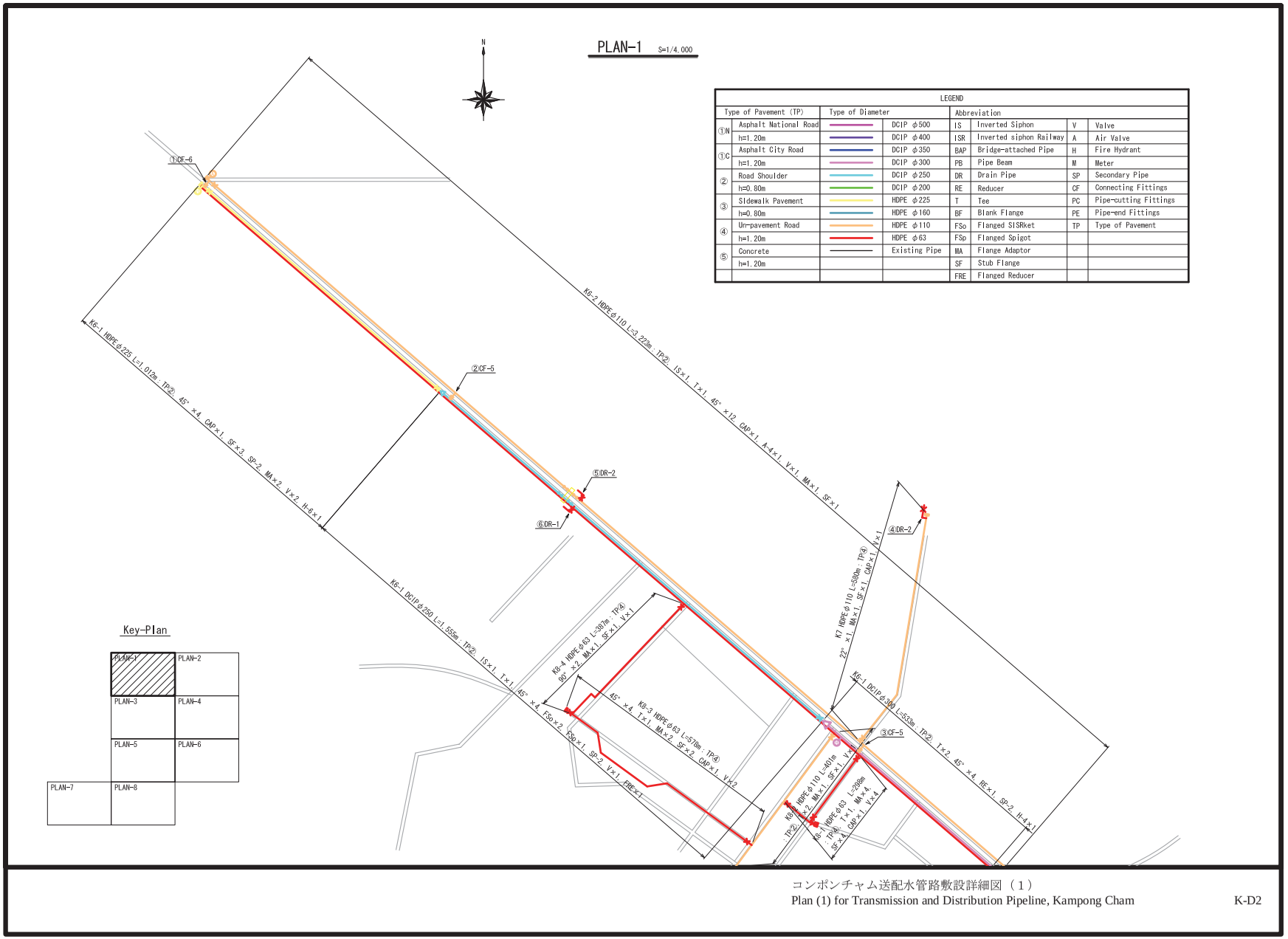
LOCALITY MAP S=1/20,000

LEGEND	
Type of Diameter	
	DCIP φ500
	DCIP φ400
	DCIP φ350
	DCIP φ300
	DCIP φ250
	DCIP φ200
	HDPE φ225
	HDPE φ160
	HDPE φ110
	HDPE φ63
	Existing Pipe

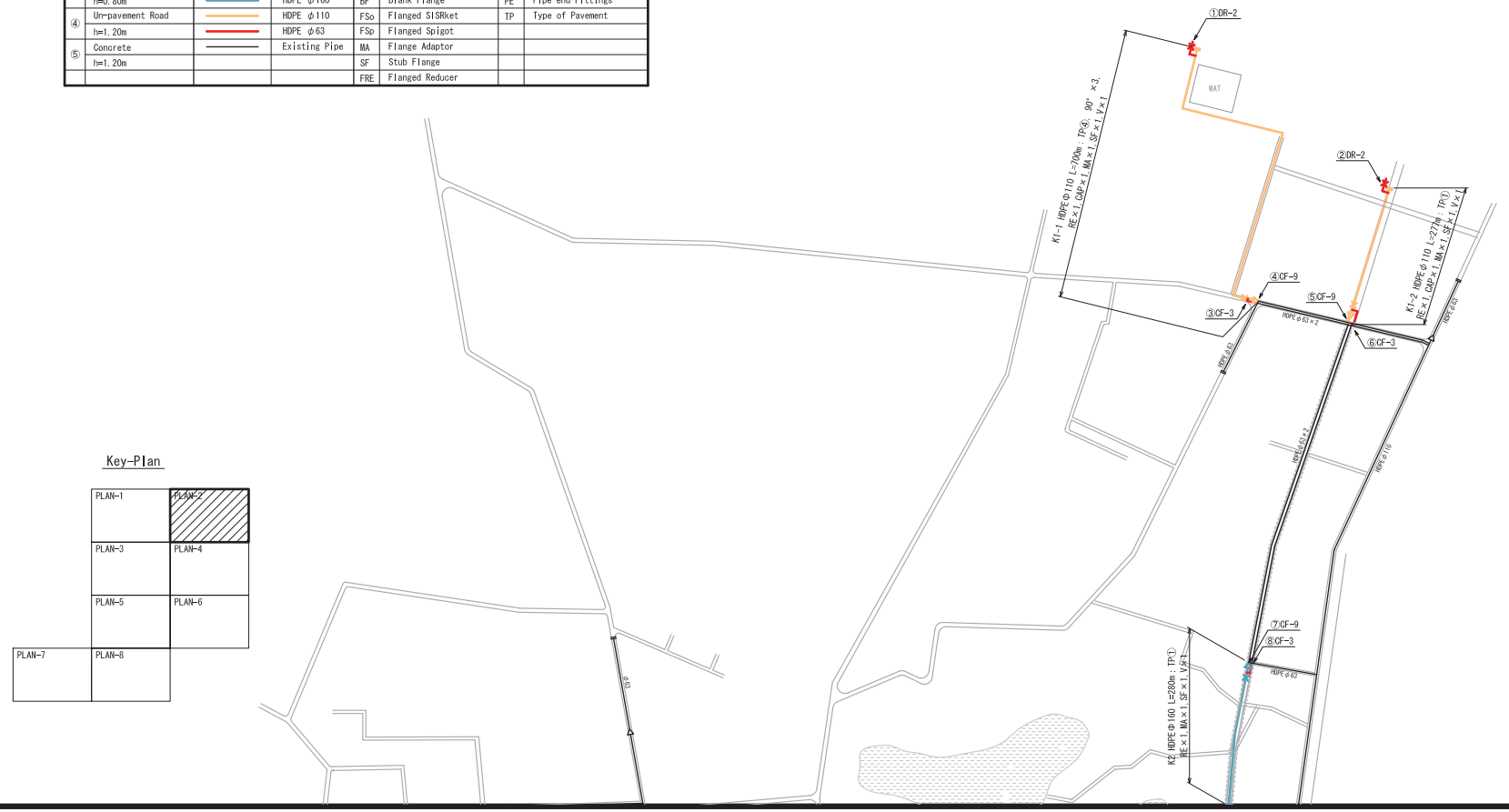
コンポンチャム送配水管路敷設概要図
Location Map for Transmission and Distribution Pipeline, Kampong Cham K-D1



コンポンチャム送配水管路敷設詳細図（１）
Plan (1) for Transmission and Distribution Pipeline, Kampong Cham K-D2

PLAN-2 S=1/4,000

LEGEND							
Type of Pavement (TP)		Type of Diameter		Abbreviation			
①N	Asphalt National Road		DCIP φ500	IS	Inverted Siphon	V	Valve
	h=1.20m		DCIP φ400	ISR	Inverted siphon Railway	A	Air Valve
①C	Asphalt City Road		DCIP φ350	BAP	Bridge-attached Pipe	H	Fire Hydrant
	h=1.20m		DCIP φ300	PB	Pipe Beam	M	Meter
②	Road Shoulder		DCIP φ250	DR	Drain Pipe	SP	Secondary Pipe
	h=0.80m		DCIP φ200	RE	Reducer	CF	Connecting Fittings
③	SIdewalk Pavement		HDPE φ225	T	Tee	PC	Pipe-cutting Fittings
	h=0.80m		HDPE φ160	BF	Blank Flange	PE	Pipe-end Fittings
④	Un-pavement Road		HDPE φ110	FSo	Flanged SISRket	TP	Type of Pavement
	h=1.20m		HDPE φ63	FSp	Flanged Spigot		
⑤	Concrete		Existing Pipe	MA	Flange Adaptor		
	h=1.20m			SF	Stub Flange		
				FRE	Flanged Reducer		

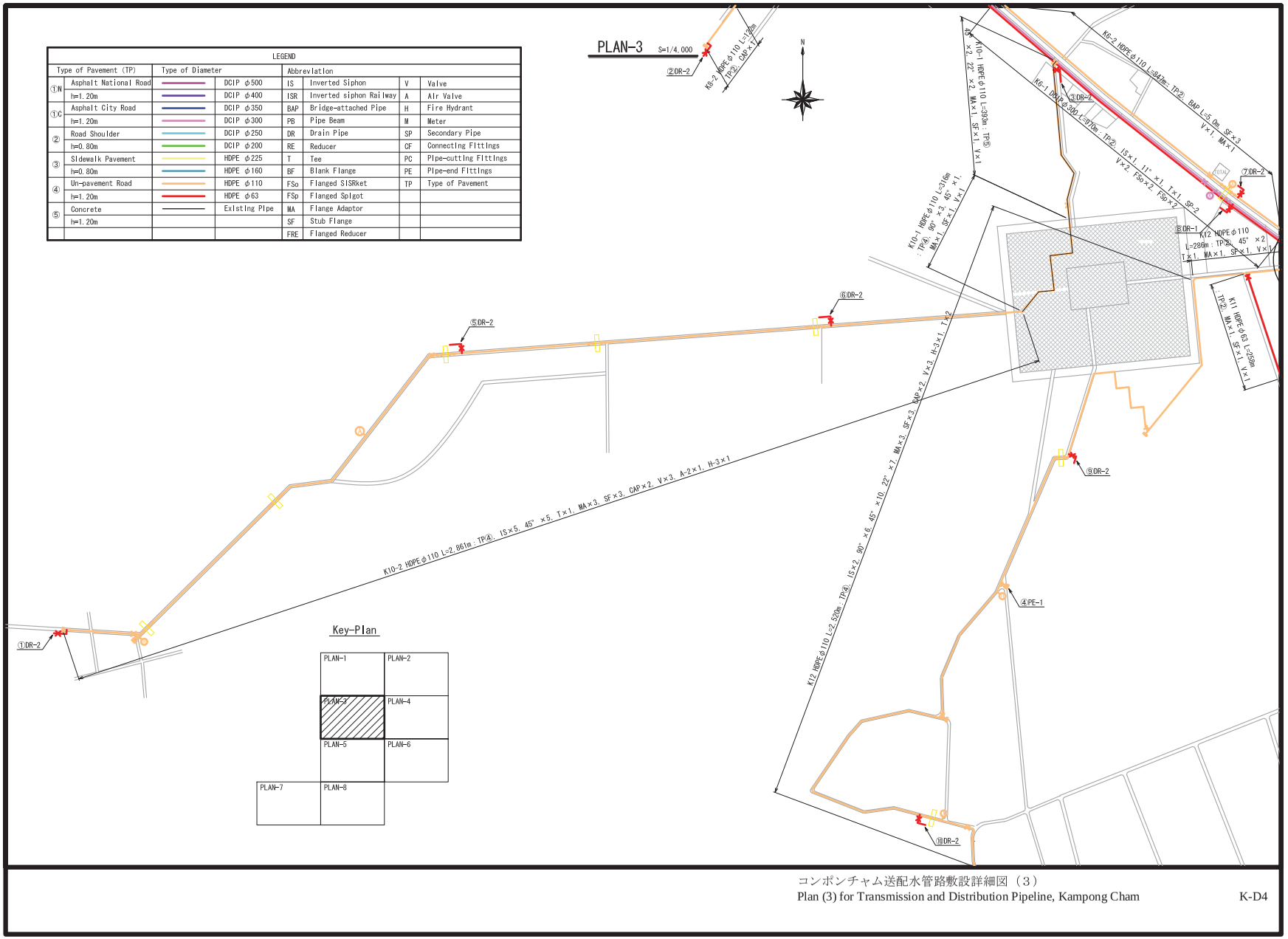


Key-Plan

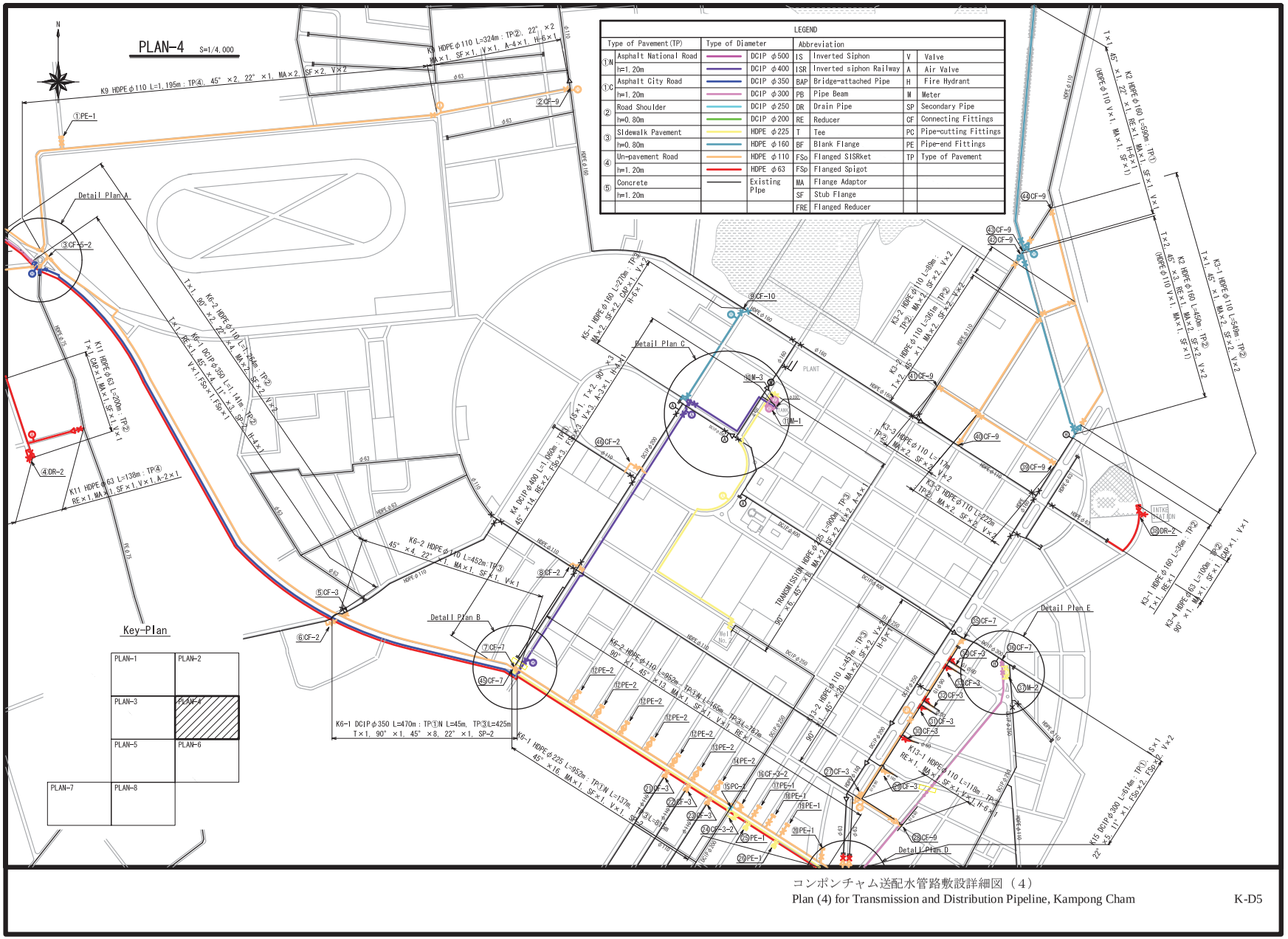
PLAN-1	PLAN-2
PLAN-3	PLAN-4
PLAN-5	PLAN-6
PLAN-7	PLAN-8

コンポンチャム送配水管路敷設詳細図（２）
Plan (2) for Transmission and Distribution Pipeline, Kampong Cham

K-D3



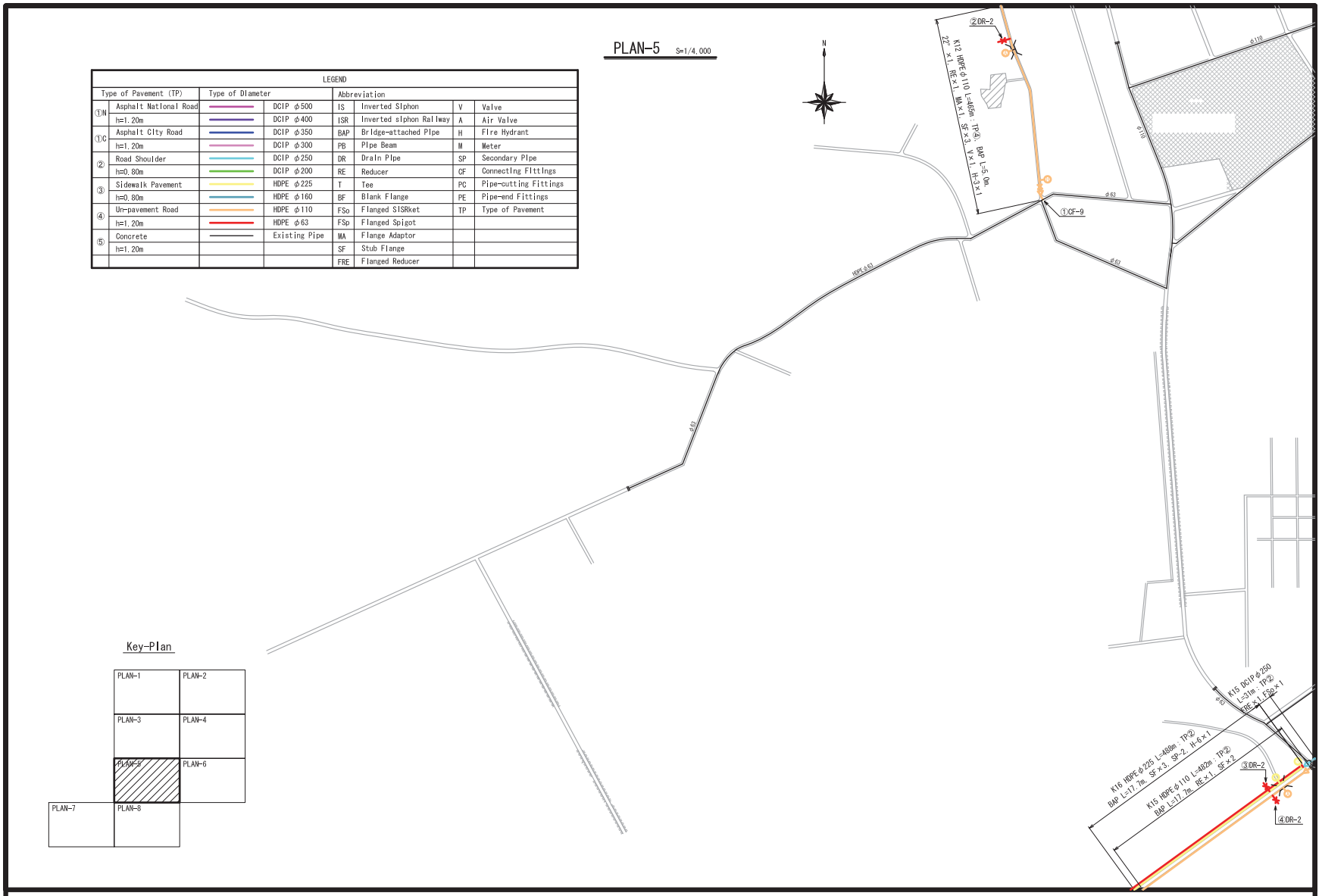
コンポンチャム送配水管路敷設詳細図（３）
Plan (3) for Transmission and Distribution Pipeline, Kampong Cham K-D4



コンポンチャム送配水管路敷設詳細図（４）
Plan (4) for Transmission and Distribution Pipeline, Kampong Cham K-D5

PLAN-5 S=1/4,000

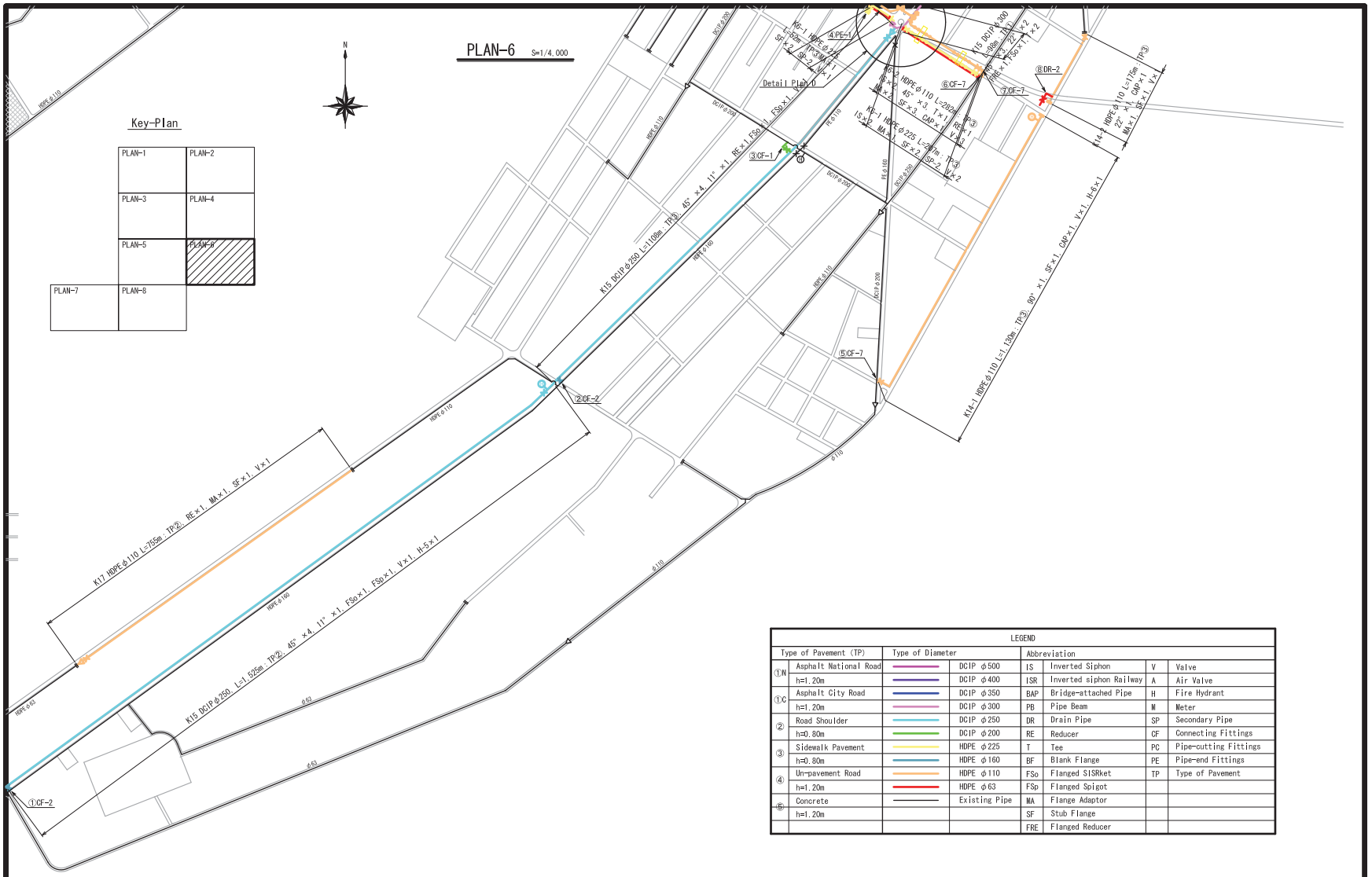
LEGEND							
Type of Pavement (TP)		Type of Diameter		Abbreviation			
①N	Asphalt National Road	DCIP φ500	IS	Inverted SIphon	V	Valve	
	h=1.20m	DCIP φ400	ISR	Inverted sIphon RaIlway	A	Air Valve	
①C	Asphalt CIty Road	DCIP φ350	BAP	BrIdge-attached PIpe	H	FIre Hydrant	
	h=1.20m	DCIP φ300	PB	PIpe Beam	M	Meter	
②	Road Shoulder	DCIP φ250	DR	DraIn PIpe	SP	Secondary PIpe	
	h=0.80m	DCIP φ200	RE	Reducer	CF	Connecting FIttIngs	
③	Sidewalk Pavement	HDPE φ225	T	Tee	PC	Pipe-cutting Fittings	
	h=0.80m	HDPE φ160	BF	Blank Flange	PE	Pipe-end Fittings	
④	Un-pavement Road	HDPE φ110	FSo	Flanged SISRket	TP	Type of Pavement	
	h=1.20m	HDPE φ63	FSp	Flanged Spigot			
⑤	Concrete	Existing Pipe	MA	Flange Adaptor			
	h=1.20m		SF	Stub Flange			
			FRE	Flanged Reducer			



Key-Plan

PLAN-1	PLAN-2
PLAN-3	PLAN-4
PLAN-5	PLAN-6
PLAN-7	PLAN-8

コンポンチャム送配水管路敷設詳細図（５）
Plan (5) for Transmission and Distribution Pipeline, Kampong Cham K-D6



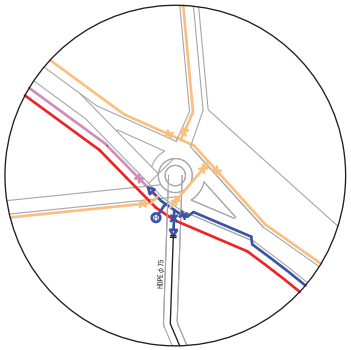
LEGEND

Type of Pavement (TP)		Type of Diameter		Abbreviation			
①N	Asphalt National Road	DCIP φ500	IS	Inverted Siphon	V	Valve
	h=1.20m	DCIP φ400	ISR	Inverted siphon Railway	A	Air Valve
①C	Asphalt City Road	DCIP φ350	BAP	Bridge-attached Pipe	H	Fire Hydrant
	h=1.20m	DCIP φ300	PB	Pipe Beam	M	Meter
②	Road Shoulder	DCIP φ250	DR	Drain Pipe	SP	Secondary Pipe
	h=0.80m	DCIP φ200	RE	Reducer	CF	Connecting Fittings
③	Sidewalk Pavement	HDPE φ225	T	Tee	PC	Pipe-cutting Fittings
	h=0.80m	HDPE φ160	BF	Blank Flange	PE	Pipe-end Fittings
④	Un-pavement Road	HDPE φ110	FSo	Flanged SISRket	TP	Type of Pavement
	h=1.20m	HDPE φ63	FSp	Flanged Spigot		
⑤	Concrete	Existing Pipe	MA	Flange Adaptor		
	h=1.20m		SF	Stub Flange		
			FRE	Flanged Reducer		

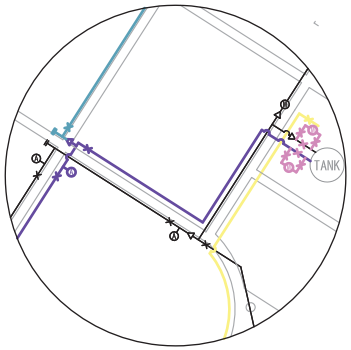
コンポンチャム送配水管路敷設詳細図（７）
Plan (7) for Transmission and Distribution Pipeline, Kampong Cham K-D8

PLAN-7 S=1/4,000

Detail Plan A

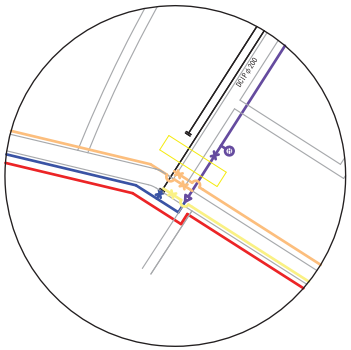


Detail Plan C

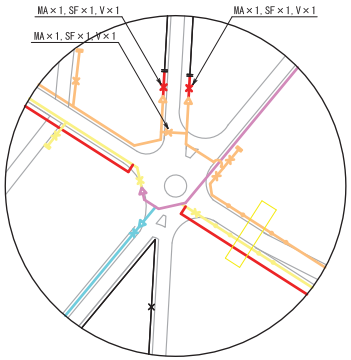


LEGEND							
Type of Pavement (TP)		Type of Diameter		Abbreviation			
①N	Asphalt National Road		DCIP φ500	IS	Inverted Siphon	V	Valve
	h=1.20m		DCIP φ400	ISR	Inverted siphon Railway	A	Air Valve
①C	Asphalt City Road		DCIP φ350	BAP	Bridge-attached Pipe	H	Fire Hydrant
	h=1.20m		DCIP φ300	PB	Pipe Beam	M	Meter
②	Road Shoulder		DCIP φ250	DR	Drain Pipe	SP	Secondary Pipe
	h=0.80m		DCIP φ200	RE	Reducer	CF	Connecting Fittings
③	Sidewalk Pavement		HDPE φ225	T	Tee	PC	Pipe-cutting Fittings
	h=0.80m		HDPE φ160	BF	Blank Flange	PE	Pipe-end Fittings
④	Un-pavement Road		HDPE φ110	FSo	Flanged SISRket	TP	Type of Pavement
	h=1.20m		HDPE φ63	FSp	Flanged Spigot		
⑤	Concrete		Existing Pipe	MA	Flange Adaptor		
	h=1.20m			SF	Stub Flange		
				FRE	Flanged Reducer		

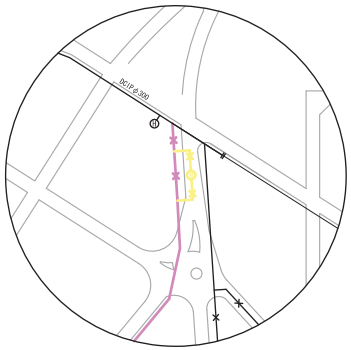
Detail Plan B



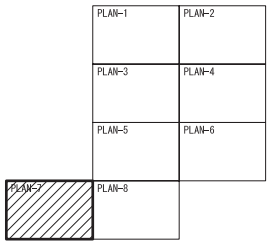
Detail Plan D

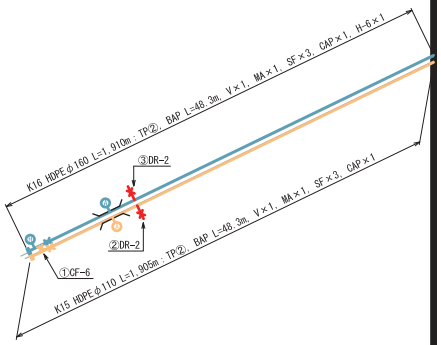


Detail Plan E



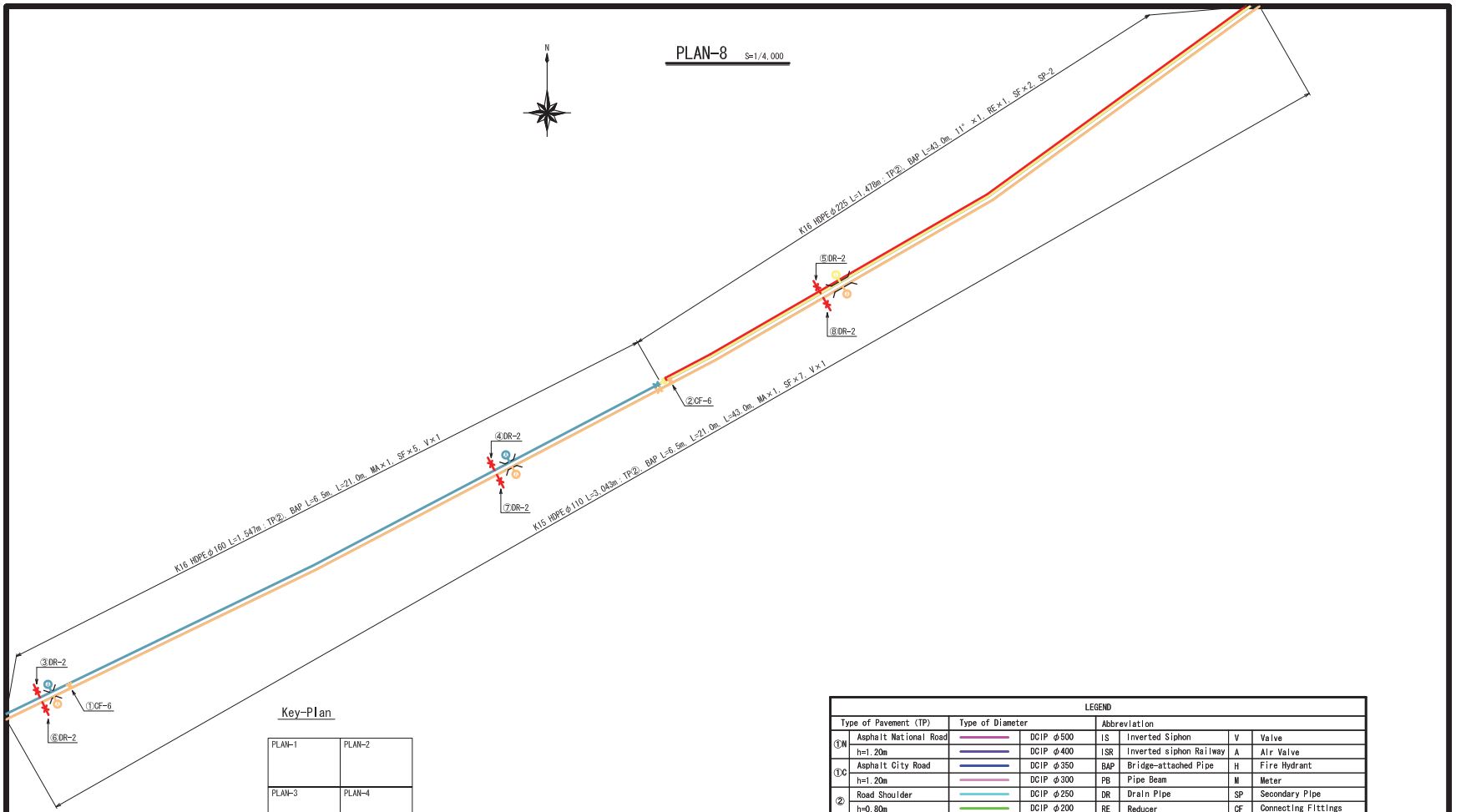
Key-Plan





コンポンチャム送配水管路敷設詳細図（８）
Plan (8) for Transmission and Distribution Pipeline, Kampong Cham

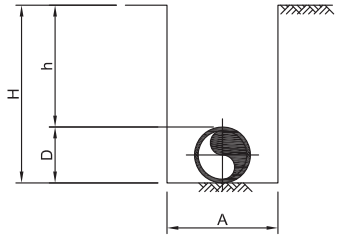
K-D9



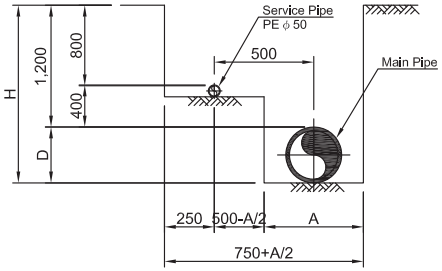
LEGEND							
Type of Pavement (TP)		Type of Diameter		Abbreviation			
①N	Asphalt National Road	DCIP φ500	IS	Inverted Siphon	V	Valve
	h=1.20m	DCIP φ400	ISR	Inverted siphon Railway	A	Air Valve
①C	Asphalt City Road	DCIP φ350	BAP	Bridge-attached Pipe	H	Fire Hydrant
	h=1.20m	DCIP φ300	PB	Pipe Beam	M	Meter
②	Road Shoulder	DCIP φ250	DR	Drain Pipe	SP	Secondary Pipe
	h=0.80m	DCIP φ200	RE	Reducer	CF	Connecting Fittings
③	Sidewalk Pavement	HDPE φ225	T	Tee	PC	Pipe-cutting Fittings
	h=0.80m	HDPE φ160	BF	Blank Flange	PE	Pipe-end Fittings
④	Un-pavement Road	HDPE φ110	FSo	Flanged SISRket	TP	Type of Pavement
	h=1.20m	HDPE φ63	FSp	Flanged Spigot		
⑤	Concrete	Existing Pipe	MA	Flange Adaptor		
	h=1.20m		SF	Stub Flange		
			FRE	Flanged Reducer		

コンポンチャム送配水管路敷設詳細図（９）
Plan (9) for Transmission and Distribution Pipeline, Kampong Cham K-D10

General Earth Work for Pipe Laying

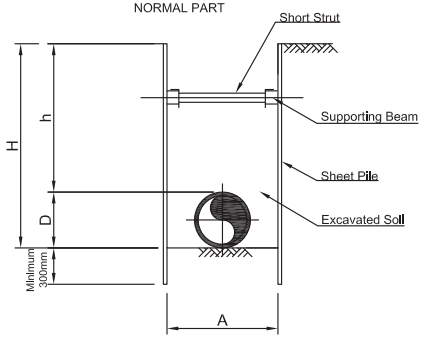


MACHINE EXCAVATION
NORMAL PART

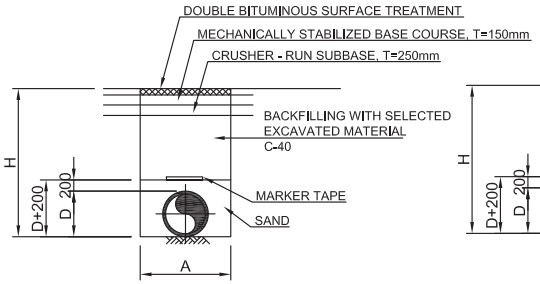


MACHINE EXCAVATION
NORMAL PART, Main Pipe with Service Pipe

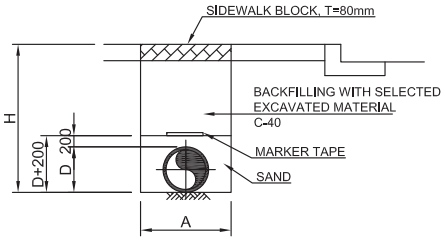
Notice : Backfill is shown on the drawings in right side.
Service pipe is not needed to install in sheet pile part.
Location of service pipe refer to cross section drawing.



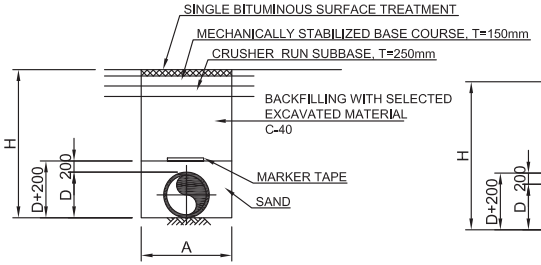
MACHINE EXCAVATION
SHEET PILE PART



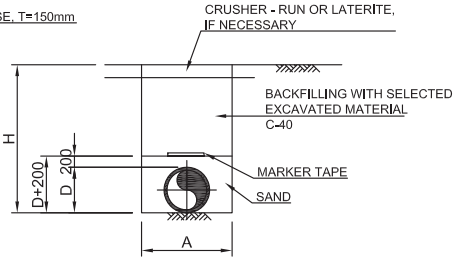
BACKFILL
A. ROADWAY OF THE NATIONAL ROAD



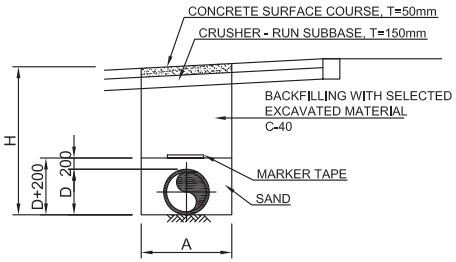
BACKFILL
C. SIDEWALK



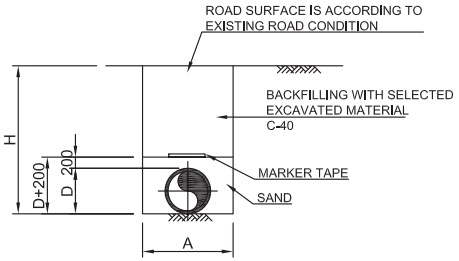
BACKFILL
B1. CITY ROAD (PAVING)
SHOULDER OF THE NATIONAL ROAD



BACKFILL
D. UN-PAVING SURFACE



BACKFILL
B2. CONCRETE SURFACE COURSE



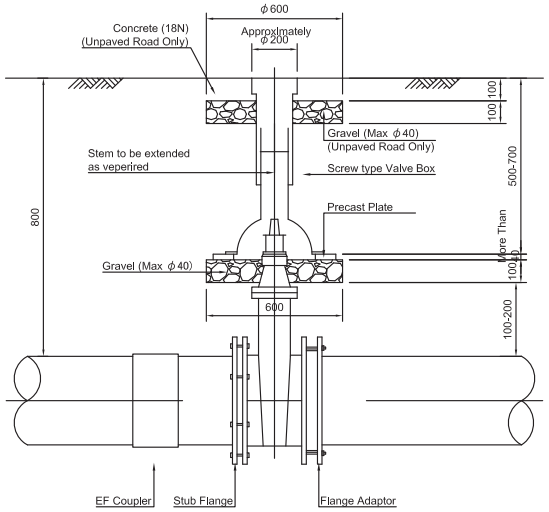
BACKFILL
SERVICE PIPE

TYPICAL SIZE OF TRENCH EXCAVATION (MACHINE EXCAVATION)

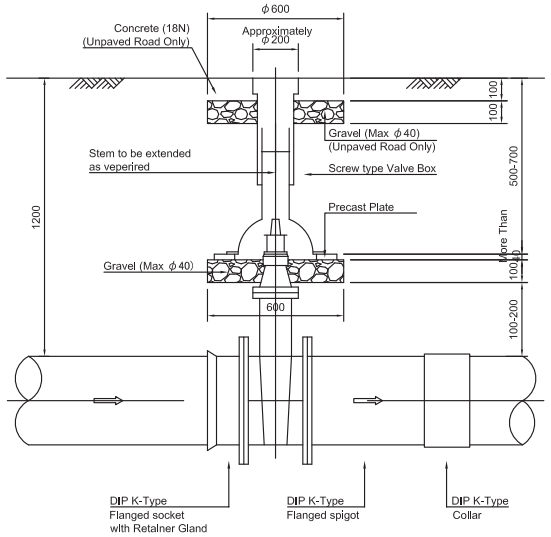
PIPE		NORMAL PART					SHEET PILE PART			
PIPE MATERIAL	NOMINAL PILE DIAMETER D (mm)	TRENCH WIDTH A (m)	DEPTH OF COVER h (m)		EXCAVATION DEPTH H (m)		TRENCH WIDTH A (m)	DEPTH OF COVER h (m)		EXCAVATION DEPTH H (m)
			Sidewalk	Road runway	Sidewalk	Road runway		Sidewalk	Road runway	
HDPE	50	0.50	0.8	1.2	0.87	1.27	0.70	0.8	1.2	H ≧1.50
	75	0.50	0.8	1.2	0.89	1.29	0.70	0.8	1.2	H ≧1.50
	100	0.50	0.8	1.2	0.93	1.33	0.75	0.8	1.2	H ≧1.50
	150	0.50	0.8	1.2	0.98	1.38	0.80	0.8	1.2	H ≧1.50
	200	0.50	0.8	1.2	1.05	1.45	0.85	0.8	1.2	H ≧1.50
DIP	200	0.50	0.8	1.2	1.05	1.45	0.85	0.8	1.2	H ≧1.50
	250	0.50	0.8	1.2	1.08	1.48	0.85	0.8	1.2	H ≧1.50
	300	0.55	0.8	1.2	1.13	1.53	0.90	0.8	1.2	H ≧1.50
	350	0.60	0.8	1.2	1.18	1.58	1.00	0.8	1.2	H ≧1.50
	400	0.70	0.8	1.2	1.23	1.63	1.00	0.8	1.2	H ≧1.50
	450	0.80	0.8	1.2	1.28	1.68	1.00	0.8	1.2	H ≧1.50
	500	1.00	0.8	1.2	1.33	1.73	1.00	0.8	1.2	H ≧1.50
Main Pipe with Service Pipe	200	1.00	0.8	1.2	1.05	1.45	1.20	0.8	1.2	H ≧1.50
	250	1.00	0.8	1.2	1.08	1.48	1.20	0.8	1.2	H ≧1.50
	300	1.05	0.8	1.2	1.13	1.53	1.20	0.8	1.2	H ≧1.50
	350	1.05	0.8	1.2	1.18	1.58	1.25	0.8	1.2	H ≧1.50
	400	1.10	0.8	1.2	1.23	1.63	1.25	0.8	1.2	H ≧1.50
	450	1.15	0.8	1.2	1.28	1.68	1.25	0.8	1.2	H ≧1.50
	500	1.25	0.8	1.2	1.33	1.73	1.25	0.8	1.2	H ≧1.50

PROJECT THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	DESCRIPTION General Earth Work for Pipe Line		APPROVE BY	DATE	DRAWING No K-D11
		NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE

Typical Drawing for Installation of Sluice Valve



SLUICE VALVE INSTALLATION
(HDPEϕ50−ϕ200mm)



SLUICE VALVE INSTALLATION
(DIPϕ250−ϕ500mm)

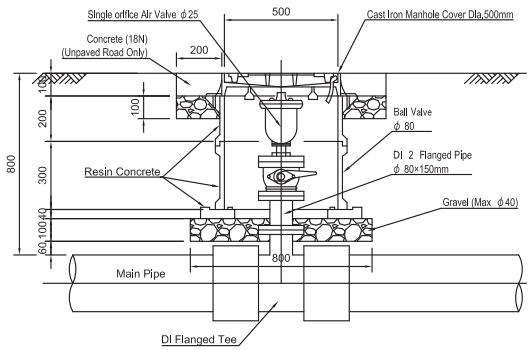
NOTE

1. ALL SLUICE VALVES LESS THAN 400mm DIA WILL HAVE NO CHAMBERS AND WILL BE INSTALLED SEEMLIER TO WASH OUT VALVES HEAVY-DUTY SURFACE BOXES AT THE ROAD LEVEL TO OPERATE THEM.

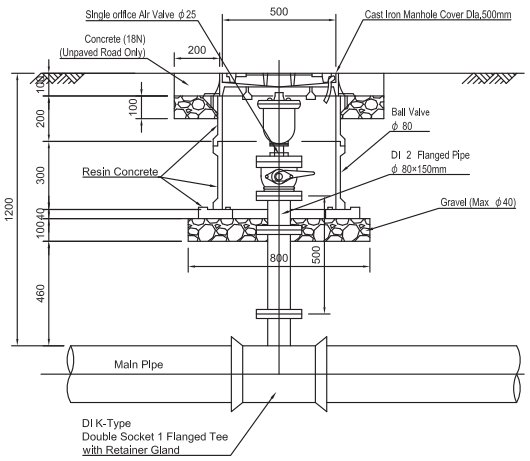
2. ALL DIMENSIONS ARE IN mm.

PROJECT	DESCRIPTION		APPROVE BY	DATE	DRAWING No
THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	Typical Drawing for Installation of Sluice Valve	NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE
					K-D12

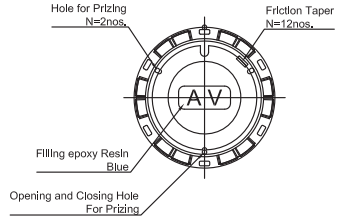
Typical Drawing for Installation of Air Valve and Washout



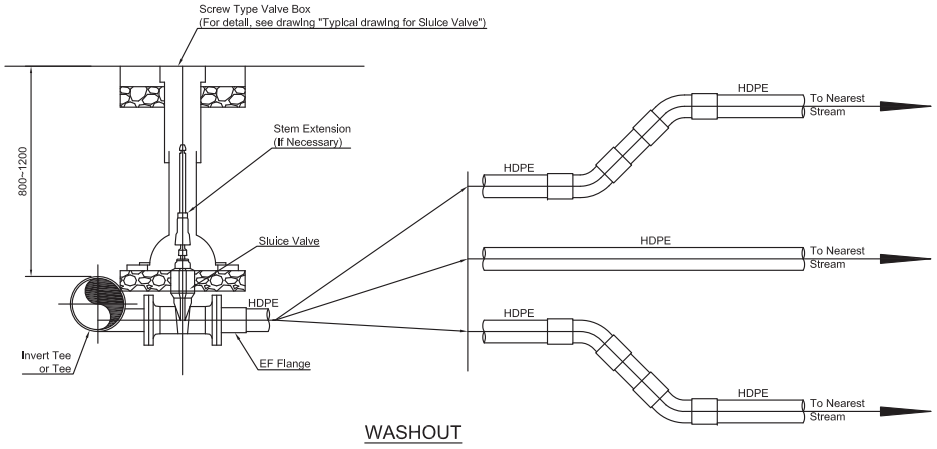
SINGLE ORIFICE AIR VALVE CHAMBER
(MAIN PIPE ≦ φ200(HDPE)



SINGLE ORIFICE AIR VALVE CHAMBER
(MAIN PIPE φ250~φ500(DIP)



CAST IRON MANHOLE COVER
φ500(No.3 Type)



WASHOUT

CRITERIA FOR AIR VALVE AND WASH OUT

MAIN PIPE	MAIN PIPE MATERIAL	BRANCH PIPE for AIR VALVE	BRANCH PIPE WASH OUT
φ 50	HDPE	φ 80	φ 50
φ 75		φ 80	φ 50
φ 100		φ 80	φ 75
φ 150		φ 80	φ 75
φ 200		φ 80	φ 75
φ 250	DIP	φ 80	φ 75
φ 300		φ 80	φ 75
φ 350		φ 80	φ 100
φ 400		φ 80	φ 150
φ 450		φ 80	φ 200
φ 500		φ 80	φ 200

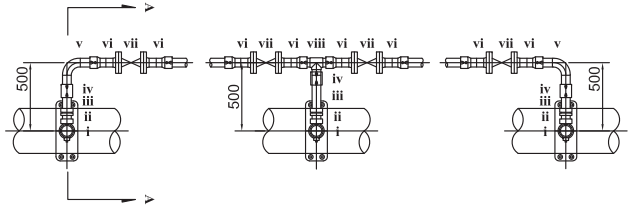
NOTE

1. THE THICKNESS OF THE BLINDING LAYER SPECIFIED IN THE DRAWING IS FOR NORMAL SOIL TYPES. HOWEVER IF THE STRUCTURE IS FOUNDED ON VERY WEAK SOIL SUCH AS PEAT.
2. THE TOP OF THE AIR VALVE CHAMBER SHOULD BE AT THE SAME LEVEL AS THE ROAD TOP LEVEL.
3. THE VALVE BOXES FOR WASHOUT MAY BE ON THE BANK OF THE ROAD.
4. ALL DIMENSIONS ARE IN mm.

PROJECT	DESCRIPTION		APPROVE BY	DATE	DRAWING No
THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	Typical Drawing for Installation of Air Valve and Washout	NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE
					K-D13

Typical Drawing for Branch of Service Pipe

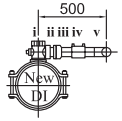
Branch of Service Pipe (DI×HDPE ϕ 50)
Saddle Cramp



Type-1
(Start or End Point)

Type-2
(Middle Point)

Type-1
(Start or End Point)



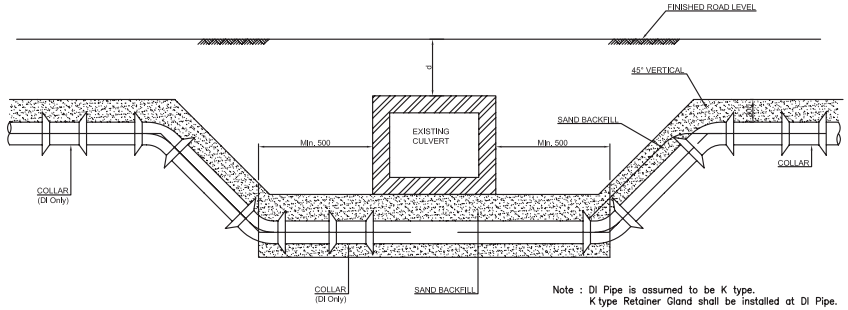
A-A Section

	Material	Specification
i	FCD Saddle Cramp for DIP	ø D × ø 50
ii	CAC Metal Socket of HDPE for Meter	ø 50
iii	HDPE Double Spigot Pipe	ø 50 L=500mm (Minimum)
iv	HDPE EF Socket	ø 50
v	HDPE 90° Bend	ø 50
vi	HDPE EF Flange	PN10 ø 50
vii	FCD Soft Seal Sluice Valve	PN10 ø 50 Inside Screw type
viii	HDPE Tee	ø 50 × ø 50

Note : Flange joints shall be SUS304 PN10.

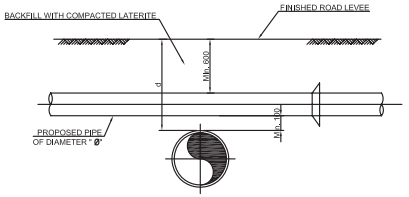
PROJECT	DESCRIPTION		APPROVE BY	DATE	DRAWING No
THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	Typical Drawing for Branch of Service Pipe				K-D14
		NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE

Typical Drawing for Structure Crossing

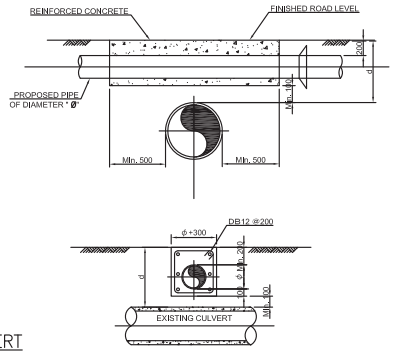


Note : DI Pipe is assumed to be K type.
K type Retainer Gland shall be installed at DI Pipe.

TYPE A : REQUIRED VERTICAL BEND 45°



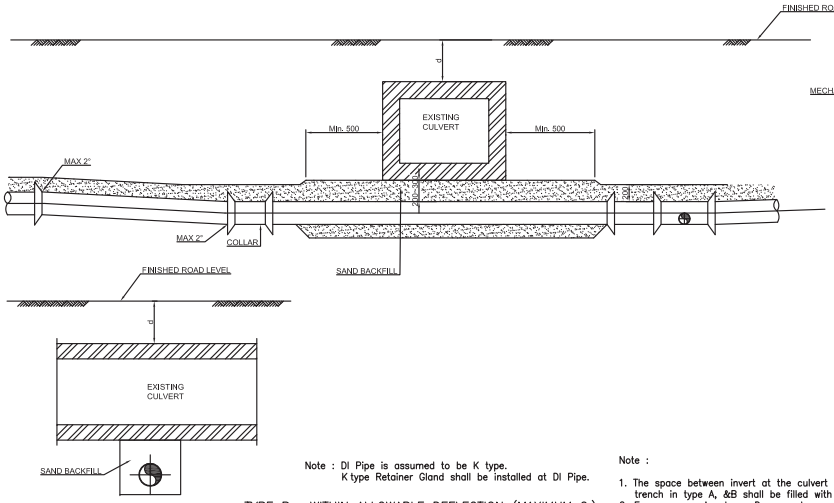
TYPE C : d ≧ Ø + 700mm



PIPE OVER CROSSING THE CULVERT
APPLICABLE TO ALL TYPES OF CULVERTS

SECTION (B)

TYPE D : Ø+400mm < d < Ø +700mm



Note : DI Pipe is assumed to be K type.
K type Retainer Gland shall be installed at DI Pipe.

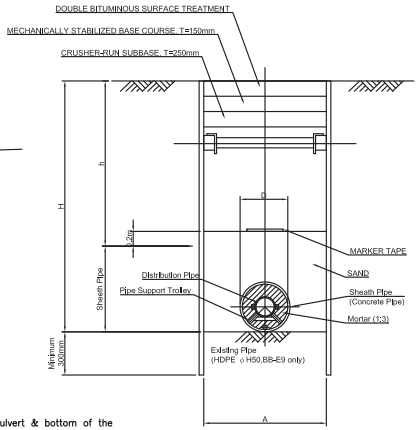
TYPE B : WITHIN ALLOWABLE DEFLECTION (MAXIMUM 2°)

SECTION (A)

PIPE UNDER CROSSING THE CULVERT

Note :

1. The space between invert at the culvert & bottom of the trench in type A, &B shall be filled with sand to the full trench width.
2. For over crossing types D, concrete surround the pipe shall minimum of 4 nos. of 12mm deformed bars at each corners & 10mm deformed bars 200mm intervals with concrete cover of 40mm.
   Concrete strength shall be 21N/mm2 for all reinforced concrete sections.
3. In the event of under crossing all types of culverts, the contractor shall be responsible for using an appropriate supporting system, as approved by the consultant.



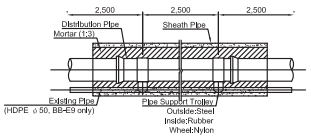
TYPE E :

PIPE UNDER CROSSING THE NATIONAL ROAD AND RAIL WAY

TYPE E

PIPE		SHEATH PIPE		MACHINE EXCAVATION				
					National Road		Rail Way	
PIPE MATERIAL	NOMINAL PIPE DIAMETER d(mm)	PIPE MATERIAL	NOMINAL PIPE DIAMETER D(mm)	TRENCH WIDTH A(m)	DEPTH OF COVER *1 h(m)	EXCAVATION DEPTH H(m)	DEPTH OF COVER *1 h(m)	EXCAVATION DEPTH H(m)
HDPE	50	CONCRETE PIPE (HP B-Type)	350	0.60	2.0	2.36	2.5	2.86
	75		300	0.60	2.0	2.36	2.5	2.86
	100		350	1.00	2.0	2.41	2.5	2.91
	150		400	1.05	2.0	2.47	2.5	2.97
	200		450	1.15	2.0	2.53	2.5	3.03
DIP	250		600	1.35	2.0	2.70	2.5	3.20
	300		600	1.35	2.0	2.70	2.5	3.20
	350		700	1.45	2.0	2.82	2.5	3.32
	400		700	1.45	2.0	2.82	2.5	3.32
	450		800	1.55	2.0	2.94	2.5	3.44
	500		800	1.55	2.0	2.94	2.5	3.44

*1 DEPTH OF COVER : DEPEND ON THE SITE CONDITION.

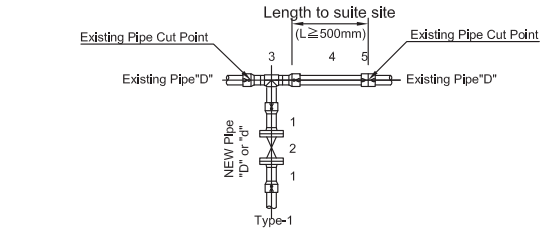


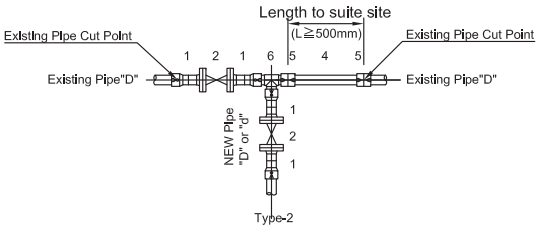
Note :
- The pitch of Spacer is 2.5m.
- The existing pipe (HDPE◇50) is only in BB-E9.

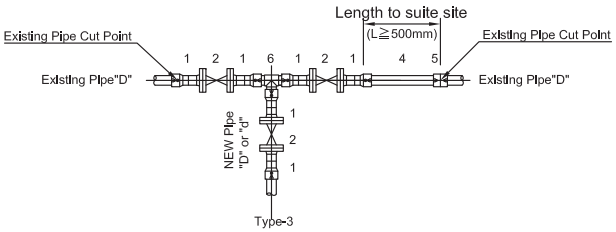
PROJECT	DESCRIPTION		APPROVE BY	DATE	DRAWING No
THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	Typical Drawing for Structure Crossing	NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	K-D15 SCALE

Typical Drawing for Connection of New Pipe and Existing Pipe (1)

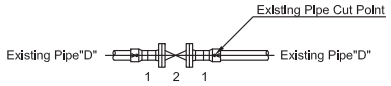
HDPE(new) x HDPE(Existing) Tee Connection

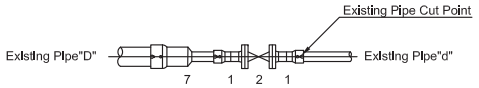


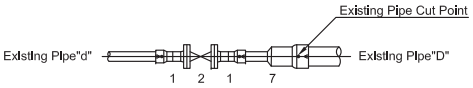




HDPE(new) x HDPE(Existing) Strate Connection







Note :

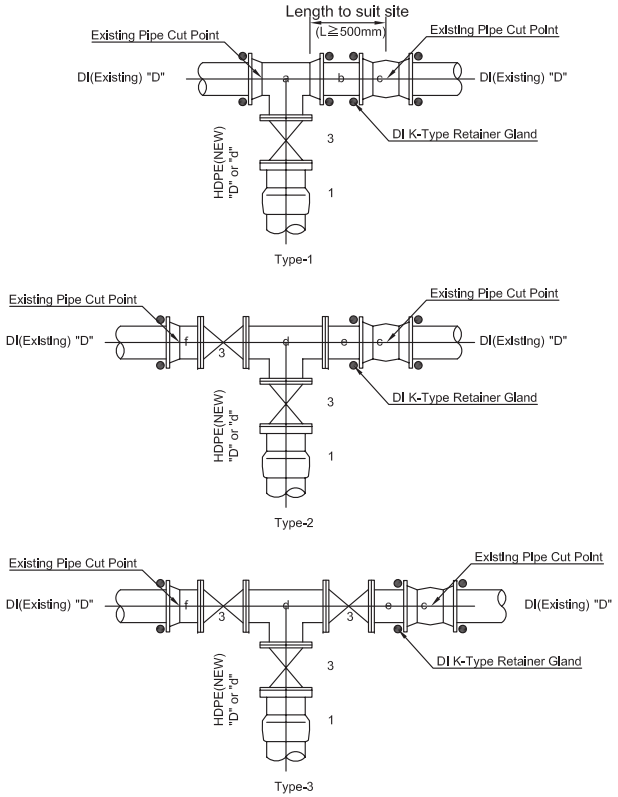
- d<D
- Taper pipe is to be installed at new pipe, when the calibers of new pipe and existing pipe differ.
- In the case of uPVC pipe, read "EF" as "TS" instead of HDPE.
- Flange joints shall be SUS304 PN10.

No.	Material	Specification
1	HDPE EF Flange	PN10 ϕD or ϕd
2	FCD Soft Seal Sluice Valve	PN10 ϕD or ϕd Inside Screw type
3	HDPE EF Tee	PN10 ϕD x ϕD or ϕd
4	HDPE Double Spigot Pipe	PN10 ϕD, L=500mm (Minimum)
5	HDPE EF Socket	PN10 ϕD
6	HDPE Tee	PN10 ϕD x ϕD or ϕd
7	HDPE EF Reducer	PN10 ϕD x ϕd

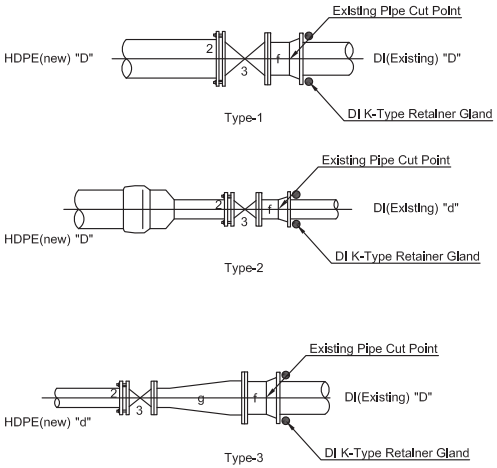
PROJECT	DESCRIPTION		APPROVE BY	DATE	DRAWING No
THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	Typical Drawing for Connection of New Pipe and Existing Pipe (1)				K-D16
		NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE

Typical Drawing for Connection of New Pipe and Existing Pipe (2)

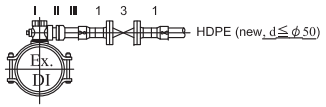
HDPE(new) x DI(existing) Tee Connection



HDPE(new, > φ 50) x DI(existing) Starate Connection



HDPE(new, ≦φ50) x DI(existing, ≦φ250) Saddle Cramp



Note :

- d<D
- Taper pipe is to be installed at new pipe, when the calibers of new pipe and existing pipe differ.
- In the case of uPVC pipe, read "EF" as "TS" instead of HDPE.
- Flange joints shall be SUS304 PN10.

No.	Material	Specification
1	HDPE EF Flange	PN10
2	HDPE Flange Adaptor	PN10
3	FCD Soft Seal Sluice Valve	PN10 φD or φd Inside Screw type
a	DI Double Socket Tee with Flanged Branch	K type PN10 φD x φD or φd
b	DI Double Spigot Pipe	φD, L=500mm (Minimum)
c	DI Collar	K type φD
d	DI All Flanged Tee	PN10 φD x φD or φd
e	DI Flanged Spigot	PN10 φD
f	DI Flanged Socket	K type PN10 φD
g	DI Double Flanged Taper	PN10 φD x φd
I	FCD Saddle Cramp for DIP	φD x φd
ii	CAC Metal Socket of HDPE for Meter	φd
iii	HDPE Double Spigot Pipe	φd L=300mm (Minimum)

PROJECT THE PREPARATORY SURVEY ON THE PROJECT ON ADDITIONAL NEW WATER TREATMENT PLANTS FOR KAMPONG CHAM AND BATTAMBANG WATERWORKS カンボジア国地方上水道拡張整備計画準備調査	DESCRIPTION Typical Drawing for Connection of New Pipe and Existing Pipe (2)		APPROVE BY	DATE	DRAWING No K-D17
		NIHON SUIDO CONSULTANTS CO., LTD. WATER AND SEWER BUREAU, CITY OF KITAKYUSHU CTI ENGINEERING INTERNATIONAL CO., LTD.	PREPARED BY	DATE	SCALE