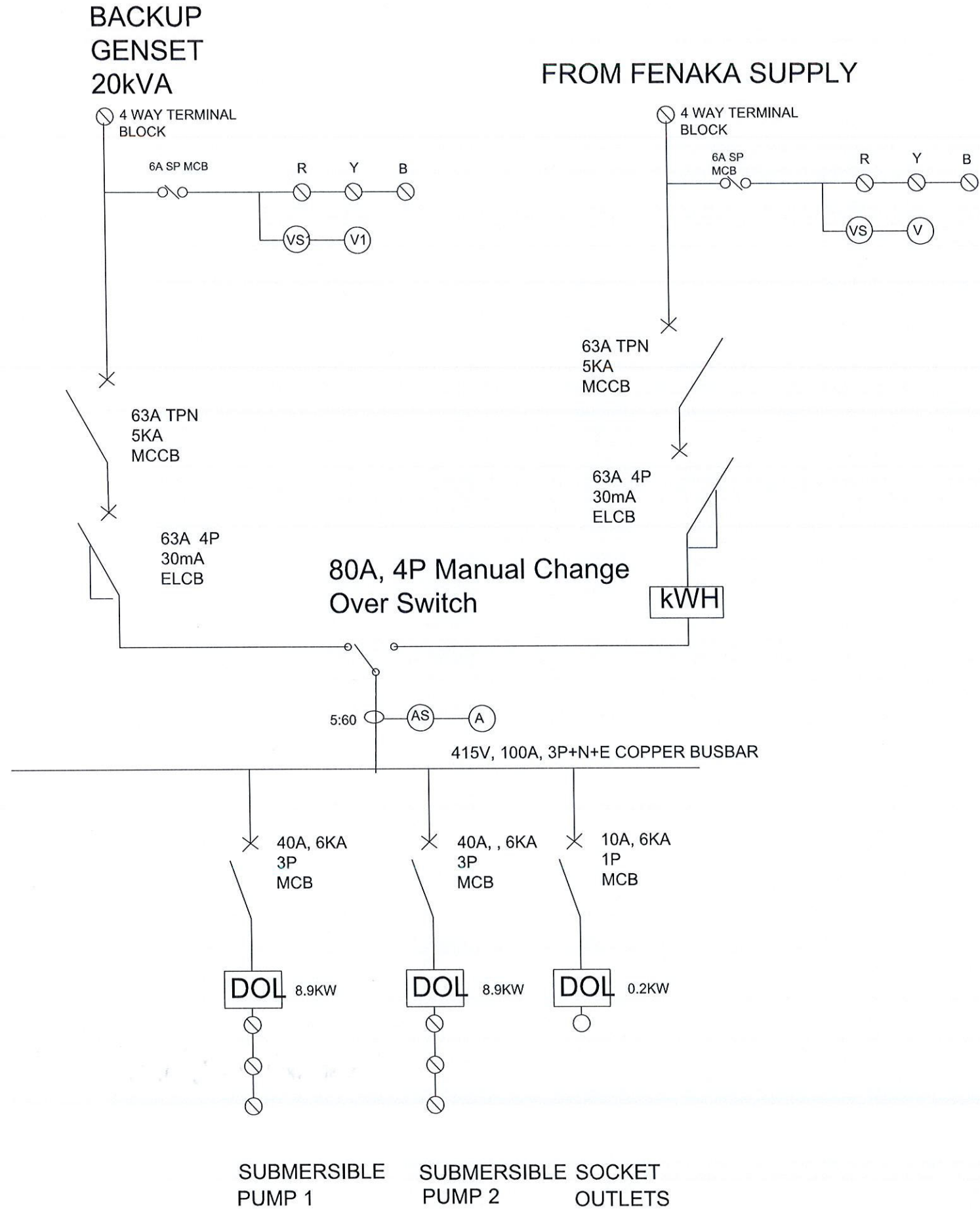


PUMP STATION No.3



DESIGNED BY : A.WAHID

LICENSE : MEB/2005/419

SIGNATURE : *A. Wahid*

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF SEWERAGE FACILITIES IN HA. BAARAH, MALDIVES

CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY

PROJECT NUMBER: -

DATE: MARCH 2017

ENGINEER: - Abdulla Wahid

CHECKED BY: -

DRAWN BY: - Mohamed Saif



RIYAN PRIVATE LIMITED

Tel: +9603315040 Fax: +9603310776

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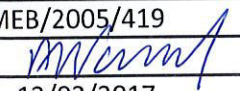
3rd floor, H. Azim, Amisememogal, Malé

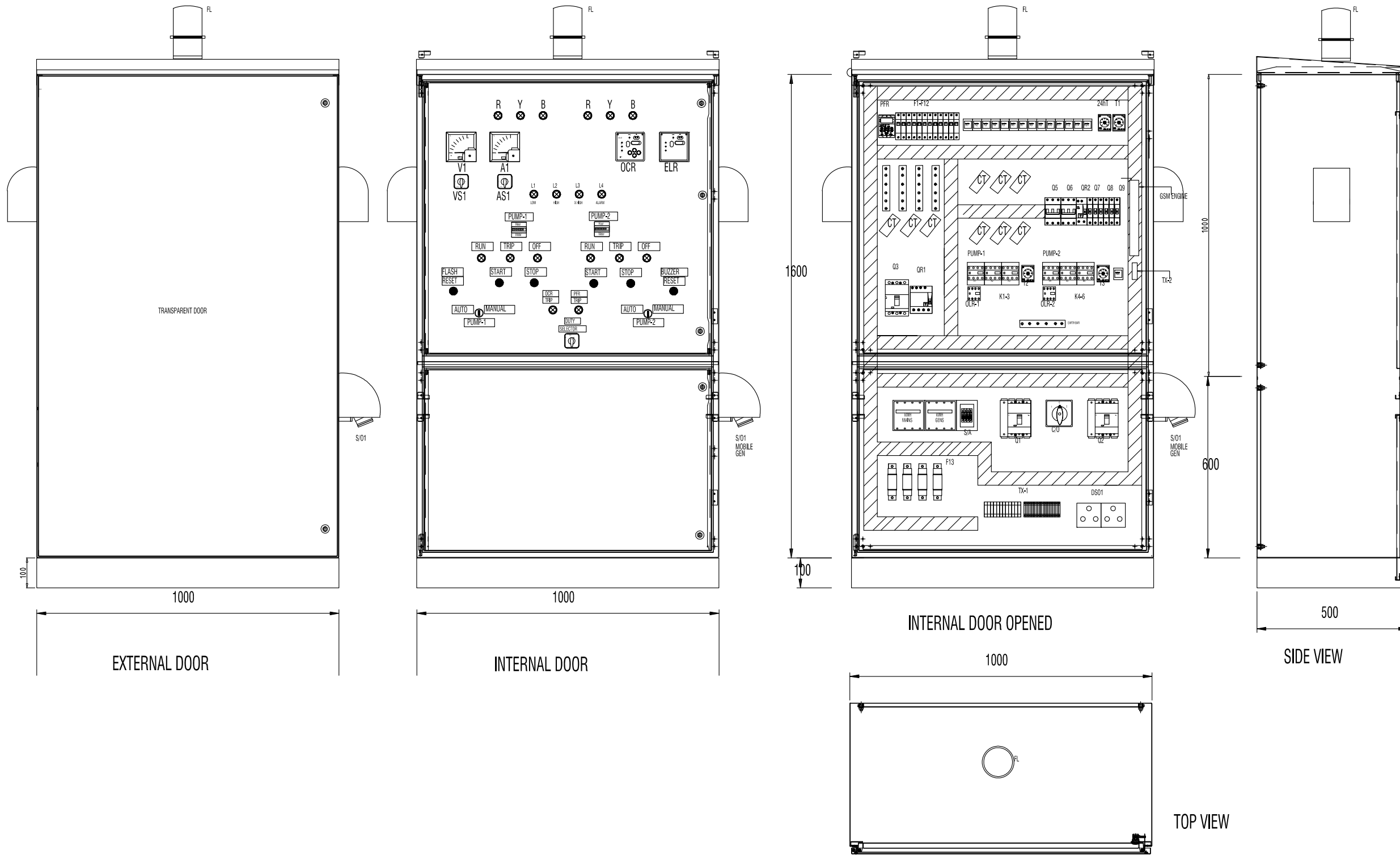
Title: POWER LAYOUT SINGLE LINE DIAGRAM FOR PSS

Page: E-03

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HA. BAARAH PS No.3

PUMP STATION No.2											
	Description	Oerating Cycle	Other Considerations	Qty (Nos.)	Power Ratings (Watt)	Current Rating (A)	DF	PF	Total Active Power (Watt)	Total Active Power (VA)	Total 3Ph Load (A)
1	Pump	2 (1 Duty ,1 stand by)	Controlled By Level sensors (float switch)	2	8900	12.85	1.00	1	17800	10277.1	25.69
2	1 x Socket Outlet 13A			1	200	0.29	1.00	1	200	115.5	0.29
3	Sub Total										25.98
Riyan Pvt. Ltd.			Client: M.E.E				Calculated by: Abdulla Wahid				
H.Azum			Project: HA. Baarah Sewerage System				Licence : MEB/2005/419				
Ameenee magu			Calculation: Load Calculation of PS3				Signature: 				
Male'			Title: Electric Load Calculation				Date 12/03/2017				



TYPICAL DETAIL FOR PUMP STATION CONTROL PANEL

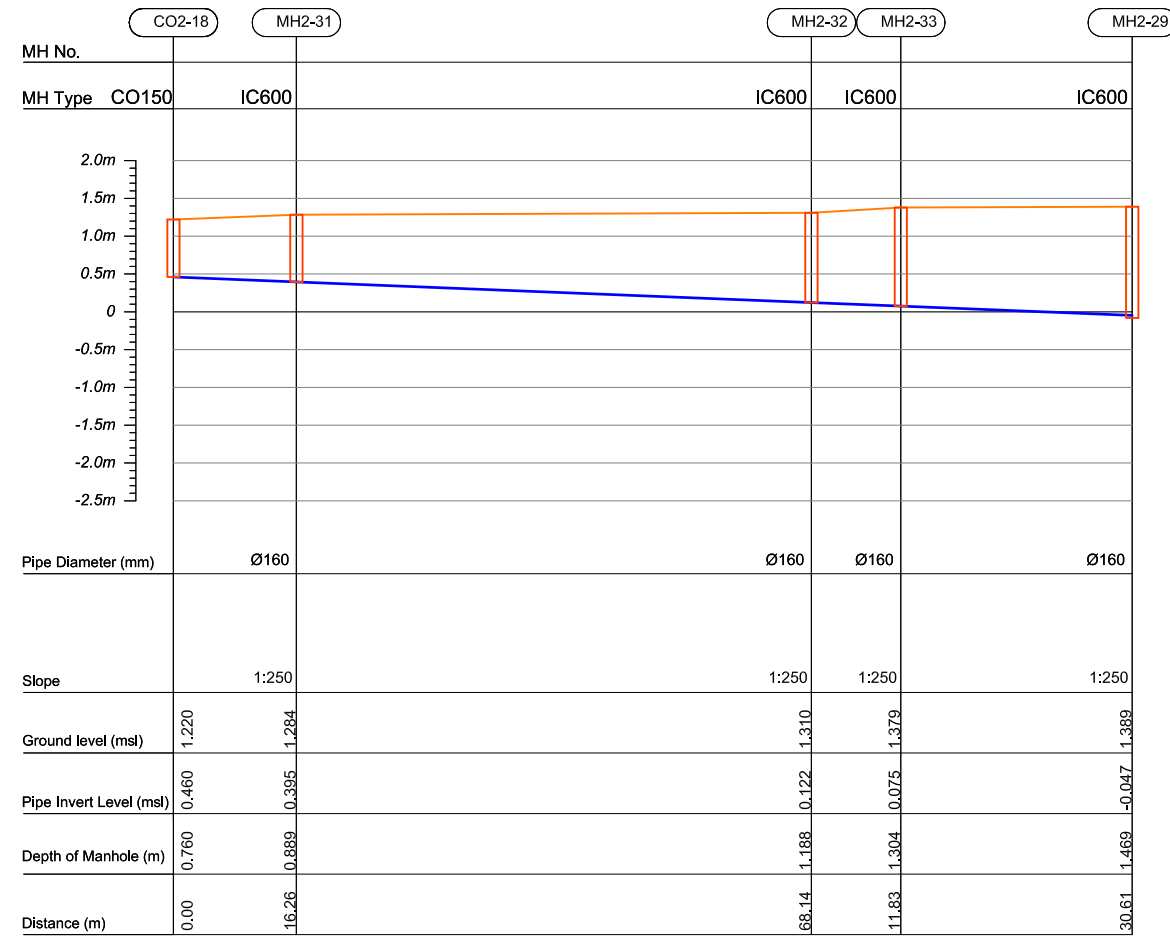
CONSULTANCY SERVICES FOR SURVEY & DESIGN
 OF SEWERAGE FACILITIES IN HA. BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY

PROJECT NUMBER :-
 DATE: MARCH 2017
 ENGINEER :- Abdulla Wahid
 CHECKED BY :-
 DRAWN BY :- Mohamed Saif

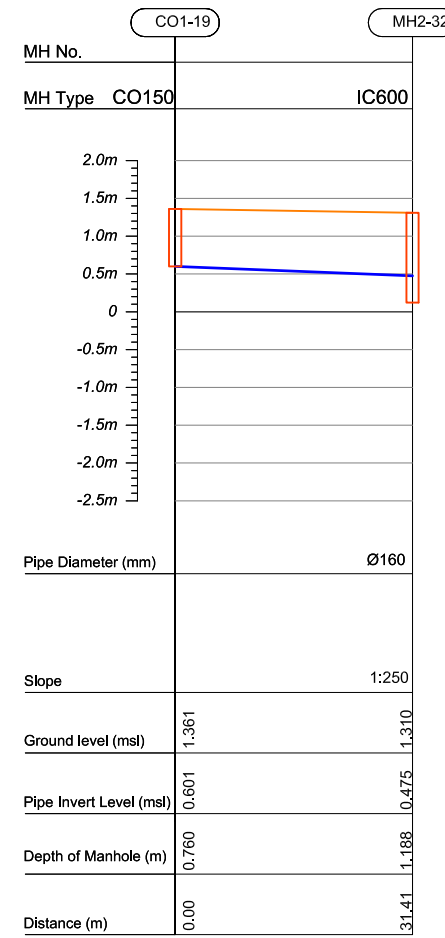
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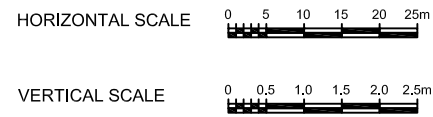
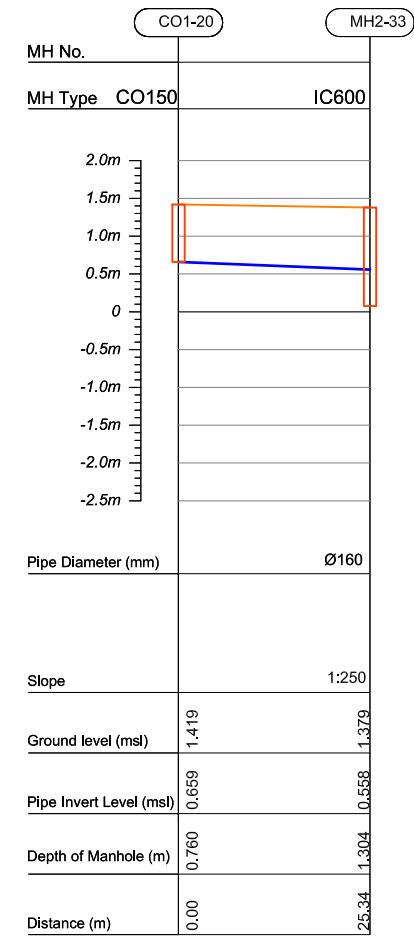
Profile 18



Profile 19



Profile 20



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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 DATE: MARCH 2017
 ENGINEER: - Mohamed Saif Saheed
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 DRAWN BY: - Zainab Abtheen Ali Rasheed

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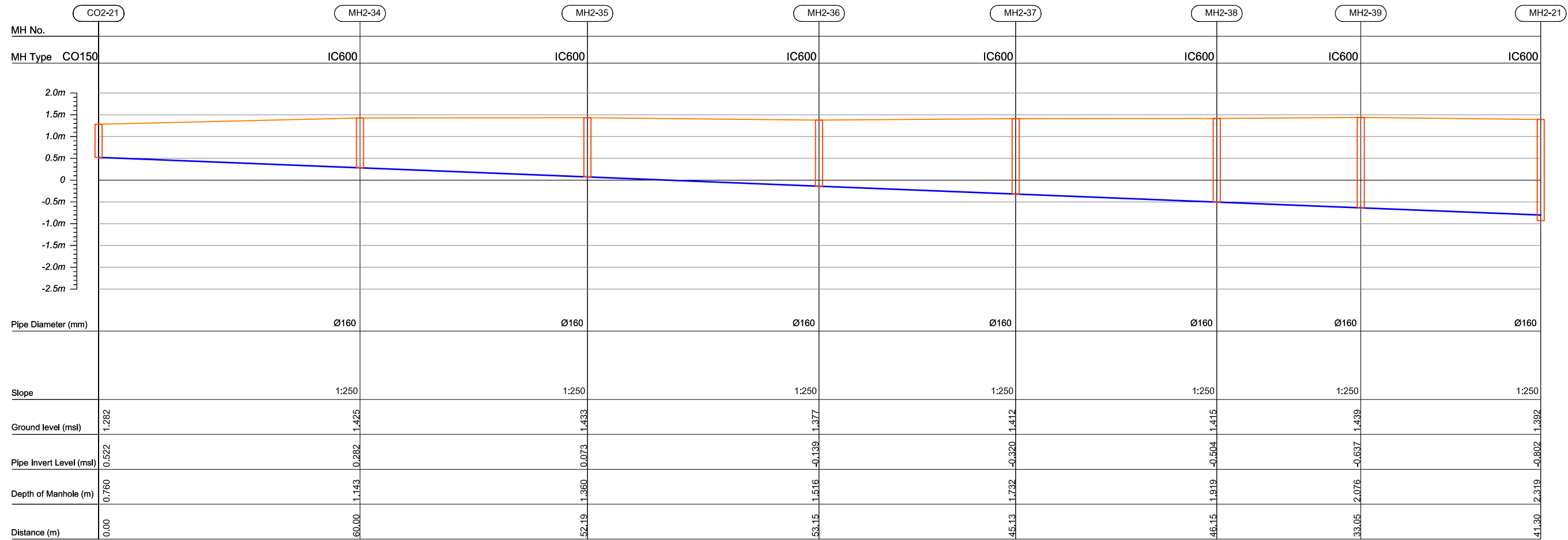
t: +9603315049 f: +9603310776
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Title: PS2:Profile 18 to 20

Page: PS2-12/20

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Profile 21



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

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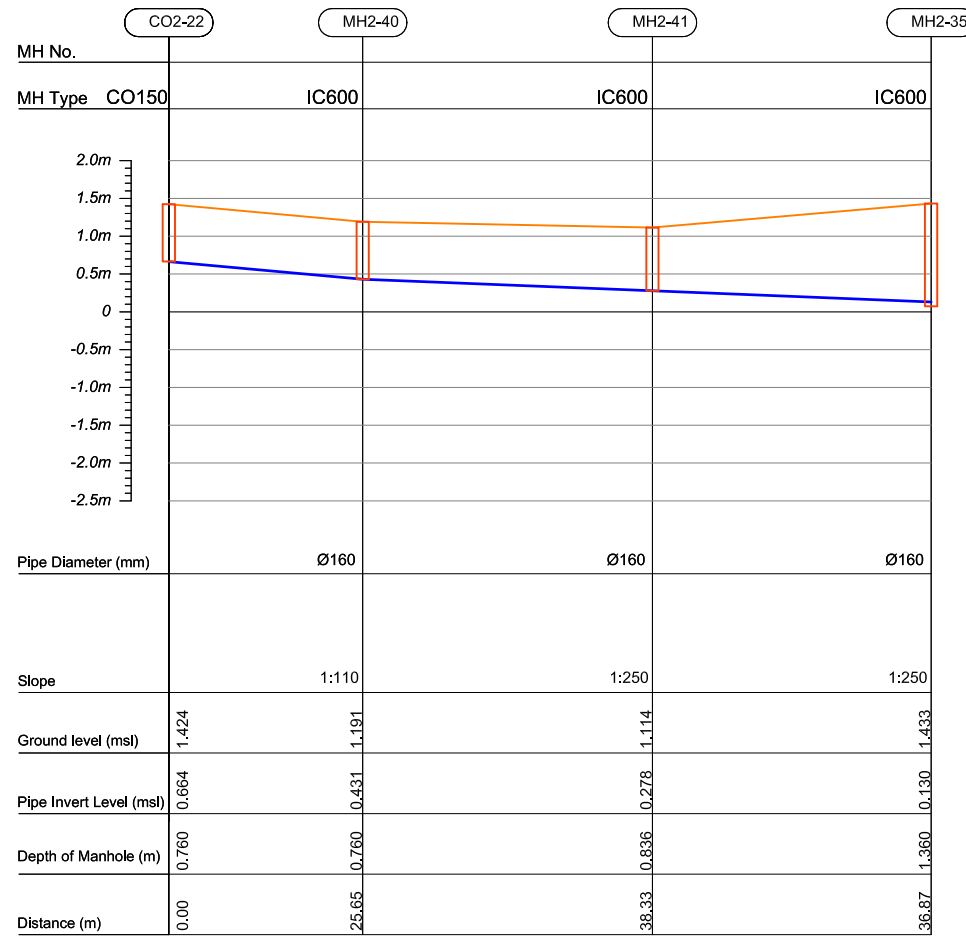
t: +9603315049 f: +9603310776
e: info@ryan.com.mv
w: www.ryan.com.mv
3rd floor, H. Azum, Ameenemogaa, Male'

Title: PS2:Profile 21

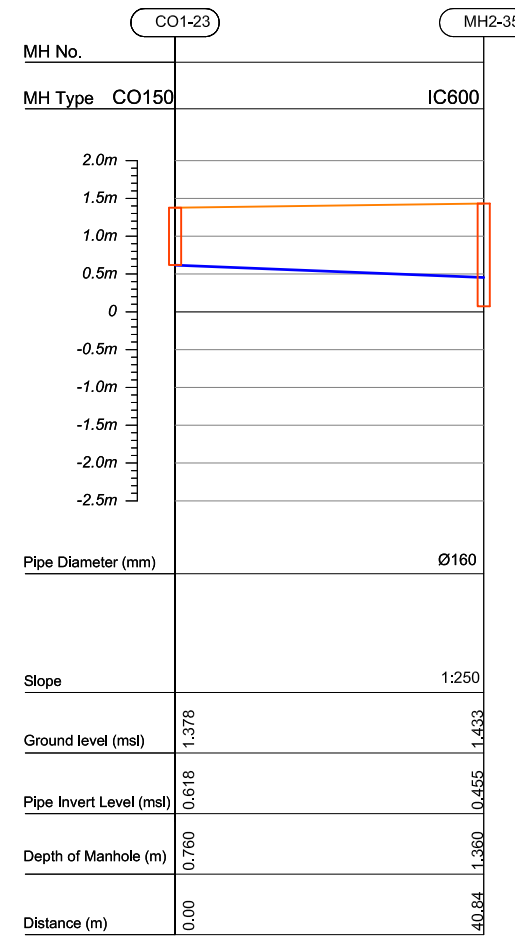
Page: PS2-13/20

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Profile 22



Profile 23



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
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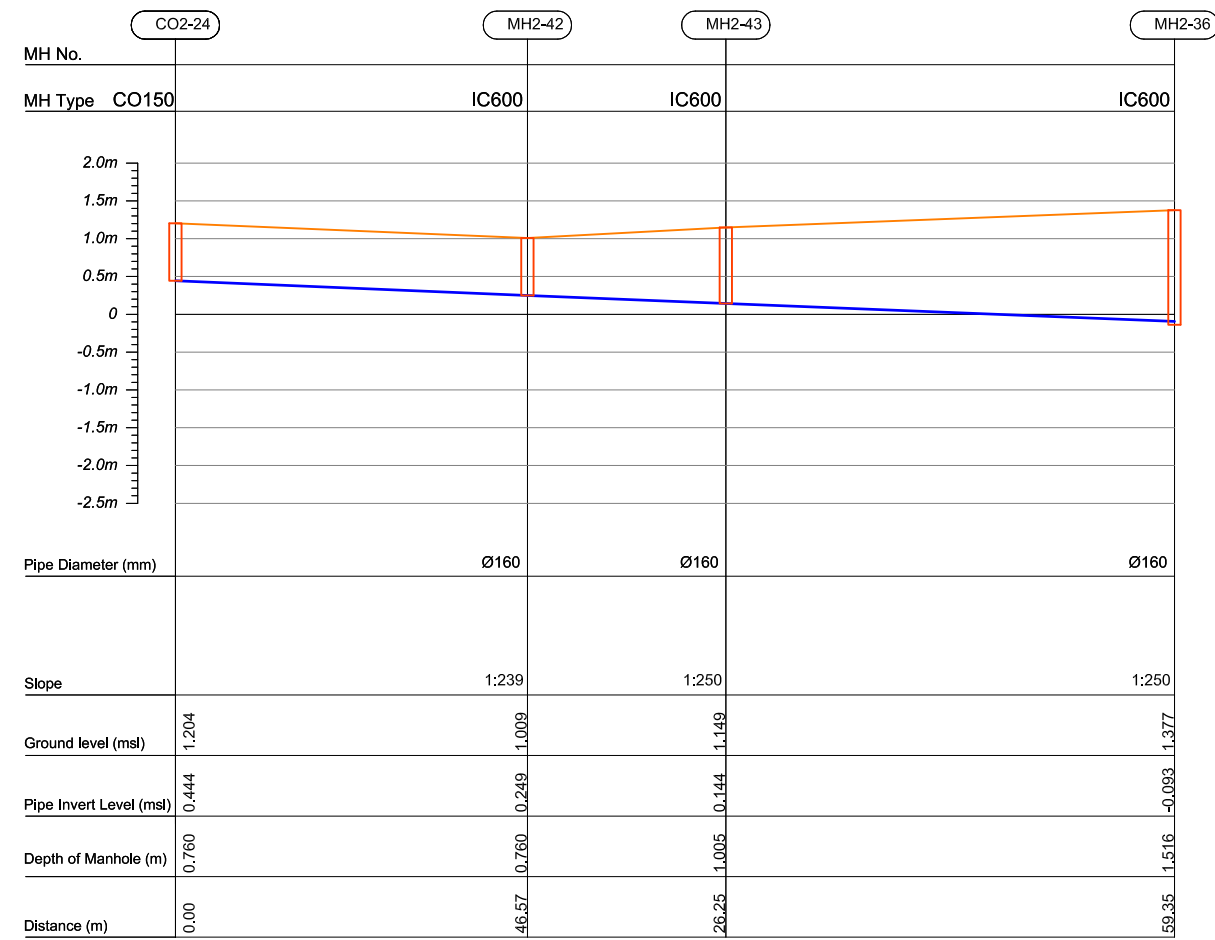
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 w: www.ryan.com.mv
 3rd floor, H. Azum, Ameenemoguu, Male'

Title: PS2:Profile 22 to 23

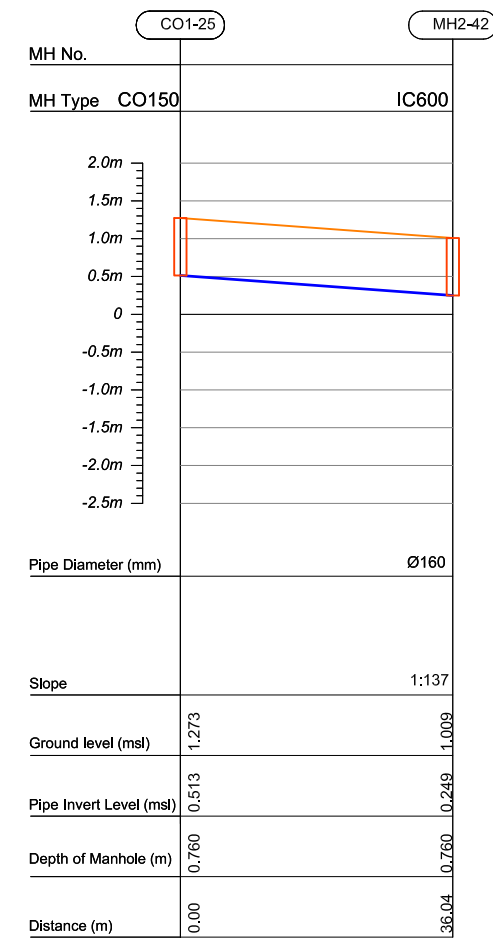
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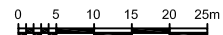
Profile 24



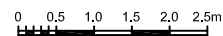
Profile 25



HORIZONTAL SCALE



VERTICAL SCALE



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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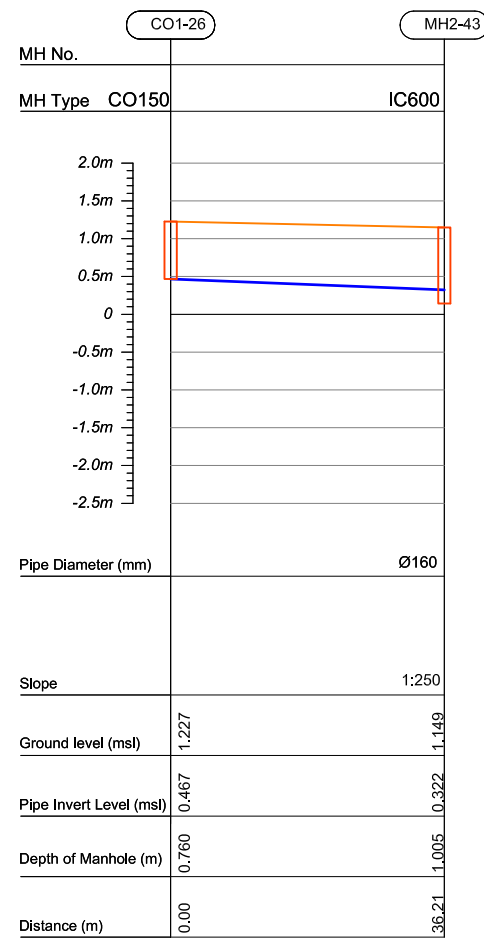
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Title: PS2:Profile 24 to 25

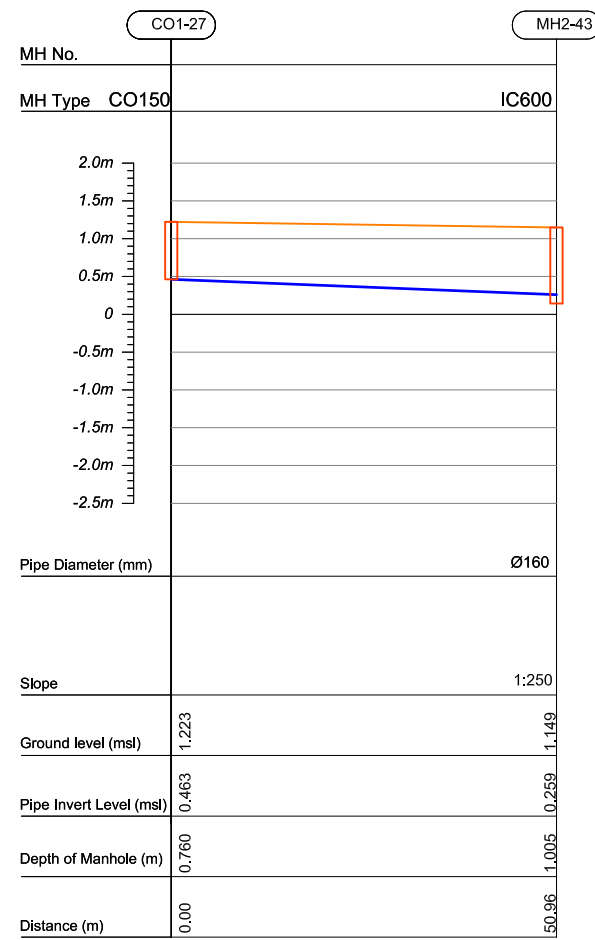
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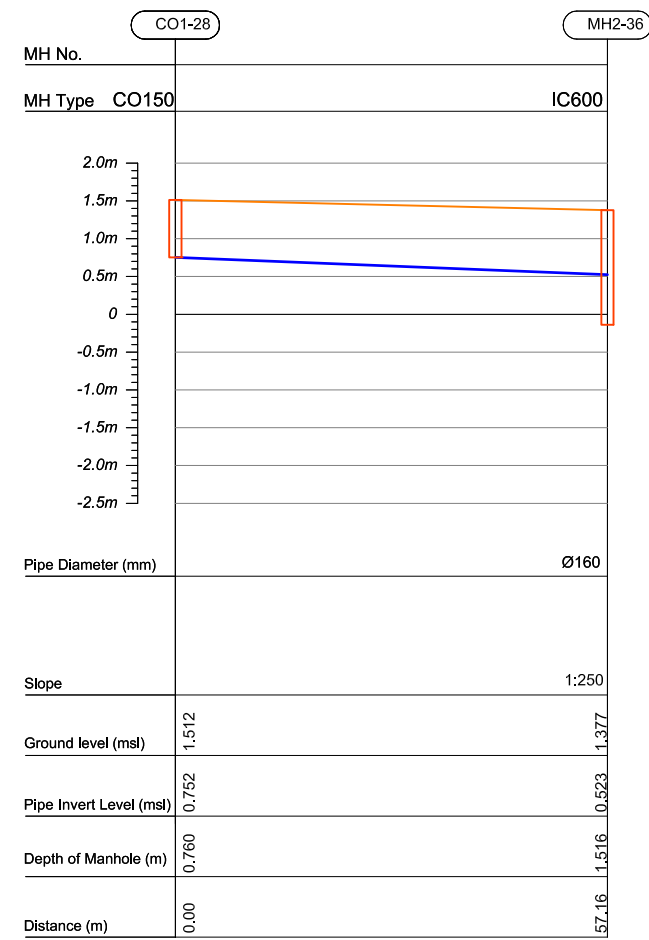
Profile 26



Profile 27



Profile 28



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
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 ENGINEER: - Mohamed Saif Saeed
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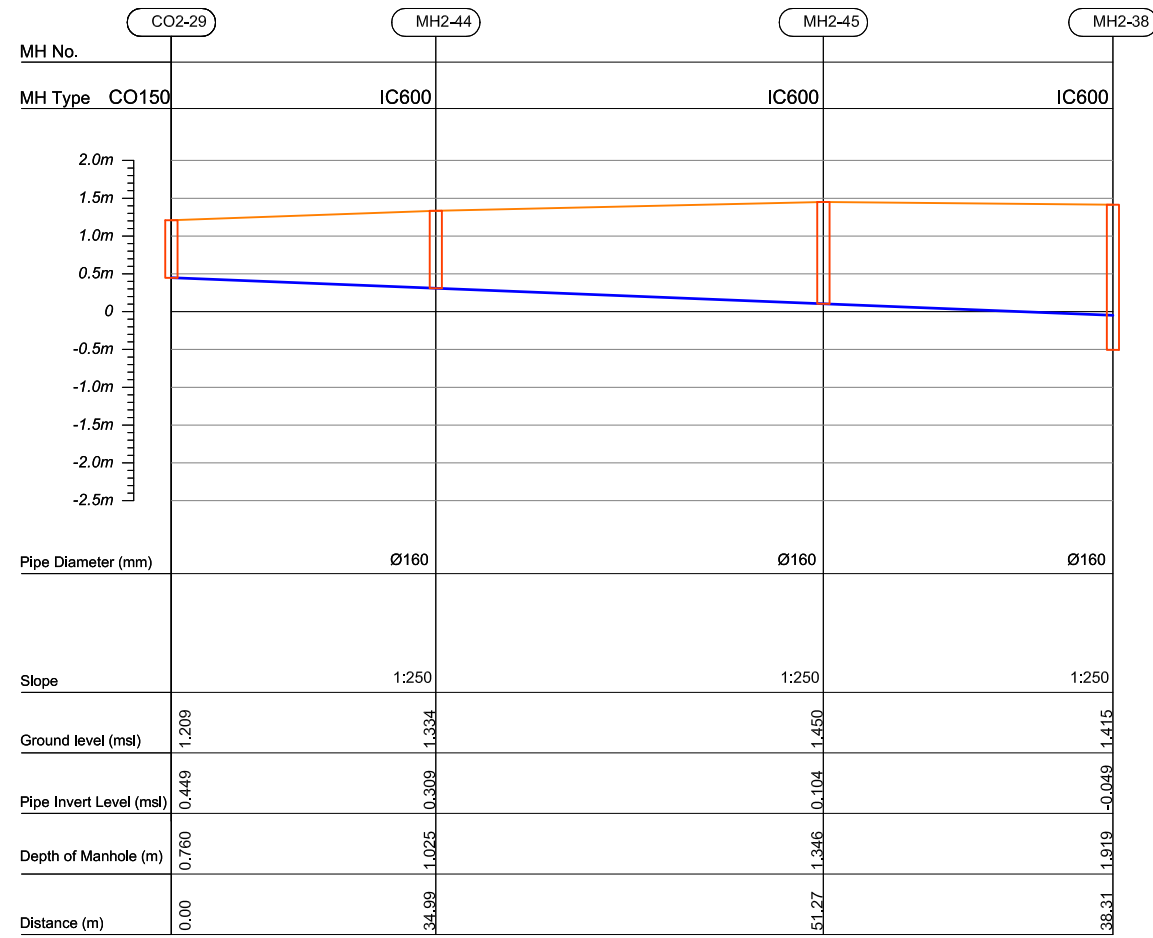
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Title: PS2:Profile 26 to 28

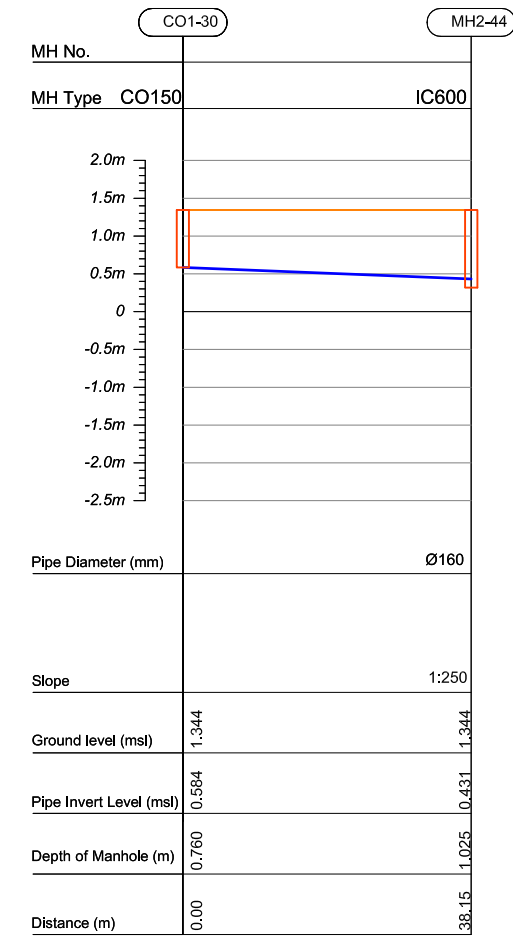
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Profile 29



Profile 30



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
 SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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 DATE: MARCH 2017
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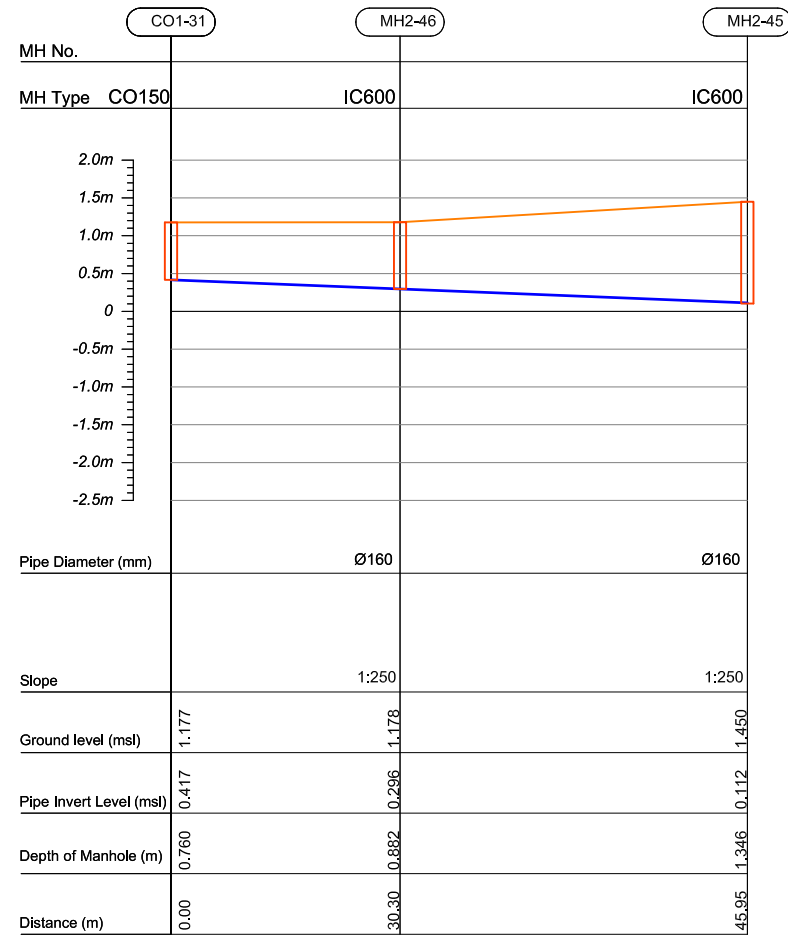
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 w: www.ryan.com.mv
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Title: PS2:Profile 29 to 30

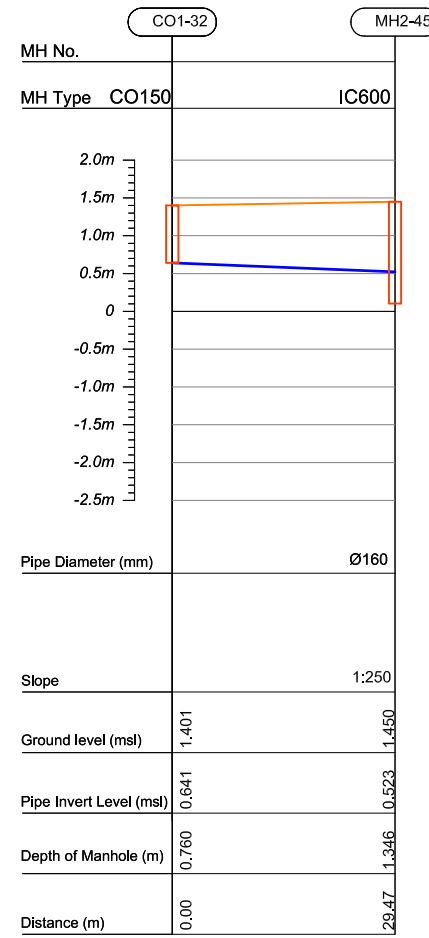
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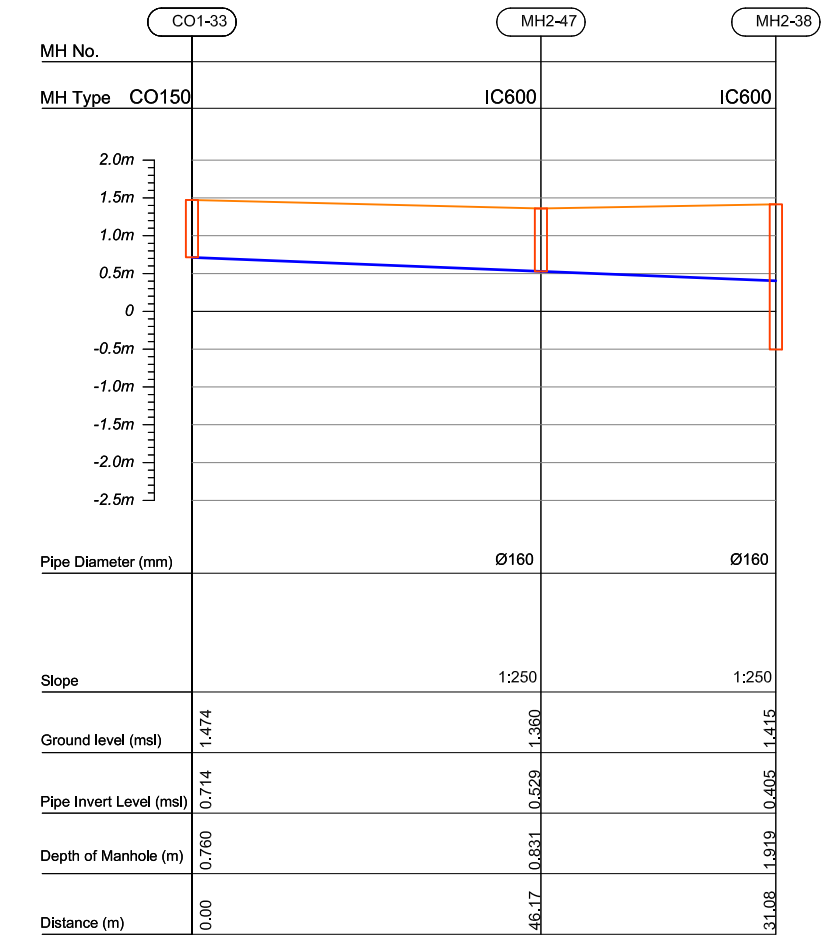
Profile 31



Profile 32



Profile 33



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
 SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
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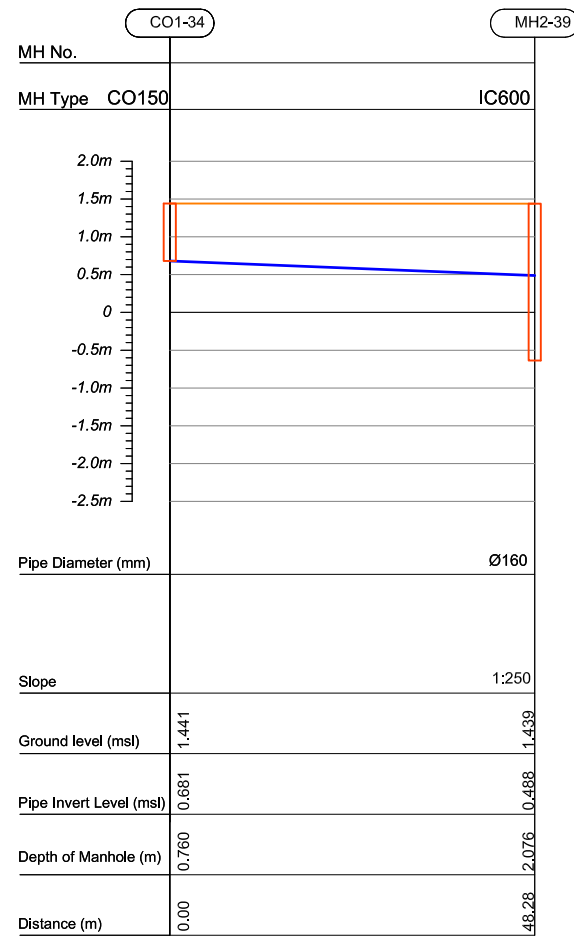
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 w: www.ryan.com.mv
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Title: PS2:Profile 31 to 33

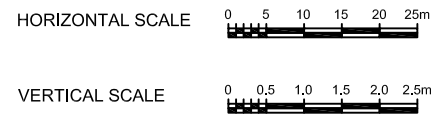
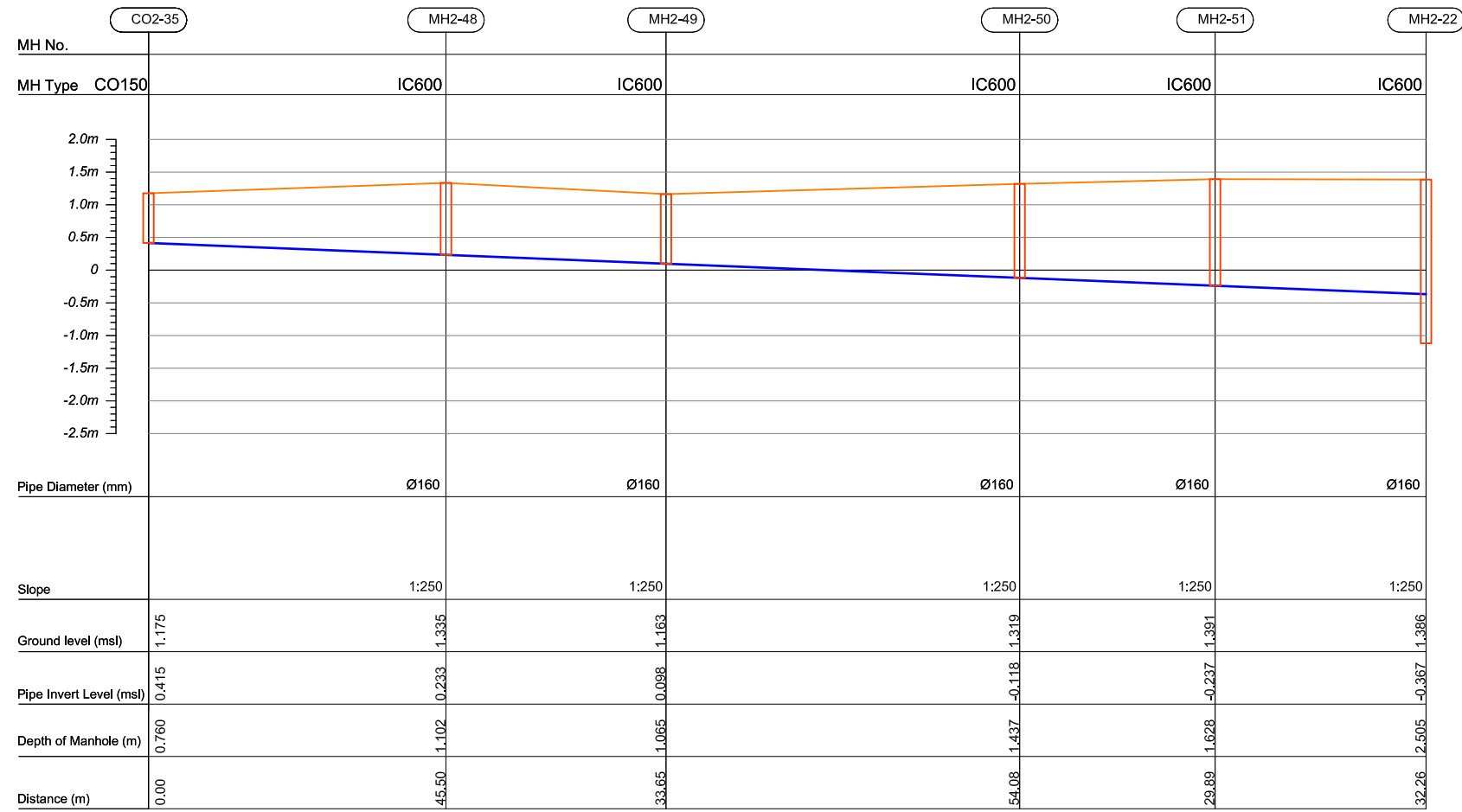
Page: PS2-18/20

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Profile 34



Profile 35



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY

PROJECT NUMBER: -
DATE: MARCH 2017
ENGINEER: - Mohamed Saif Saeed
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DRAWN BY: - Zainab Abubteen Ali Rasheed

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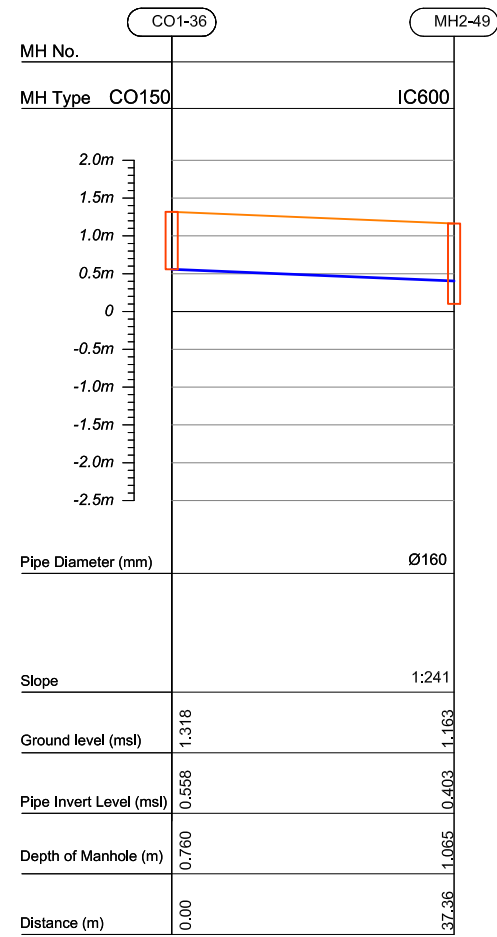
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w: www.riyan.com.mv
3rd floor, H. Azum, Ameenemogaa, Male'

Title: PS2:Profile 34 to 35

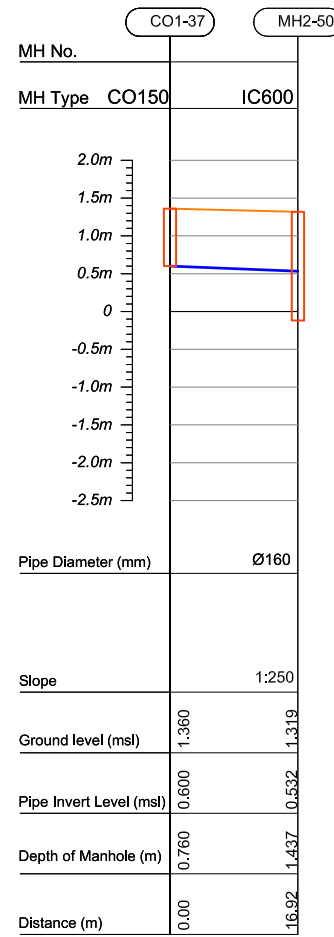
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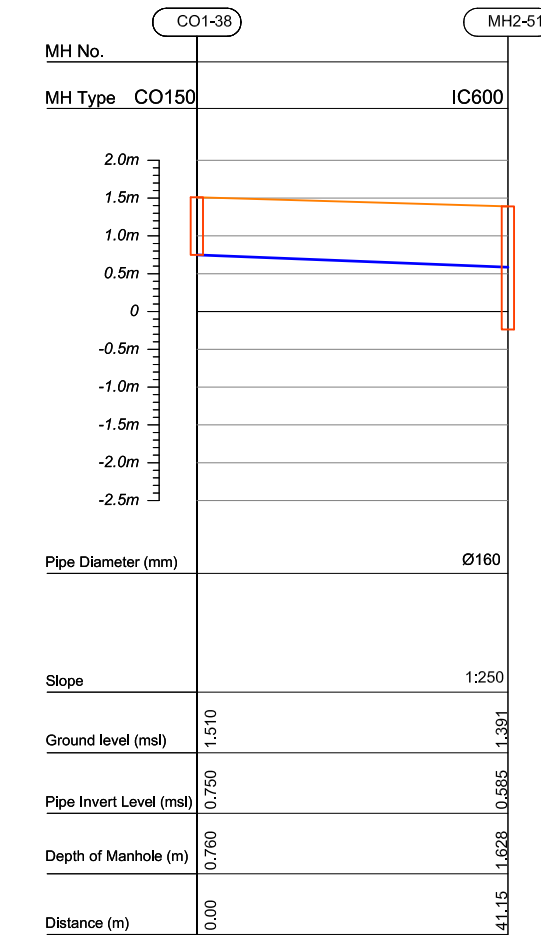
Profile 36



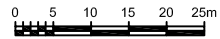
Profile 37



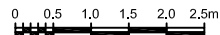
Profile 38



HORIZONTAL SCALE



VERTICAL SCALE



CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
 SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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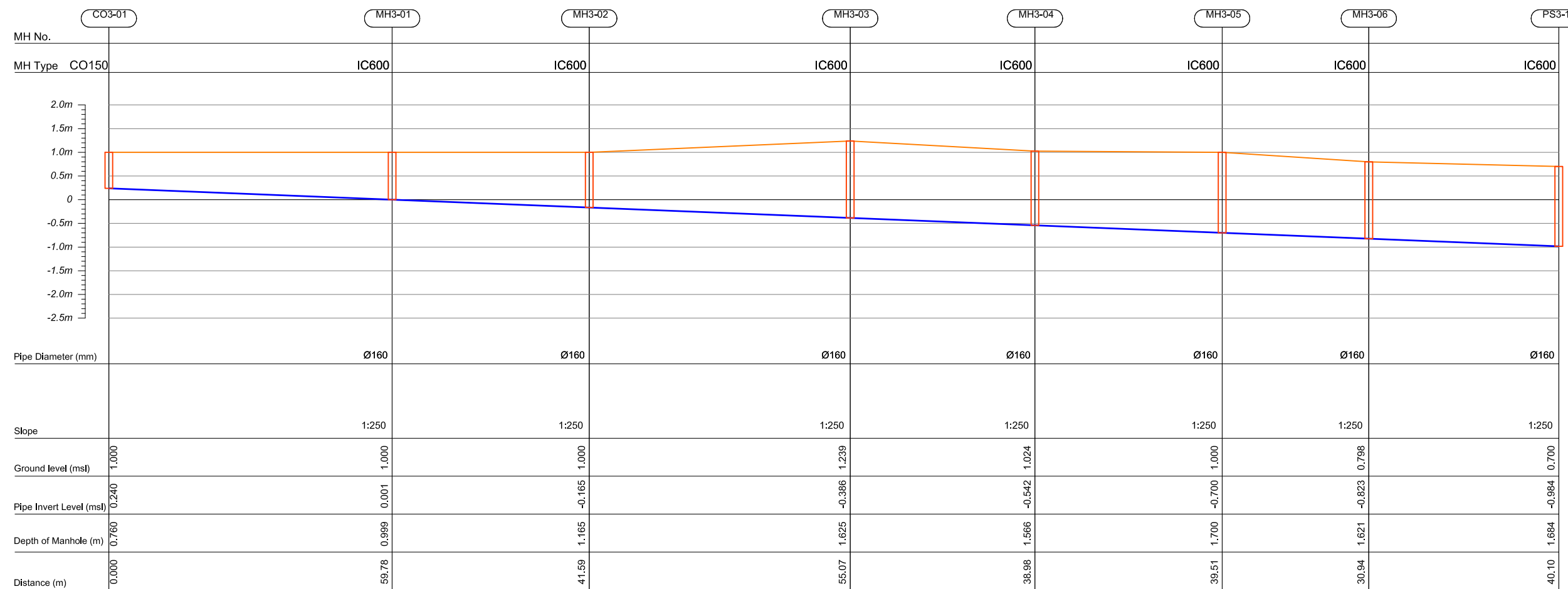
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Title: PS2:Profile 36 to 38

Page: PS2-20/20

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Profile 01



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
 PROJECT NUMBER: -
 DATE: MARCH 2017
 ENGINEER: - Mohamed Saif Saeed
 CHECKED BY: - Ihsan Waheed
 DRAWN BY: - Zainal Abidineen Ali Rasheed

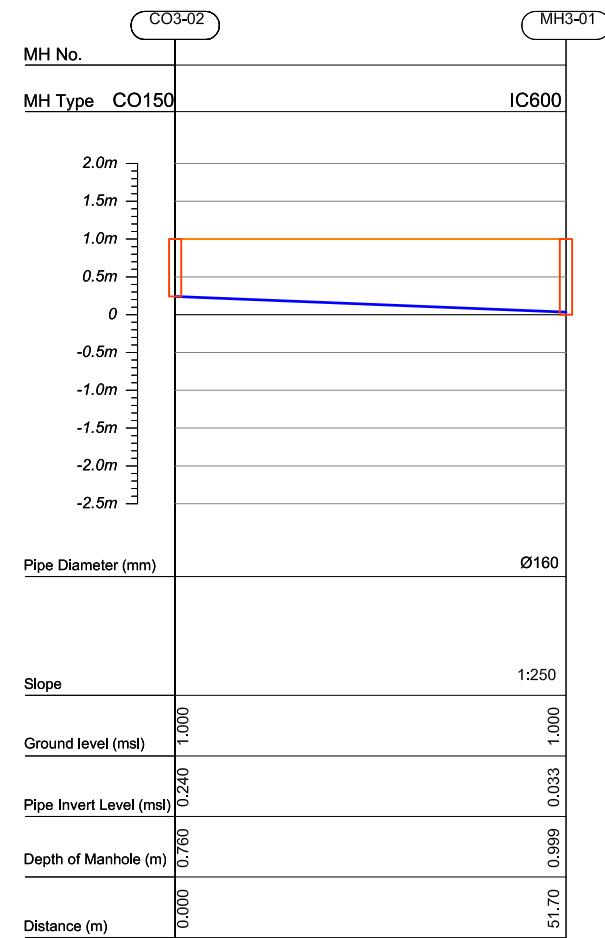
Rev no	Date



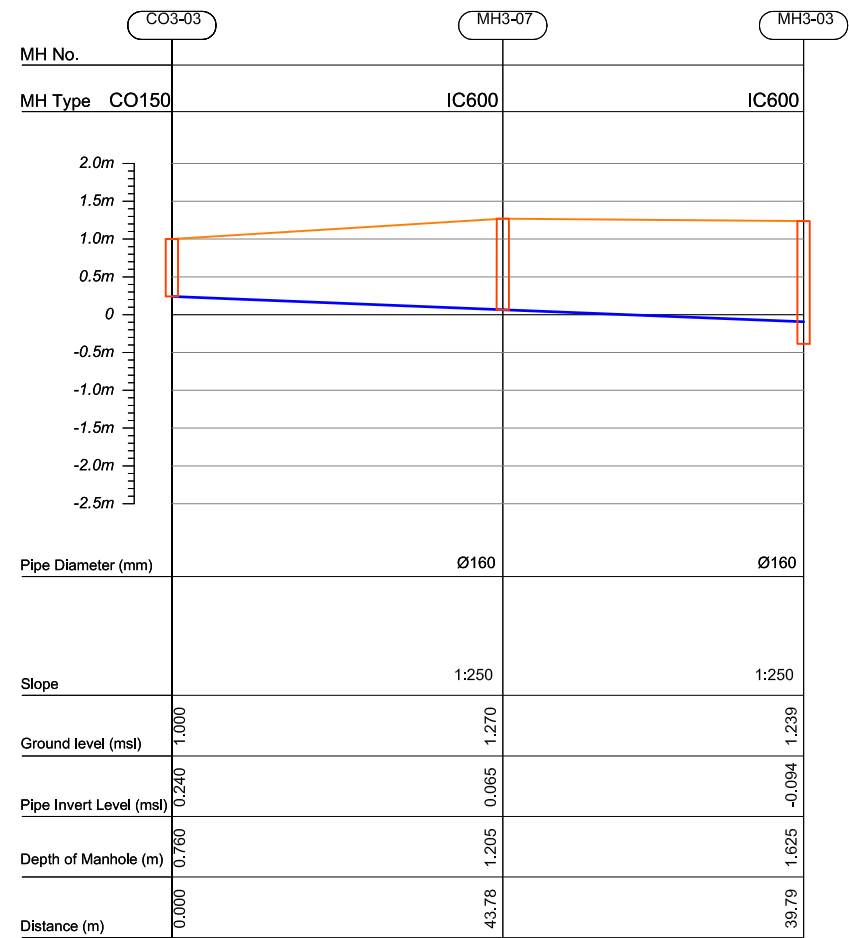
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Profile 02



Profile 03



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

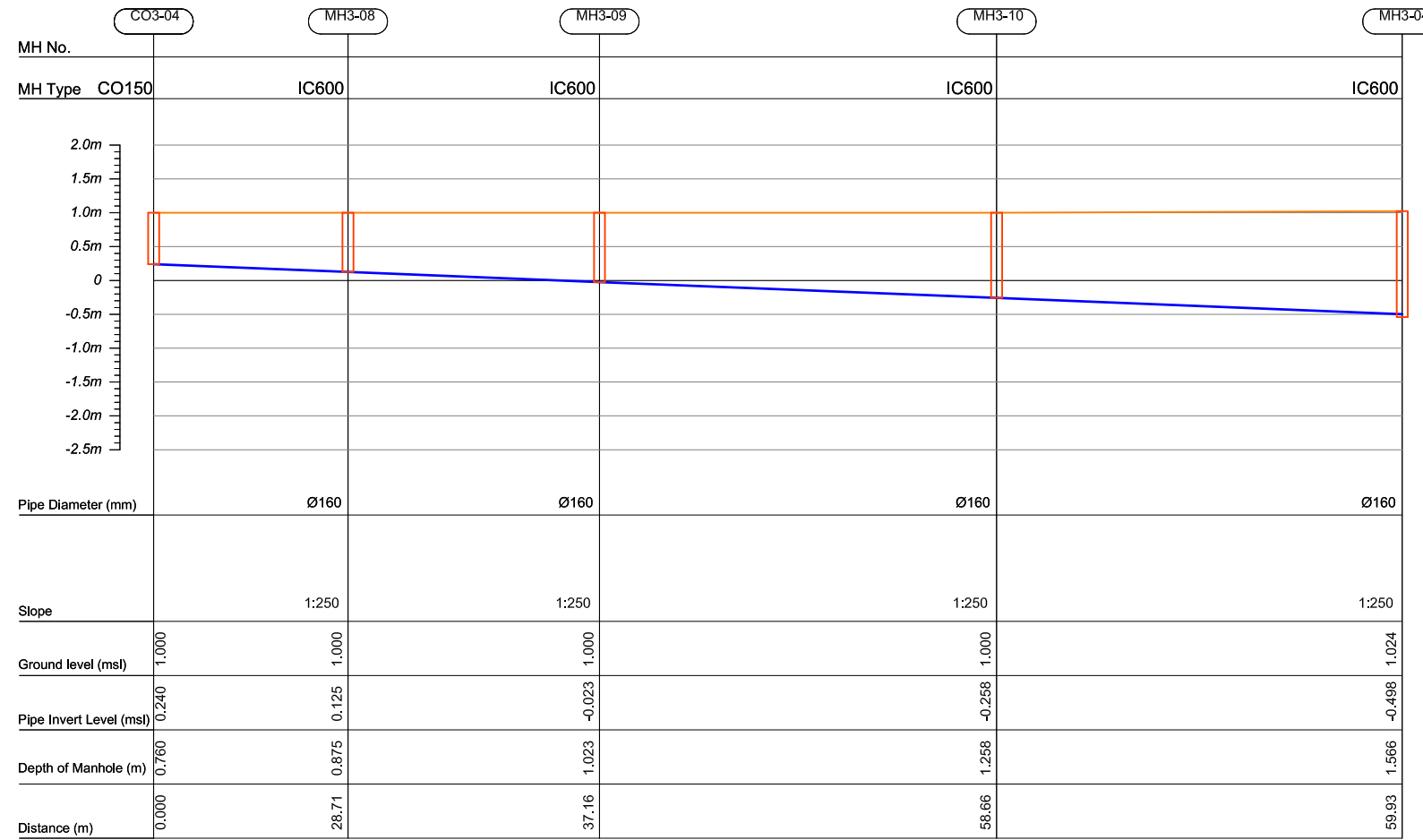
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 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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 DATE: MARCH 2017
 ENGINEER: - Mohamed Saif Saeed
 CHECKED BY: - Ihsan Waheed
 DRAWN BY: - Zainal Abidine Ali Rasheed

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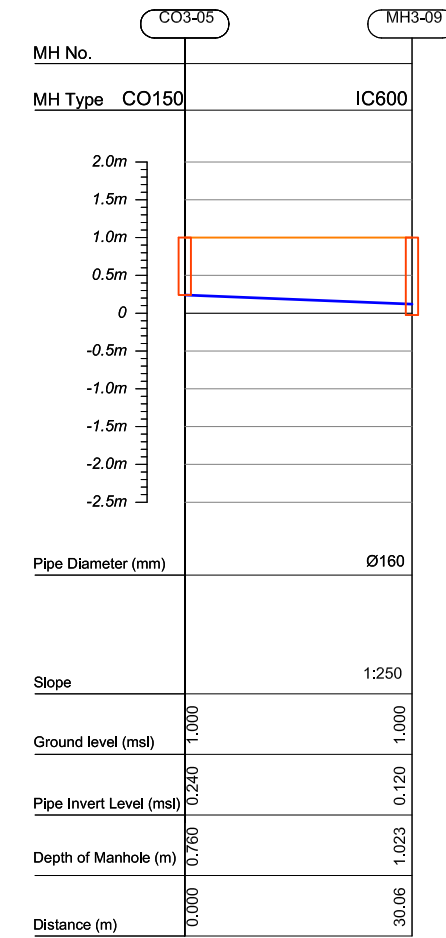
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Profile 04



Profile 05



HORIZONTAL SCALE 0 5 10 15 20 25m

VERTICAL SCALE 0 0.5 1.0 1.5 2.0 2.5m

CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
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 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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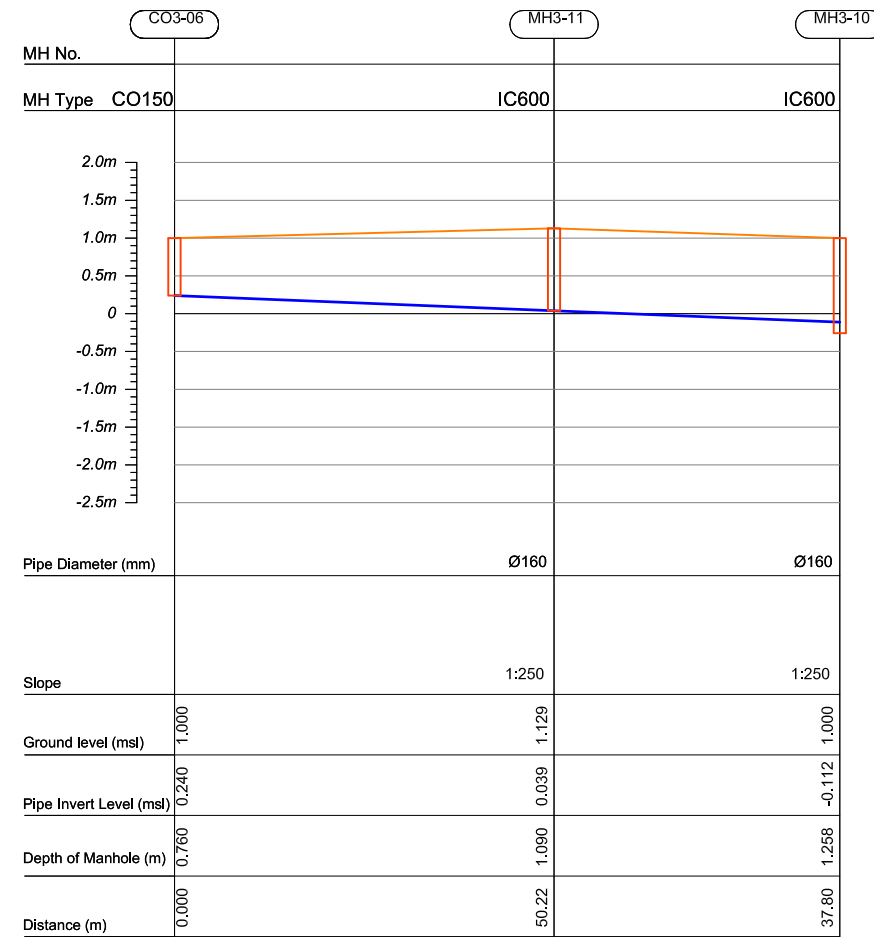
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Title: PS3:Profile 4 to 5

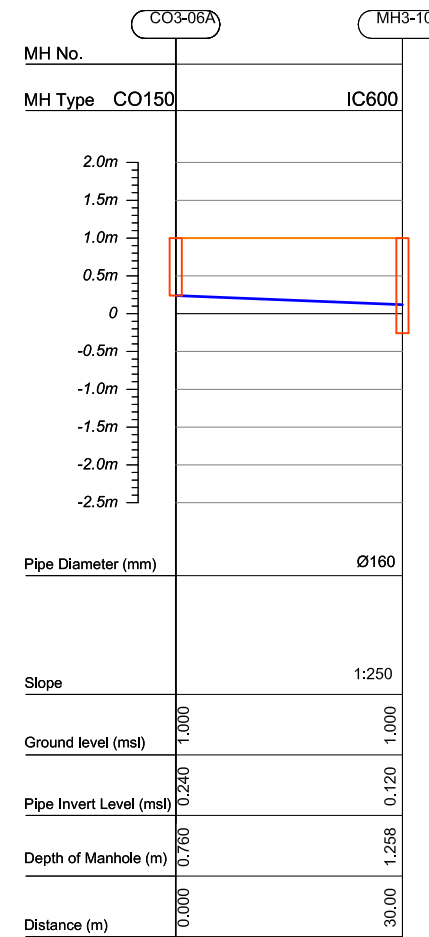
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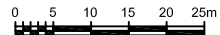
Profile 06



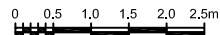
Profile 6A



HORIZONTAL SCALE



VERTICAL SCALE



CO150 — Cleanout Ø150
 IC600 — HDPE Manhole Ø600
 PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
 SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
 PROJECT NUMBER: -
 DATE: MARCH 2017
 ENGINEER: - Mohamed Saif Saeed
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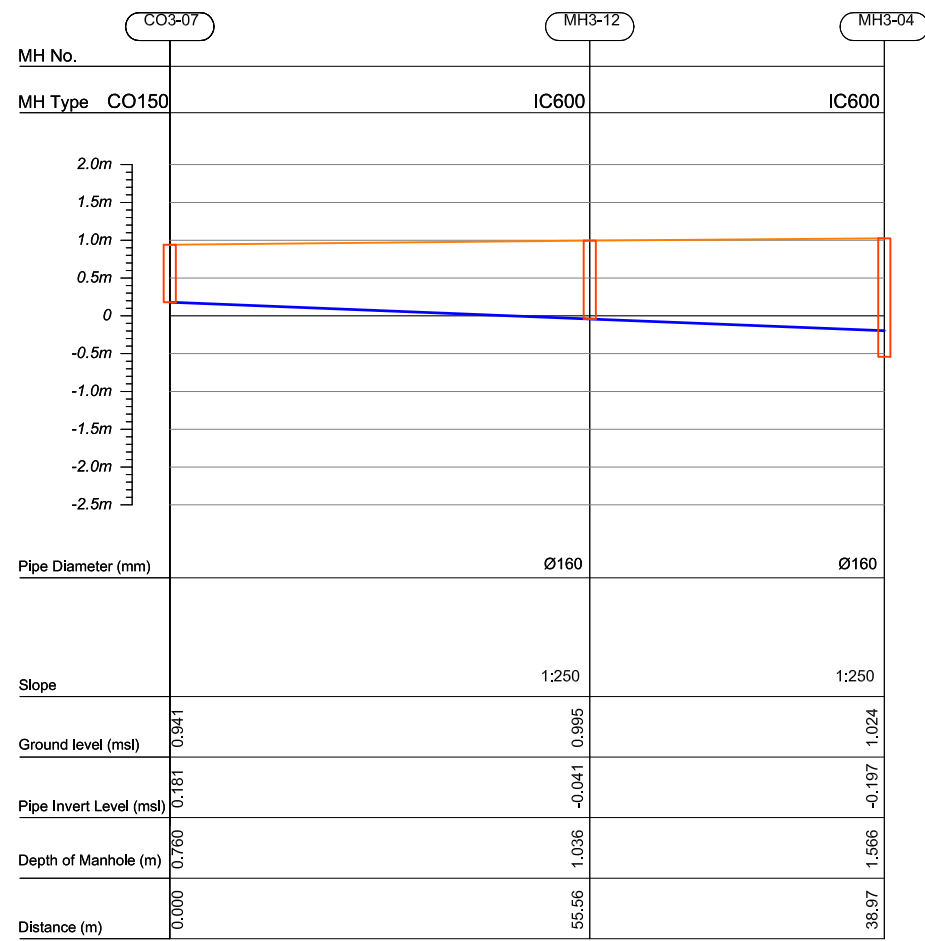
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 w: www.ryan.com.mv
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Title: PS3:Profile 6 to 6A

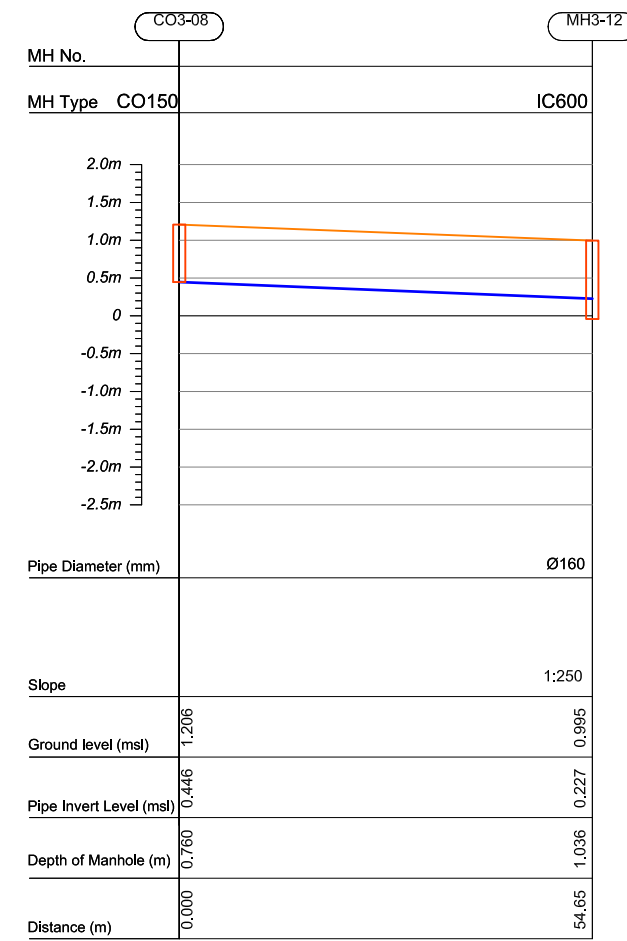
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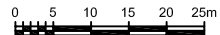
Profile 07



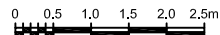
Profile 08



HORIZONTAL SCALE



VERTICAL SCALE



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

**CONSULTANCY SERVICES FOR SURVEY & DESIGN OF
SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES**
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
 PROJECT NUMBER: -
 DATE: MARCH 2017
 ENGINEER: - Mohamed Saif Saeed
 CHECKED BY: - Ihsan Waheed
 DRAWN BY: - Zainab Abdooneen Ali Rasheed

Rev no	Date



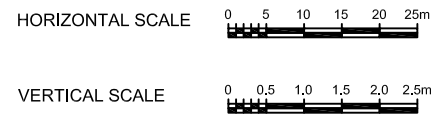
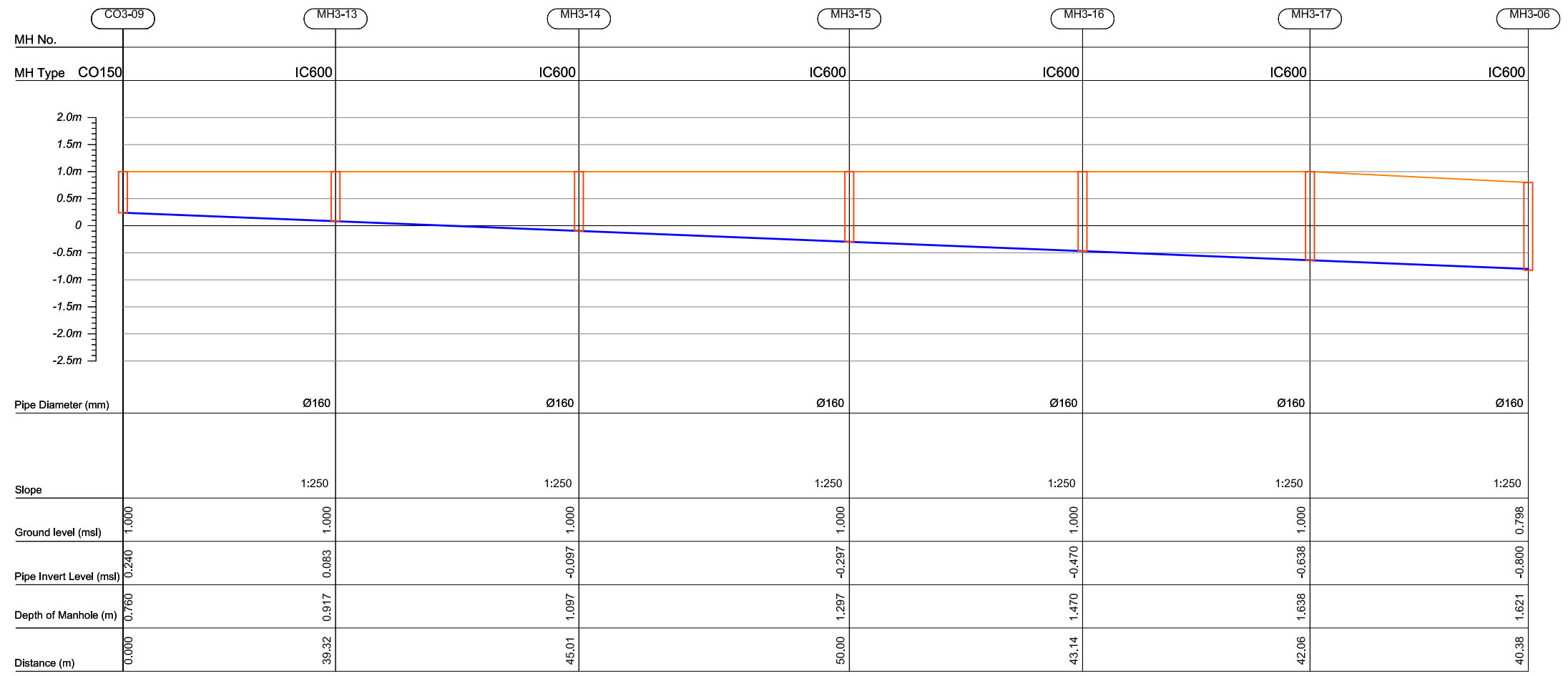
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Title: PS3:Profile 7 to 8

Page: PS3-05/22

Profile 09



- CO150 — Cleanout Ø150
- IC600 — HDPE Manhole Ø600
- PS — Pump Station

CONSULTANCY SERVICES FOR SURVEY & DESIGN OF SEWERAGE FACILITIES IN HA.BAARAH, MALDIVES
 CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY
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 ENGINEER: - Mohamed Saif Saeed
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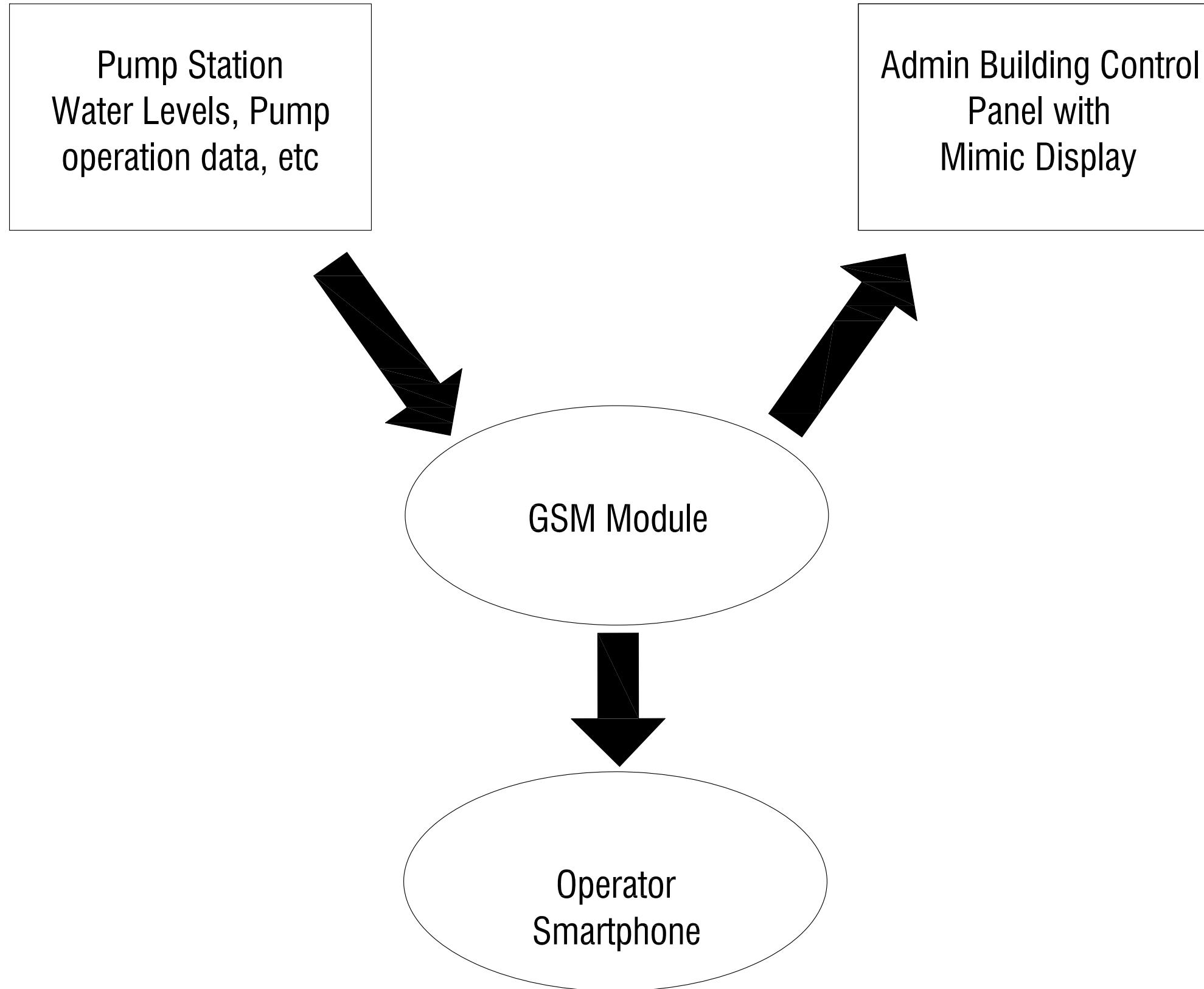


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Overall Process and Instrumentation Control Diagram



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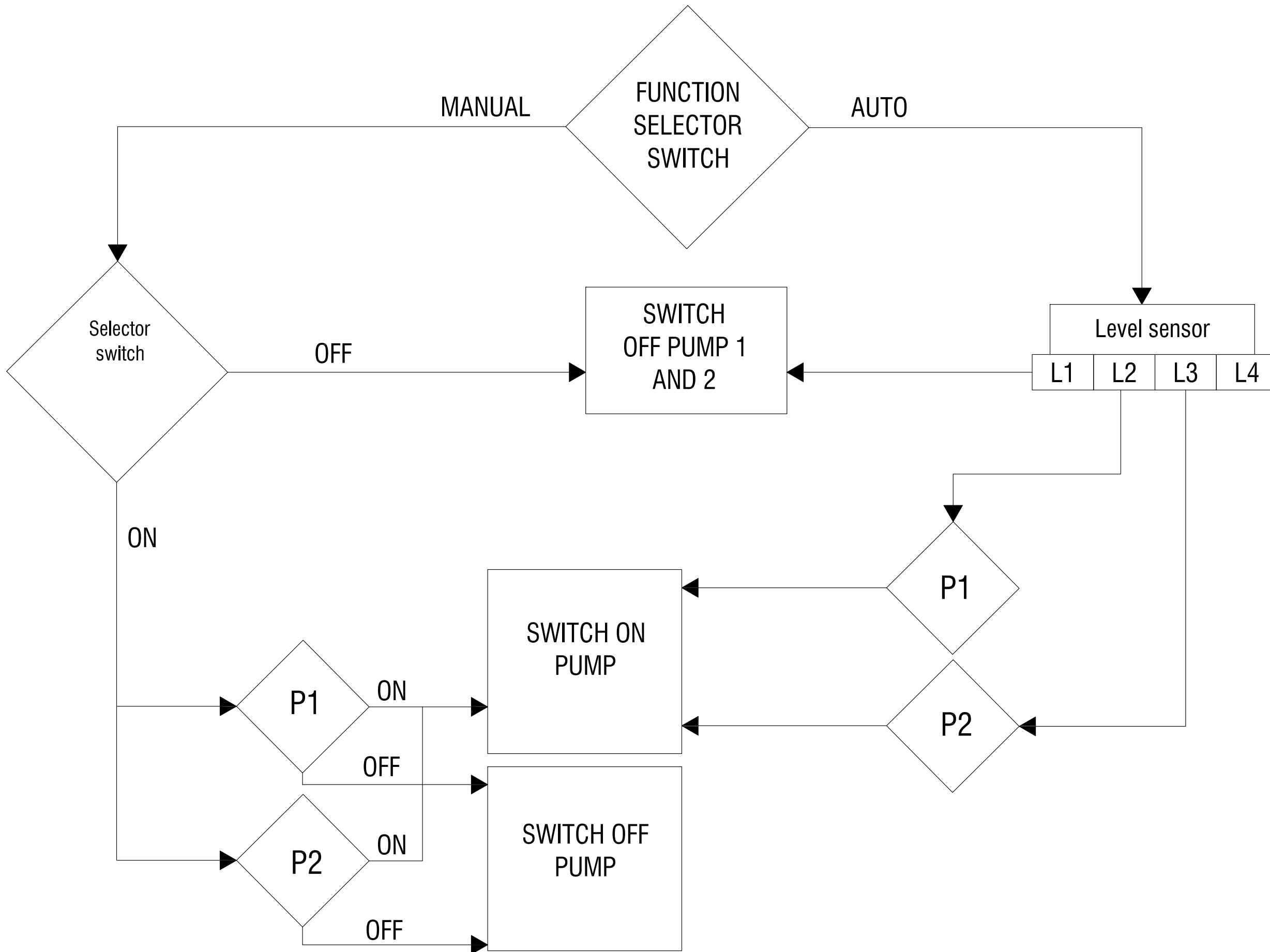
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Page: E-05

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Pump Station Operation Control



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