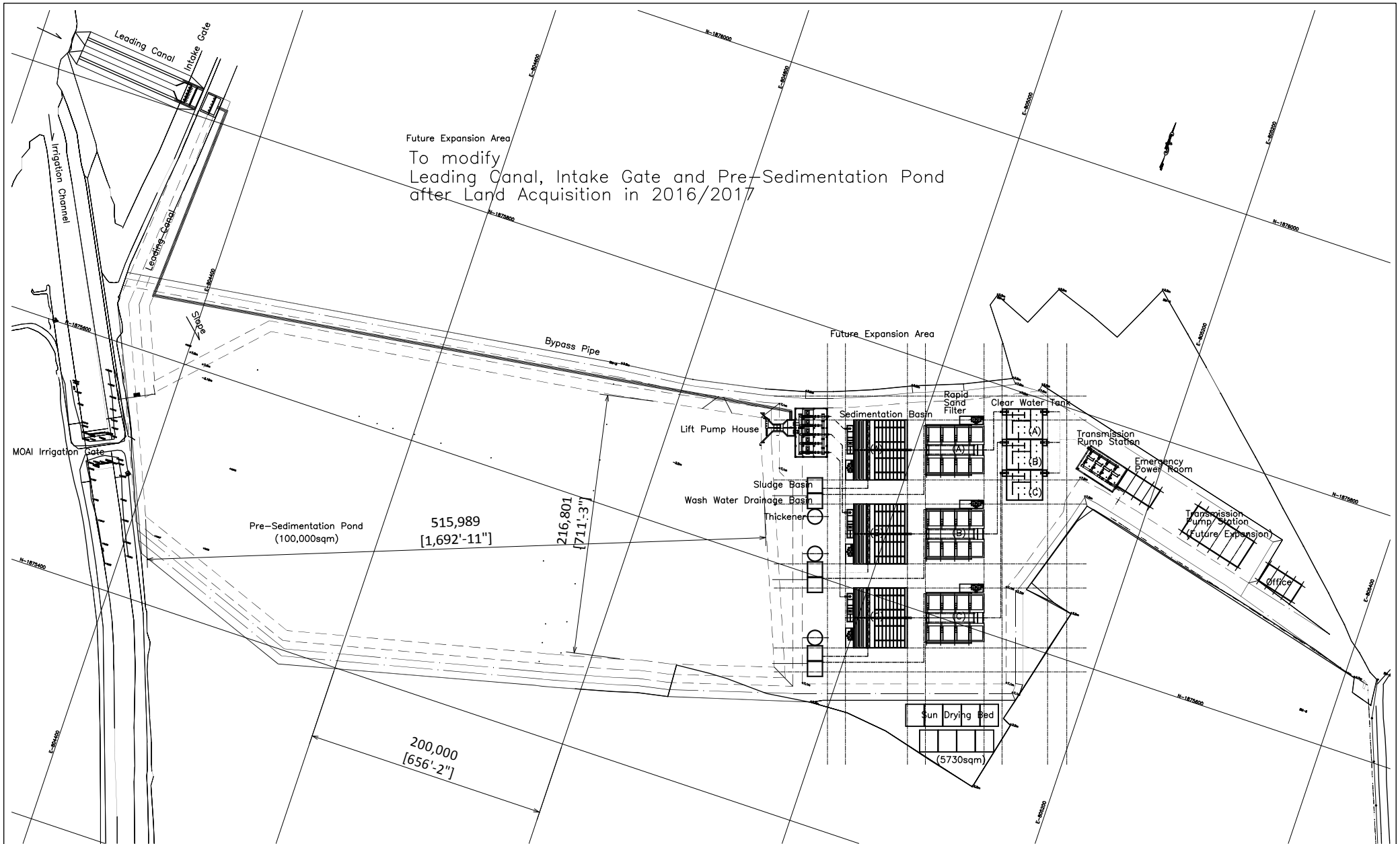


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	Kokkowa Water Treatment Plant			Transmission Pipe for Zone1	
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WTP-2	Layout Plan(2/2)	1:1500	PL-011	Plan and Longitudinal Section (8)	H=1:10,000 V=2000
WTP-3	Water Level Chart	NONE	PL-012	Cross Section (3)	1:500
WTP-4	Flow Sheet (Intake)	NONE	PL-013	Hlaing River Crossing Plan and Longitudinal Section	1:1000
WTP-5	Flow Sheet (WTP)	NONE	PL-014	Index MAP (Yangon City)	1:30,000
WTP-6	Single Line Diagram	NONE	PL-015	Plan and Longitudinal Section (9)	H=1:10,000 V=2000
	Transmission Pipe to Zone9		PL-016	Plan and Longitudinal Section (10)	H=1:10,000 V=2000
PL-001	Index MAP (Hlaing Tharyar TS)	1:80,000	PL-017	Plan and Longitudinal Section (11)	H=1:10,000 V=2000
PL-002	Plan and Longitudinal Section (1)	H=1:10,000 V=2000	PL-018	Plan and Longitudinal Section (12)	H=1:10,000 V=2000
PL-003	Plan and Longitudinal Section (2)	H=1:10,000 V=2000	PL-019	Plan and Longitudinal Section (13)	H=1:10,000 V=2000
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PL-005	Plan and Longitudinal Section (4)	H=1:10,000 V=2000	PL-021	Cross Section (4)	1:500
PL-006	Plan and Longitudinal Section (5)	H=1:10,000 V=2000	PL-022	Cross Section (5)	1:500
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Z9SR-3	Section of Zone 9 SR and Relay Pump Tank	1:500	DPL-Z9	Zone9 in 2025: General Plan of Distribution Main, DMA and Distribution Pipe	NONE
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			SCADA	Flow Monitoring Diagram	NONE



Future Expansion Area
 To modify
 Leading Canal, Intake Gate and Pre-Sedimentation Pond
 after Land Acquisition in 2016/2017

Pre-Sedimentation Pond
 (100,000sqm)
 515,989
 [1,692'-11"]

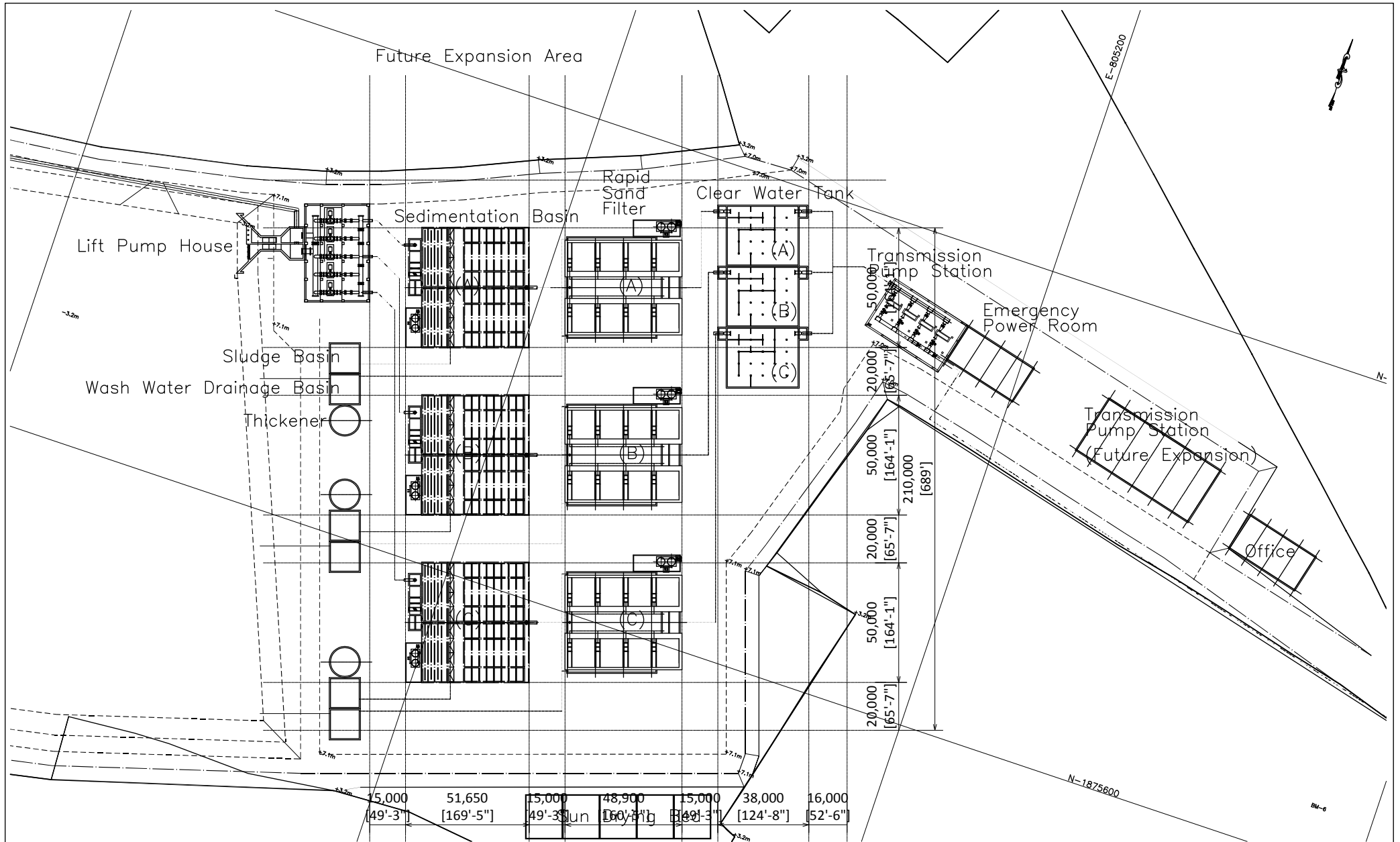
216,801
 [711'-3"]

200,000
 [656'-2"]

Sun Drying Bed
 (5730sqm)

Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	A3; S=1:3000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Kokkowa Water Treatment Plant Layout Plan(1/2)	Drawing No.	WTP- 1
-	-	-	-			Date	30 June 2016



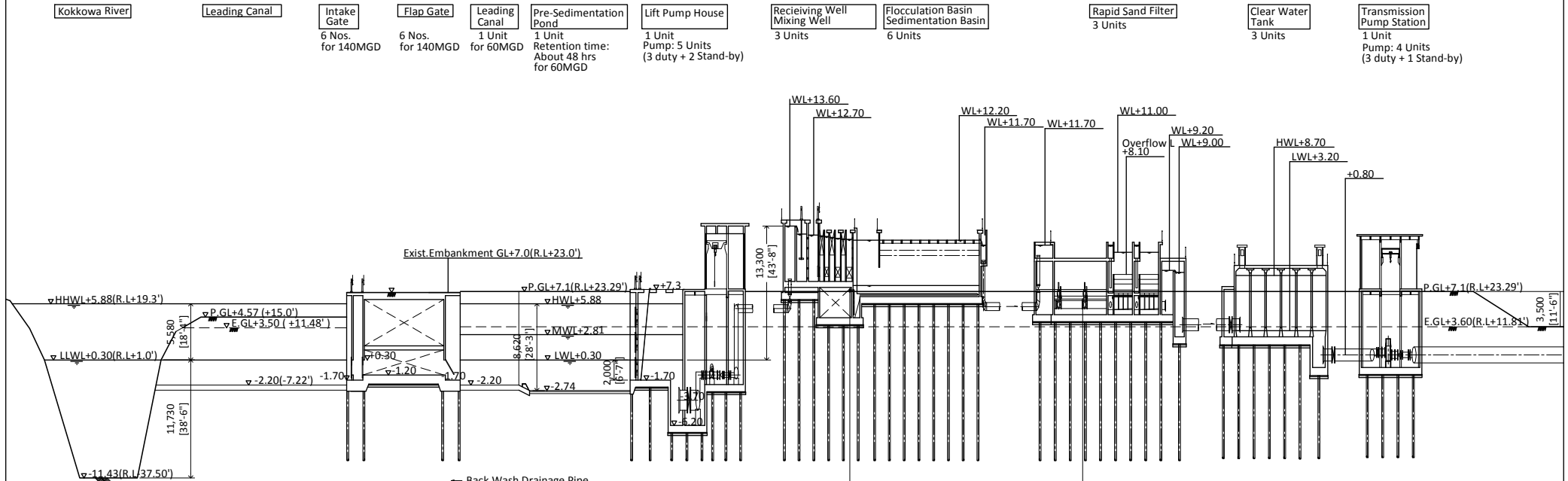
Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale A3; S=1:1500
DRAWN BY -	DESIGNED BY -	CHECKED BY -	APPROVED BY -	TITLE Kokkowa Water Treatment Plant Layout Plan (2/2)	Drawing No. WTP-2
					Date 30 June 2016

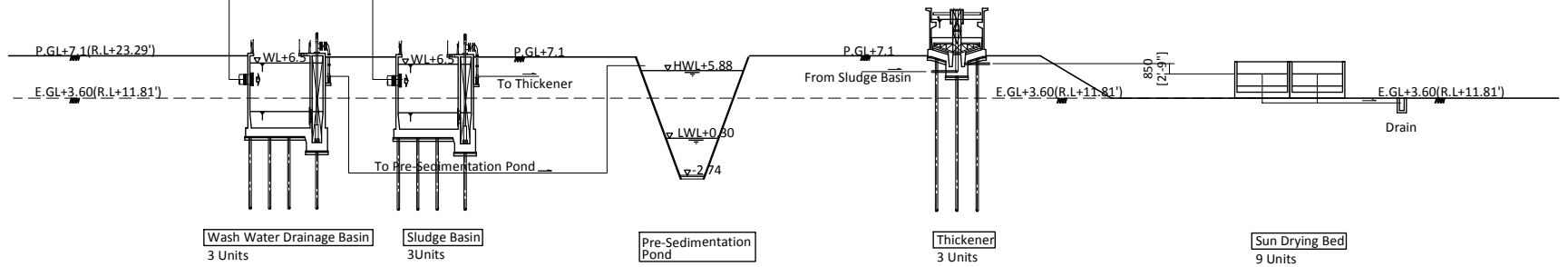
[Intake Facility]

[Water Treatment Facility]

[Transmission Facility]



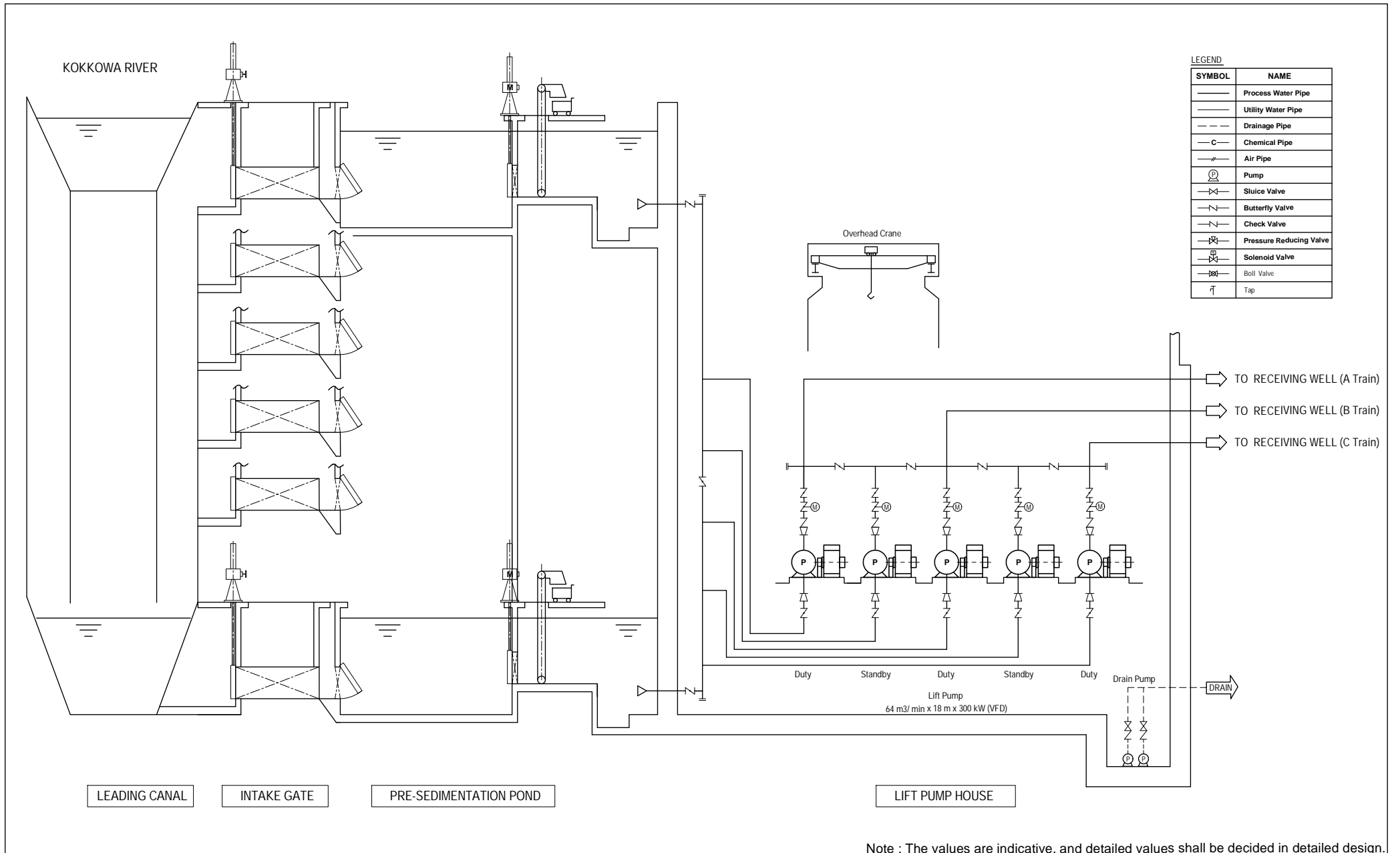
[Sludge Treatment Facility]



60MGD=286,400m³/day

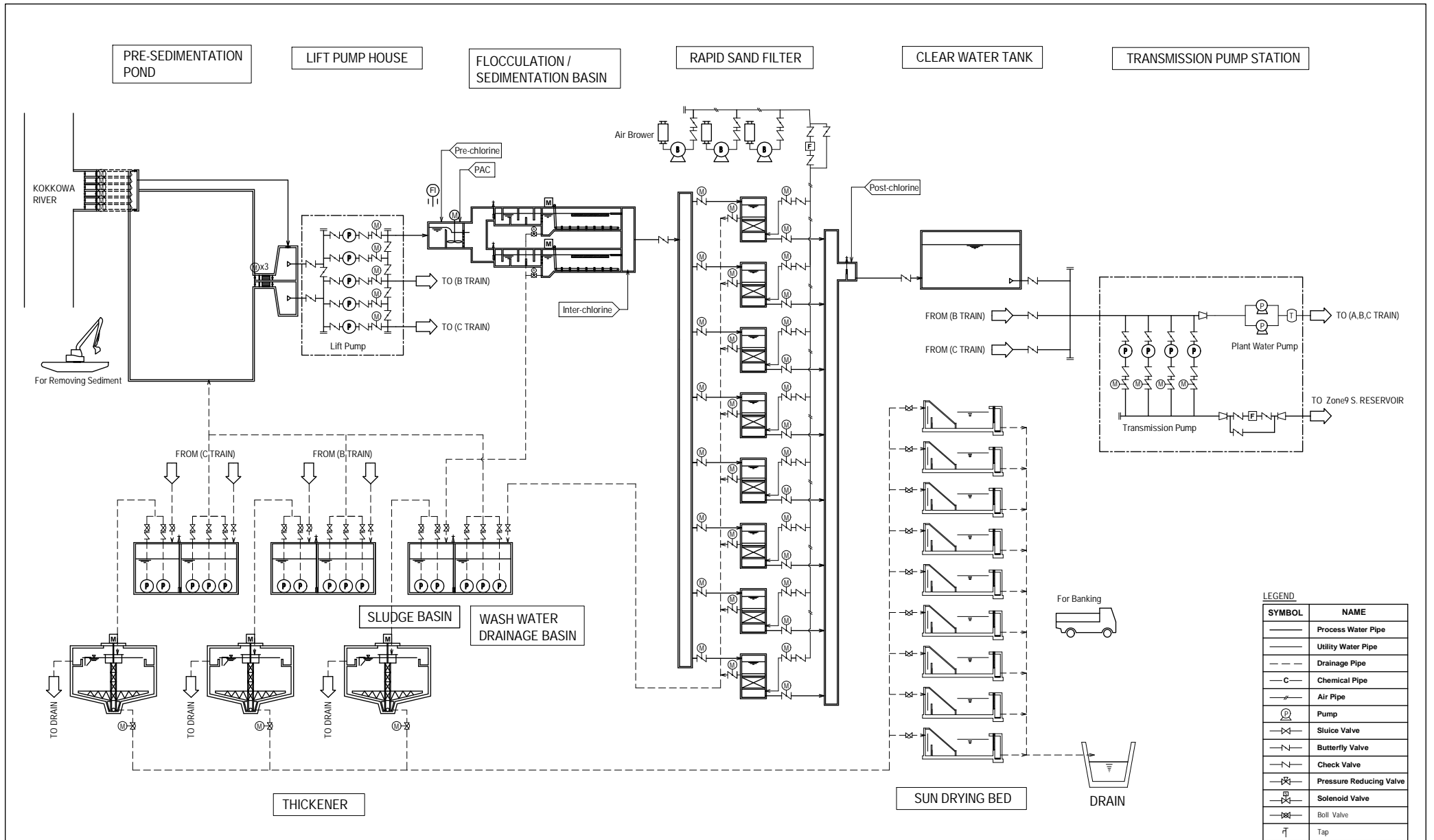
Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	None
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Kokkowa Water Treatment Plant Water Level Chart	Drawing No.	WTP-3
-	-	-	-			Date	30 June 2016



Note : The values are indicative, and detailed values shall be decided in detailed design.

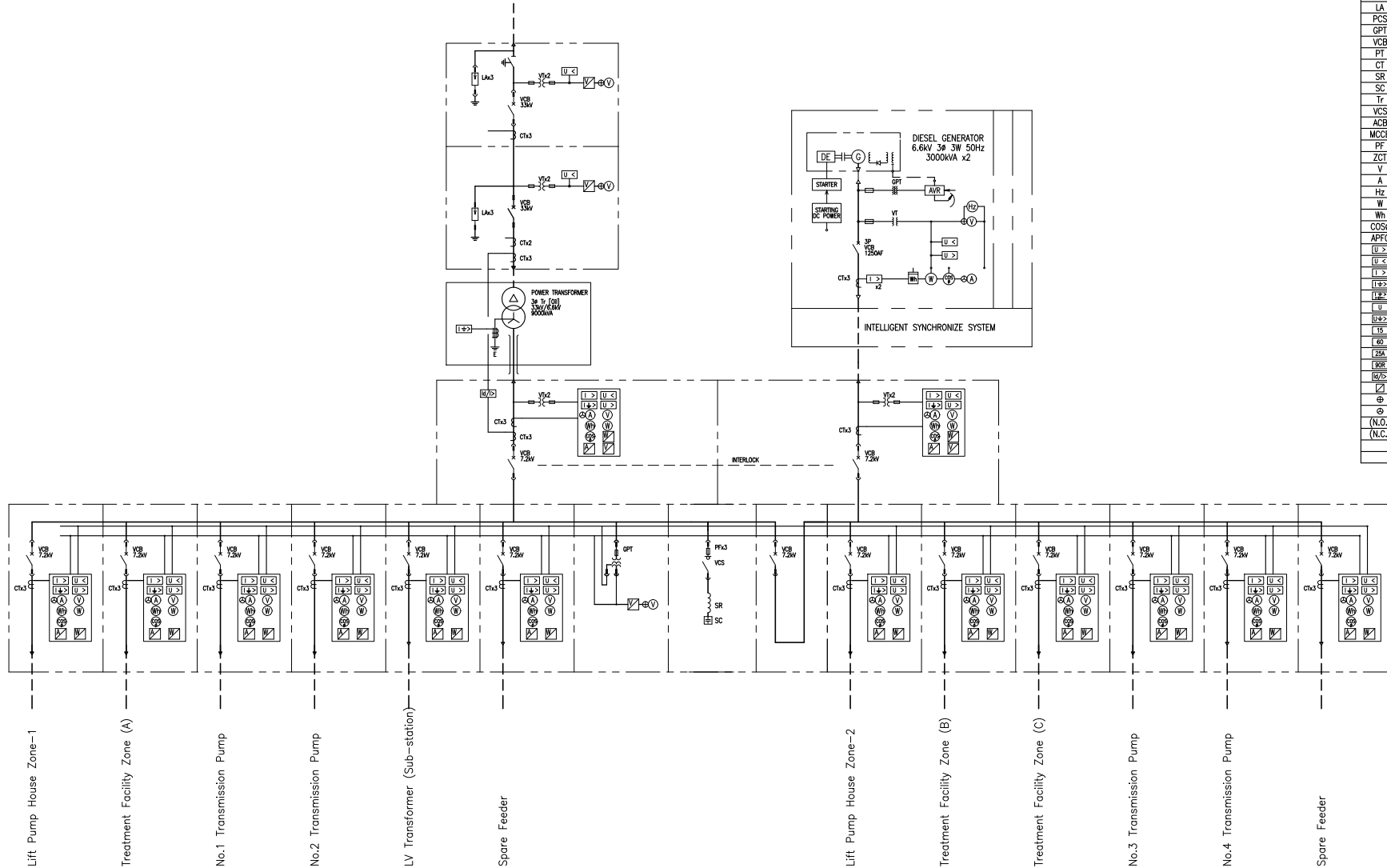
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)		Scale	A3; None
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE Kokkowa Water Treatment Plant Flow Sheet (Intake)		Drawing No.	WTP-4
-	-	-	-			Date	30 June 2016



Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)		Scale	A3; None
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-	-	-	-			Date	30 June 2016

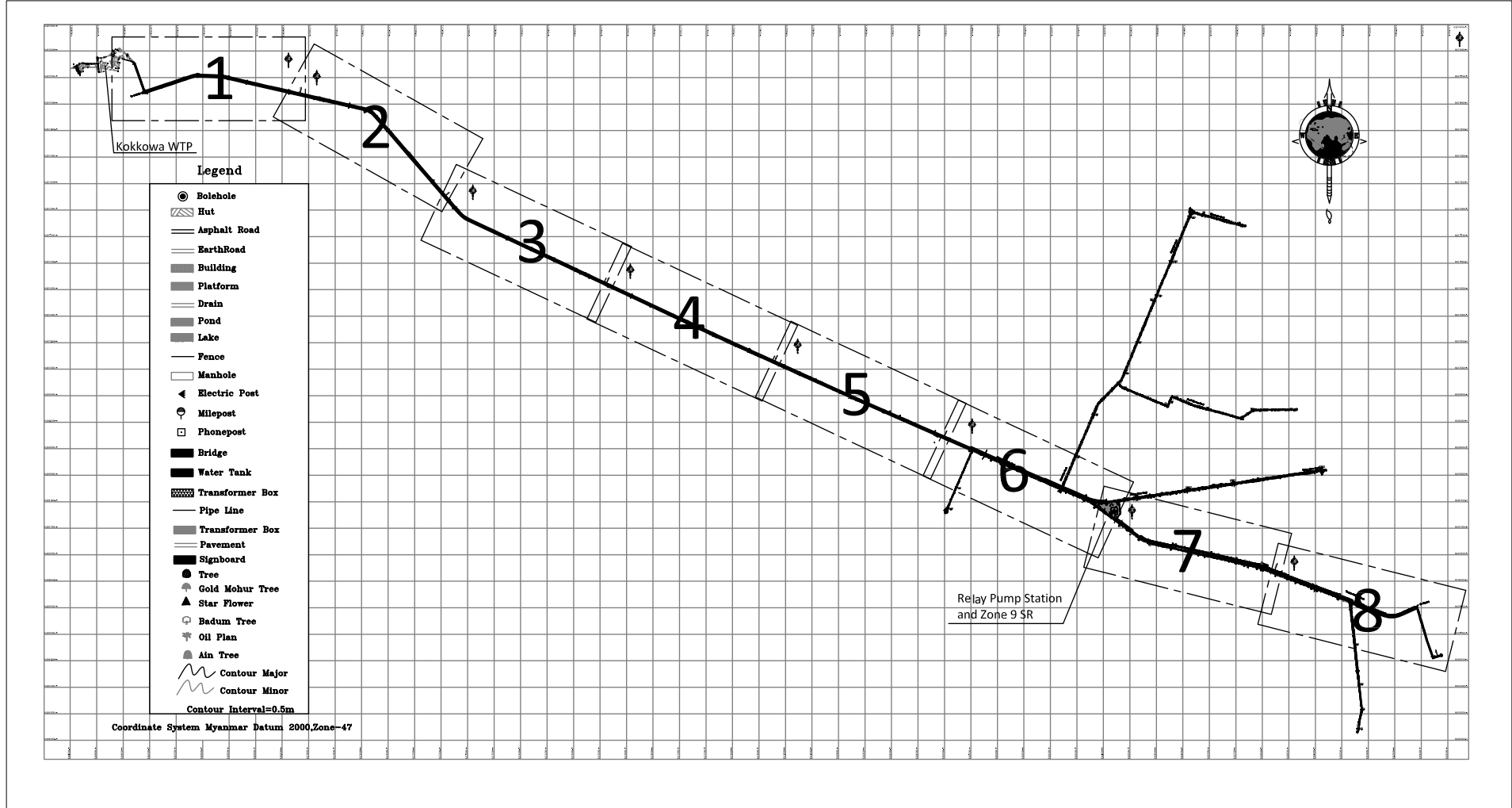
SYMBOL	LEGEND
VCT	VOLTAGE CURRENT TRANSFORMER
VD	VOLTAGE DETECTOR
DS	DISCONNECTING SWITCH
LA	LIGHTNING ARRESTER
PCS	PRIMARY CUTOFF SWITCH
GPT	GROUNDING POTENTIAL TRANSFORMER
VCB	VACUUM CIRCUIT BREAKER
PT	POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER
SR	SERIES REACTOR
SC	STATIC CAPACITOR
Tr	TRANSFORMER
VCS	VACUUM CONTACTOR
ACB	AIR CIRCUIT BREAKER
MCCB	MOLDED CASE CIRCUIT BREAKER
PF	POWER FUSE
ZCT	ZERO PHASE CURRENT TRANSFORMER
V	VOLTMETER
A	AMMETER
Hz	FREQUENCY METER
W	WATT METER
Wh	WATT HOUR METER
COSφ	POWER FACTOR METER
APFC	AUTOMATIC PF CONTROLLER
[U>]	AC OVER VOLTAGE RELAY
[U<]	UNDER VOLTAGE RELAY
[I>]	OVER CURRENT RELAY
[I<]	OVER CURRENT GROUNDING RELAY
[D<]	DIRECTIONAL GROUNDING RELAY
[U]	AC VOLTAGE RELAY
[U>]	GROUNDING OVER VOLTAGE RELAY
[S]	SPEED ADJUSTING DEVICE RELAY
[60]	VOLTAGE BALANCE RELAY
[2SA]	SYNCHRONIZING RELAY
[90R]	AUTOMATIC VOLTAGE REGULATING RELAY
[67/5]	RATIO DIFFERENTIAL RELAY
[Z]	TRANSDUCER
⊕	VOLTMETER SWITCH
⊙	AMMETER SWITCH
(N.O.)	NORMALLY OPEN
(N.C.)	NORMALLY CLOSE



Single Line Diagram for WTP

Note : The values are indicative, and detailed values shall be decided in detailed design.

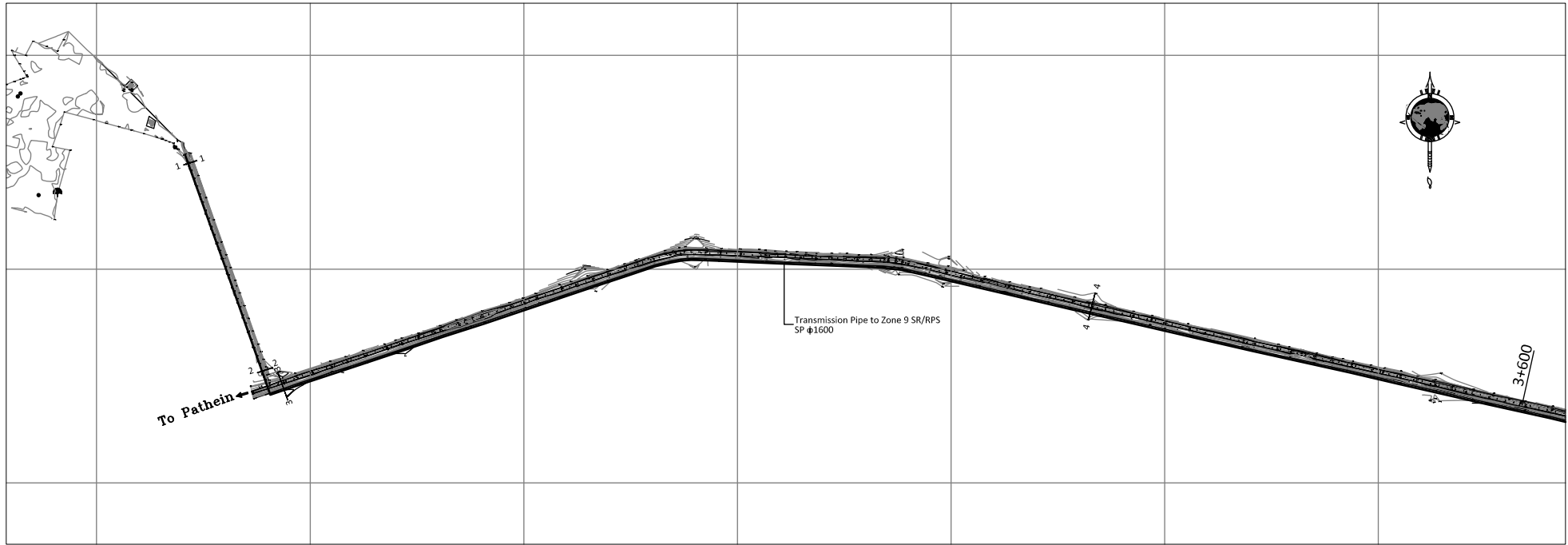
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	NTS
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Kokkowa WTP Single Line Diagram	Drawing No.	WTP-6
-	-	-	-			Date	30 June 2016



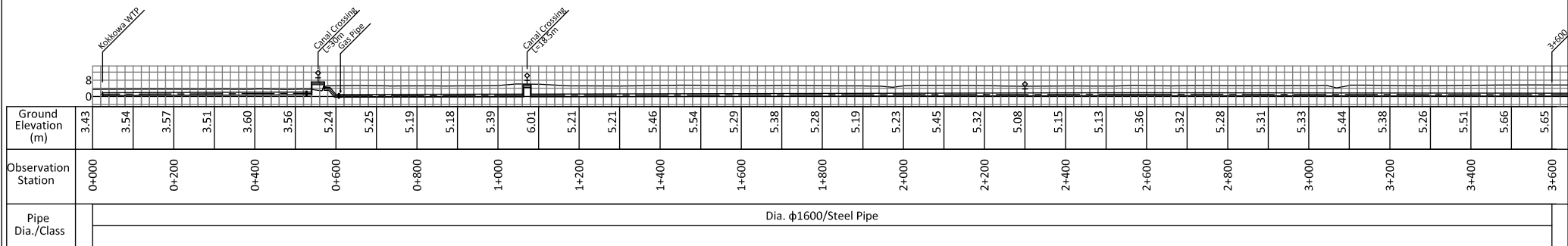
Index Map (1)

Scale = 1: 80000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:80000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Index Map (Hlaing Tharyar TS)	Drawing No.	TRM-PL-001
-	-	-	-			Date	June 2016

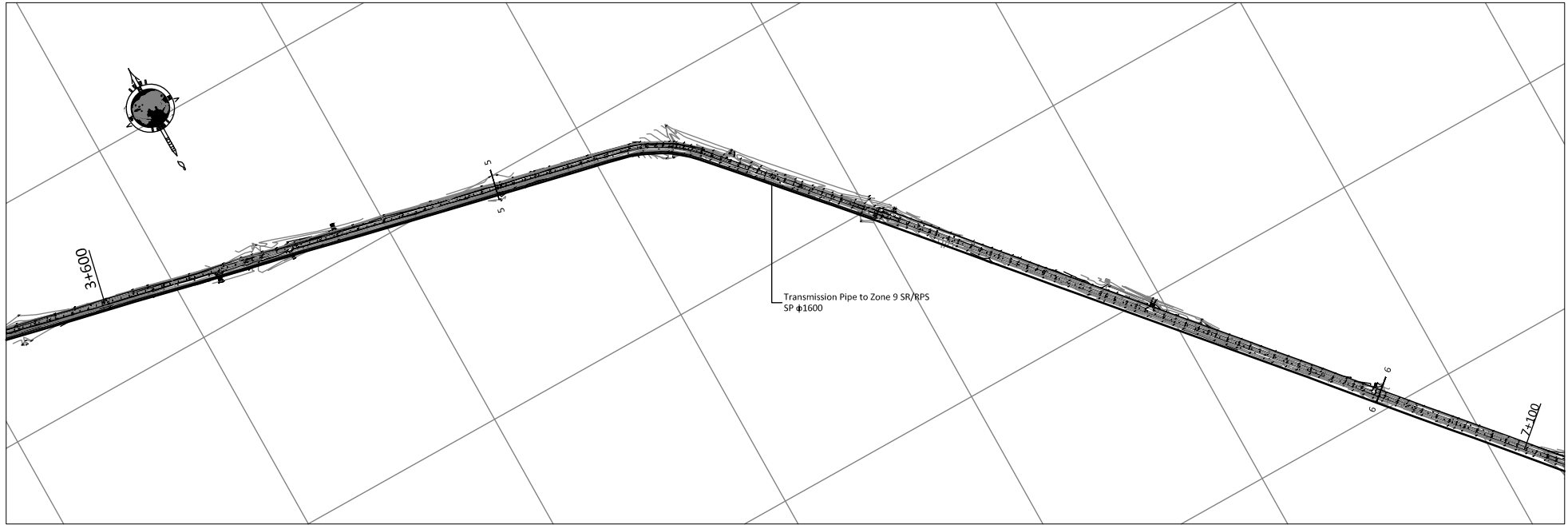


Plan (1)
Scale = 1:10000



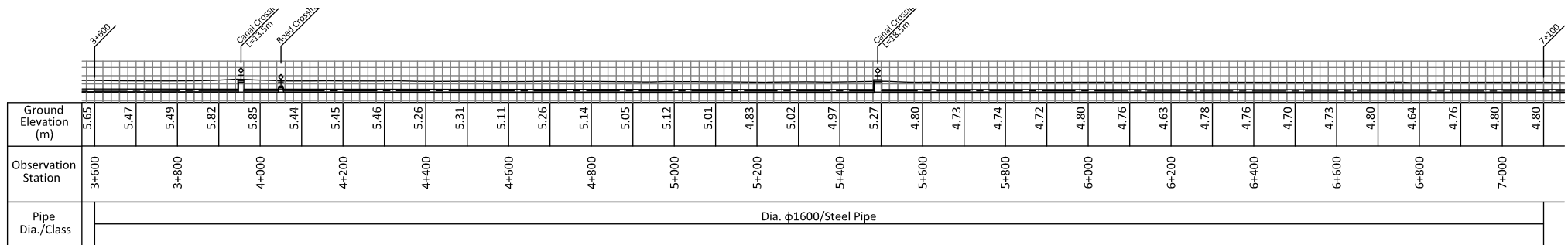
Longitudinal Section (1)
Scale: H=1:10000, V=2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Plan and Longitudinal Section (1)	Drawing No.	TRM-PL-002
-	-	-	-			Date	June 2016



Plan (2)

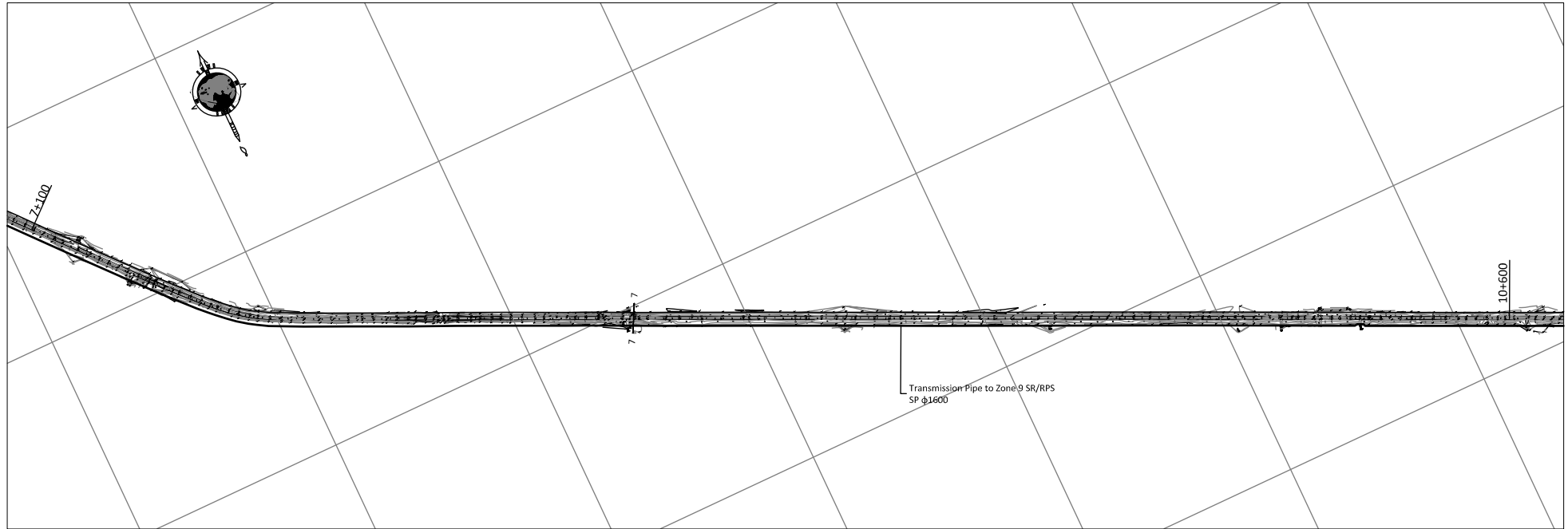
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Longitudinal Section (2)

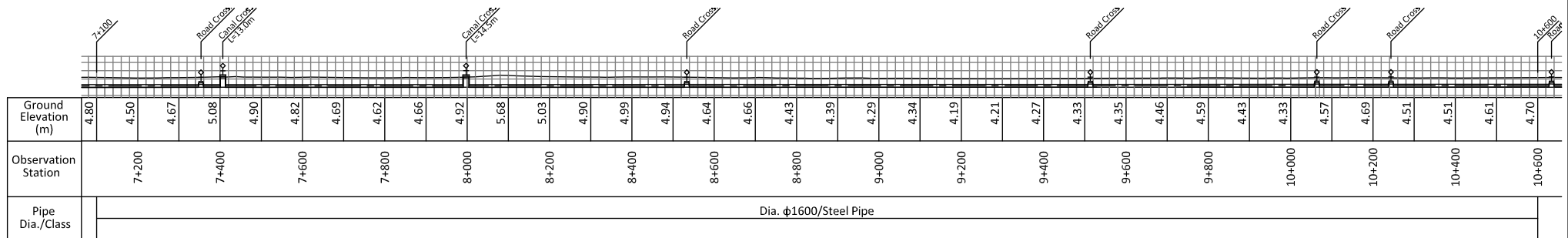
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JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Plan and Longitudinal Section (2)	Drawing No.	TRM-PL-003
-	-	-	-			Date	June 2016



Plan (3)

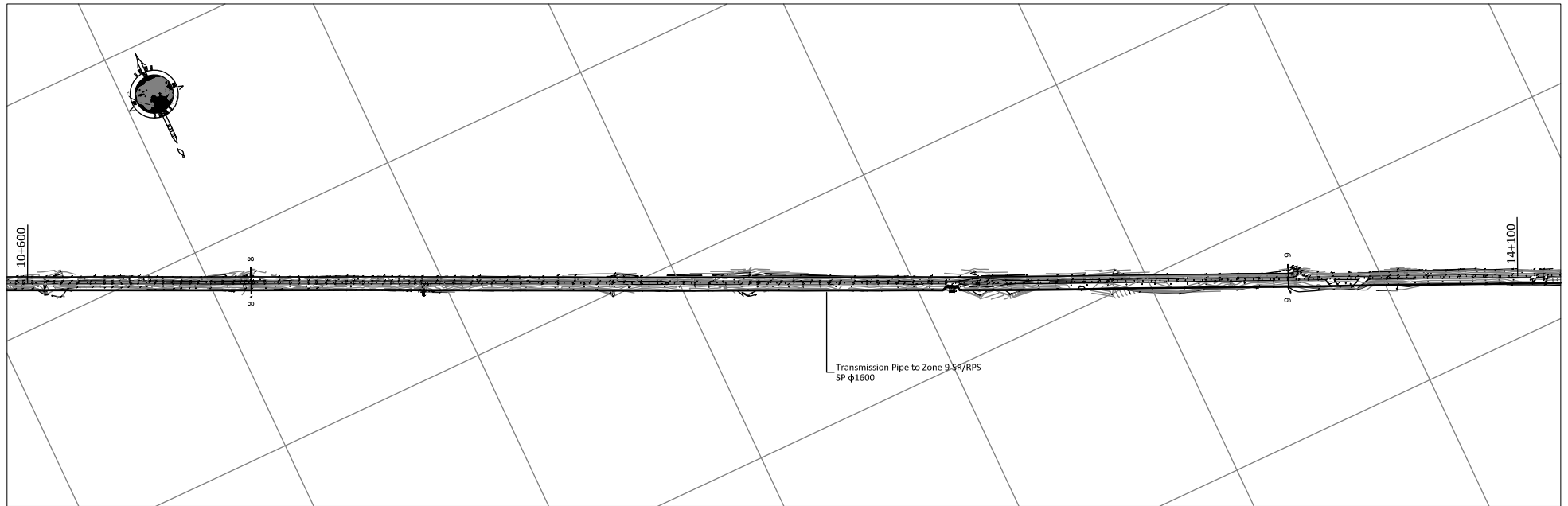
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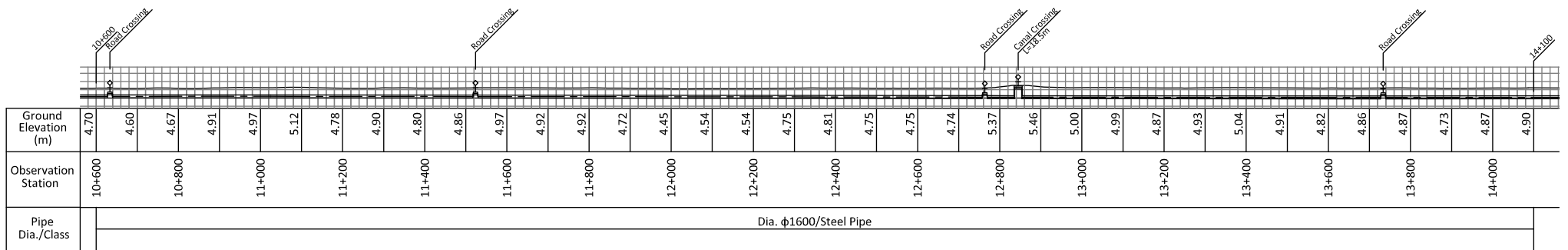
Longitudinal Section (3)

Scale: H=1:10000, V=2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
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-	-	-	-			Date	June 2016

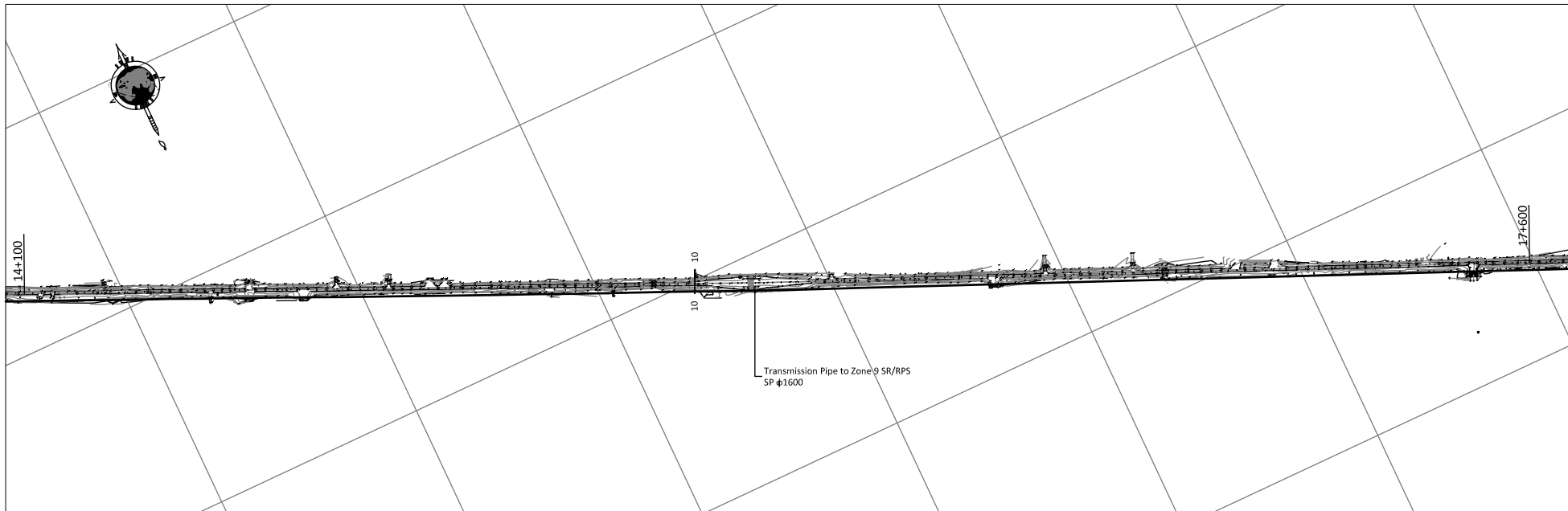


Plan (4)
Scale = 1:10000



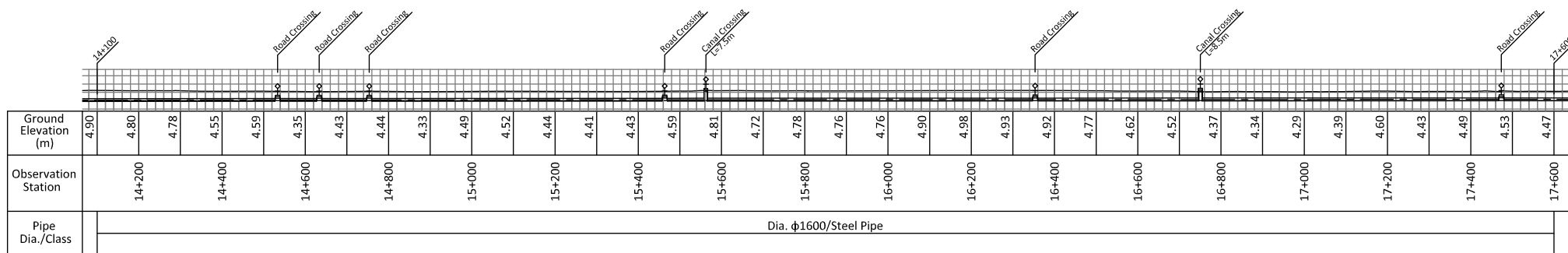
Longitudinal section (4)
Scale: H=1:10000, V=2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Plan and Longitudinal Section (4)	Drawing No.	TRM-PL-005
-	-	-	-			Date	June 2016



Plan (5)

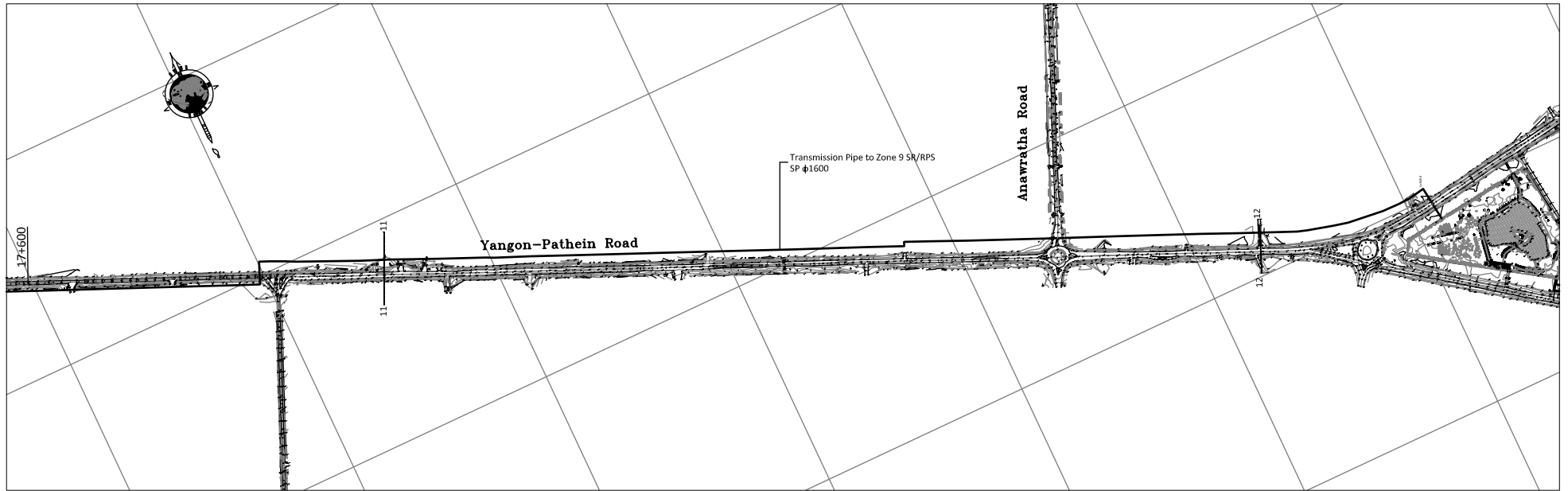
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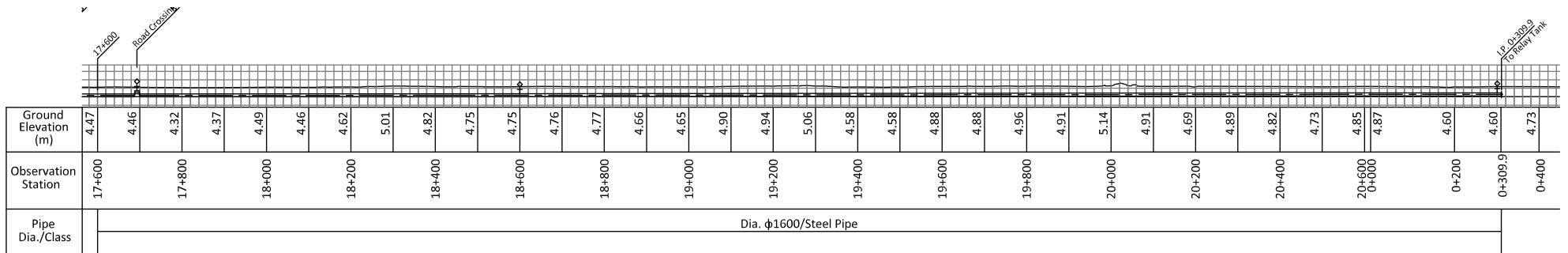
Longitudinal Section (5)

Scale: H=1:10000, V=2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 H=1:2000
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-	-	-	-			Date	June 2016

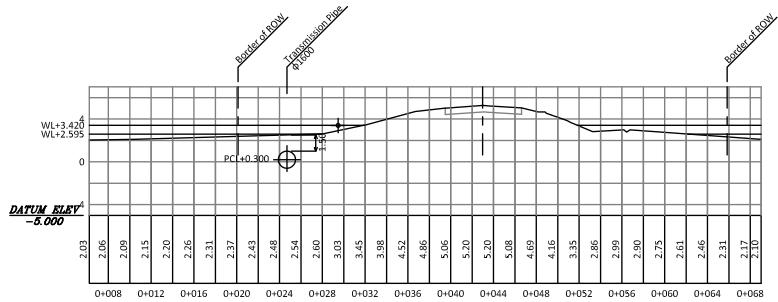


Plan (6)
Scale = 1:10000

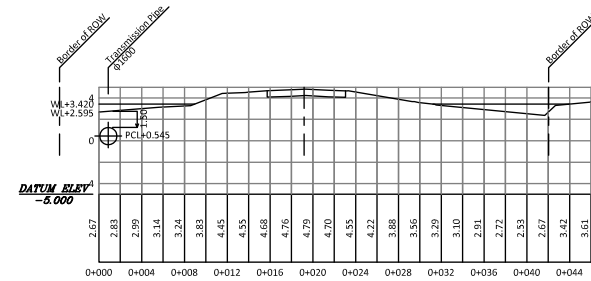


Longitudinal Section (6)
Scale: H=1:10000, V=1:2000

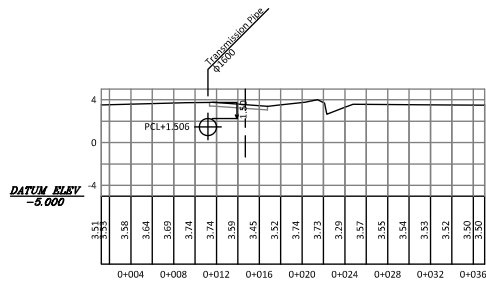
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Plan and Longitudinal Section (6)	Drawing No.	TRM-PL-007
-	-	-	-			Date	June 2016



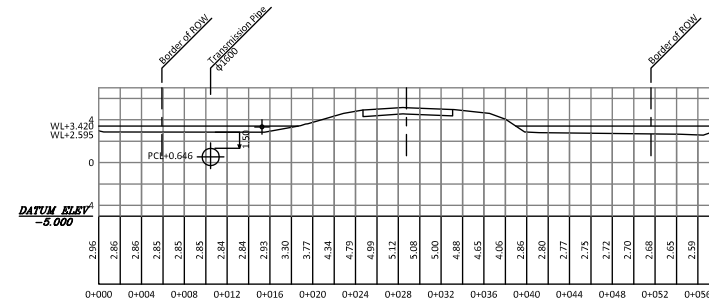
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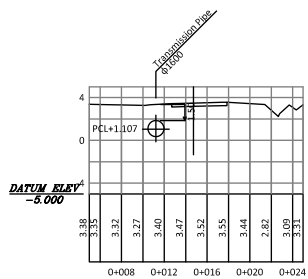
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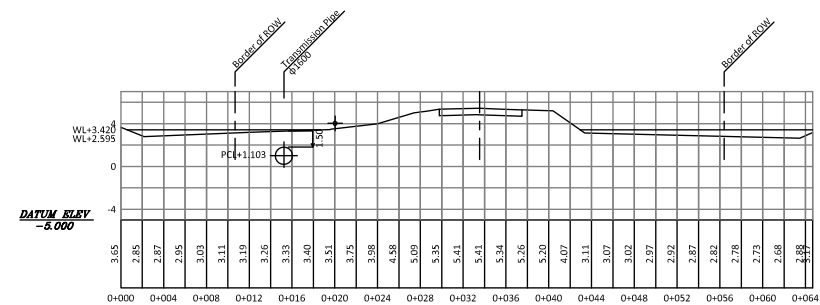
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5-5



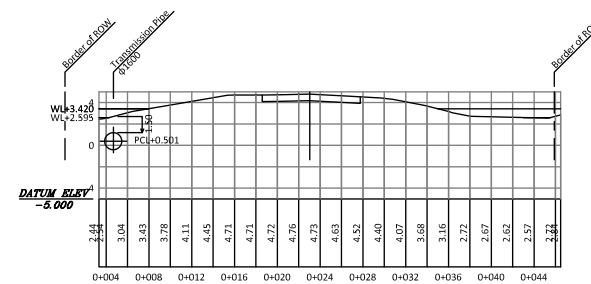
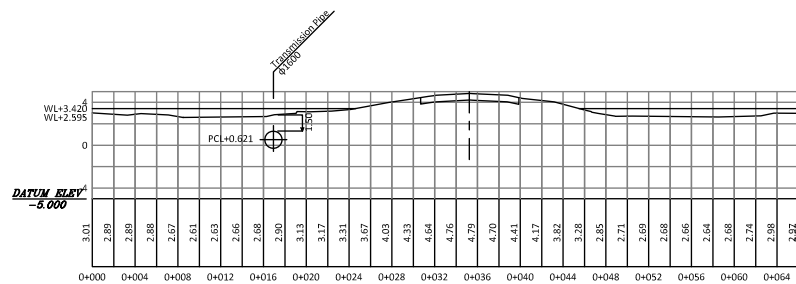
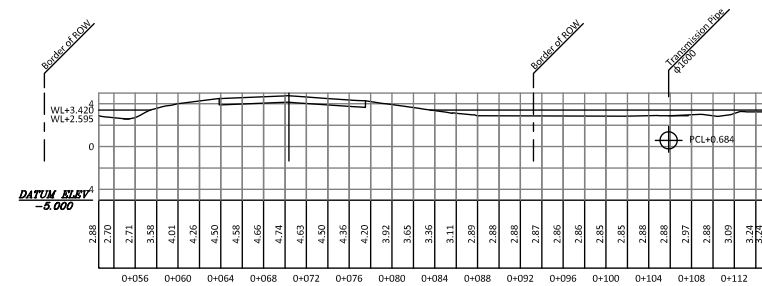
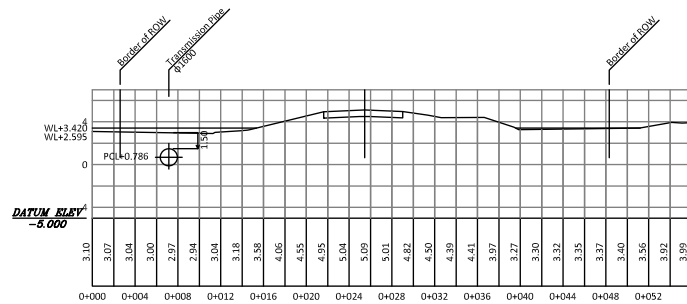
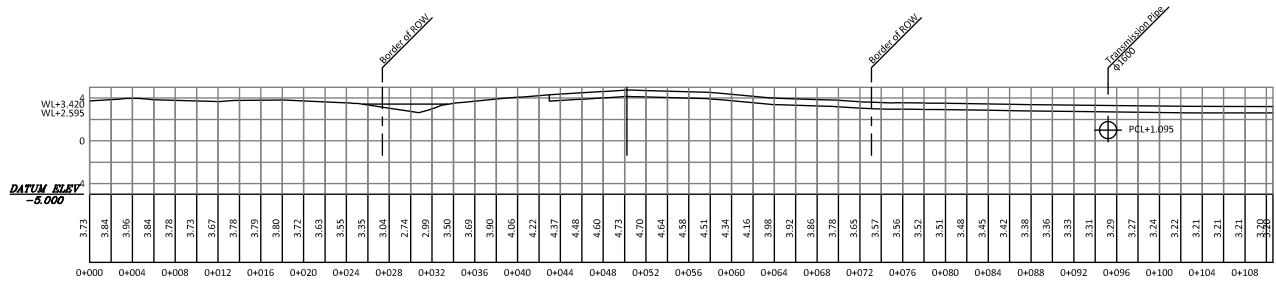
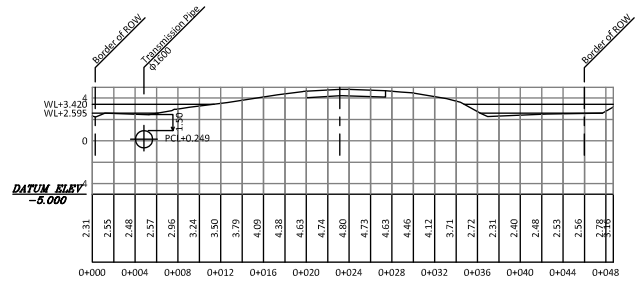
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4-4

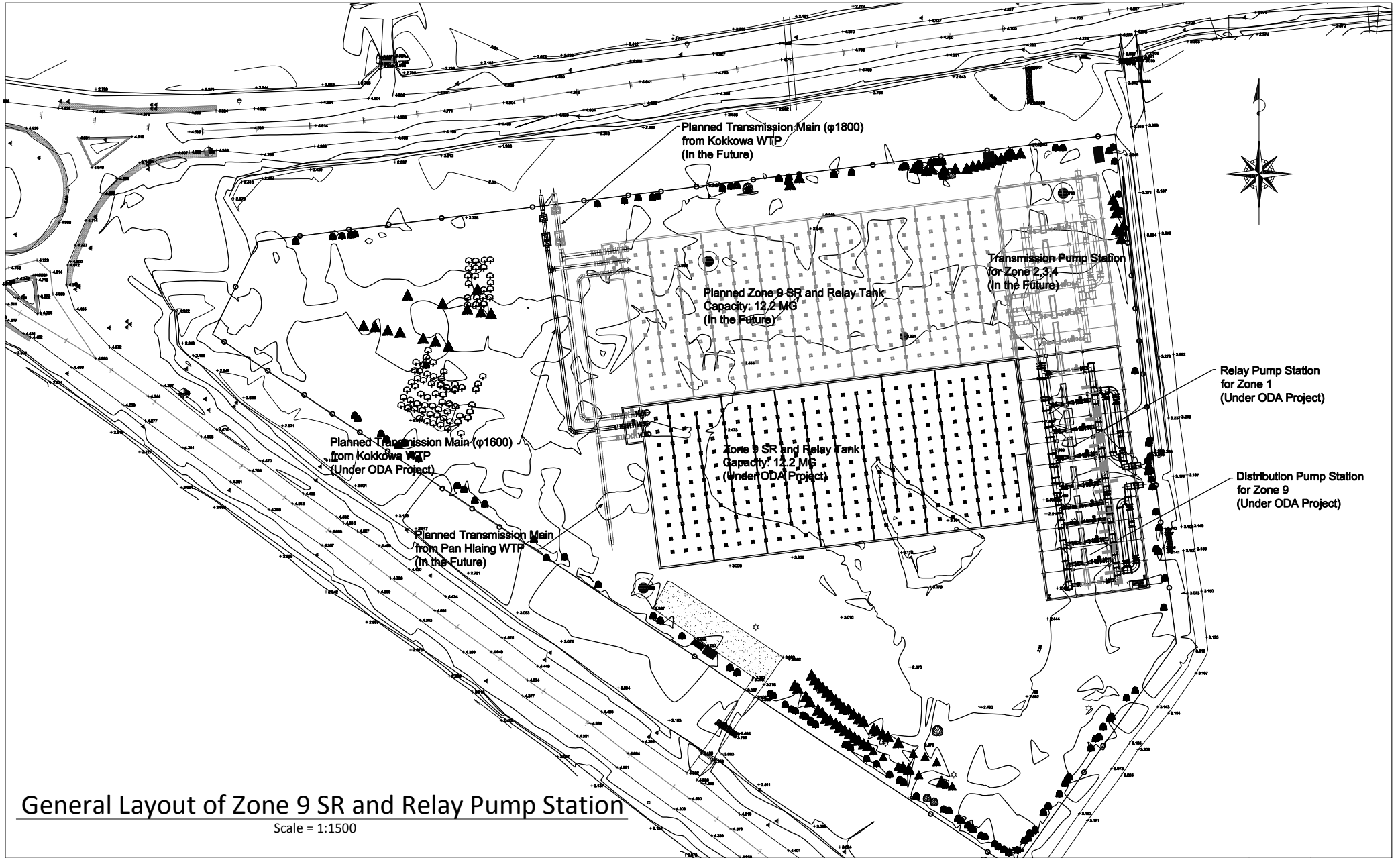
Note: WL+2.595 (Dry Season), WL+3.420 (Rainy Season)

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Cross Section (1)	Drawing No.	TRM-PL-008
-	-	-	-			Date	June 2016



Note: WL+2.595 (Dry Season), WL+3.420 (Rainy Season)

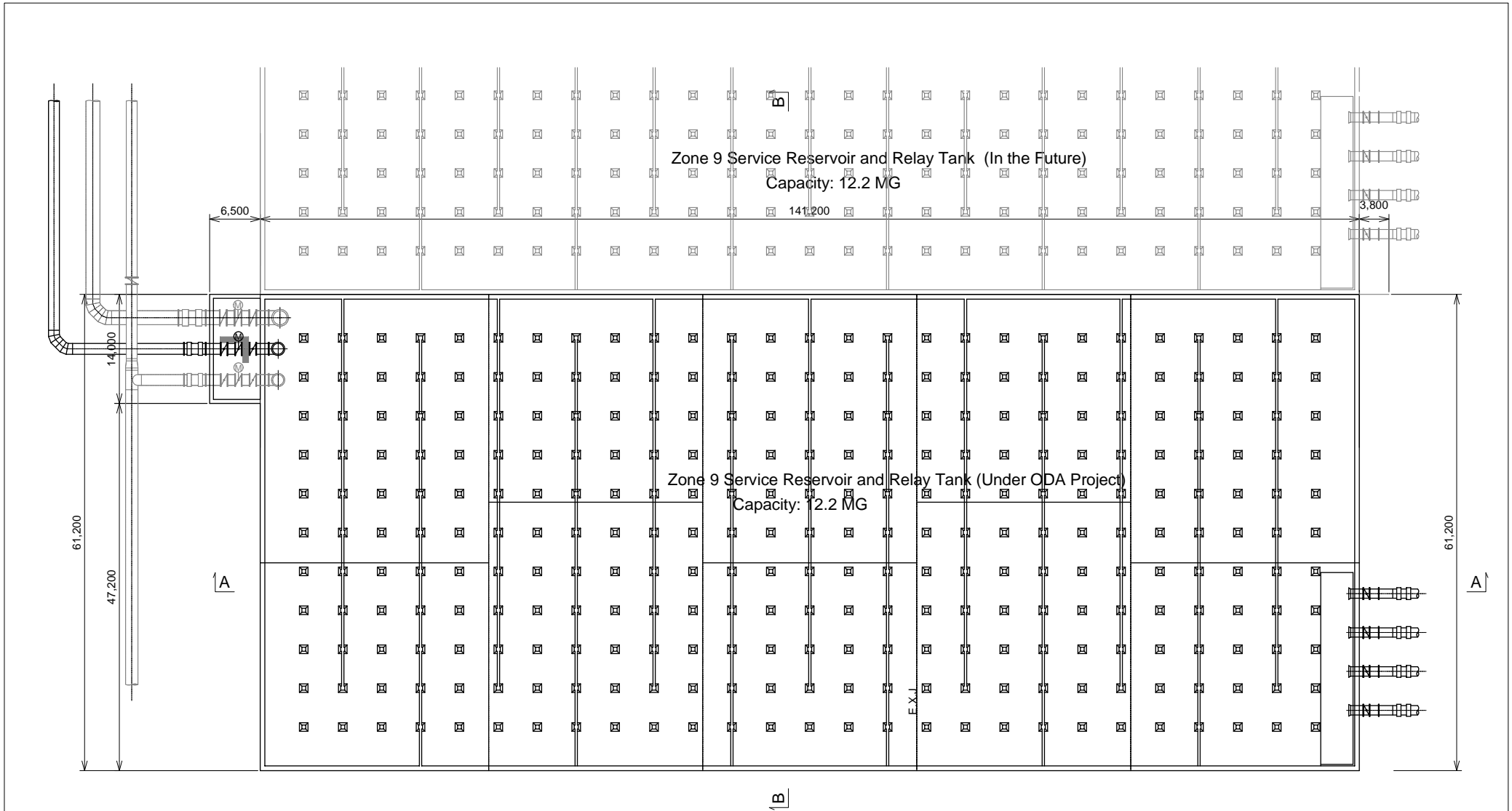
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe to Zone 9 Cross Section (2)	Drawing No.	TRM-PL-009
-	-	-	-			Date	June 2016



General Layout of Zone 9 SR and Relay Pump Station

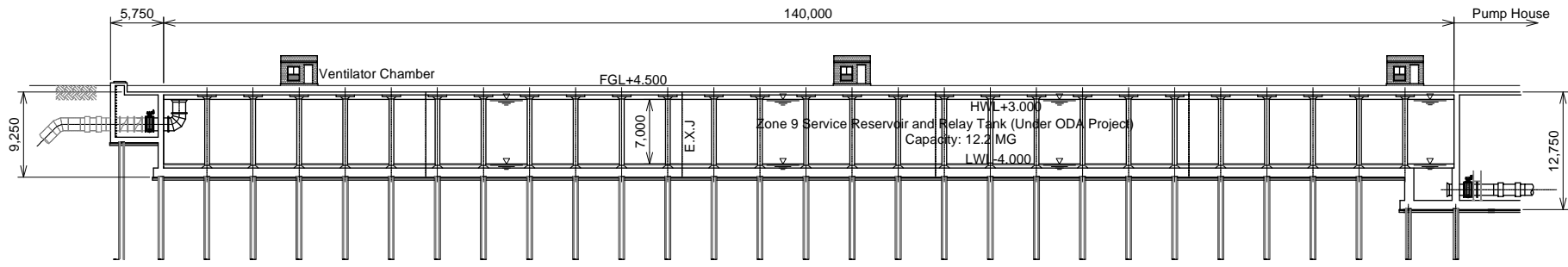
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JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkova River)	Scale	1:1500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	General Layout of Zone 9 SR and Relay Pump Station	Drawing No.	Z9SR-1
-	-	-	-			Date	June 2016

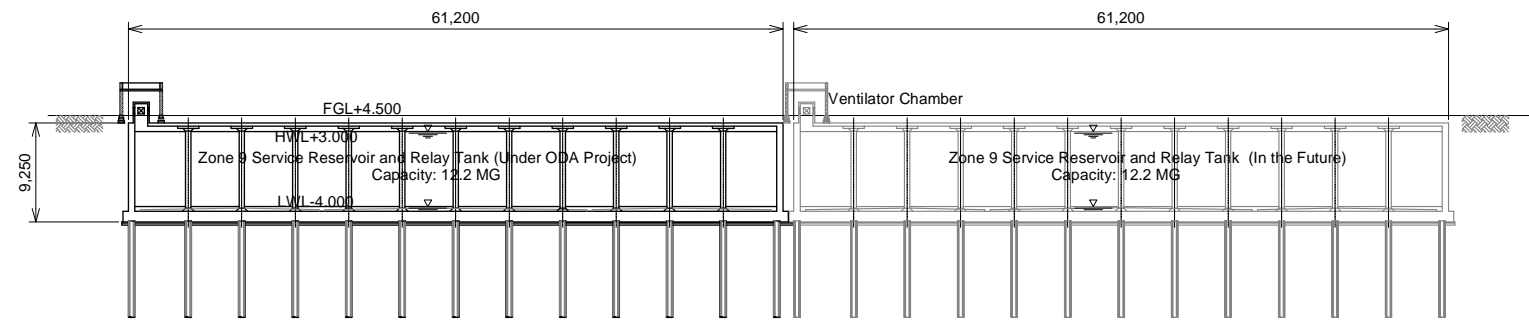


Plan of Zone 9 SR and Relay Pump Tank Scale = 1:500

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:500
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-	-	-	-			Date	June 2016



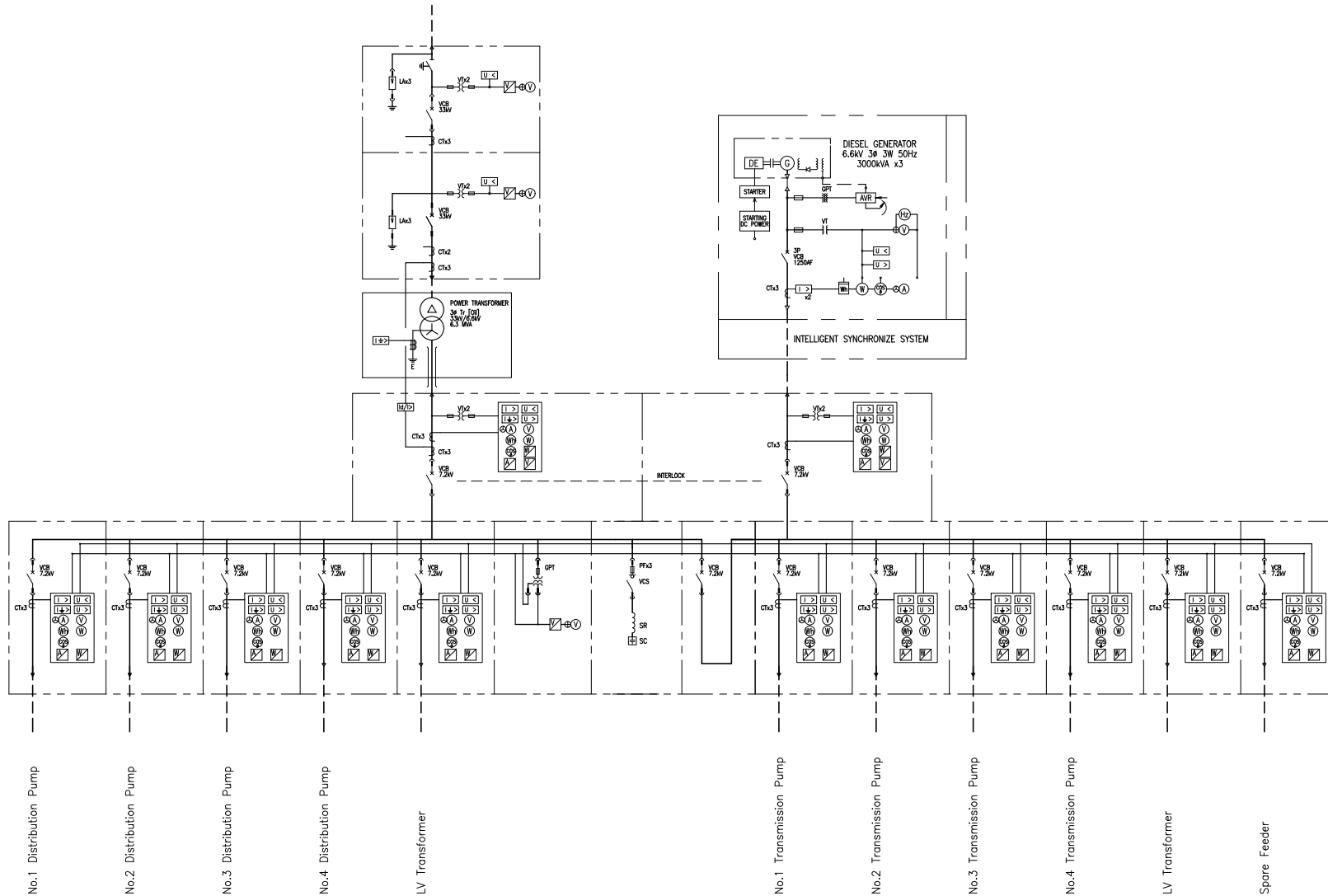
A - A Section



B - B Section

Section of Zone 9 SR and Relay Pump Tank Scale = 1:500

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale 1:500
DRAWN BY -	DESIGNED BY -	CHECKED BY -	APPROVED BY -	TITLE Section of Zone 9 SR and Relay Pump Tank	Drawing No. Z9SR-3
					Date June 2016

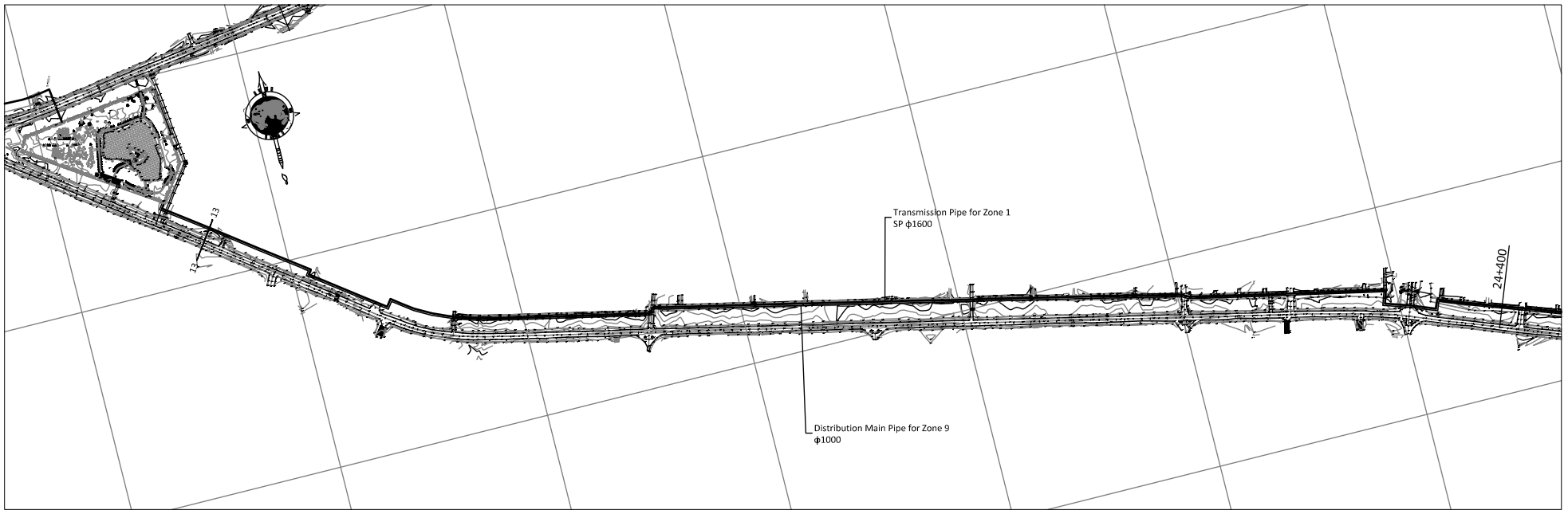


SYMBOL	LEGEND
VCT	VOLTAGE CURRENT TRANSFORMER
VD	VOLTAGE DETECTOR
DS	DISCONNECTING SWITCH
LA	LIGHTNING ARRESTER
PCS	PRIMARY CUTOFF SWITCH
GPT	GROUNDING POTENTIAL TRANSFORMER
VCB	VACUUM CIRCUIT BREAKER
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SR	SERIES REACTOR
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ZCT	ZERO PHASE CURRENT TRANSFORMER
V	VOLTMETER
A	AMMETER
Hz	FREQUENCY METER
W	WATT METER
Wh	WATT HOUR METER
COSφ	POWER FACTOR METER
APFC	AUTOMATIC PF CONTROLLER
[U>]	AC OVER VOLTAGE RELAY
[U<]	UNDER VOLTAGE RELAY
[I>]	OVER CURRENT RELAY
[I>G]	OVER CURRENT GROUNDING RELAY
[D>G]	DIRECTIONAL GROUNDING RELAY
[U]	AC VOLTAGE RELAY
[U>G]	GROUNDING OVER VOLTAGE RELAY
[S]	SPEED ADJUSTING DEVICE RELAY
[B]	VOLTAGE BALANCE RELAY
[SR]	SYNCHRONIZING RELAY
[RVR]	AUTOMATIC VOLTAGE REGULATING RELAY
[RDR]	RATIO DIFFERENTIAL RELAY
[Z]	TRANSDUCER
⊕	VOLTMETER SWITCH
⊖	AMMETER SWITCH
(N.O.)	NORMALLY OPEN
(N.C.)	NORMALLY CLOSE

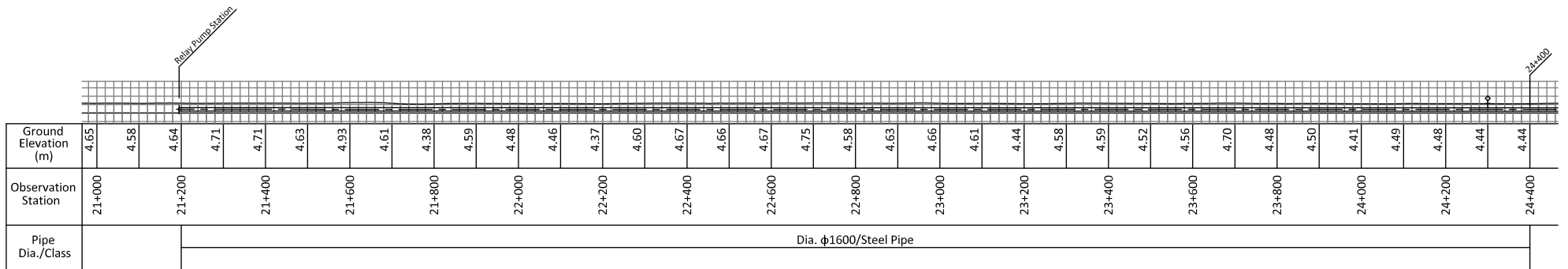
Single Line Diagram for Zone 9

Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	NTS
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Zone 9 Single Line Diagram	Drawing No.	Z9SR-4
-	-	-	-			Date	30 June 2016

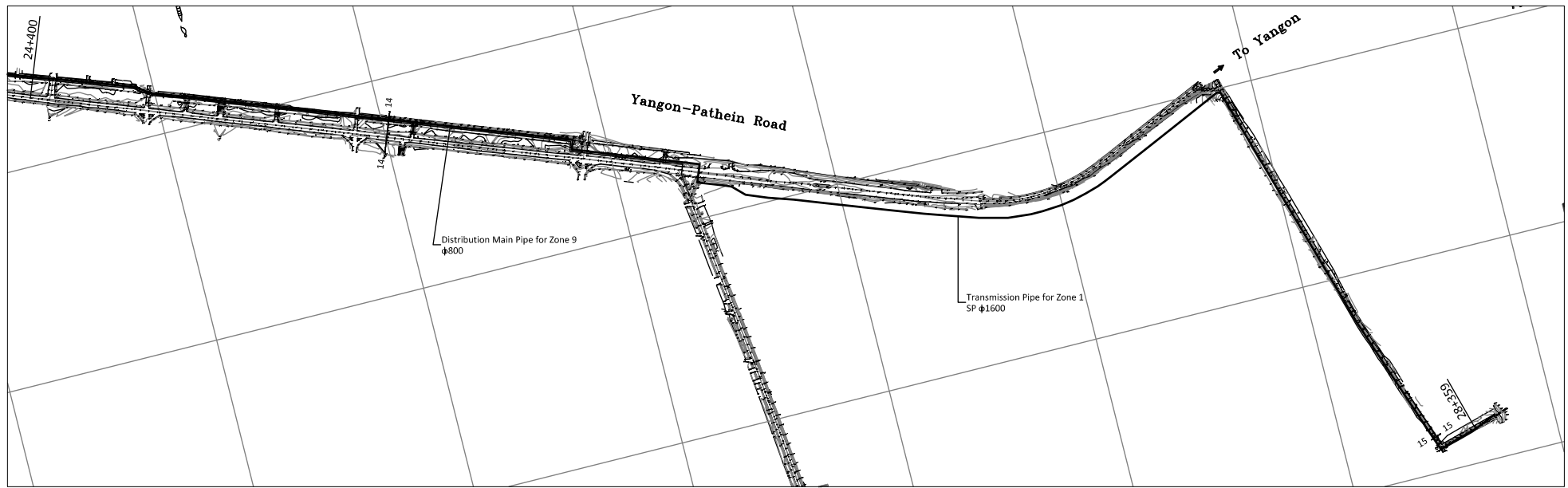


Plan (7)
Scale = 1:10000

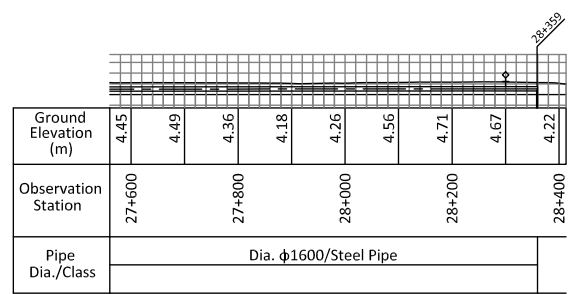
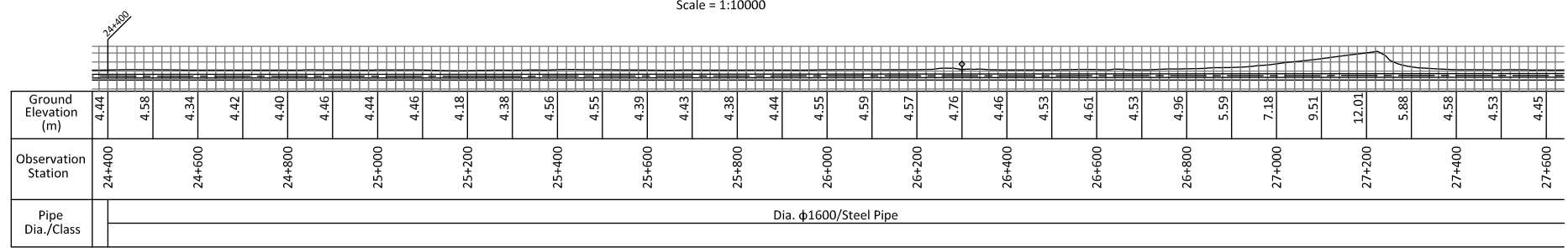


Longitudinal Section (7)
Scale: H=1:10000, V=2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (7)	Drawing No.	TRM-PL-010
-	-	-	-			Date	June 2016

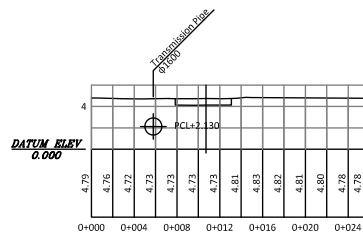


Plan (8)
Scale = 1:10000

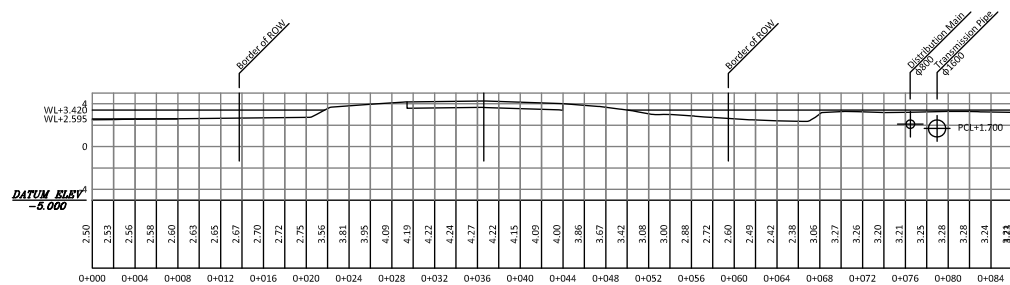


Longitudinal Section (8)
Scale: H=1:10000, V=2000

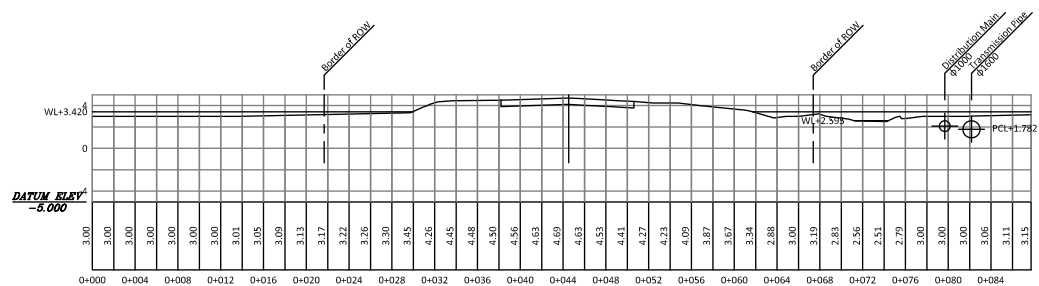
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (8)	Drawing No.	TRM-PL-011
-	-	-	-			Date	June 2016



15 - 15



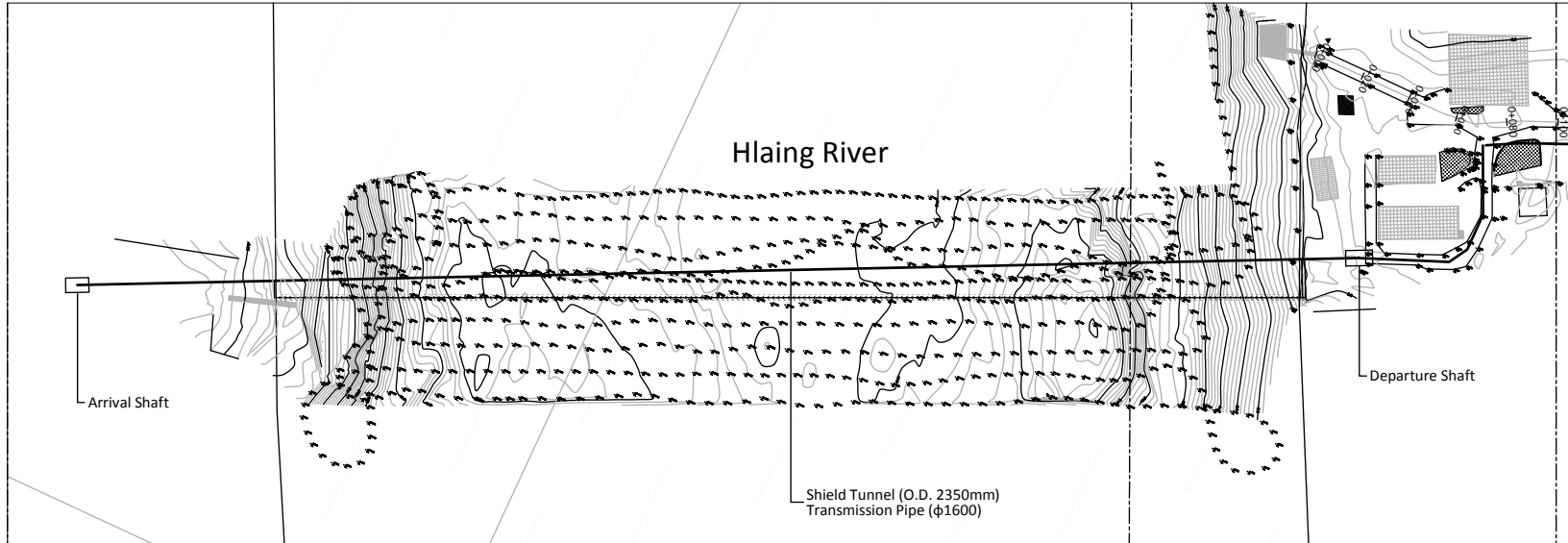
14 - 14



13 - 13

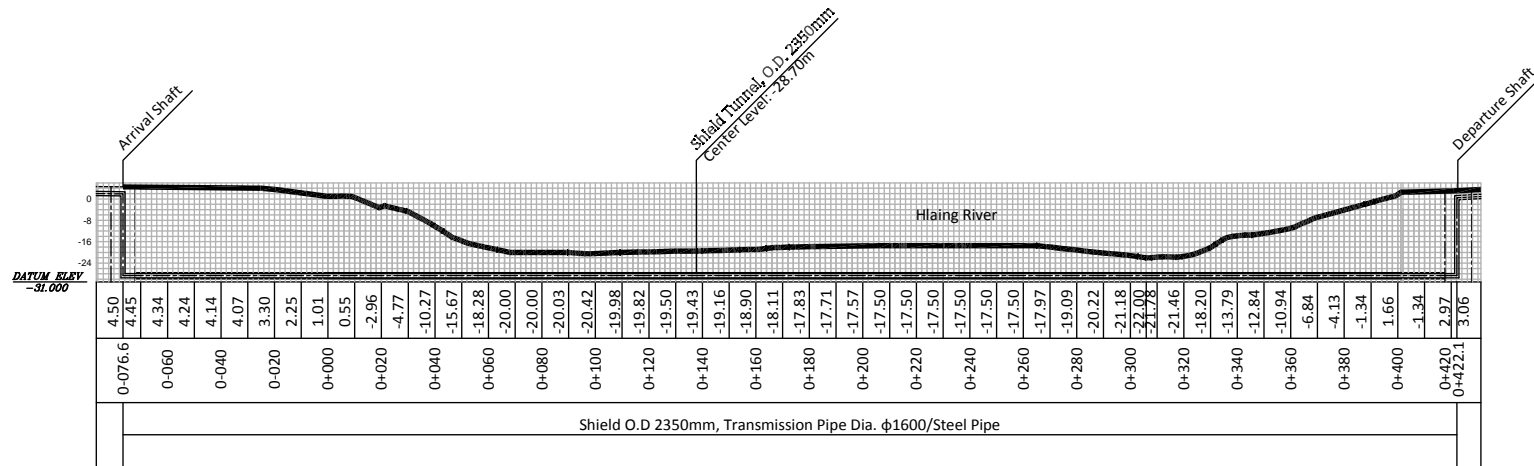
Note: WL+2.595 (Dry Season), WL+3.420 (Rainy Season)

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Cross Section (3)	Drawing No.	TRM-PL-012
-	-	-	-			Date	June 2016



Hlaing River Crossing Plan

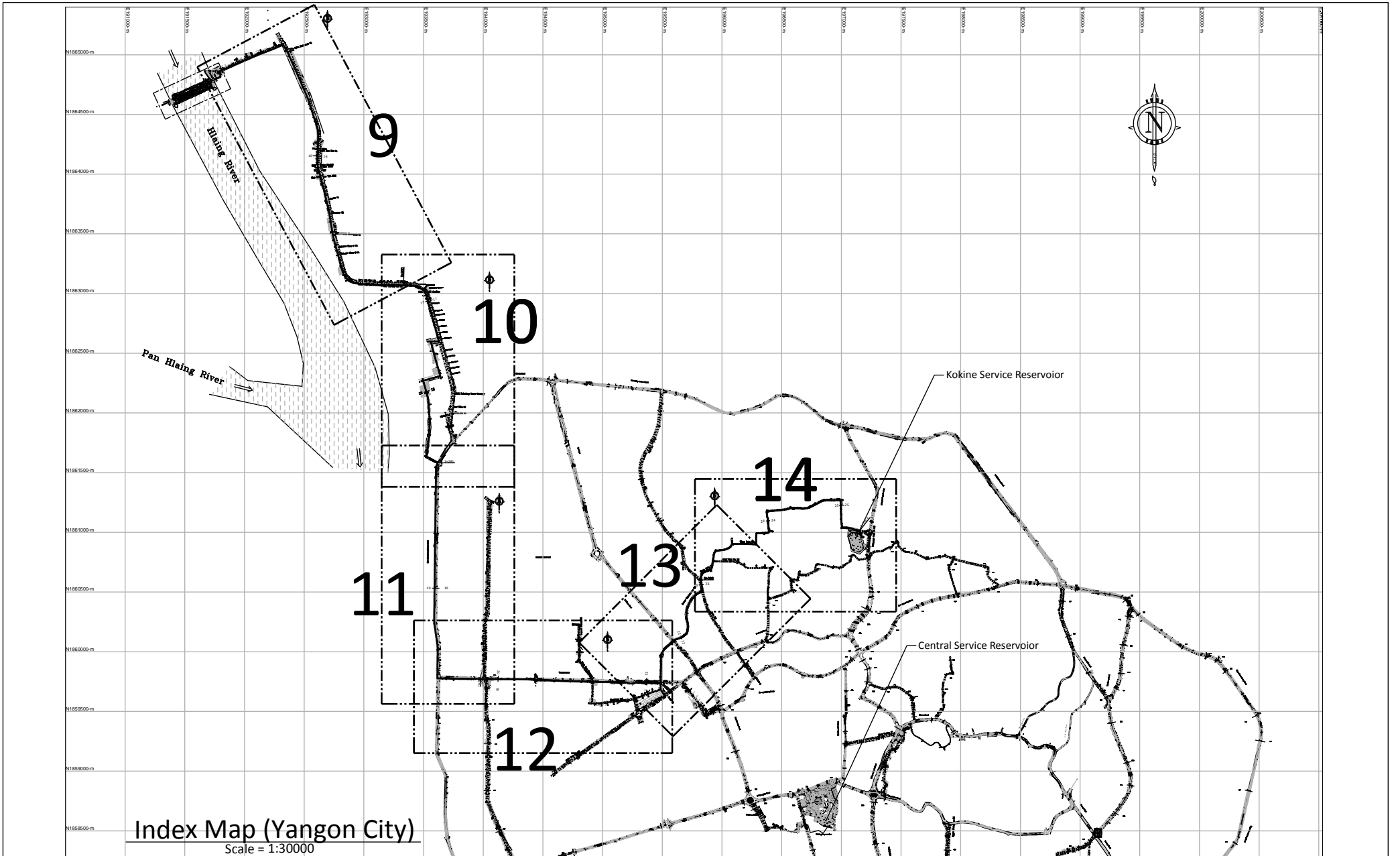
Scale = 1:1000



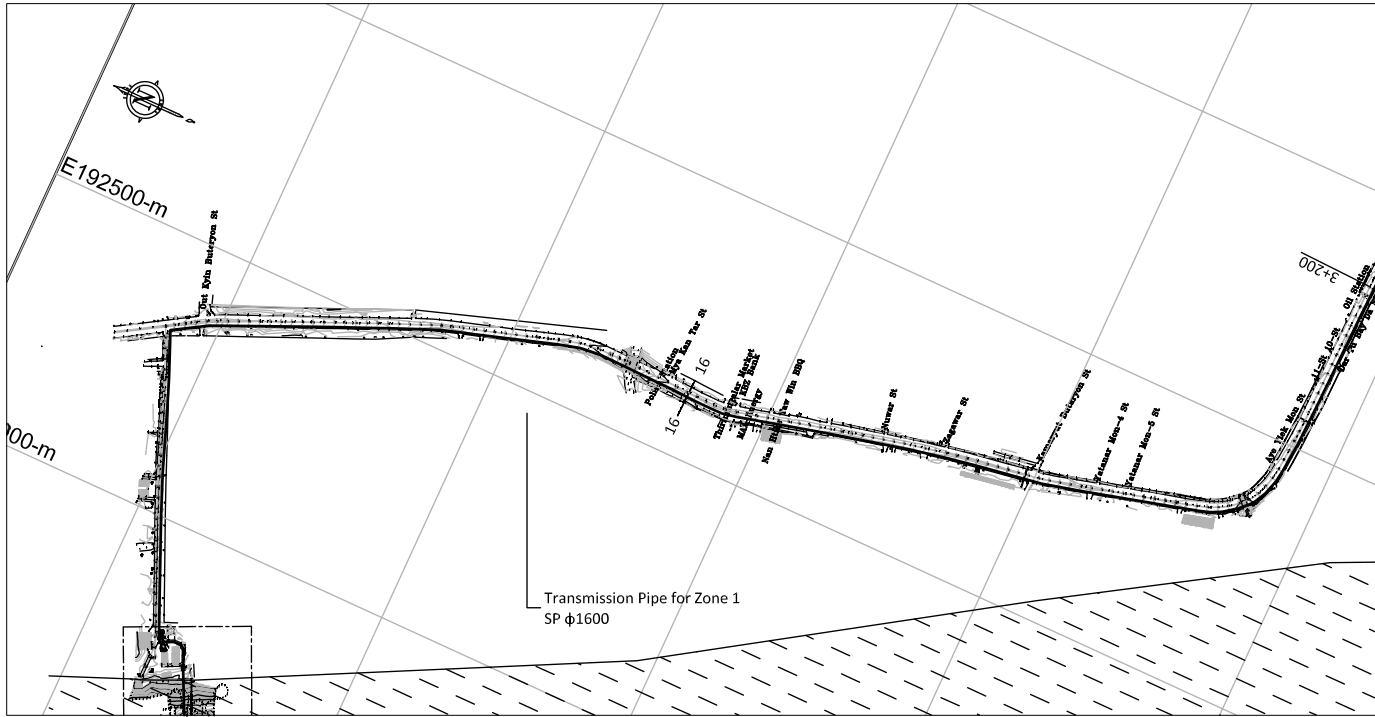
Hlaing River Crossing Longitudinal Section

Scale: H=V= 1:1000

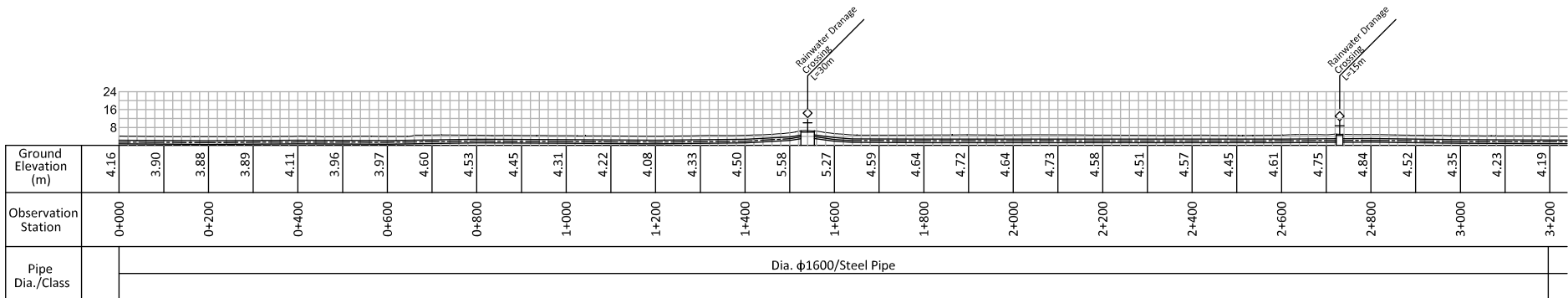
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	1:1000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Hlaing River Crossing Plan and Longitudinal Section	Drawing No.	TRM-PL-013
-	-	-	-			Date	June 2016



JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale 1:30000
DRAWN BY -	DESIGNED BY -	CHECKED BY -	APPROVED BY -	TITLE Transmission Pipe for Zone 1 Index Map (Yangon City)	Drawing No. TRM-PL-014
					Date June 2016

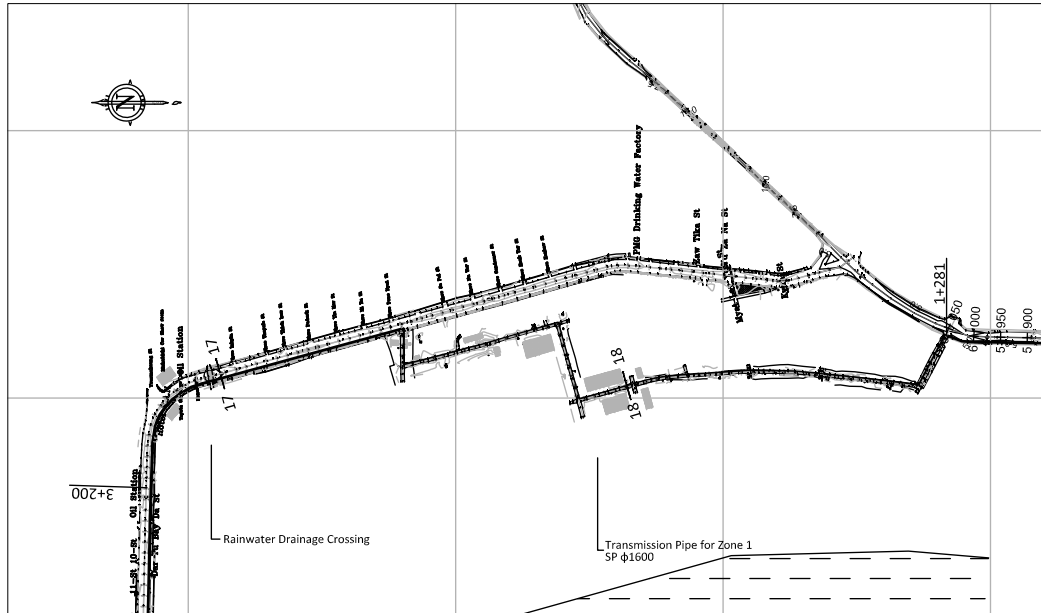


Plan (9)
Scale = 1:10000

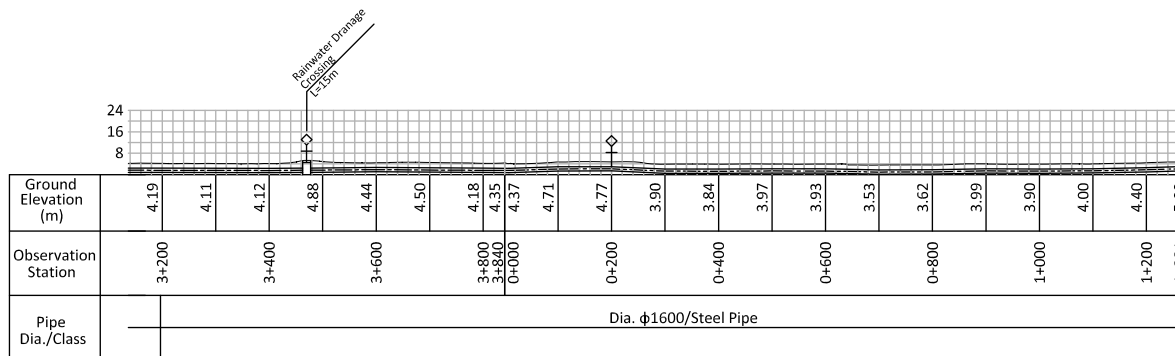


Longitudinal Section (9)
Scale : H= 1:10000, V=1:2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (9)	Drawing No.	TRM-PL-015
-	-	-	-			Date	June 2016

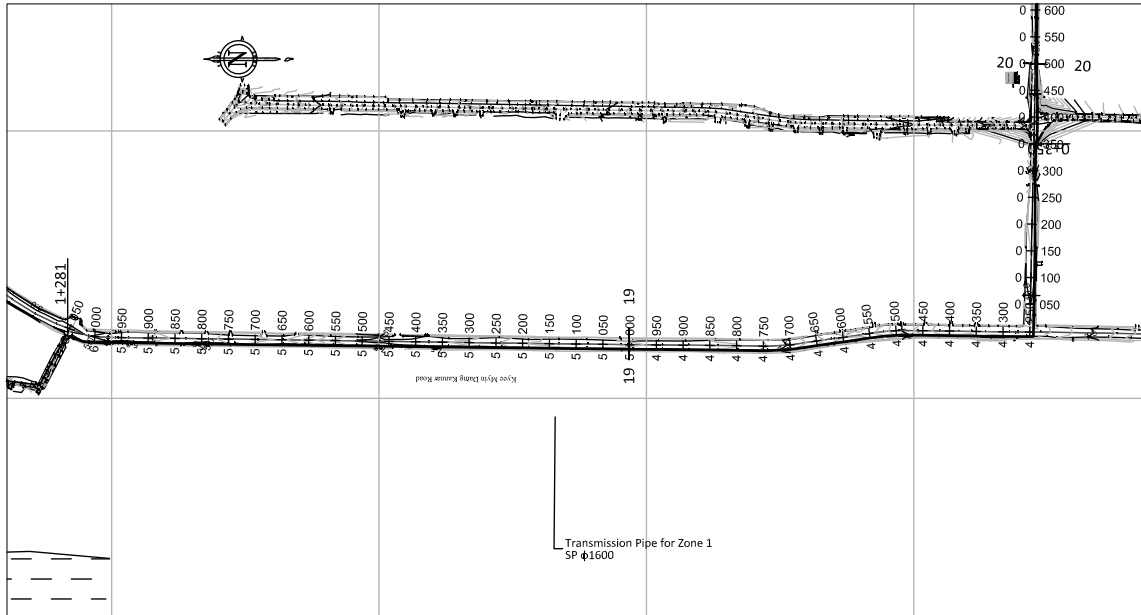


Plan (10)
Scale = 1:10000



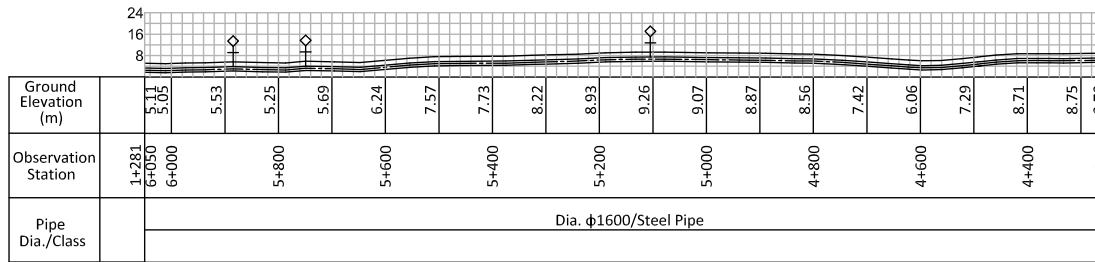
Longitudinal Section (10)
Scale: H=1:10000, V=1:2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)		Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE Transmission Pipe for Zone 1 Plan and Longitudinal Section (10)		Drawing No.	TRM-PL-016
-	-	-	-			Date	June 2016



Plan (11)

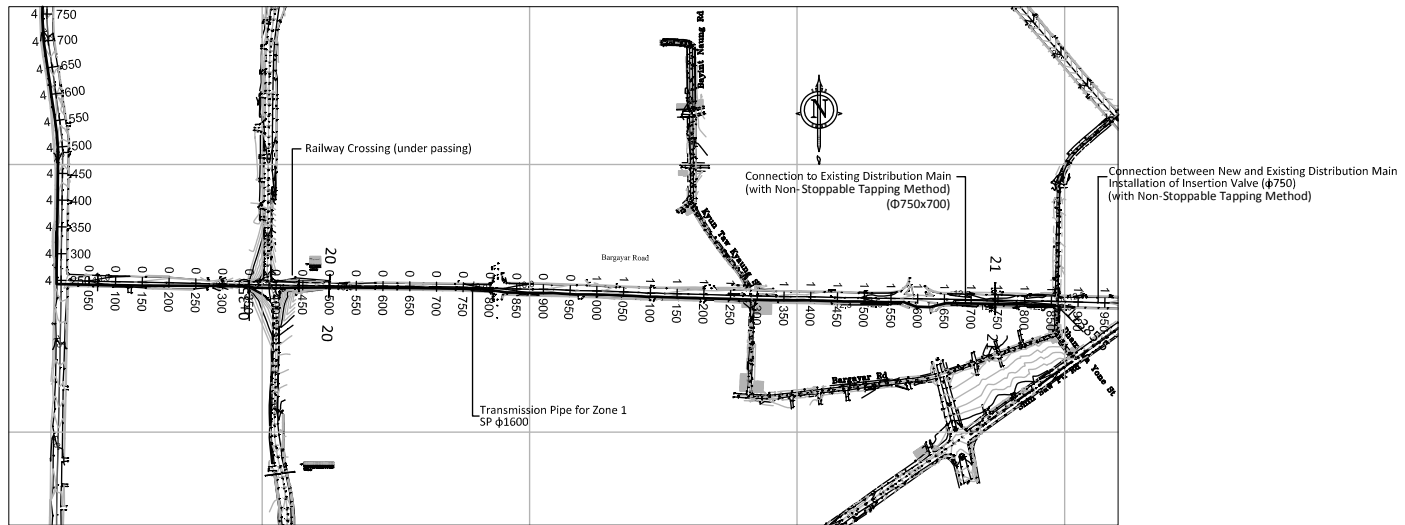
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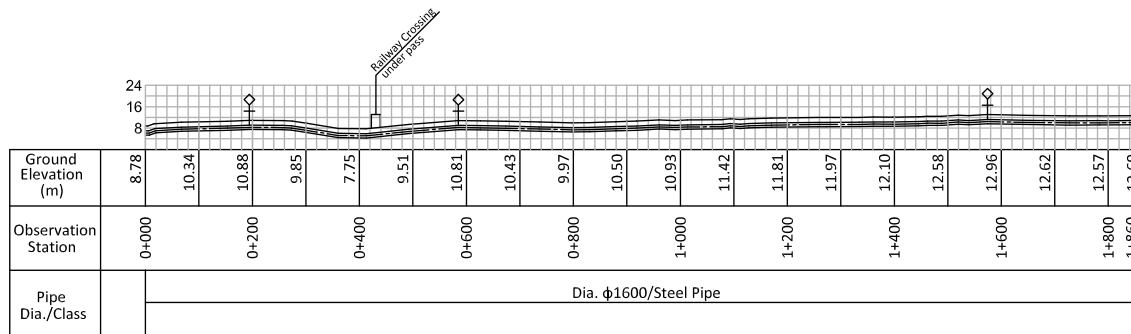
Longitudinal Section (11)

Scale: H=1:10000, V=1:2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (11)	Drawing No.	TRM-PL-017
-	-	-	-			Date	June 2016

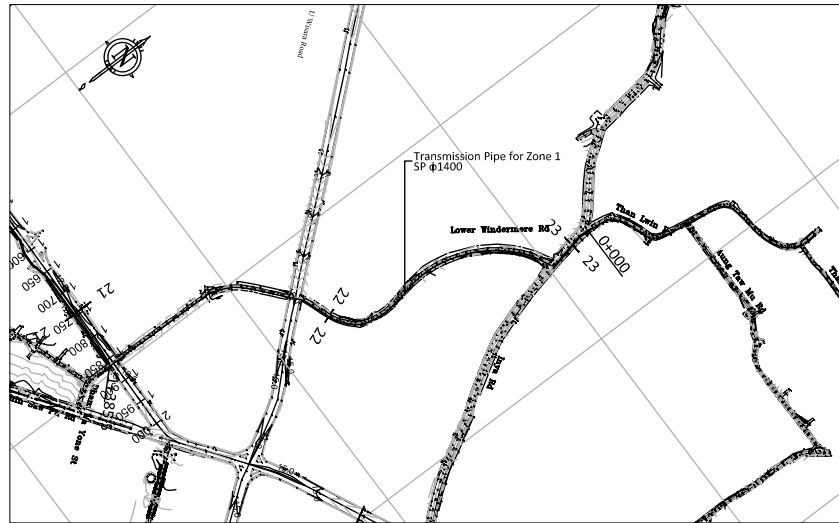


Plan (12)
Scale = 1:10000

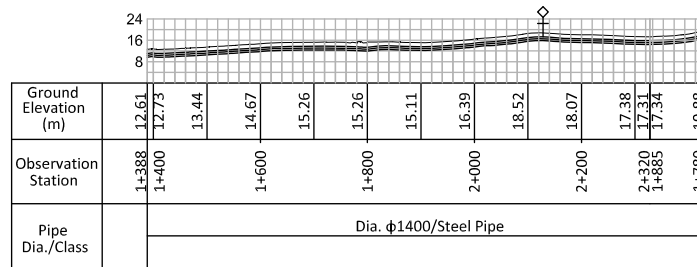


Logitudinal Section (12)
Scale: H=1:10000, V=1:2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (12)	Drawing No.	TRM-PL-018
-	-	-	-			Date	June 2016

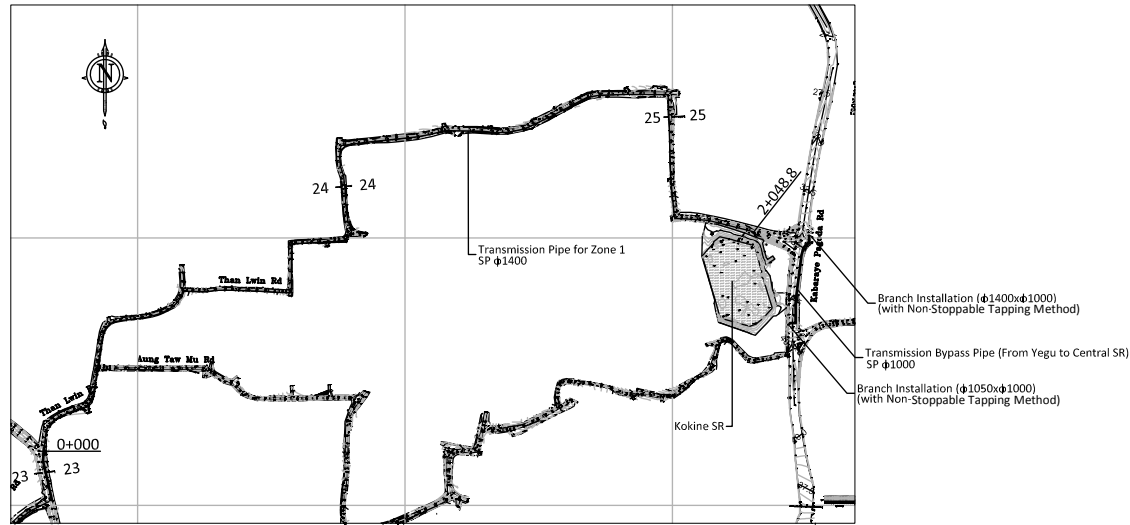


Plan (13)
Scale = 1:10000



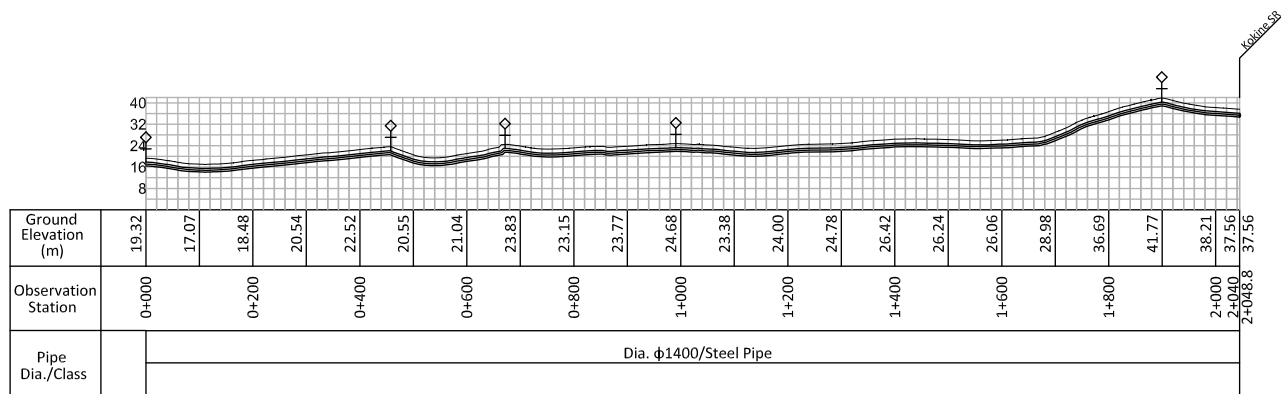
Longitudinal Section (13)
Scale: H=1:10000, V=1:2000

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (13)	Drawing No.	TRM-PL-019
-	-	-	-			Date	June 2016



Plan (14)

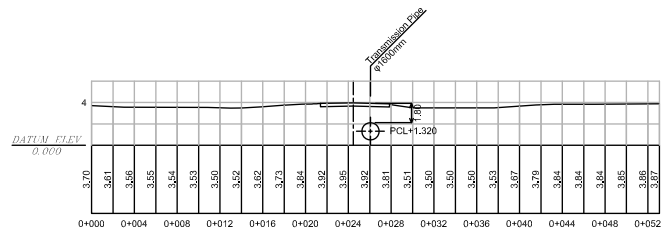
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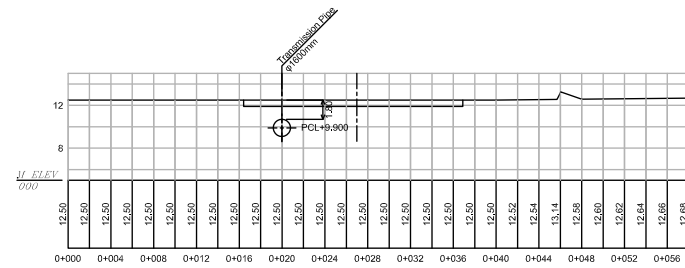
Longitudinal Section (14)

Scale: H=1:10000, V=1:2000

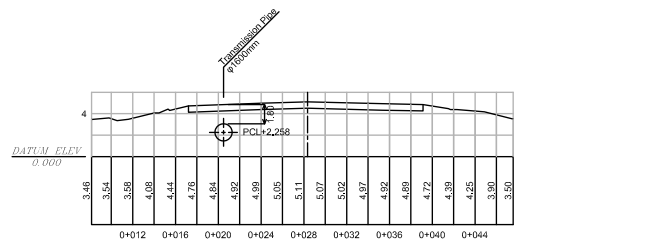
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	H=1:10000 V=1:2000
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Transmission Pipe for Zone 1 Plan and Longitudinal Section (14)	Drawing No.	TRM-PL-020
-	-	-	-			Date	June 2016



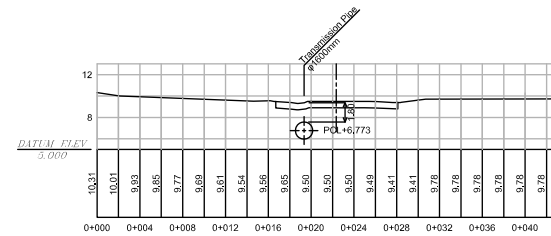
18 - 18



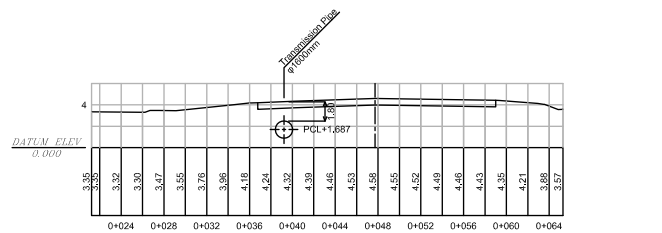
21 - 21



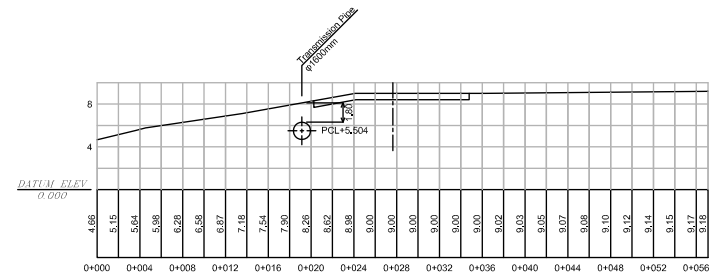
17 - 17



20 - 20



16 - 16



19 - 19

JAPAN INTERNATIONAL COOPERATION AGENCY
YANGON CITY DEVELOPMENT COMMITTEE

JICA Study Team
ENGINEERING DEPARTMENT (WATER & SANITATION)

PROJECT Preparatory Survey for Greater Yangon Water Supply
Improvement Project Phase II (Kokkowa River)

Scale 1:500

DRAWN BY

DESIGNED BY

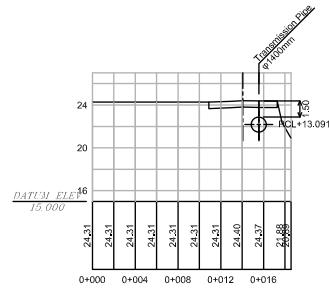
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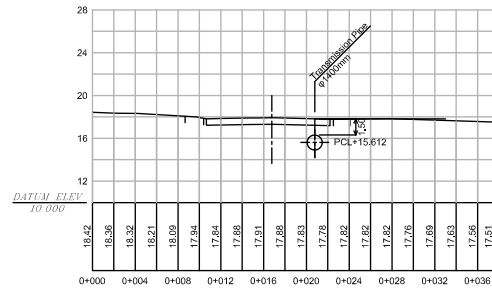
TITLE Transmission Pipe for Zone 1
Cross Section (4)

Drawing No. TRM-PL-021

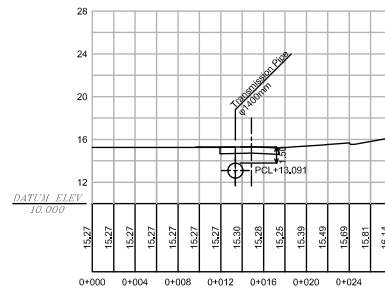
Date June 2016



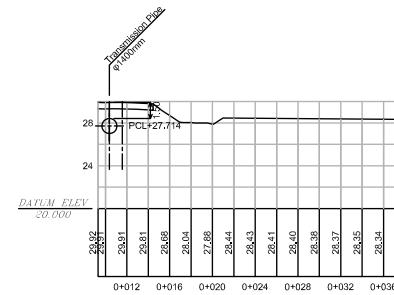
24 - 24



23 - 23

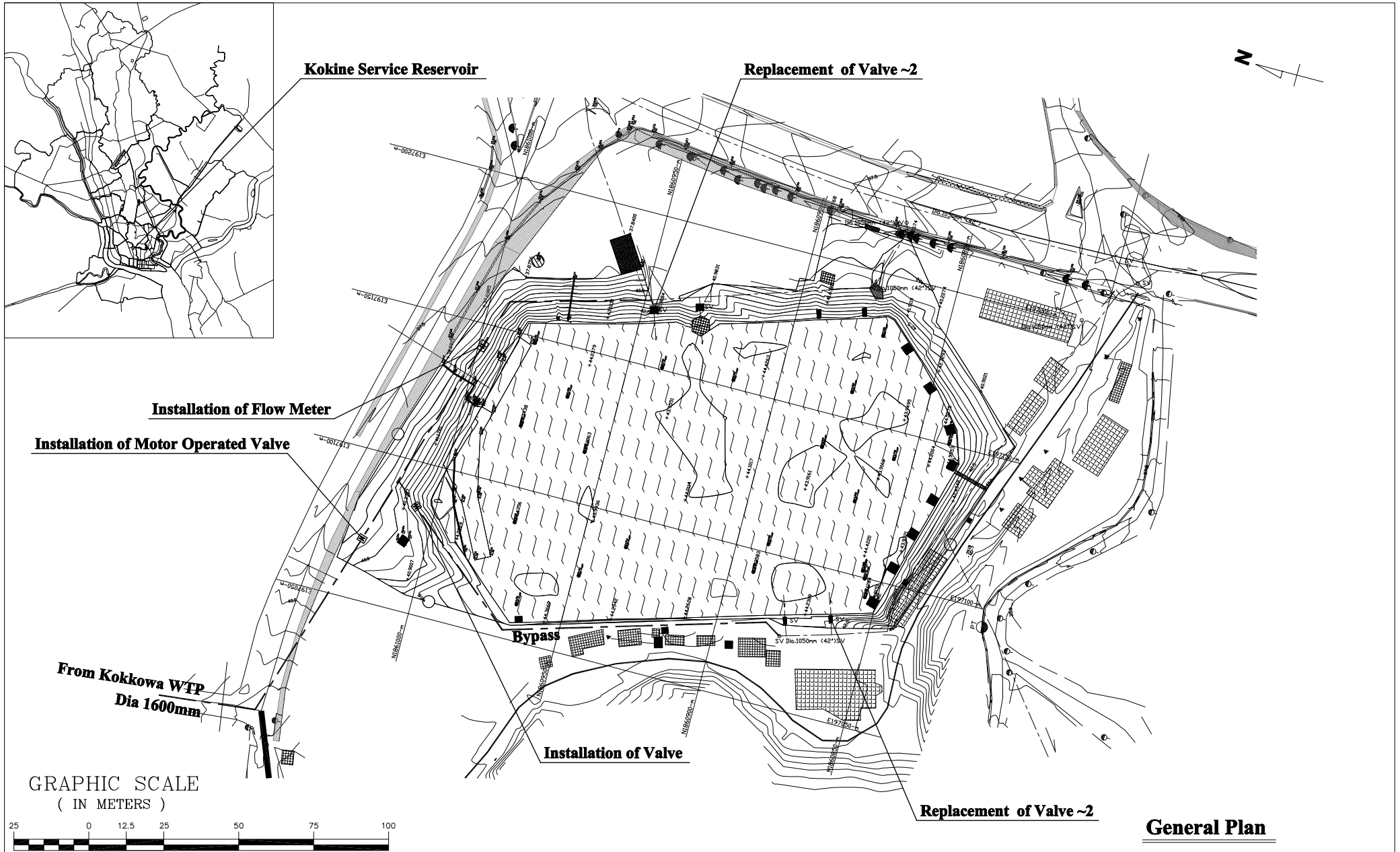


22 - 22

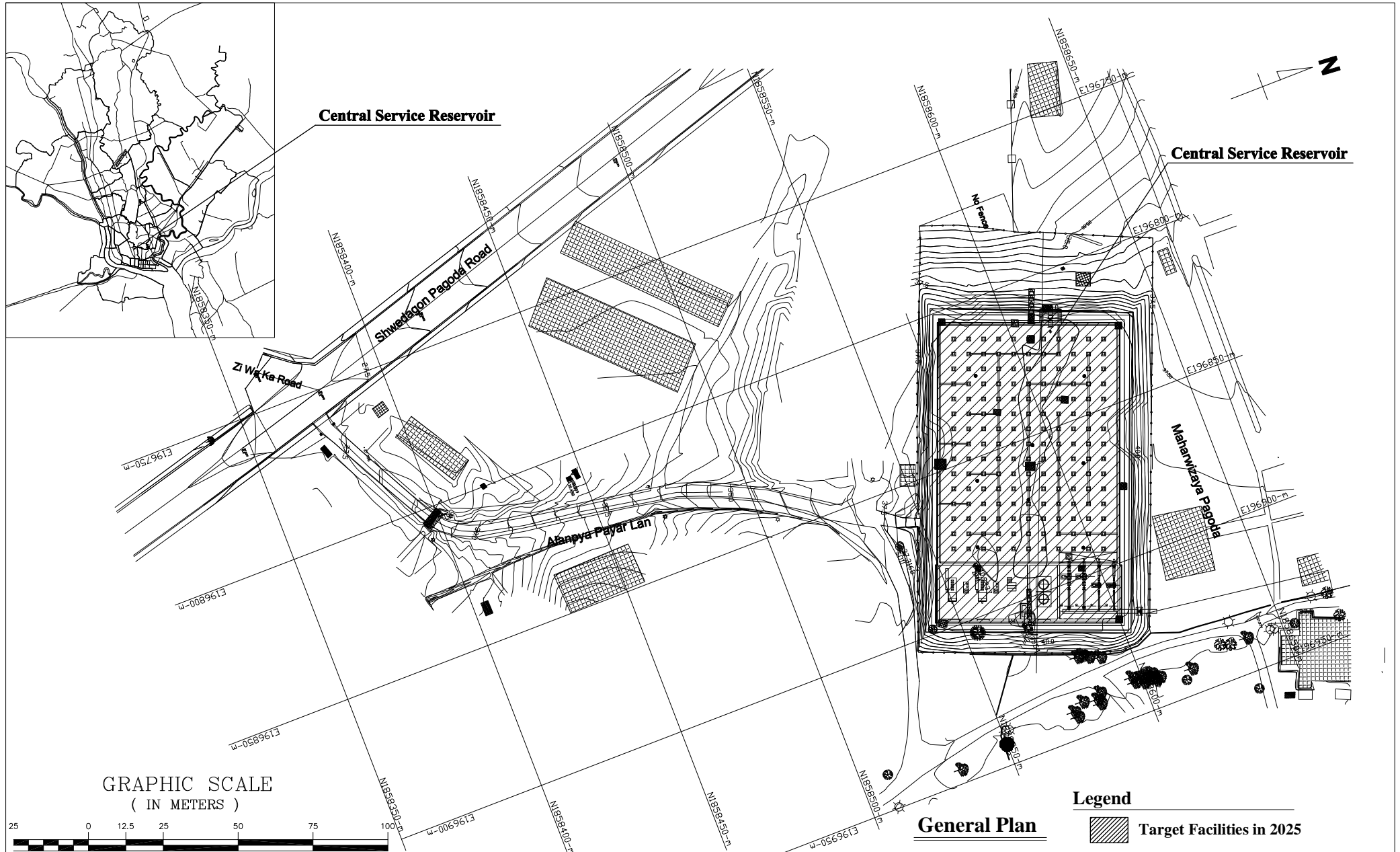


25 - 25

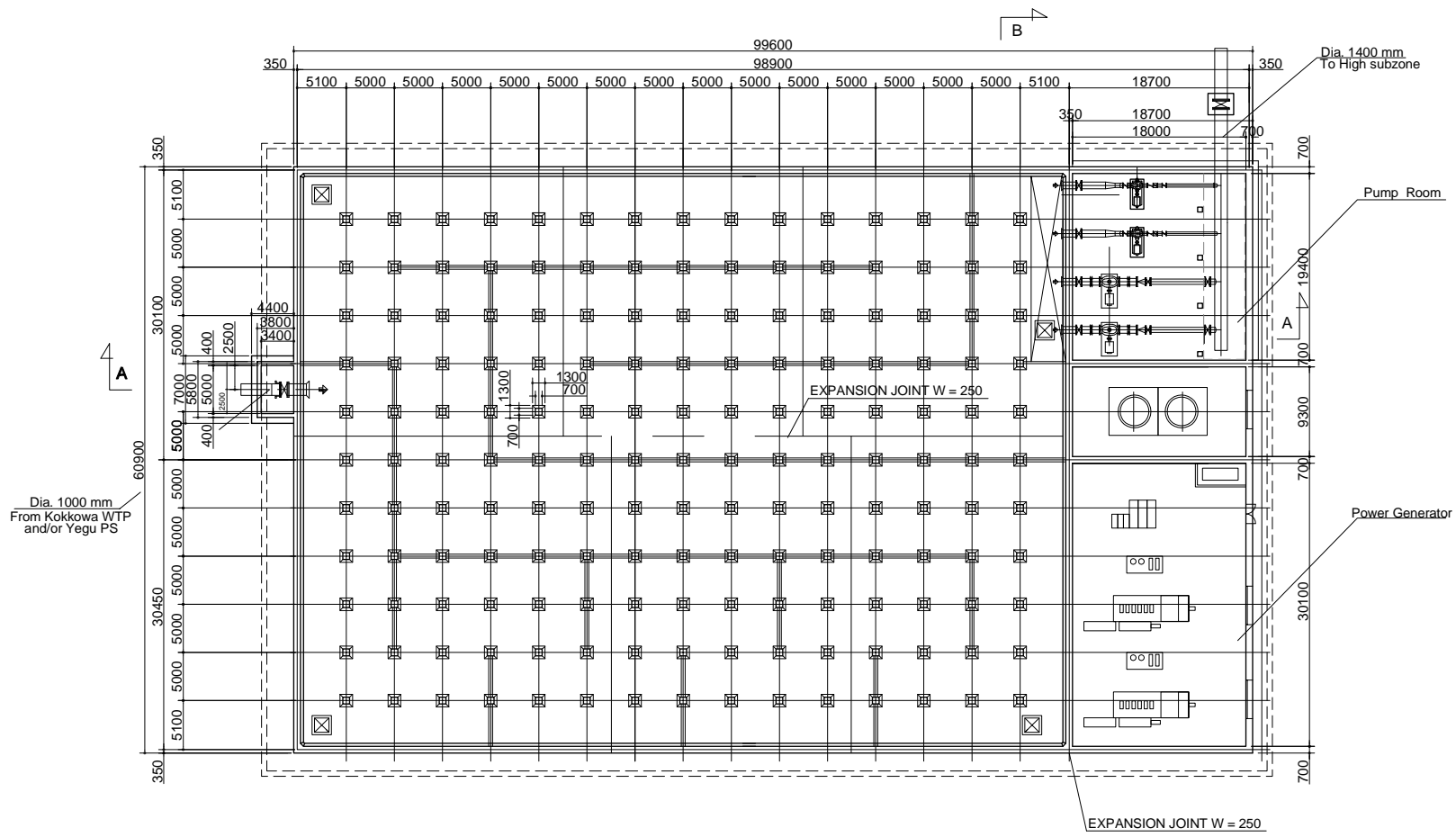
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)		Scale	1:500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE Transmission Pipe for Zone 1 Cross Section (5)		Drawing No.	TRM-PL-022
-	-	-	-			Date	June 2016



JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	A3; S=1:1200
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Kokine Service Reservoir General Plan	Drawing No.	KSR-1
-	-	-	-			Date	April 2016



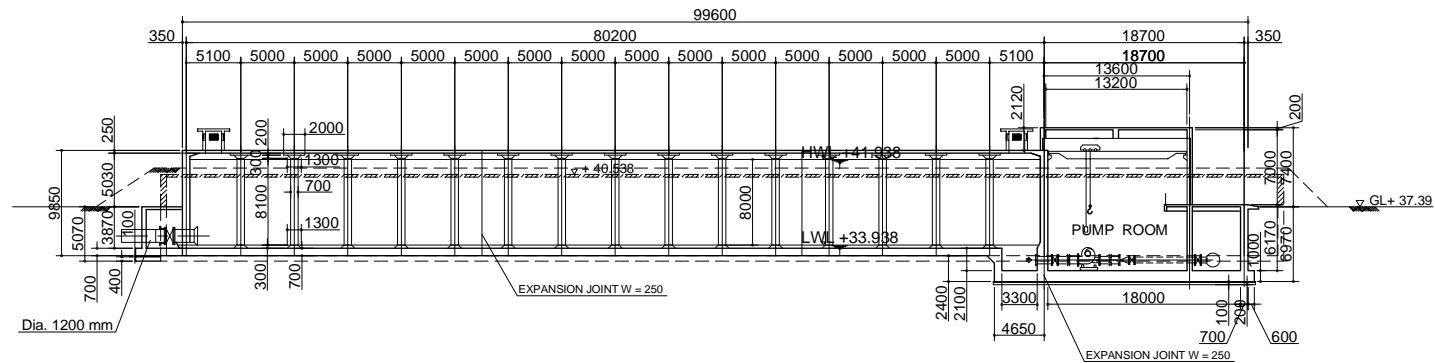
JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale A3; S=1:1200
DRAWN BY -	DESIGNED BY -	CHECKED BY -	APPROVED BY -	TITLE Central Service Reservoir General Plan	Drawing No. CSR-1
					Date April 2016



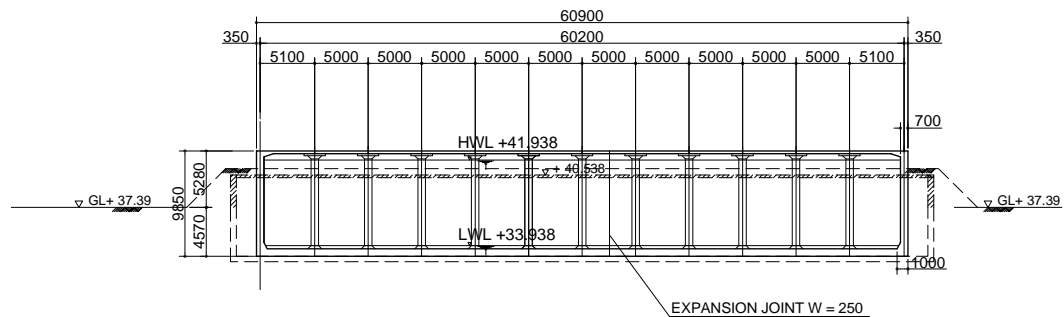
Plan

Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	A3; S=1:500
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Central Service Reservoir Plan	Drawing No.	CSR-2
-	-	-	-			Date	April 2016



SECTION A - A

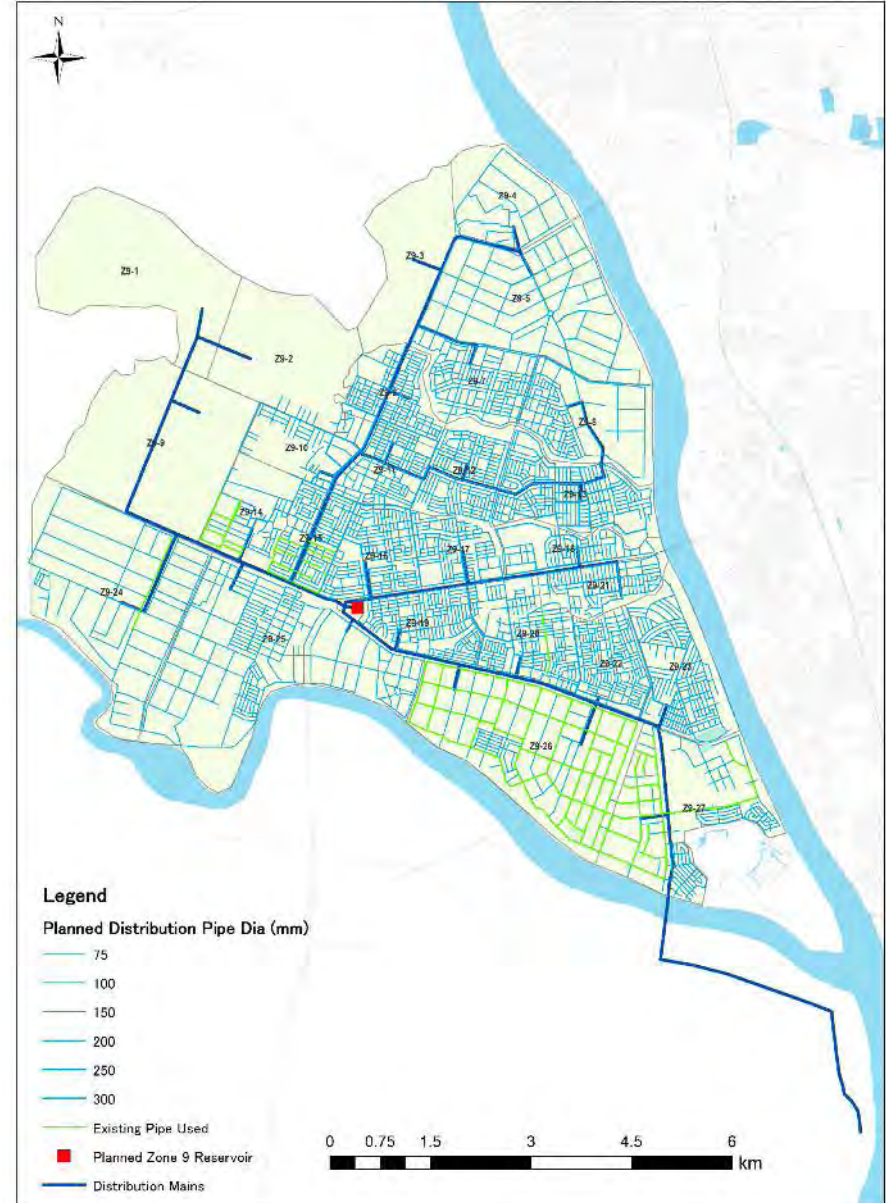
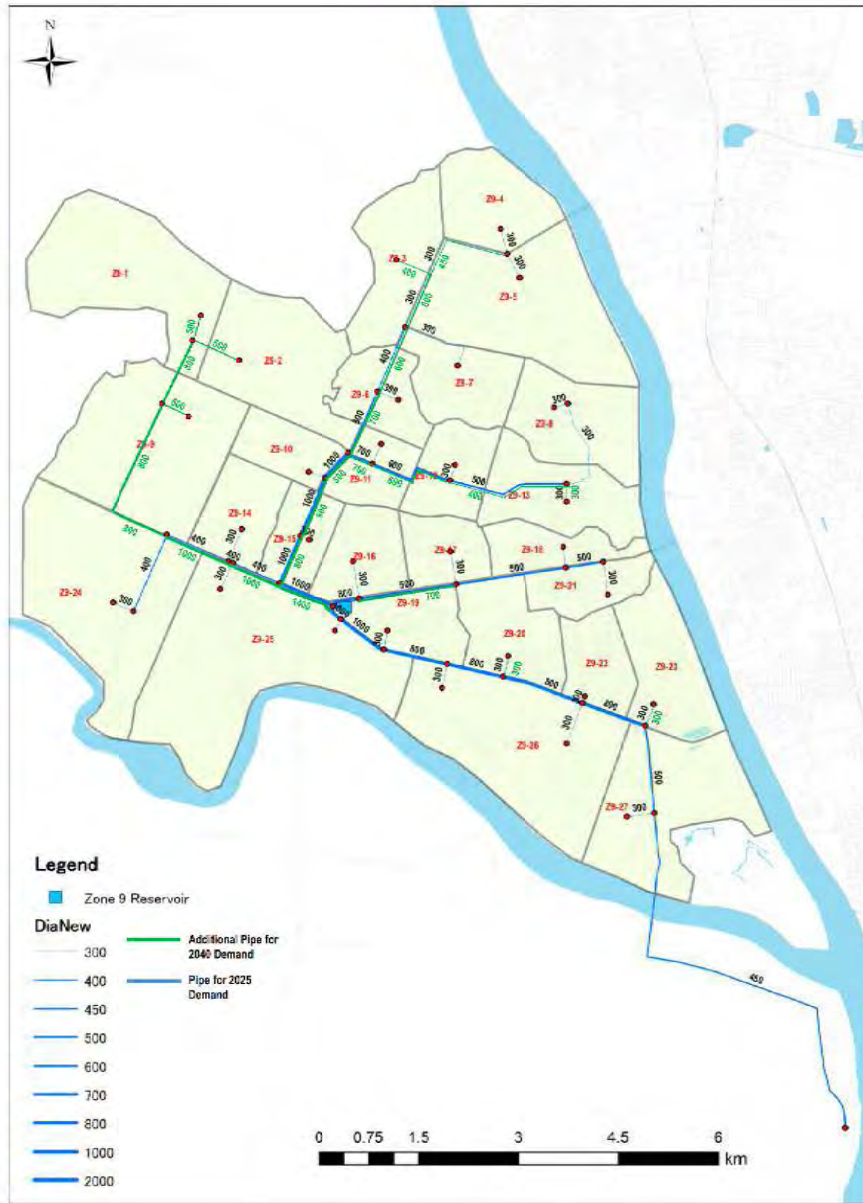


SECTION B - B

Hole Number : Dagon Township
 Demand Station : 407.28M

Structure	Type of Soil	γ _{sat} (kN/m ³)
1-13.000	Clayey Sil	18.0
1-12.000	Silty Sand	18.0
1-11.000	Clayey Sil	18.0
1-10.000	Silty Sand	18.0
1-09.000	Silty Sand	18.0
1-08.000	Silty Sand	18.0
1-07.000	Silty Sand	18.0
1-06.000	Silty Sand	18.0
1-05.000	Silty Sand	18.0
1-04.000	Silty Sand	18.0
1-03.000	Silty Sand	18.0
1-02.000	Silty Sand	18.0
1-01.000	Silty Sand	18.0
1-00.000	Silty Sand	18.0

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale A3; S=1:500
DRAWN BY -	DESIGNED BY -	CHECKED BY -	APPROVED BY -	TITLE Central Service Reservoir Section	Drawing No. CSR-3
					Date April 2016



Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY
YANGON CITY DEVELOPMENT COMMITTEE

JICA Study Team
ENGINEERING DEPARTMENT (WATER & SANITATION)

PROJECT Preparatory Survey for Greater Yangon Water Supply
Improvement Project Phase II (Kokkowa River)

Scale A3; None

DRAWN BY

DESIGNED BY

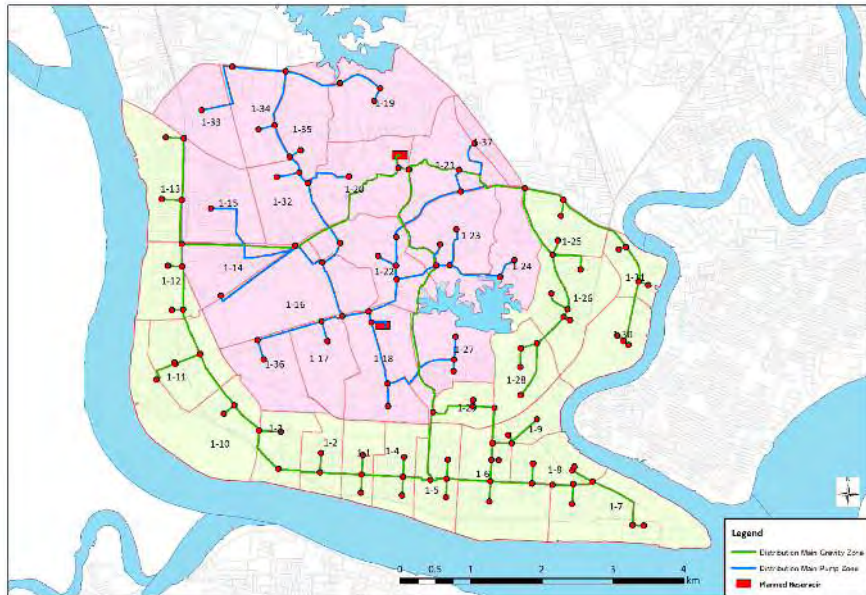
CHECKED BY

APPROVED BY

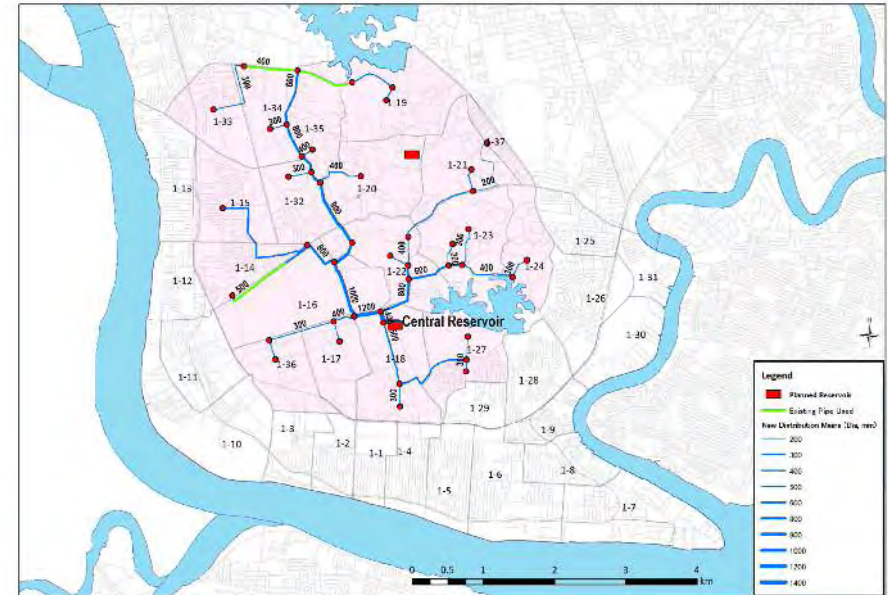
TITLE Zone 9 in 2025
General Plan of Distribution Main, DMA and Distribution Pipe

Drawing No. DPL-Z9

Date June 2016



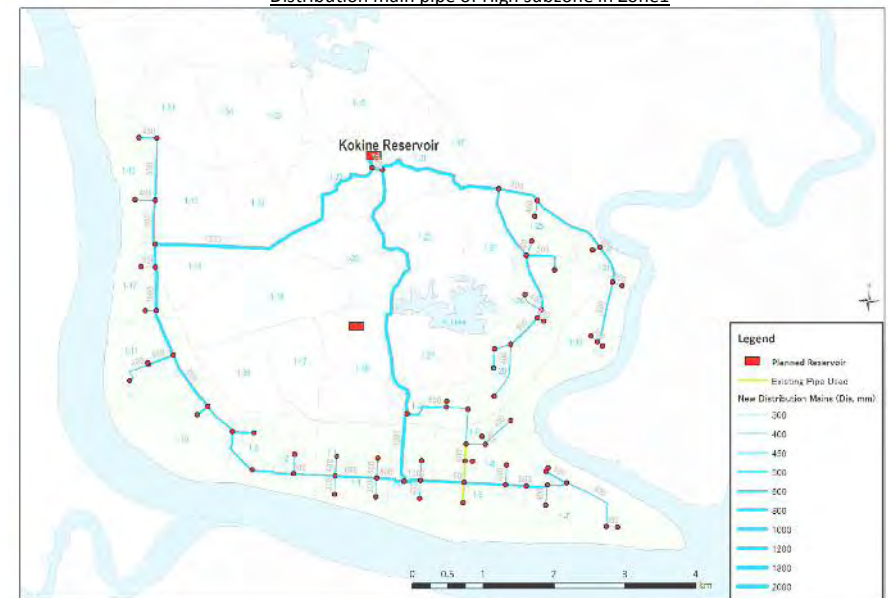
Proposed DMA in Zone1



Distribution main pipe of High subzone in Zone1



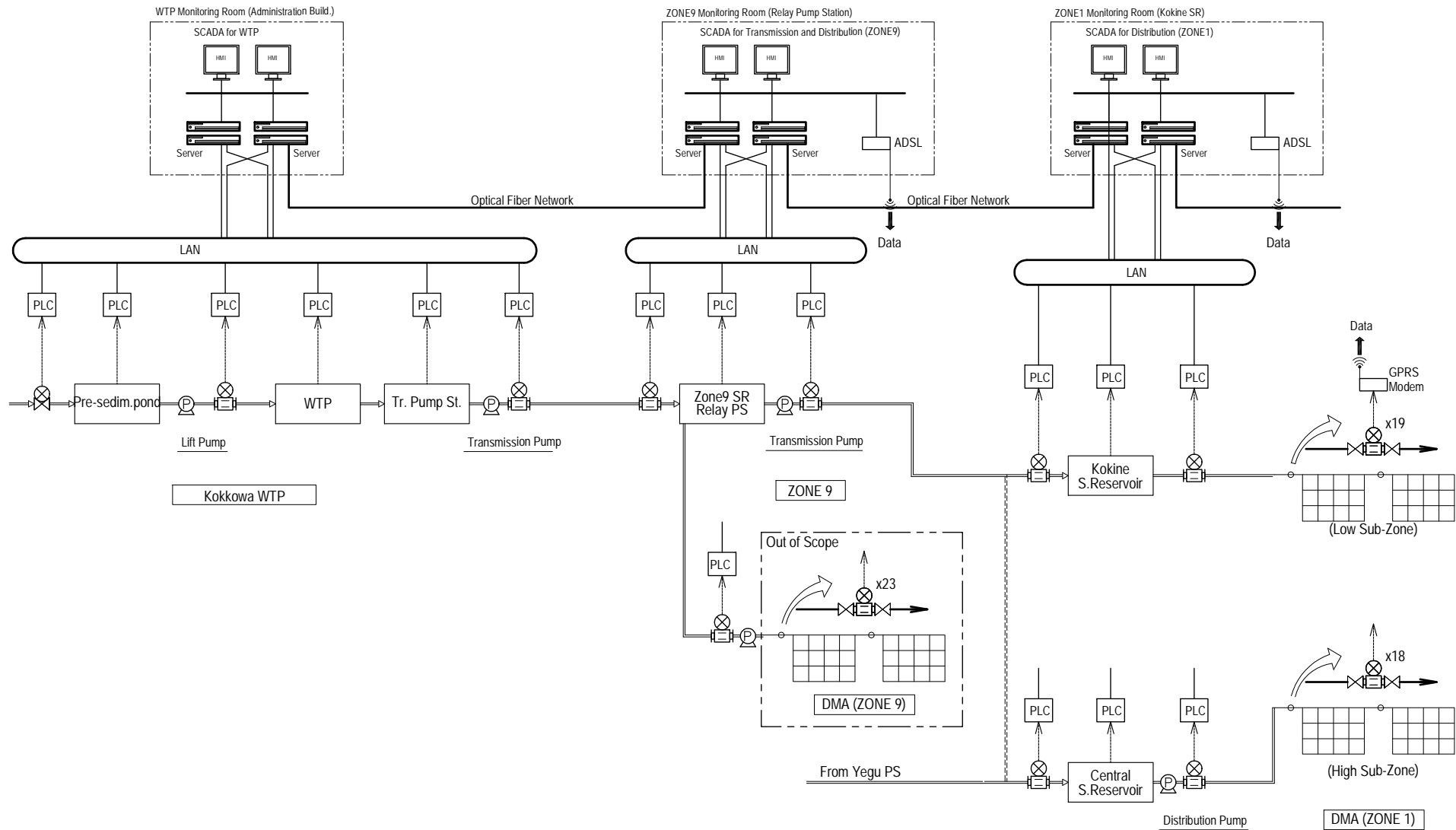
Distribution pipe-network in Zone1



Distribution main pipe of Low subzone in Zone1

Note : The values are indicative shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkowa River)	Scale	A3; None
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	Zone 1 in 2025 General Plan of Distribution Main, DMA and Distribution Pipe	Drawing No.	DPL-Z1
-	-	-	-			Date	June 2016



Flow Monitoring Diagram

Note : The values are indicative, and detailed values shall be decided in detailed design.

JAPAN INTERNATIONAL COOPERATION AGENCY YANGON CITY DEVELOPMENT COMMITTEE		JICA Study Team ENGINEERING DEPARTMENT (WATER & SANITATION)		PROJECT	Preparatory Survey for Greater Yangon Water Supply Improvement Project Phase II (Kokkova River)	Scale	NTS
DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY	TITLE	General Flow Monitoring Diagram	Drawing No.	SCADA
-	-	-	-			Date	30 June 2016