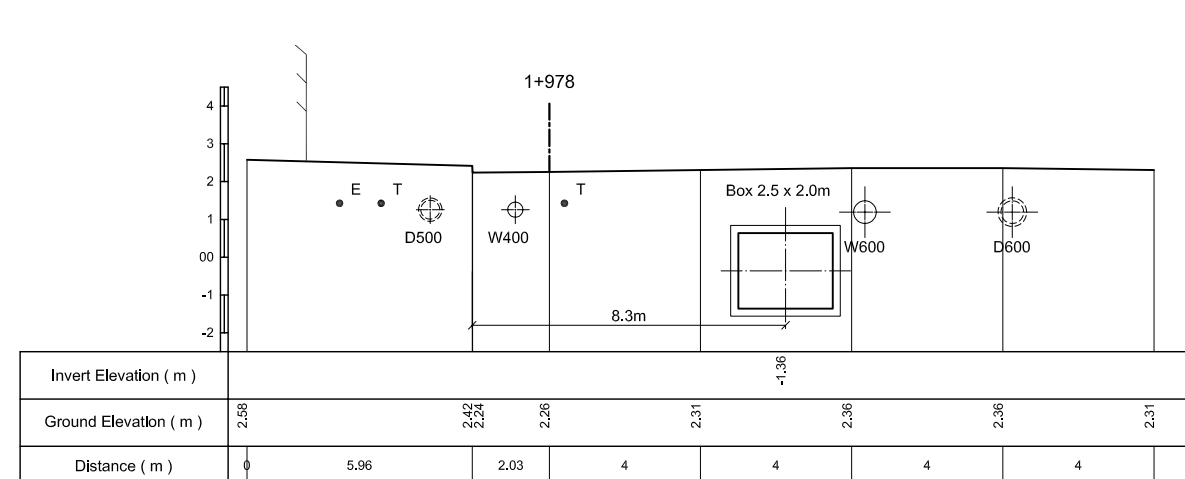
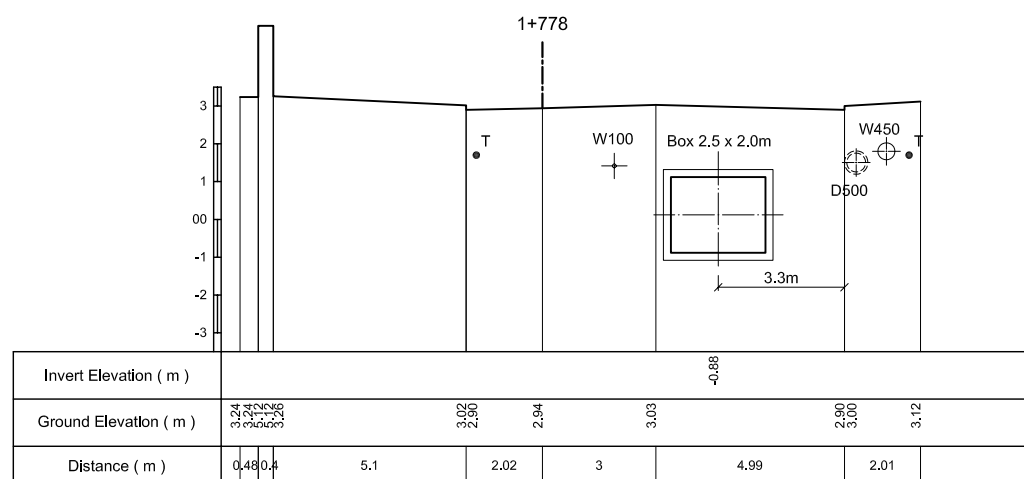
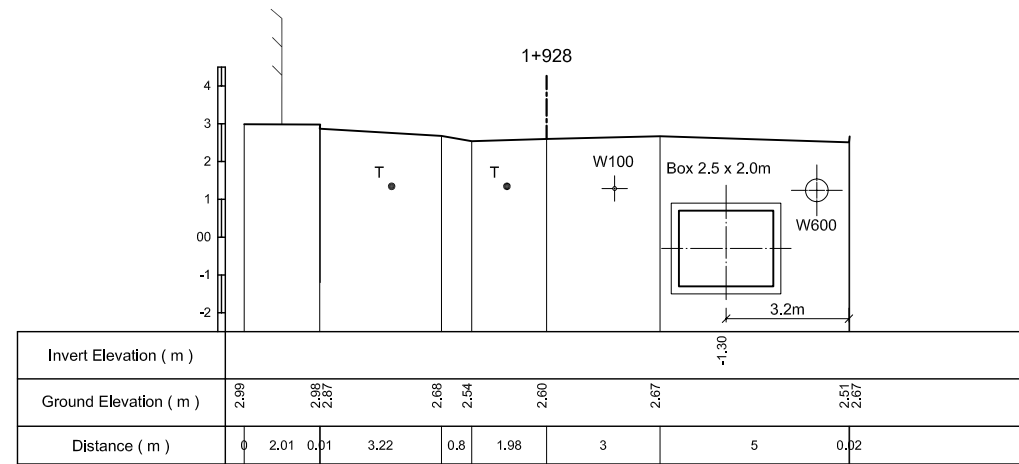
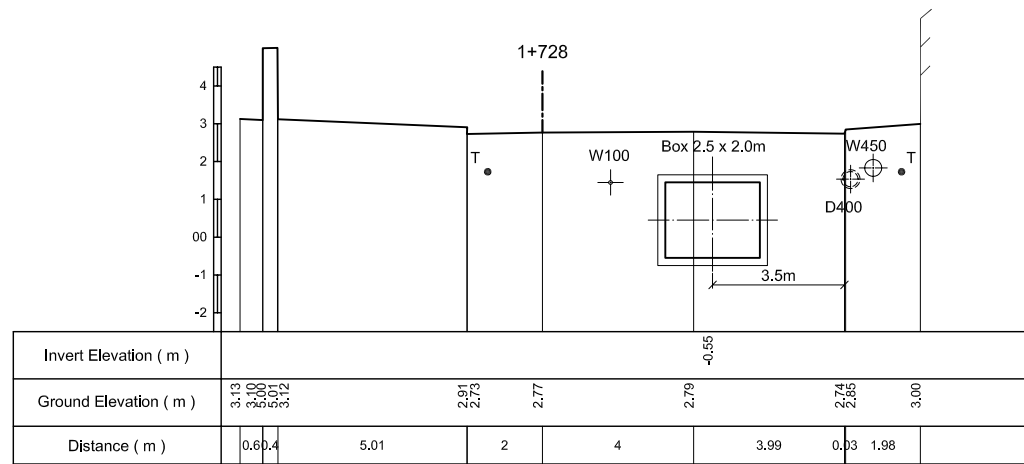
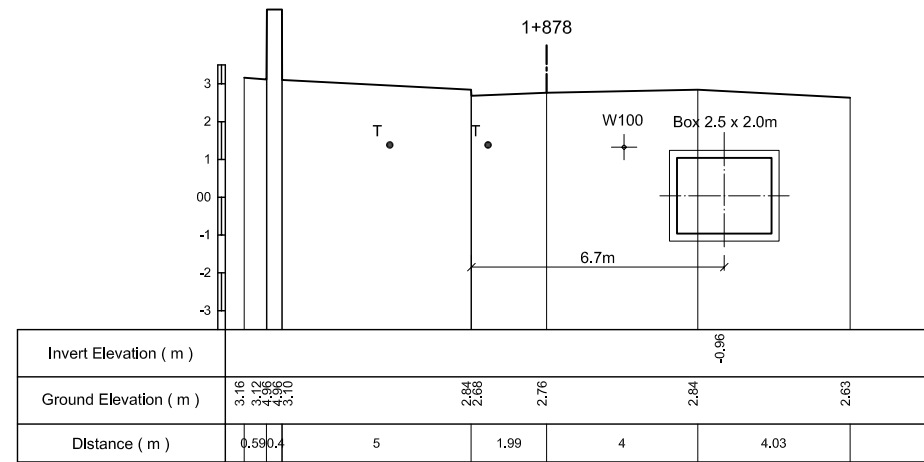
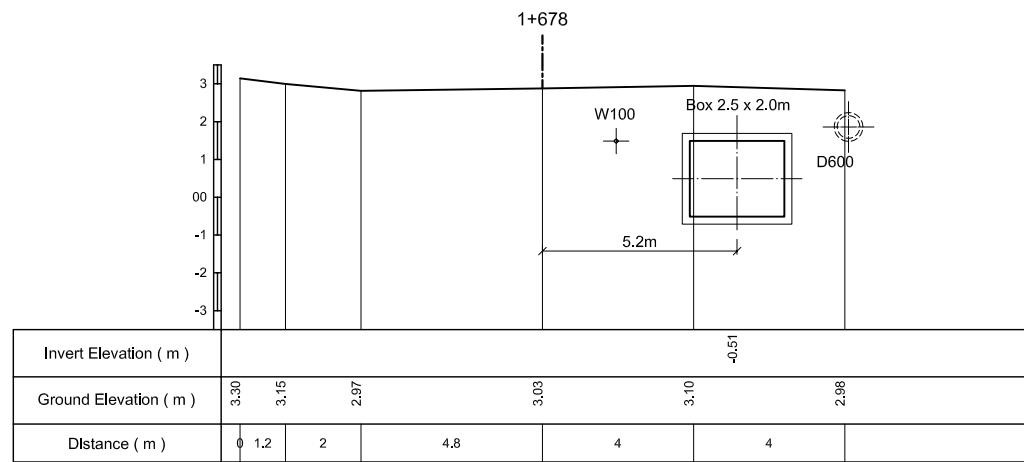
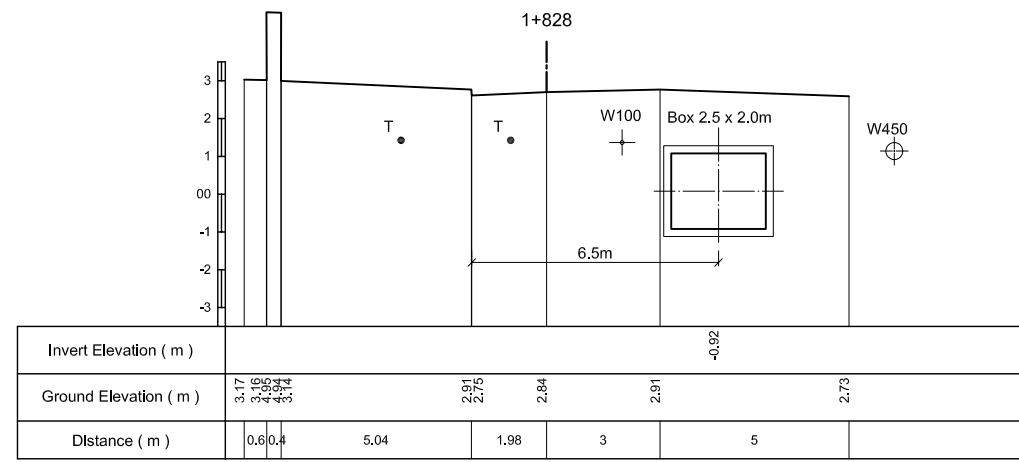
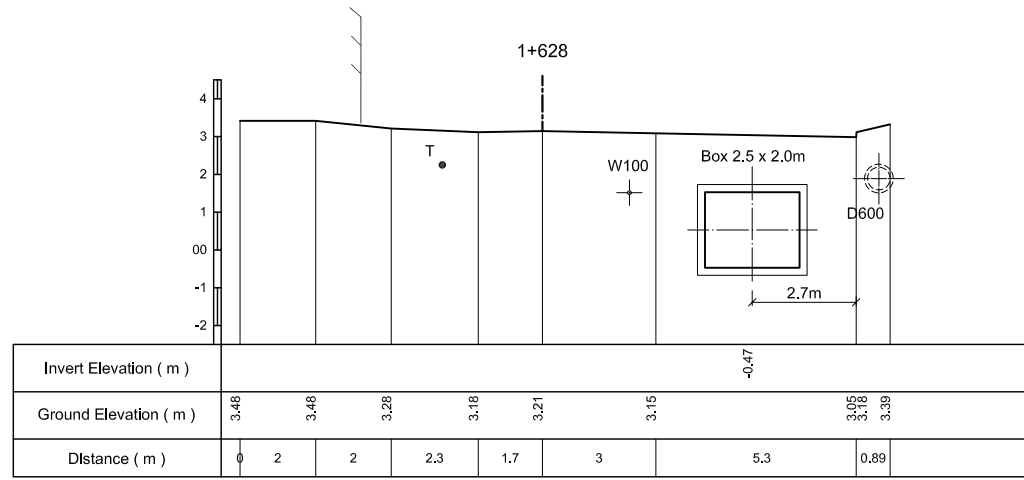
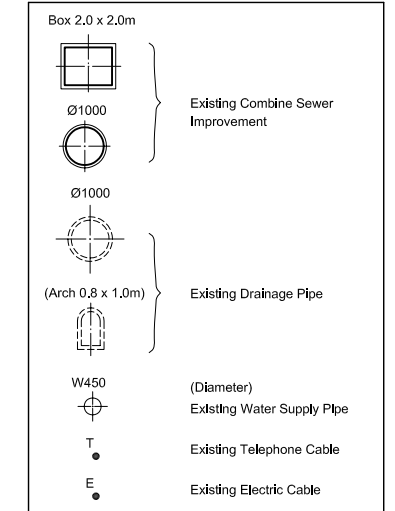


KEYMAP



LEGEND



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

CROSS SECTION
OF ECSI - LINE 6 (5)

SCALE : 1 / 100

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

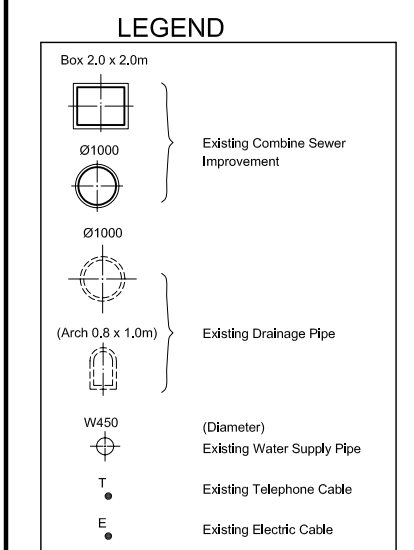
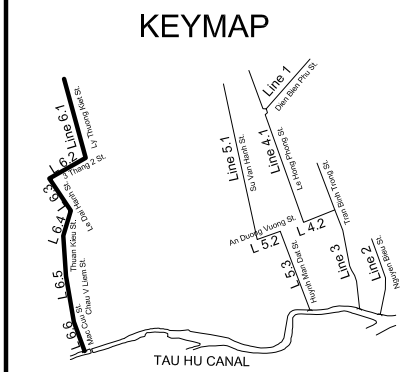
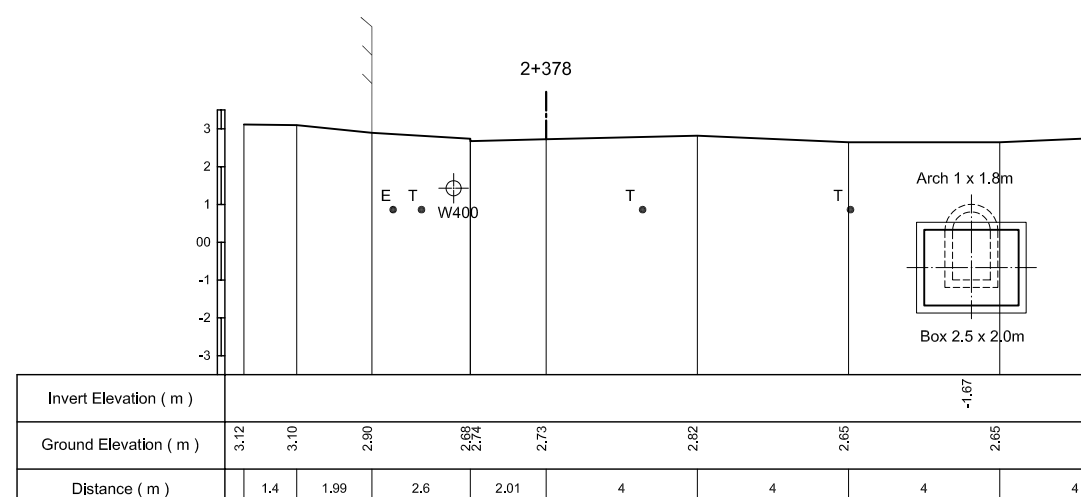
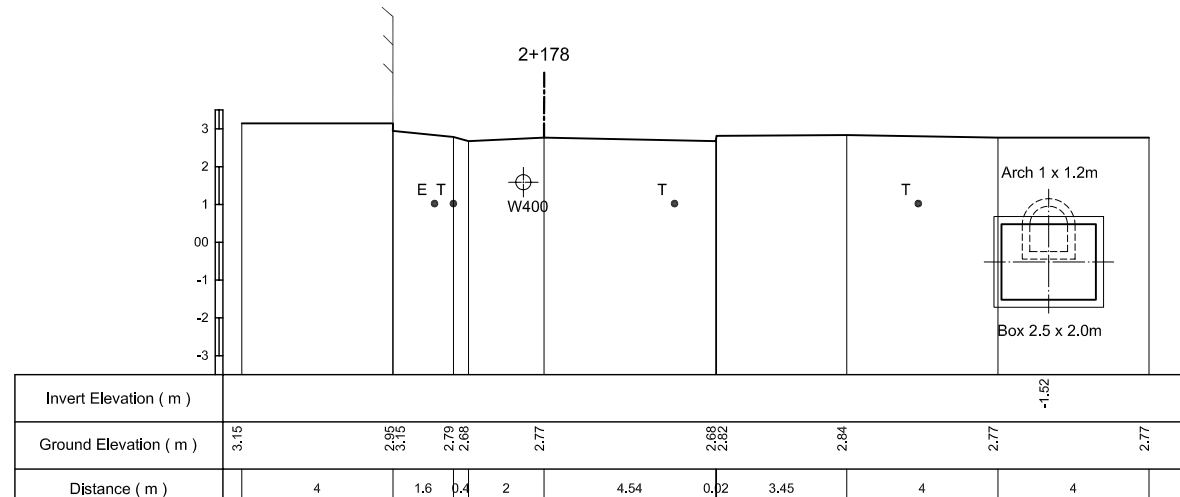
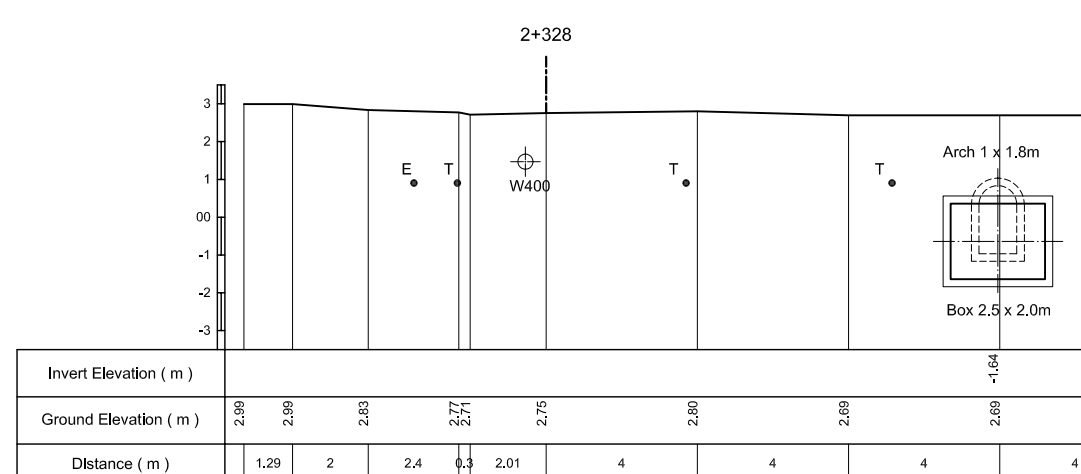
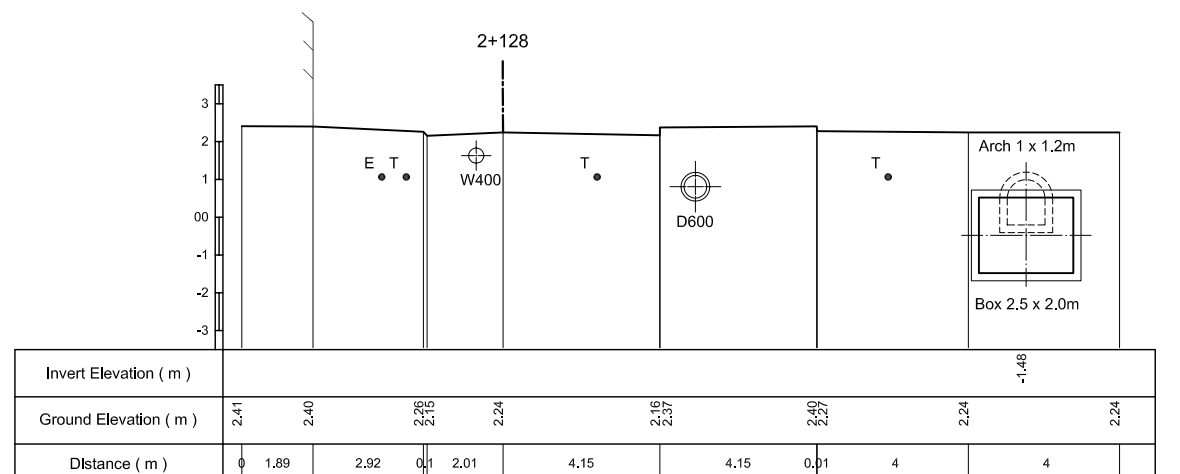
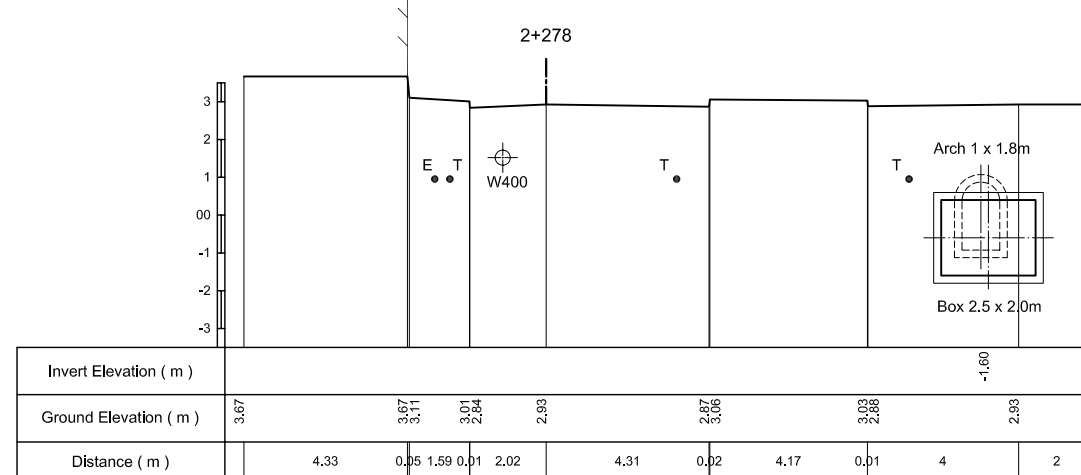
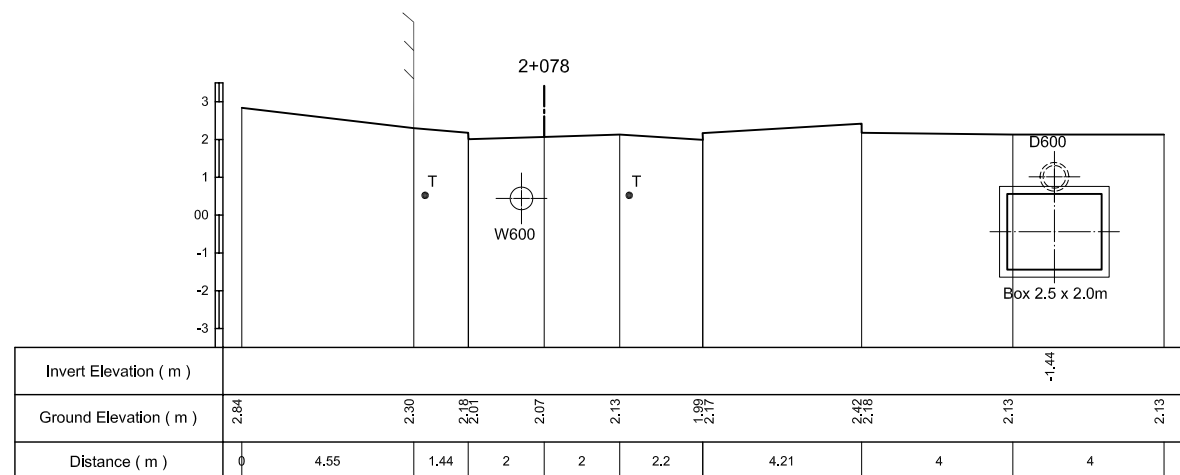
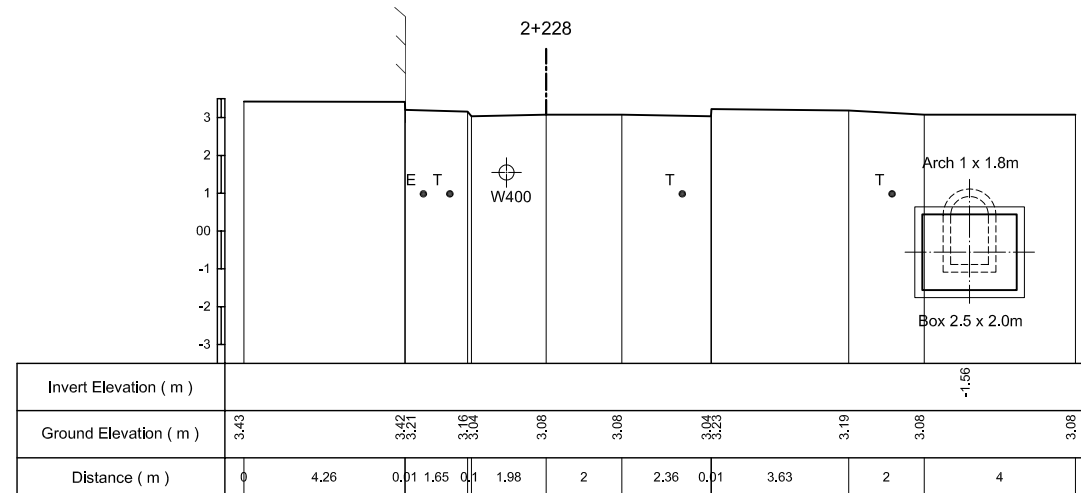
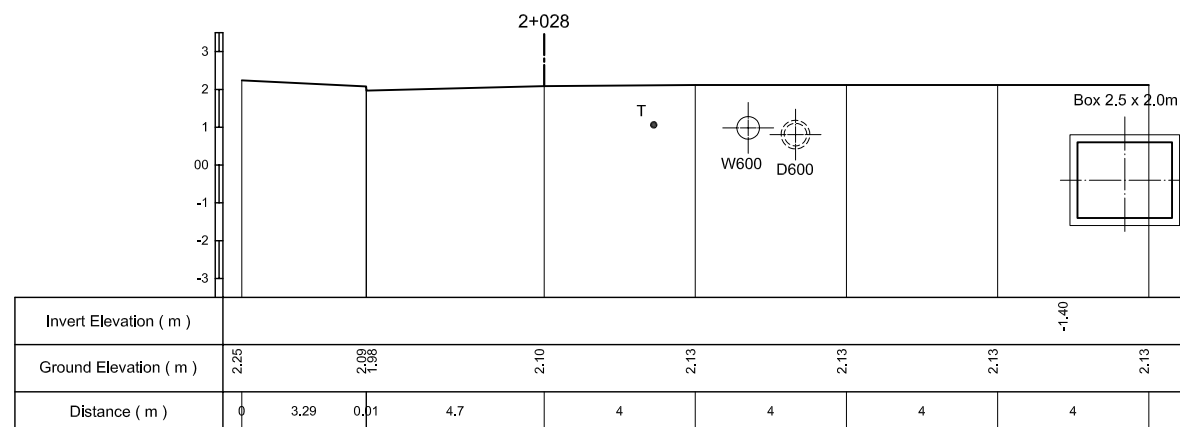
PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KATSUKI TAKAAKI

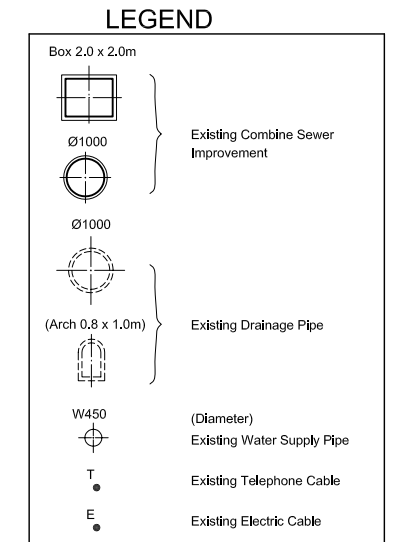
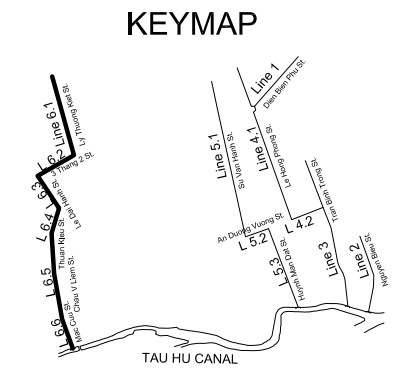
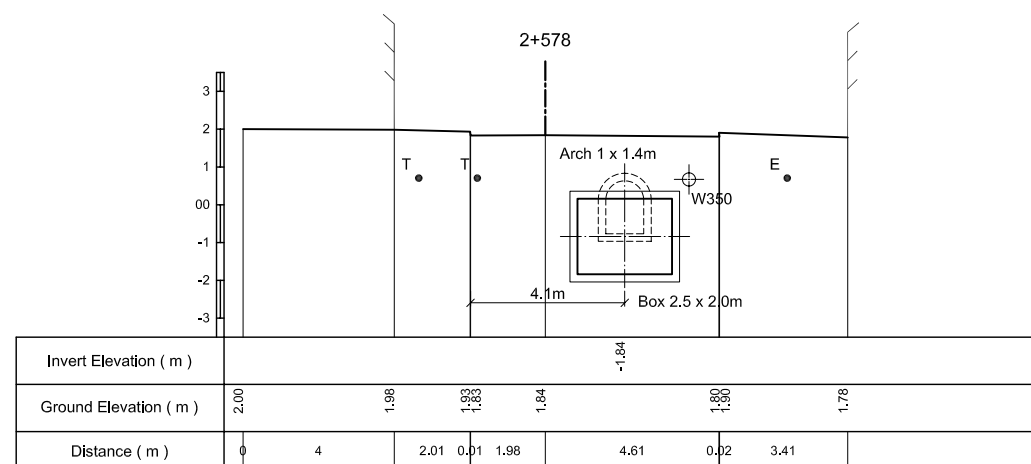
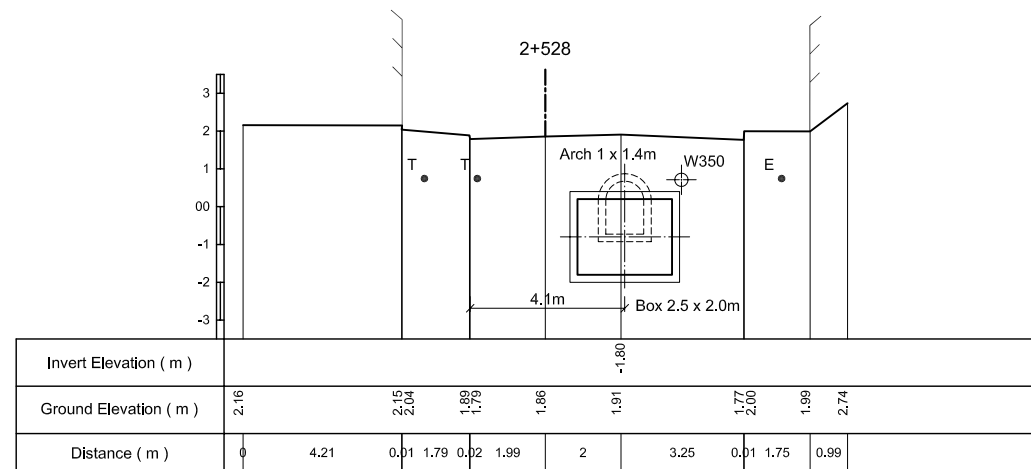
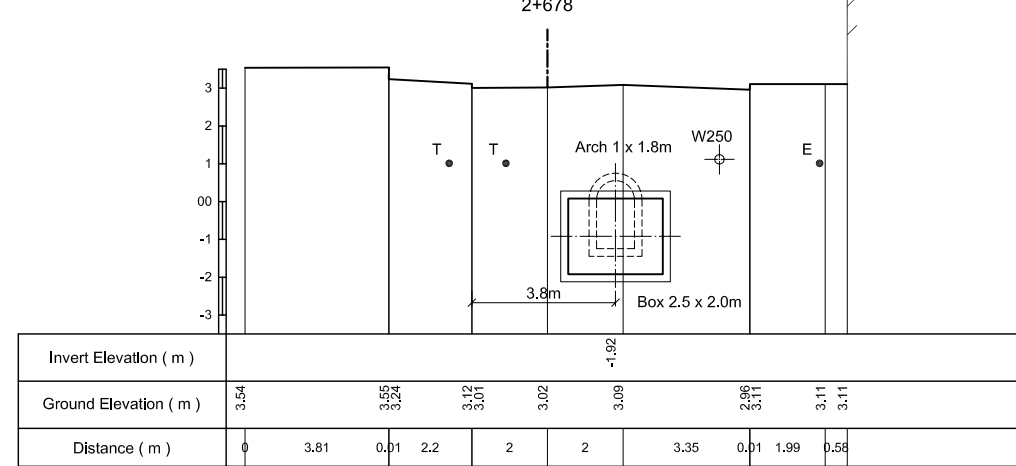
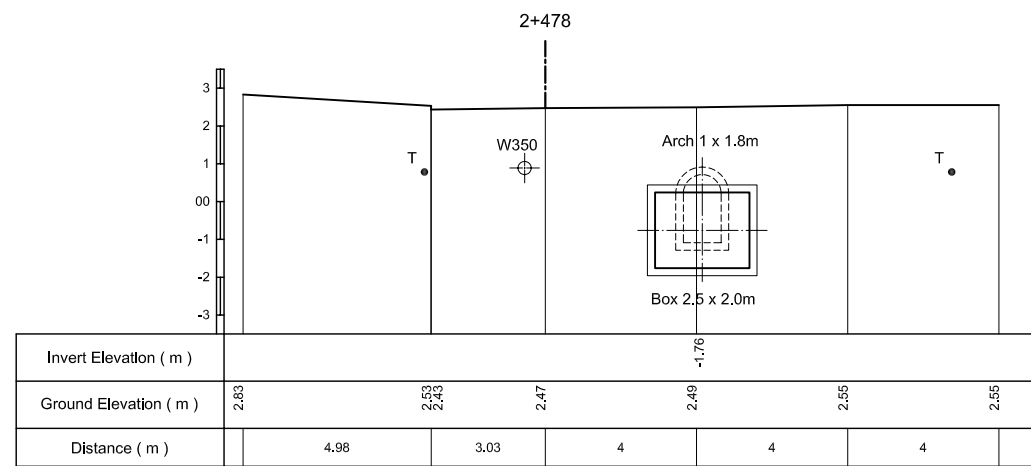
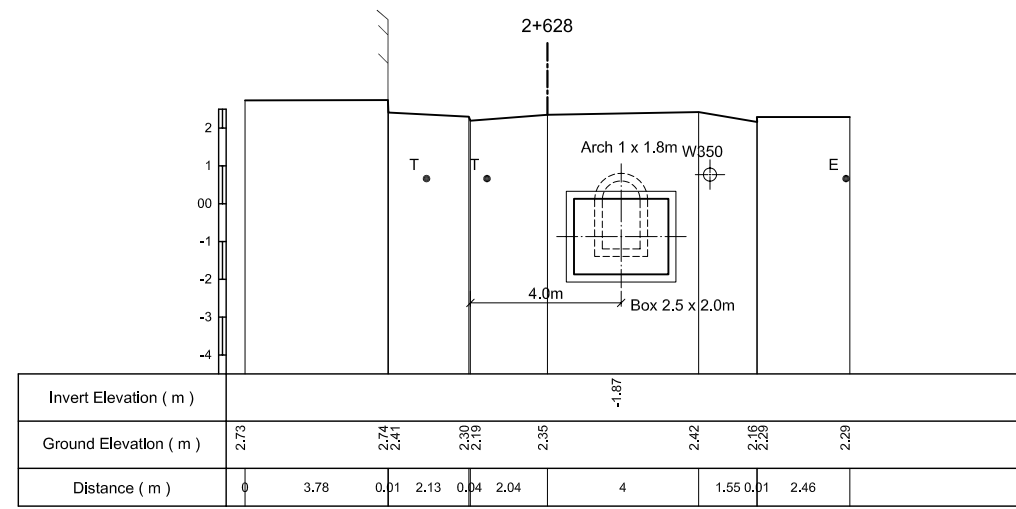
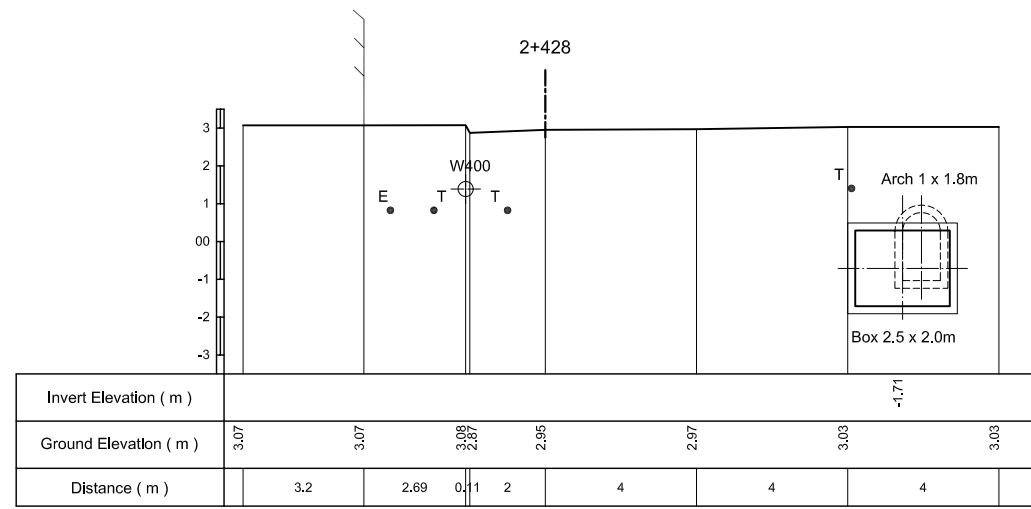
CHECKED
KONDO MASAMI

DATE : JUNE 2001

DWG. No. PD - ECSI - 260



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				
CROSS SECTION OF ECSI - LINE 6 (6)				
SCALE : 1 / 100				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KATSUKI TAKAAKI		CHECKED KONDO MASAMI		
DATE : JUNE 2001		DWG. No. PD - ECSI - 261		



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 6 (7)

SCALE : 1 / 100

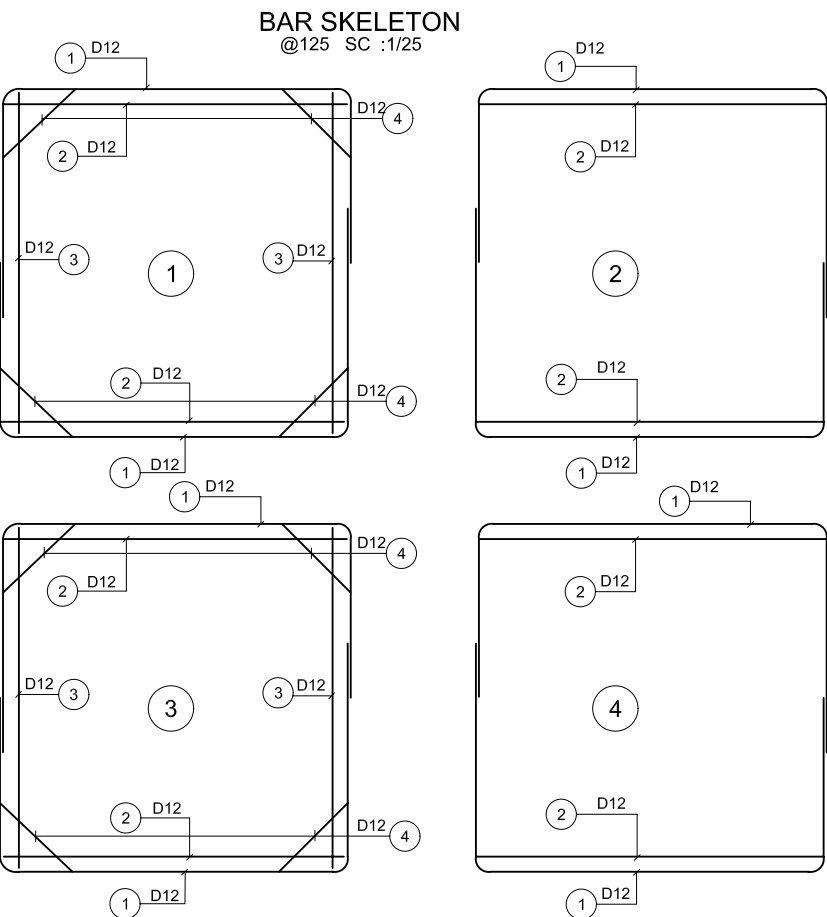
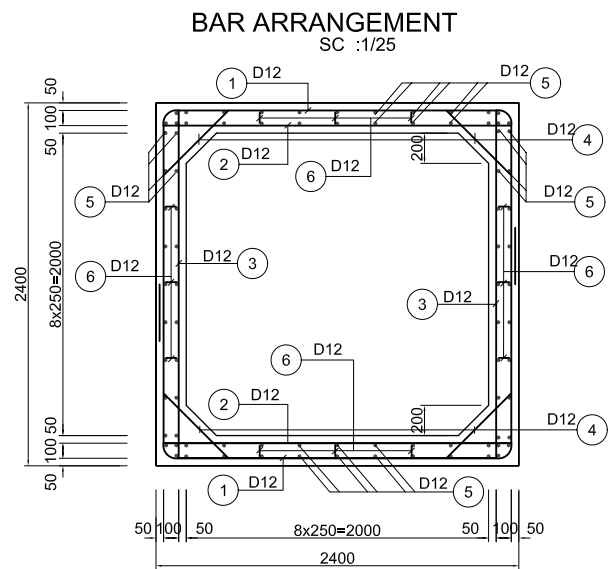
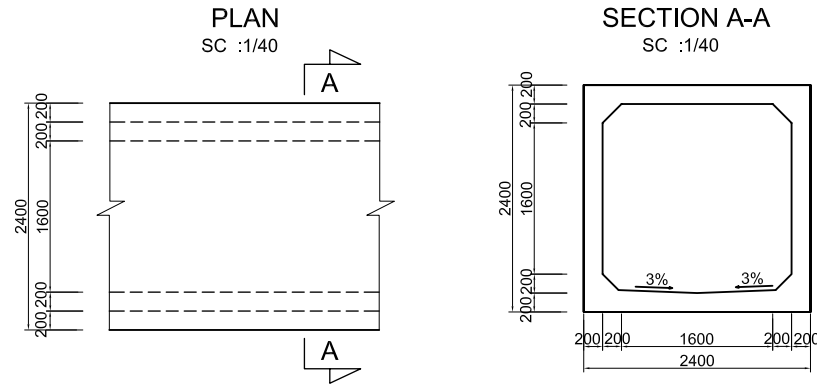
JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

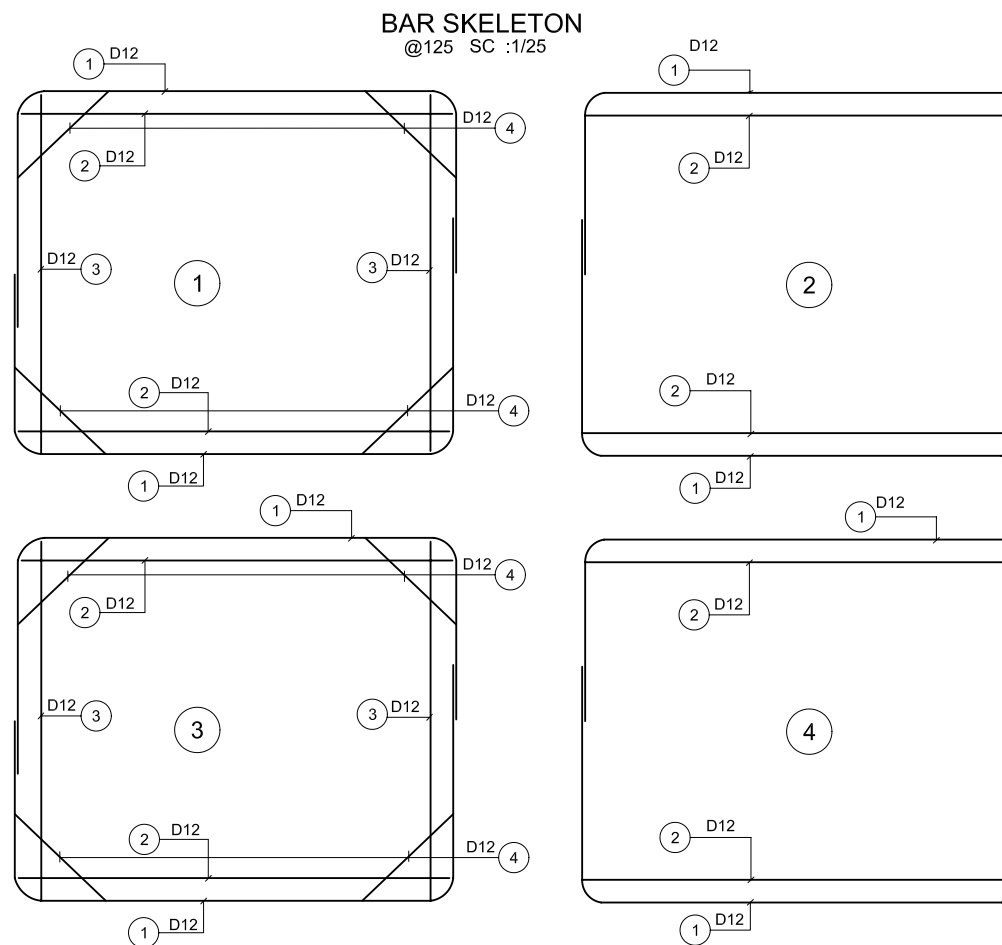
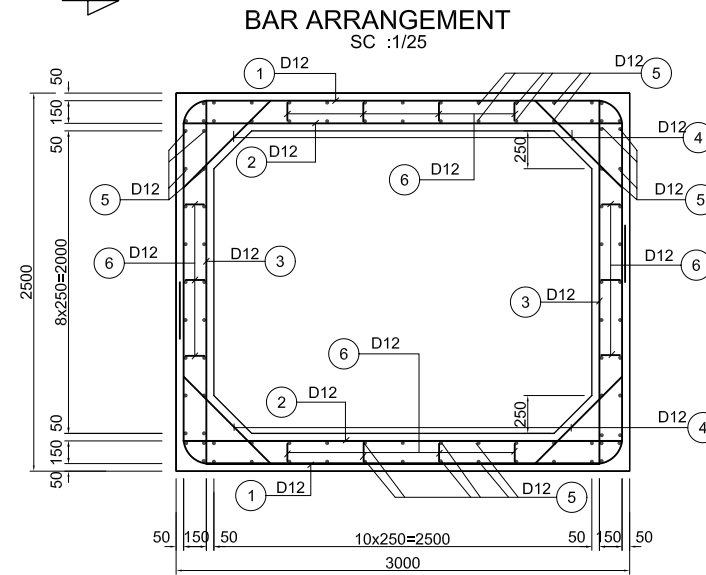
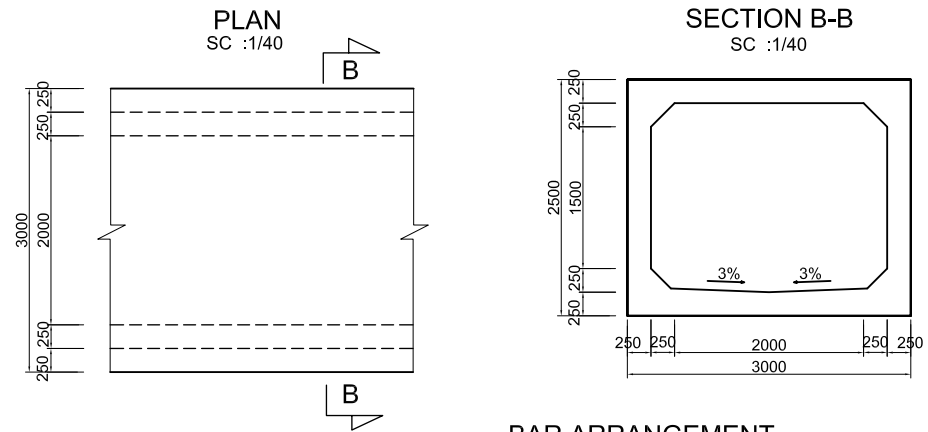
DESIGNED KATSUKI TAKAAKI	CHECKED KONDO MASAMI
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DATE : JUNE 2001 DWG. No. PD - ECSI - 262

TYPE 2000x2000

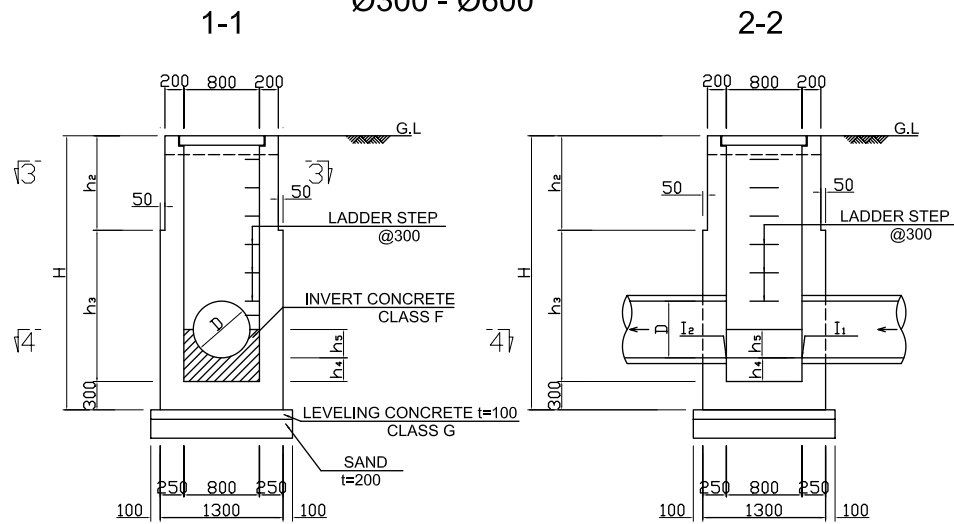


TYPE 2500x2000

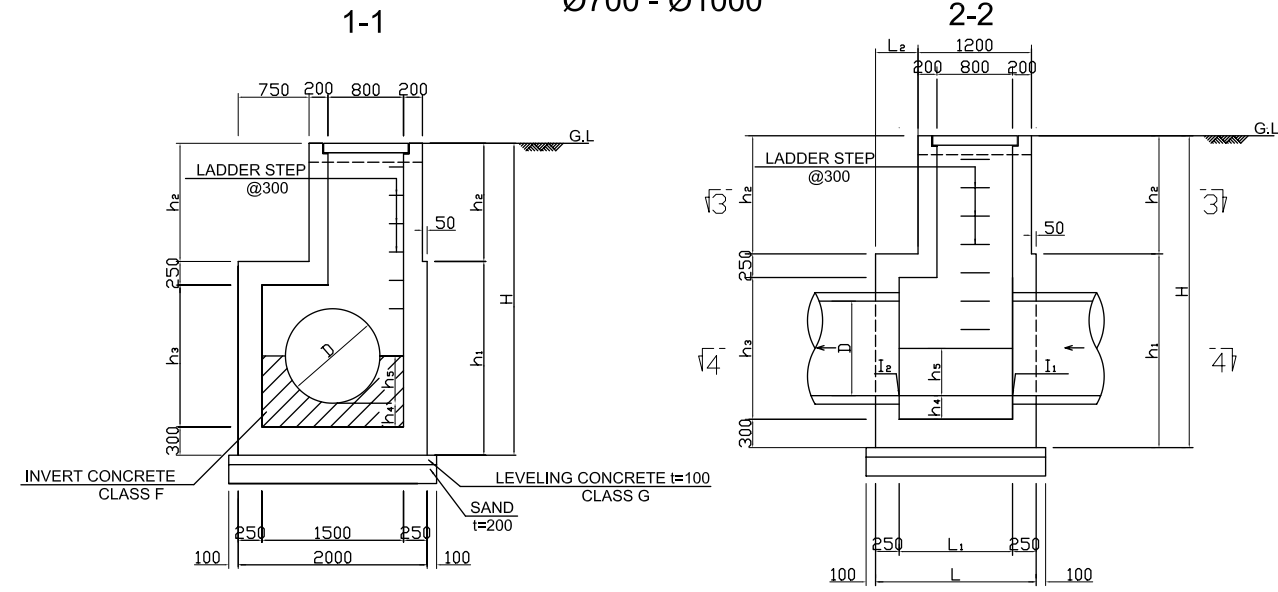


NO.	DATE	DESCRIPTIONS	BY	APRO.
REVISIONS				
PROJECT MANAGEMENT UNIT FOR HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT				
THE DETAILED DESIGN STUDY ON HO CHI MINH CITY WATER ENVIRONMENT IMPROVEMENT PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM				
PACKAGE D EXISTING COMBINED SEWER IMPROVEMENT				
PLAN, SECTION AND BAR ARRANGEMENT OF BOX CULVERT				
SCALE : AS SHOWN				
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)				
PACIFIC CONSULTANTS INTERNATIONAL				
DESIGNED KATSUKI TAKAAKI	CHECKED KONDO MASAMI			
DATE : JUNE 2001	DWG. No. PD - ECSI - 263			

TYPE 1 S = 1:40
Ø300 - Ø600

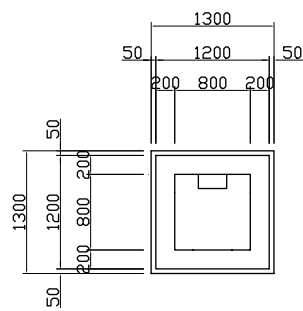


TYPE 2 S = 1:40
Ø700 - Ø1000

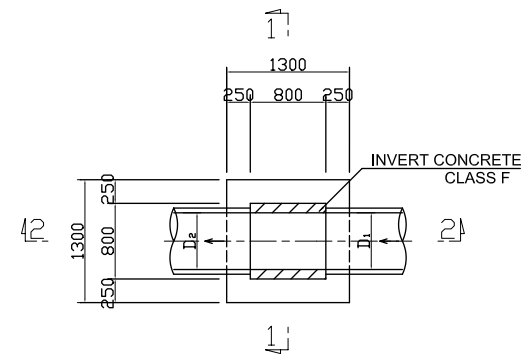


When H ≤ 2850, h₂ = 300
When H ≥ 2850, h₂ = 2000

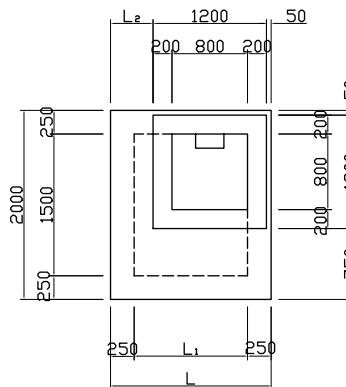
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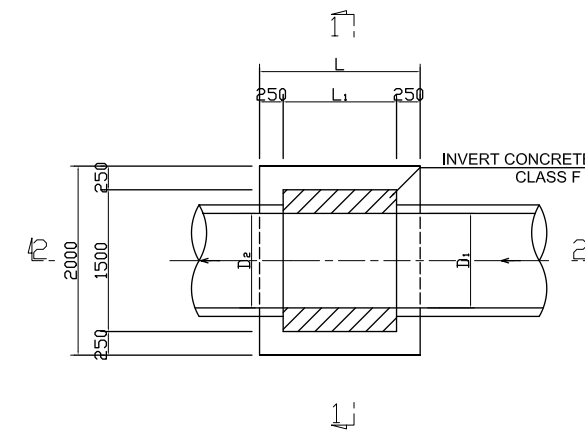
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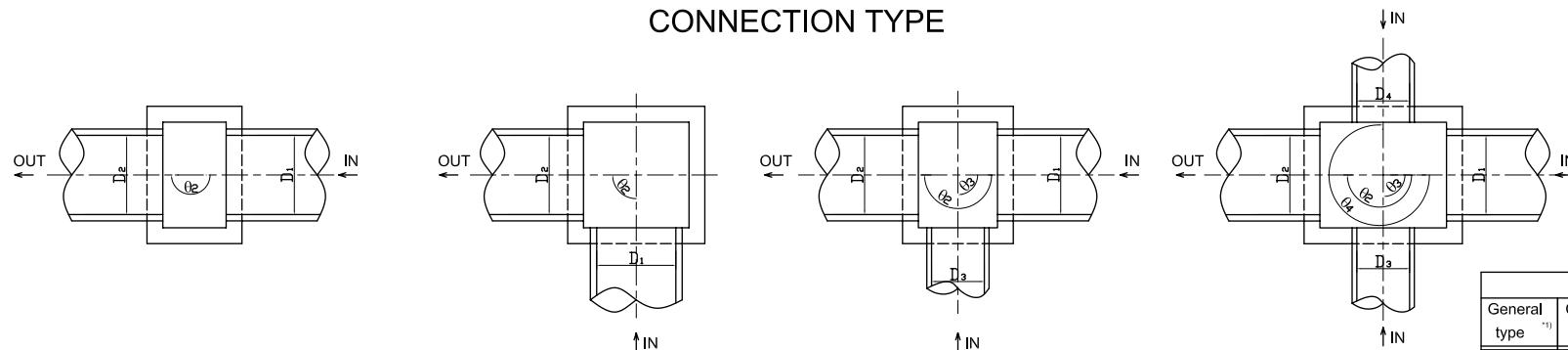
3-3



4-4



CONNECTION TYPE



TYPE A

TYPE B

TYPE C

TYPE D

TYPE OF MANHOLE

General type ⁽¹⁾	Type of Manhole		Diameter (mm)		Dimension (m)			Number of Manhole
	Connection type	Connection pipe ⁽²⁾	Main pipe (D ₁ , D ₂)	Connecting pipe (D ₃ , D ₄)	L	L ₁	L ₂	
1	A, B, C	-	Ø300-Ø600	Ø300-Ø600	-	-	-	0
	A	-	Ø700-Ø1000	-	1,700	1,200	450	12
B	-	-		2,000	1,500	750	0	
C	1	1		Ø300-Ø600	1,700	1,200	450	5
		2		Ø700-Ø1000	2,000	1,500	750	4
D	1	1	Ø300-Ø600	2,500	2,000	1,250	0	
		2	Ø700-Ø1000	2,900	2,400	1,650	1	

This table is applied at a depth of up to 2.5m for Type 1 and 5.0m for Type 2

Note:

*1) General type of Manhole type is categorized in diameter of Main pipe, D₁ and D₂

*2) Connection pipe of Manhole type is categorized in a diameter of connection pipe.

NO.	DATE	DESCRIPTIONS	BY	APPRO.

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

TYPICAL PLAN AND SECTION
OF MANHOLE FOR PIPE (1)

SCALE : 1/40

JICA JAPAN INTERNATIONAL COOPERATION
AGENCY (JICA)

PACIFIC CONSULTANTS INTERNATIONAL

DESIGNED
KATSUKI TAKAAKI

CHECKED
KONDO MASAMI

DATE : JUNE 2001 DWG. No. PD - ECSI - 264