



SWA-S23 / 2024

MAUGA / SAMALEULU NEW NETWORK

WATER SUPPLY



NETWORK SHEET

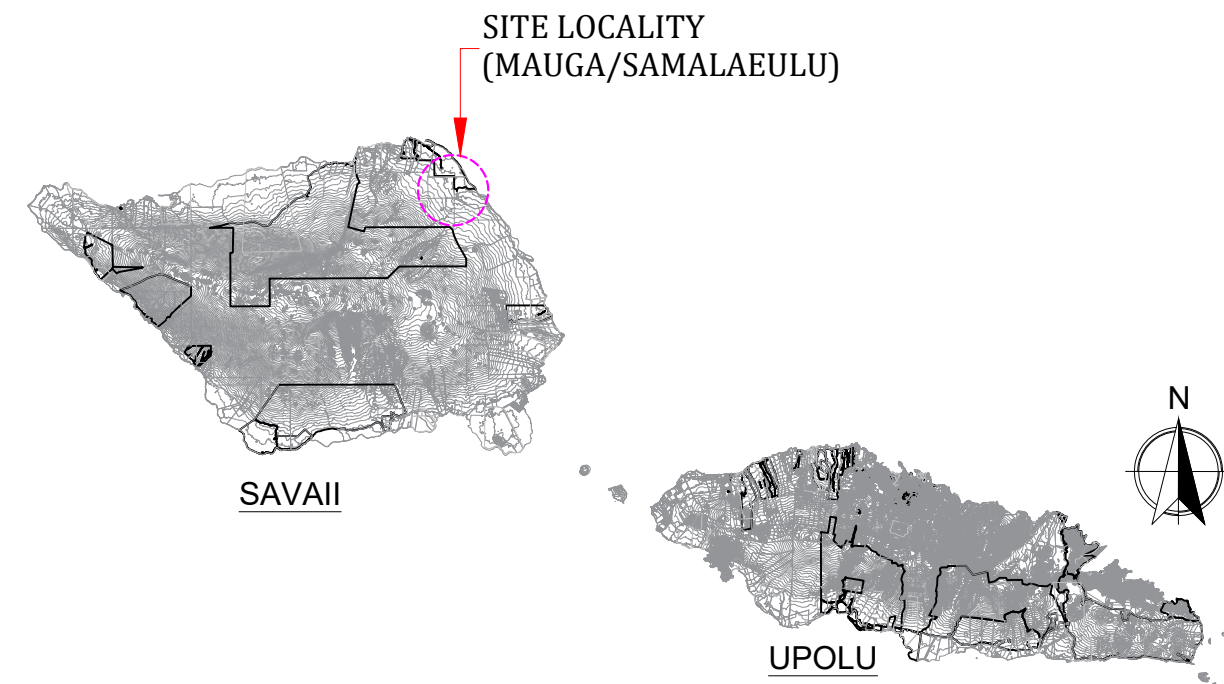
000	DRAWING INDEX
001	PROJECT MAP OVERVIEW
002	NETWORK SHEET 01
003	NETWORK SHEET 02
004	NETWORK SHEET 03
005	NETWORK SHEET 04
006	NETWORK SHEET 05
007	NETWORK SHEET 06
008	NETWORK SHEET 07
009	NETWORK SHEET 08
010	NETWORK SHEET 09
011	NETWORK SHEET 10

DETAIL CONNECTIONS

012	DETAIL CONNECTION
013	FORD CROSSING DETAILS
014	VALVE CHAMBER DETAIL
015	150 PRV CHAMBER PLAN LAYOUT
016	150 PRV CHAMBER REINFORCEMENT DETAIL
017	150 PRV CHAMBER SOAK PIT & DRAINAGE
018	PUMP BORE ARRANGEMENT
019	TRENCH AND BEDDING DETAIL
020	ANCHOR BLOCKS DETAIL

LEGENDS

DN150 mPVC PIPE	
DN63 HDPE PIPE	
DN90 HDPE PIPE	
ROAD CENTERLINE	
CONTOUR LINE	
PRV	
AIR VALVE	
FIRE HYDRANT	
SLUICE VALVE	
END OF CONTRACT	
EXISTING BUILDING	



FOR CONSTRUCTION

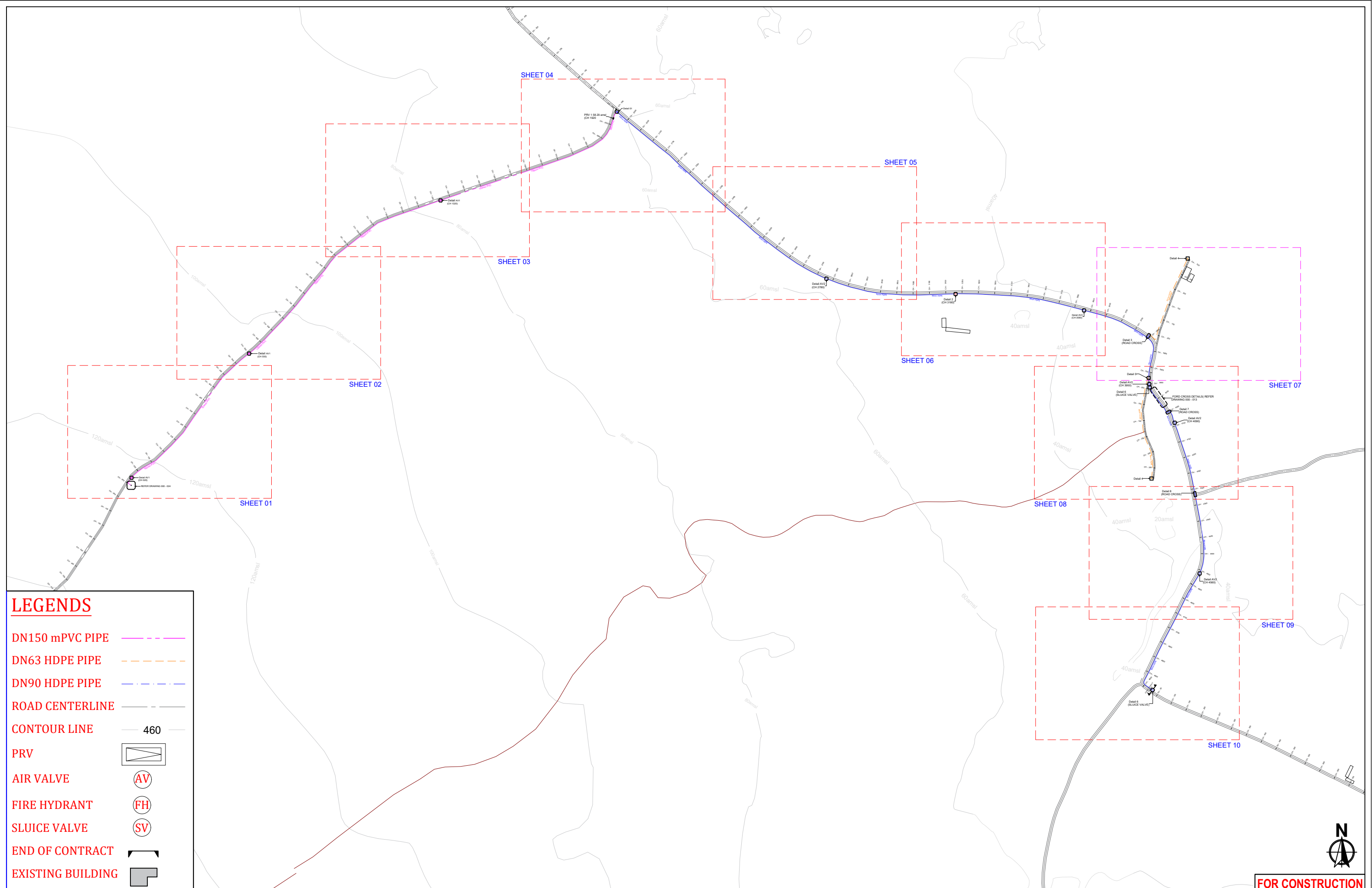
BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

MAUGA & SAMALAEULU NETWORK

DRAWING TITLE:
INDEX SHEET

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION 00
SCALE: NTS	DRAWING NUMBER: S23 - 000	



LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUCE VALVE
- END OF CONTRACT
- EXISTING BUILDING

FOR CONSTRUCTION

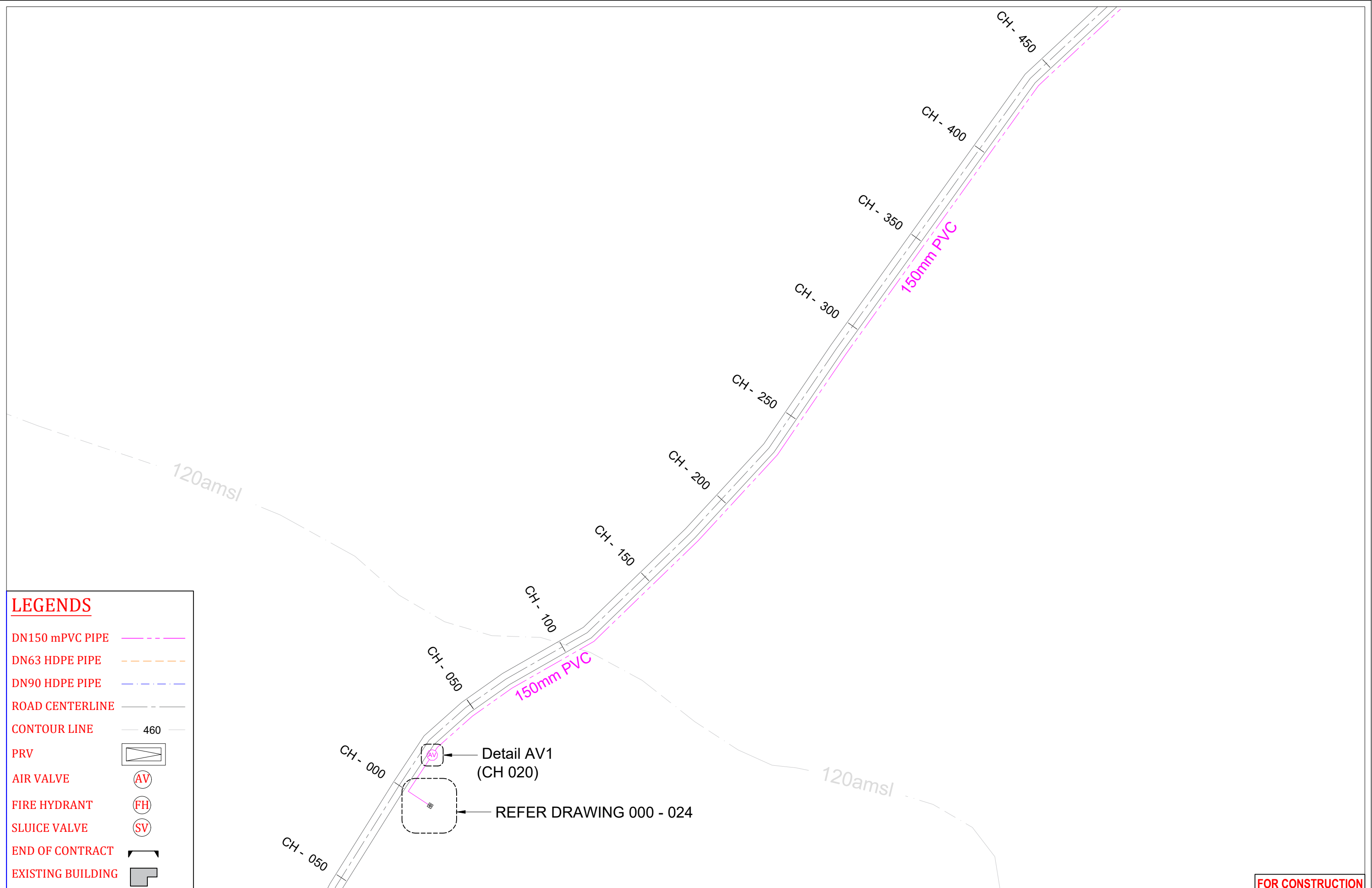
BY:	DATE:	REV:	DESCRIPTIONS:	DATE:	APRVD:
DESIGNED:	--	---		---	--
DRAWN:	--	---		---	--
DSGN CHECKED:	--	---		---	--
DWG CHECKED:	--	---		---	--
APPROVED:	--	---		---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **OVERALL LAYOUT**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SCALE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1 : 1000	DRAWING NUMBER: S23 - 001	



LEGENDS

- DN150 mPVC PIPE ---
- DN63 HDPE PIPE ---
- DN90 HDPE PIPE ---
- ROAD CENTERLINE ---
- CONTOUR LINE --- 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT
- EXISTING BUILDING

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	--
DRAWN:	--	--
DSGN CHECKED:	--	--
DWG CHECKED:	--	--
APPROVED:	--	--

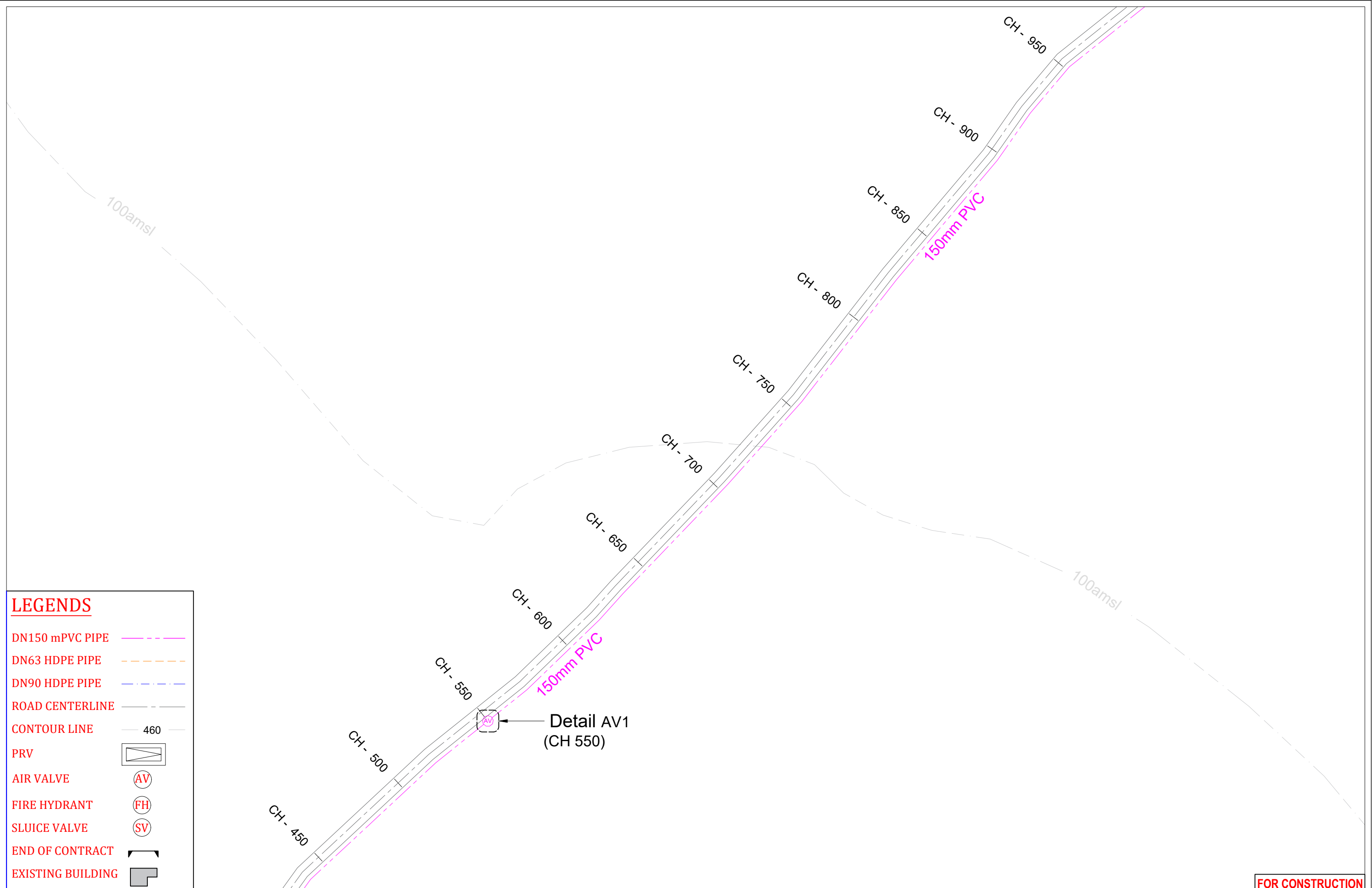
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **NETWORK SHEET 01**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150		DRAWING NUMBER: S23 - 002

FOR CONSTRUCTION



LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT
- EXISTING BUILDING

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---			---	--
DRAWN:	--	---			---	--
DSGN CHECKED:	--	---			---	--
DWG CHECKED:	--	---			---	--
APPROVED:	--	---			---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **NETWORK SHEET 02**

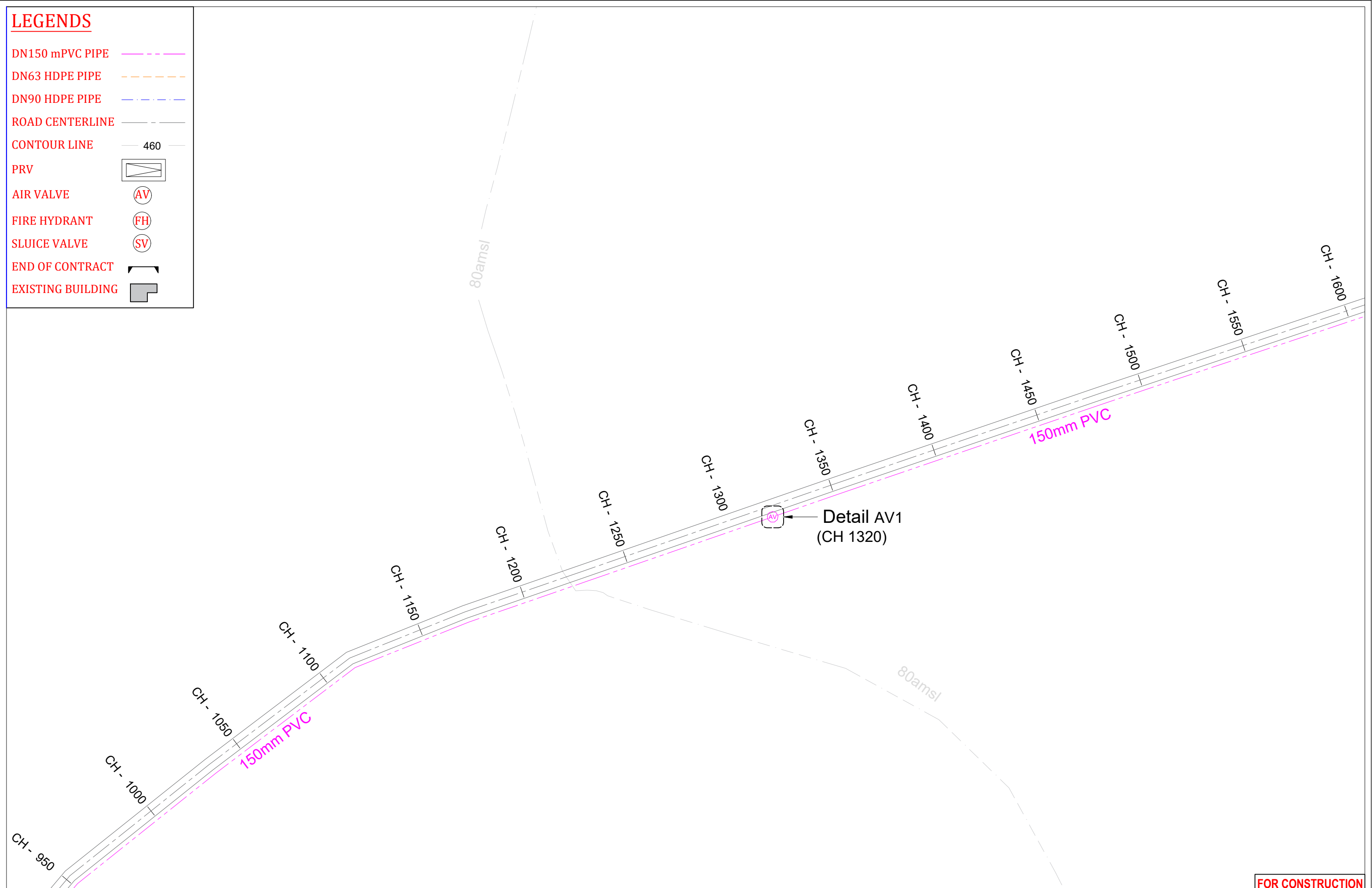
SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 003	

FOR CONSTRUCTION

LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT
- EXISTING BUILDING



FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

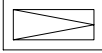





PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

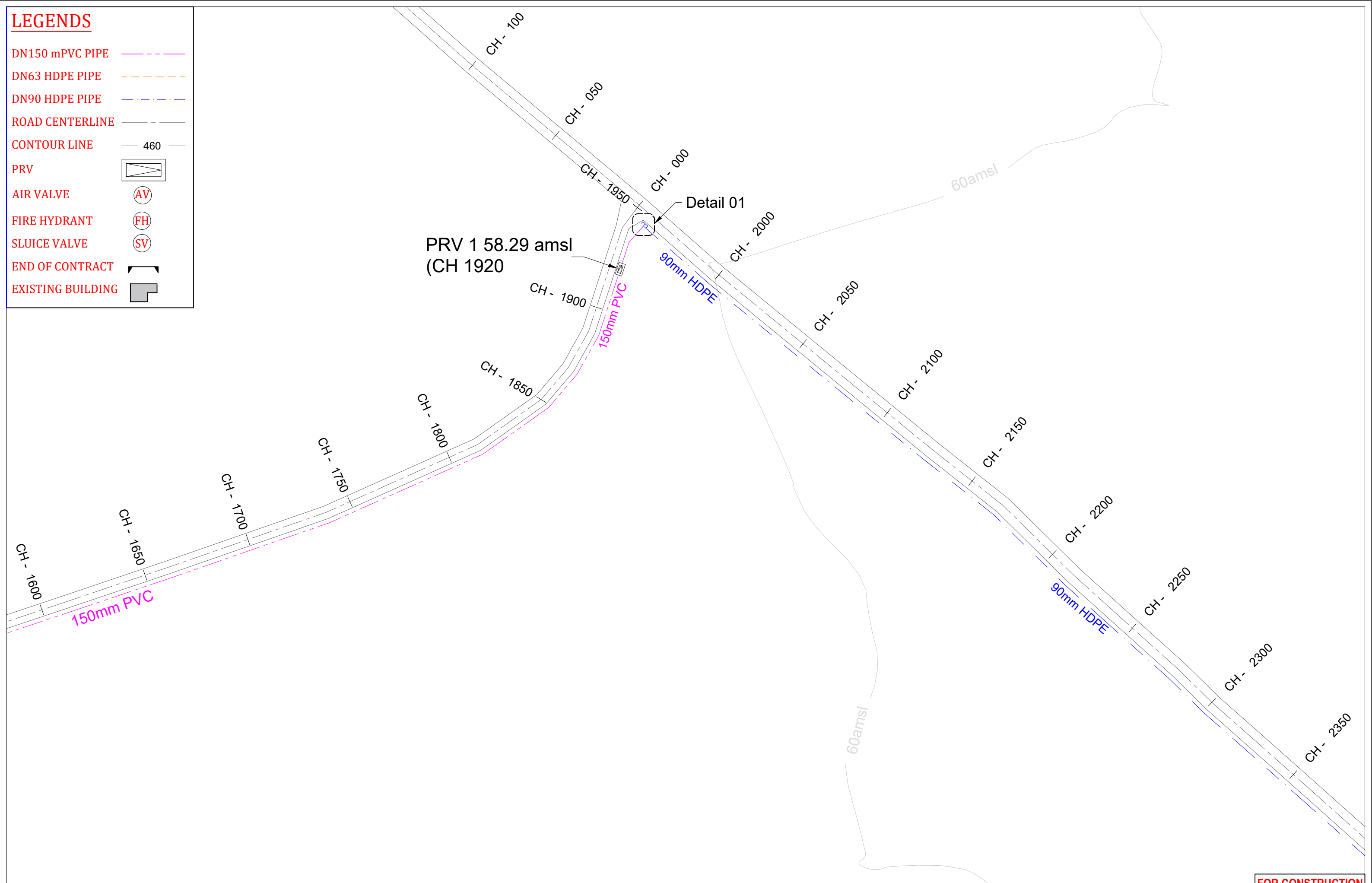
DRAWING TITLE: **NETWORK SHEET 03**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150		DRAWING NUMBER: S23 - 004

LEGENDS

- DN150 mPVC PIPE ---
- DN63 HDPE PIPE ---
- DN90 HDPE PIPE ---
- ROAD CENTERLINE ---
- CONTOUR LINE --- 460
- PRV 
- AIR VALVE 
- FIRE HYDRANT 
- SLUICE VALVE 
- END OF CONTRACT 
- EXISTING BUILDING 




	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---			---	--
DRAWN:	--	---			---	--
DSGN CHECKED:	--	---			---	--
DWG CHECKED:	--	---			---	--
APPROVED:	--	---			---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

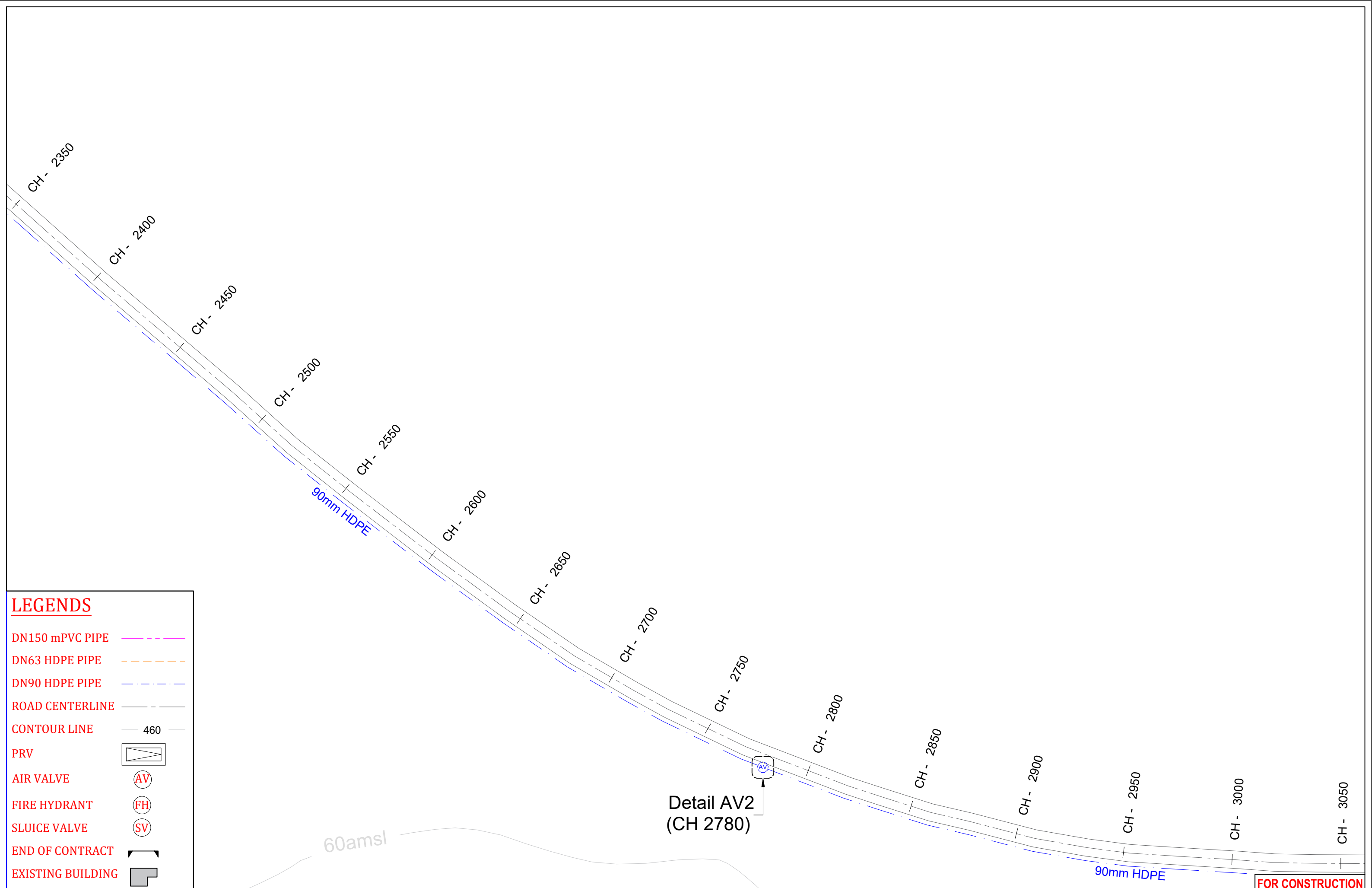
DRAWING TITLE: **NETWORK SHEET 04**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 005	

FOR CONSTRUCTION



LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT
- EXISTING BUILDING

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---			---	--
DRAWN:	--	---			---	--
DSGN CHECKED:	--	---			---	--
DWG CHECKED:	--	---			---	--
APPROVED:	--	---			---	--

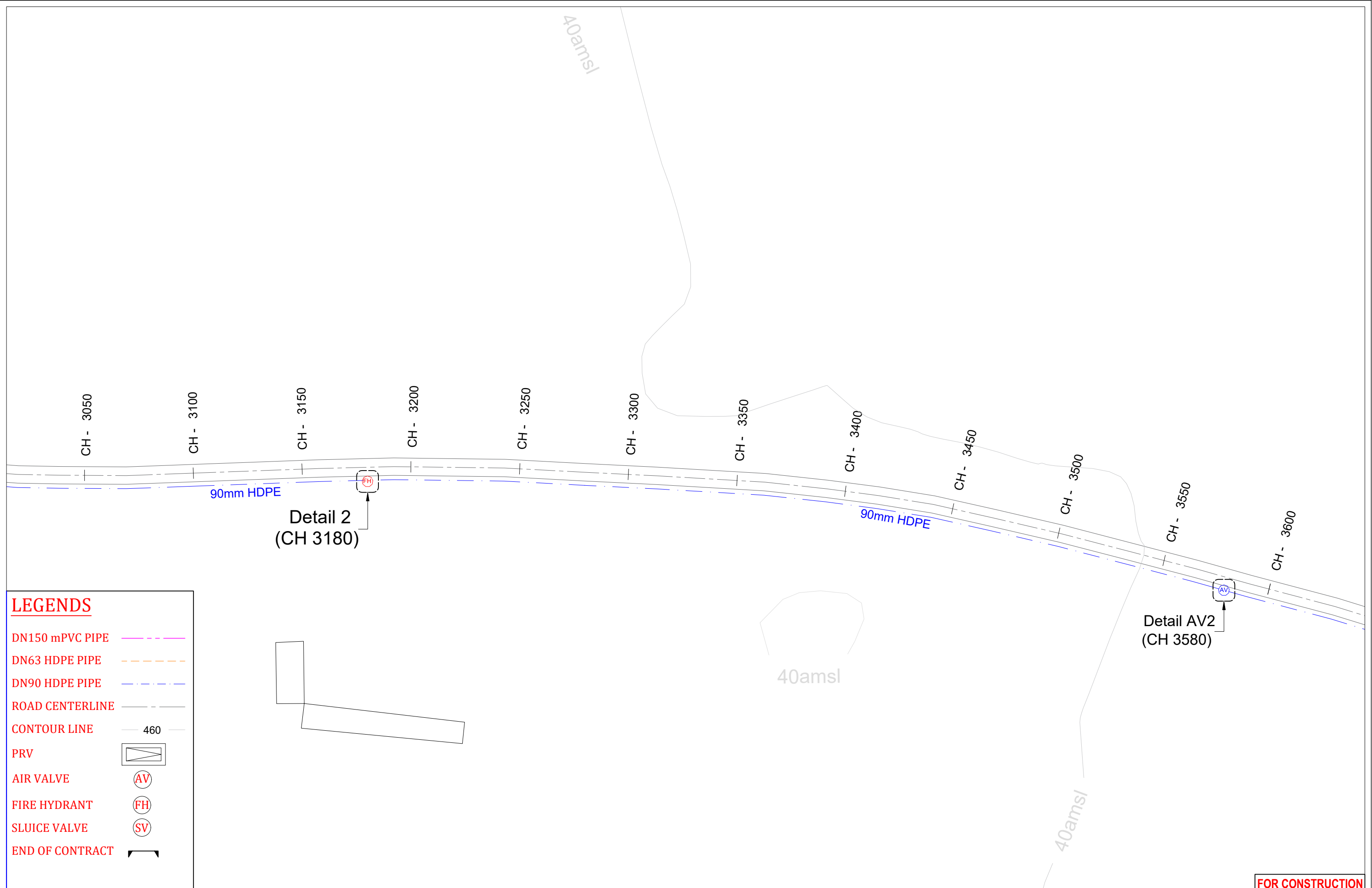
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **NETWORK SHEET 05**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 006	

FOR CONSTRUCTION



LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---			---	--
DRAWN:	--	---			---	--
DSGN CHECKED:	--	---			---	--
DWG CHECKED:	--	---			---	--
APPROVED:	--	---			---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

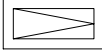




DRAWING TITLE: **NETWORK SHEET 06**

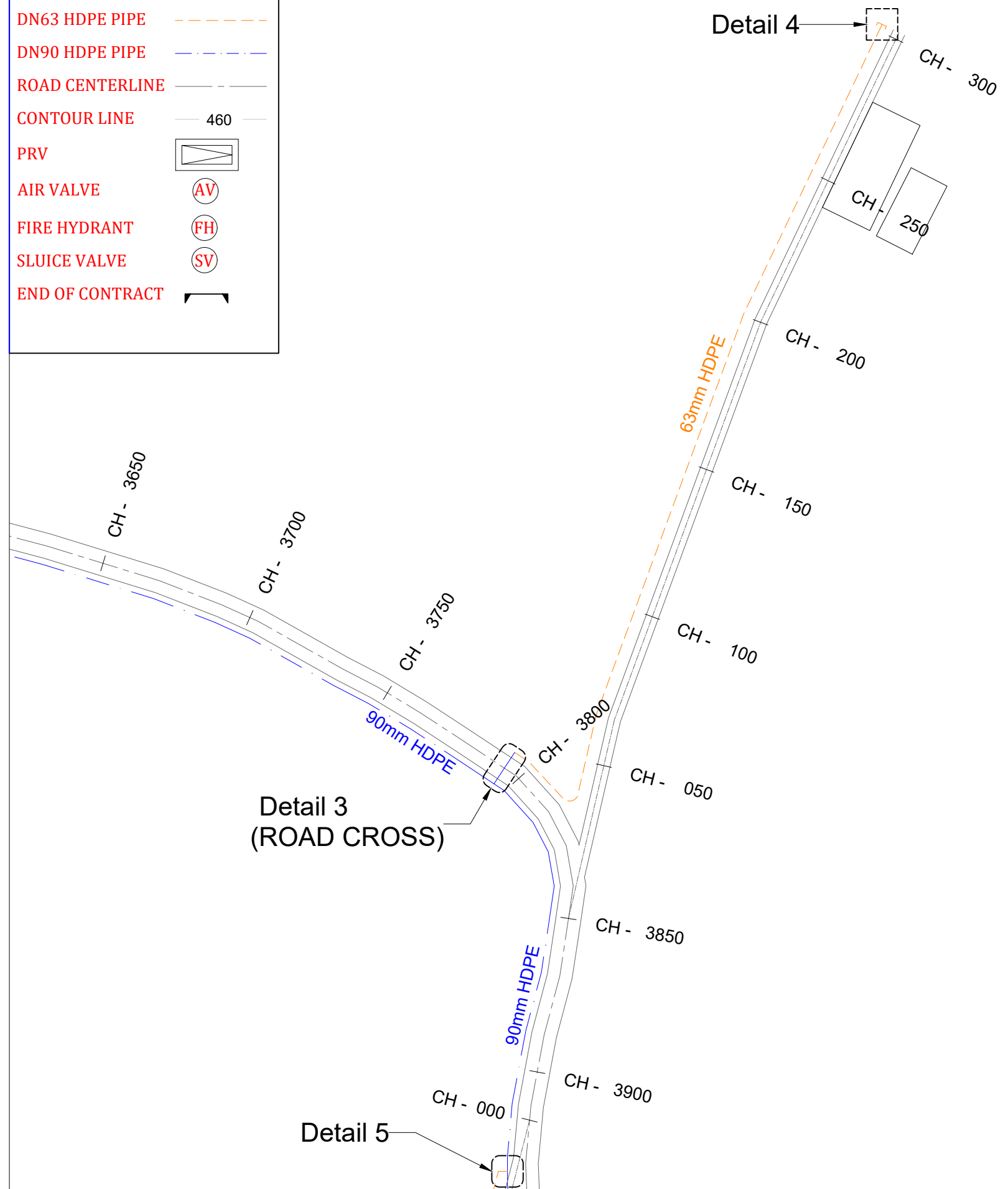
SAMOA WATER AUTHORITY
 Level 2 TATTE
 Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
	SCALE: 1:150	DRAWING NUMBER: S23 - 007

FOR CONSTRUCTION

LEGENDS

- DN150 mPVC PIPE ---
- DN63 HDPE PIPE ---
- DN90 HDPE PIPE ---
- ROAD CENTERLINE ---
- CONTOUR LINE 460 ---
- PRV 
- AIR VALVE 
- FIRE HYDRANT 
- SLUICE VALVE 
- END OF CONTRACT 



FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---		---	--
DRAWN:	--	---		---	--
DSGN CHECKED:	--	---		---	--
DWG CHECKED:	--	---		---	--
APPROVED:	--	---		---	--

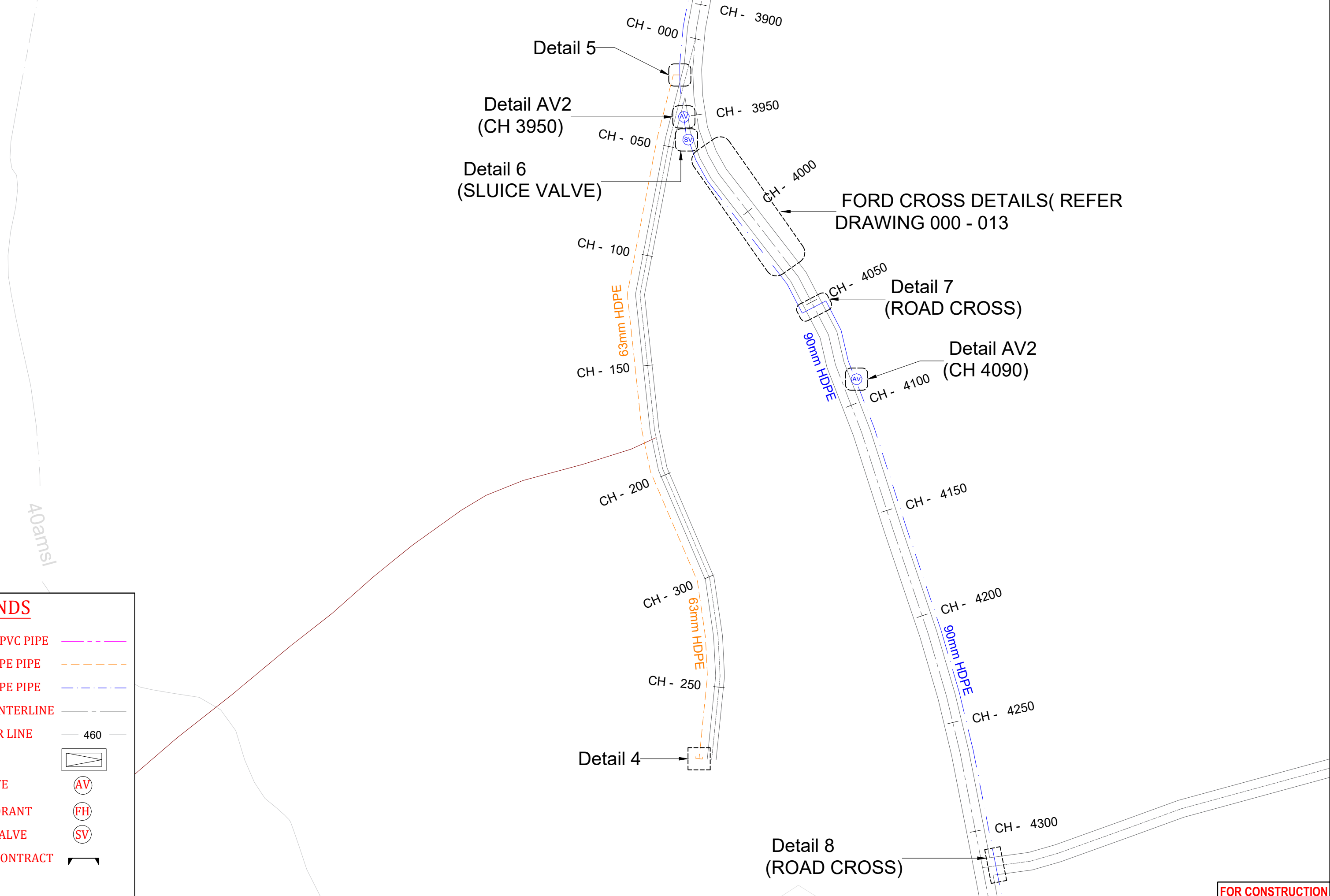
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **NETWORK SHEET 07**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150		DRAWING NUMBER: S23 - 008



FORD CROSS DETAILS(REFER DRAWING 000 - 013

Detail 7 (ROAD CROSS)

Detail AV2 (CH 4090)

Detail 8 (ROAD CROSS)

Detail 5

Detail AV2 (CH 3950)

Detail 6 (SLUICE VALVE)

Detail 4

LEGENDS

- DN150 mPVC PIPE
- DN63 HDPE PIPE
- DN90 HDPE PIPE
- ROAD CENTERLINE
- CONTOUR LINE 460
- PRV
- AIR VALVE
- FIRE HYDRANT
- SLUICE VALVE
- END OF CONTRACT

FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---		---	--
DRAWN:	--	---		---	--
DSGN CHECKED:	--	---		---	--
DWG CHECKED:	--	---		---	--
APPROVED:	--	---		---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **NETWORK SHEET 08**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 009	

Detail 8
(ROAD CROSS)

40amsl

20amsl

CH - 4300

CH - 4350

CH - 4400

CH - 4450

CH - 4500

CH - 4550

Detail AV2
(CH 4560)

CH - 4600

CH - 4650






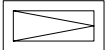




CH - 4700

90mm HDPE

90mm HDPE

40amsl

LEGENDS

- DN150 mPVC PIPE 
- DN63 HDPE PIPE 
- DN90 HDPE PIPE 
- ROAD CENTERLINE 
- CONTOUR LINE  460
- PRV 
- AIR VALVE 
- FIRE HYDRANT 
- SLUICE VALVE 
- END OF CONTRACT 

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---			---	--
DRAWN:	--	---			---	--
DSGN CHECKED:	--	---			---	--
DWG CHECKED:	--	---			---	--
APPROVED:	--	---			---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

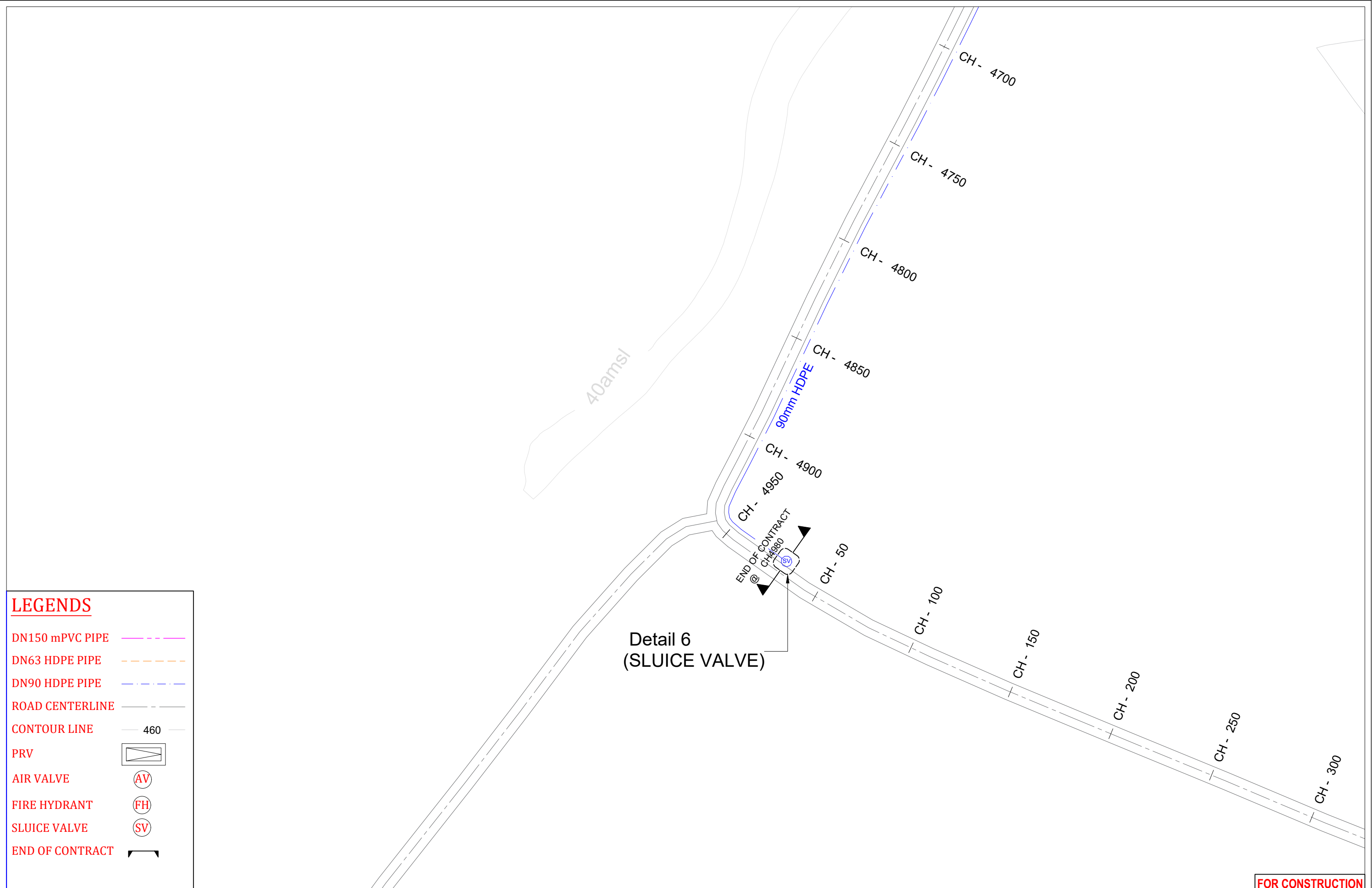
DRAWING TITLE: **NETWORK SHEET 09**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 010	

FOR CONSTRUCTION



LEGENDS

DN150 mPVC PIPE	
DN63 HDPE PIPE	
DN90 HDPE PIPE	
ROAD CENTERLINE	
CONTOUR LINE	460
PRV	
AIR VALVE	
FIRE HYDRANT	
SLUICE VALVE	
END OF CONTRACT	

	BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	--
DRAWN:	--	--
DSGN CHECKED:	--	--
DWG CHECKED:	--	--
APPROVED:	--	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

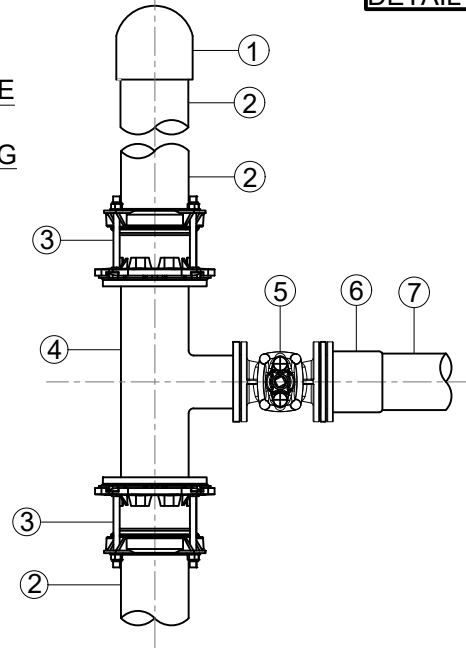
DRAWING TITLE: **NETWORK SHEET 10**

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: 1:150	DRAWING NUMBER: S23 - 011	

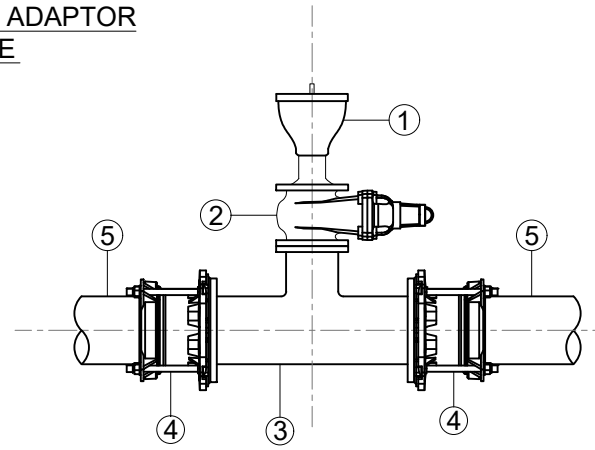
FOR CONSTRUCTION

- ① DN150 PVC END CAP
- ② DN150 PVC PIPE
- ③ DN150 FLANGE ADAPTOR
- ④ DN150X80 FLANGE DI REDUCING TEE
- ⑤ DN80 DI SLUICE VALVE
- ⑥ DN80 STUB FLANGE & BACKING RING
- ⑦ DN90 HDPE PIPE



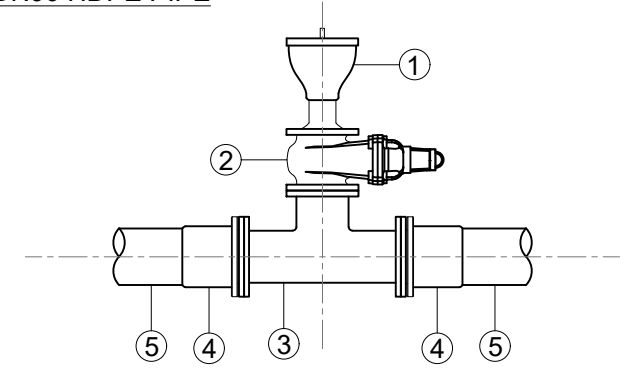
DETAIL 1

- ① DN100 DOUBLE ACTING AIR VALVE
- ② DN100 SLUICE VALVE
- ③ DN150x100 FLANGE DI EQUAL TEE
- ④ DN150 FLANGE ADAPTOR
- ⑤ DN150 PVC PIPE



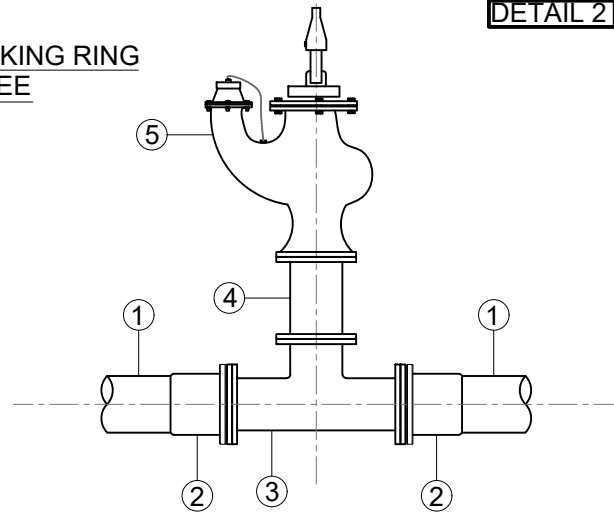
AV1

- ① DN80 DOUBLE ACTING AIR VALVE
- ② DN80 SLUICE VALVE
- ③ DN80 FLANGE DI EQUAL TEE
- ④ DN90 STUB FLANGE & BACKING RING
- ⑤ DN90 HDPE PIPE



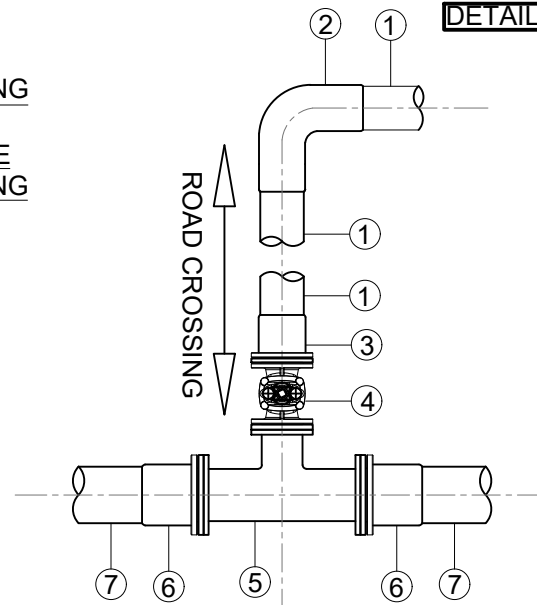
AV2

- ① DN90 HDPE PIPE
- ② DN90 STUB FLANGE & BACKING RING
- ③ DN80 FLANGE DI EQUAL TEE
- ④ DN80 DI FLANGE RISER
- ⑤ DN80 FIRE HYDRANT



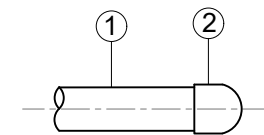
DETAIL 2

- ① DN63 HDPE PIPE
- ② DN63x90° EF BEND
- ③ DN63 STUB FLANGE & BACKING RING
- ④ DN50 SLUICE VALVE
- ⑤ DN80x50 DI FLANGE REDUCING TEE
- ⑥ DN90 STUB FLANGE & BACKING RING
- ⑦ DN90 HDPE PIPE



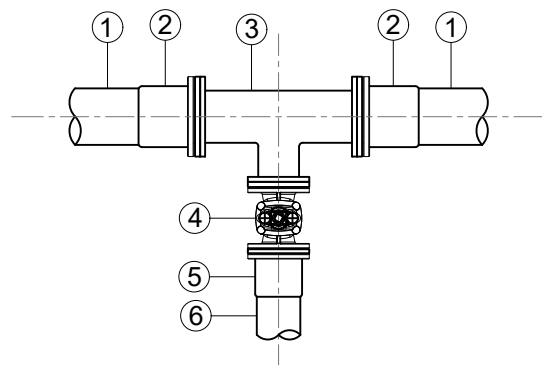
DETAIL 3

- ① DN63 HDPE PIPE
- ② DN63 END CAP



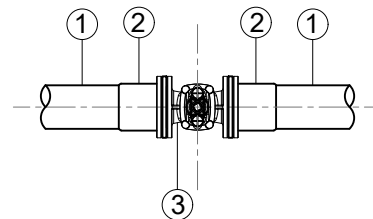
DETAIL 4

- ① DN90 HDPE PIPE
- ② DN90 STUB FLANGE & BACKING RING
- ③ DN80x50 DI FLANGE REDUCING TEE
- ④ DN50 SLUICE VALVE
- ⑤ DN63 STUB FLANGE & BACKING RING
- ⑥ DN63 HDPE PIPE



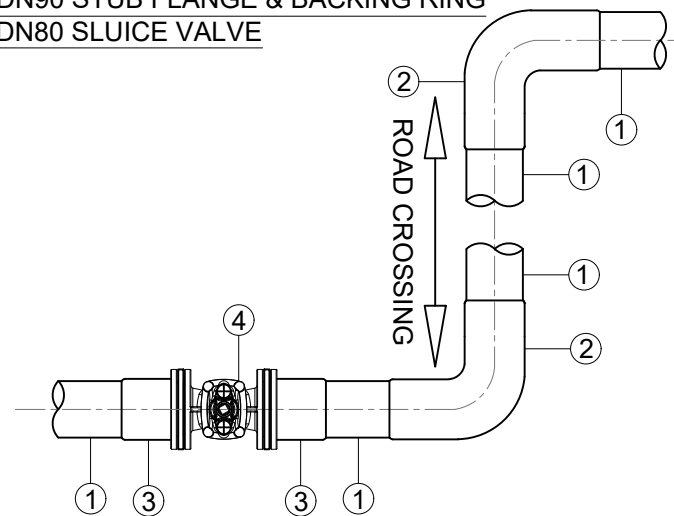
DETAIL 5

- ① DN90 HDPE PIPE
- ② DN90 STUB FLANGE & BACKING RING
- ③ DN80 SLUICE VALVE



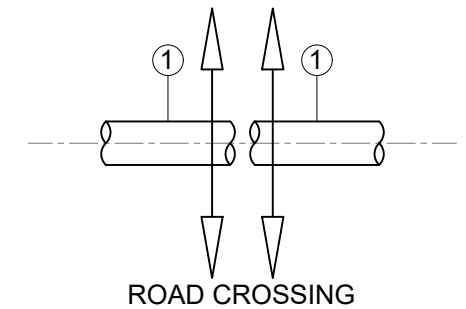
DETAIL 6

- ① DN90 HDPE PIPE
- ② DN90x90° EF BEND
- ③ DN90 STUB FLANGE & BACKING RING
- ④ DN80 SLUICE VALVE



DETAIL 7

- ① DN90 HDPE PIPE



DETAIL 8

FOR CONSTRUCTION

BY:	DATE:	REV:	DESCRIPTIONS:	DATE:	APPROV:
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

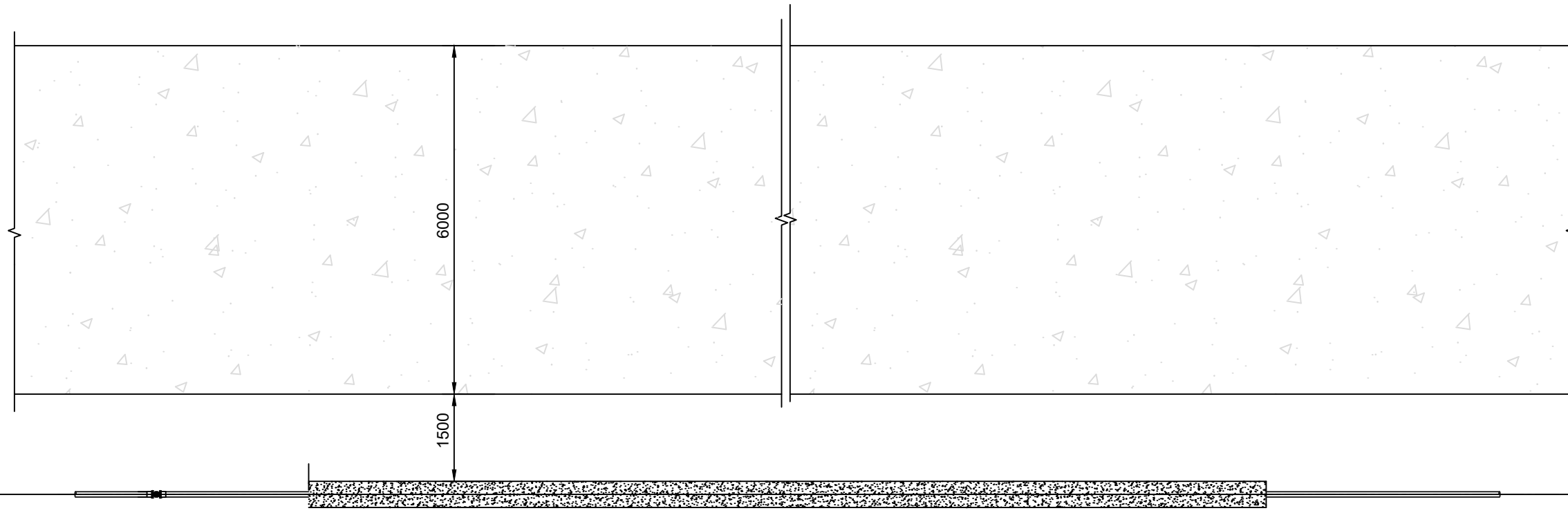
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **DETAIL CONNECTION**

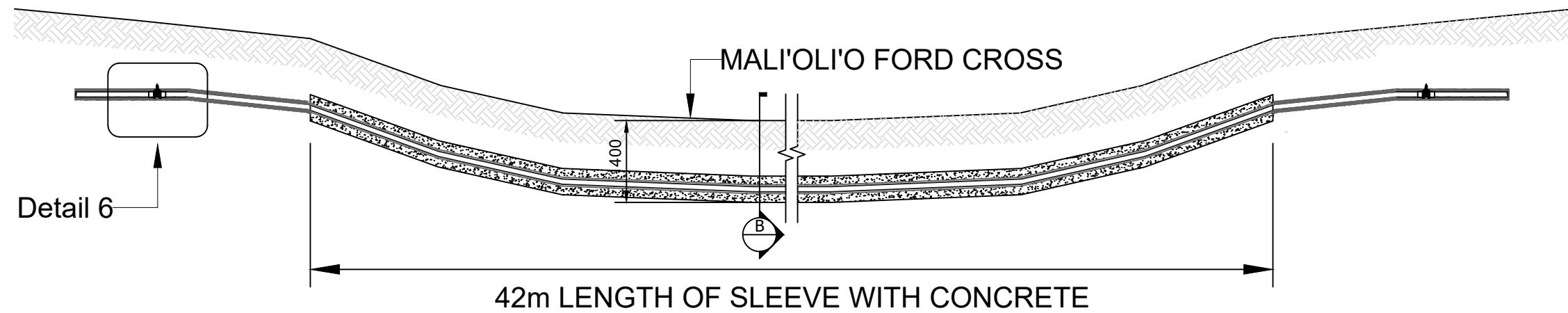
SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE:	CONTRACT NUMBER:	REVISION:
A3	SWA - S23 / 2024	00
SCALE:	DRAWING NUMBER:	
NTS	S23 - 012	

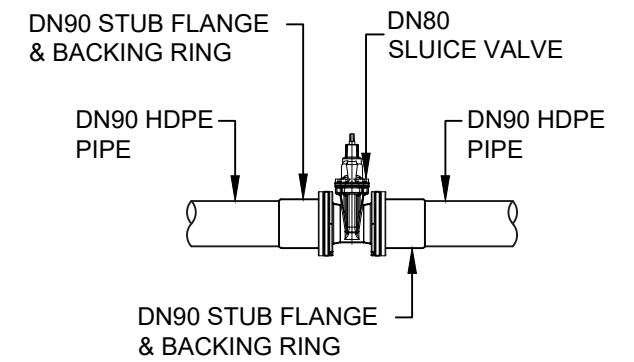


PLAN VIEW

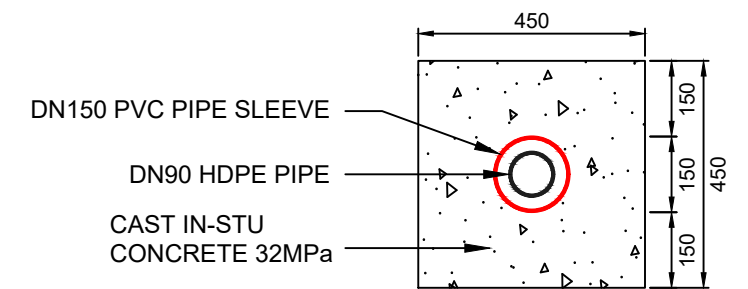


42m LENGTH OF SLEEVE WITH CONCRETE

SECTION A



DETAIL 6
SCALE 1:15



CROSS SECTION B
SCALE 1:15

FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APPROV
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

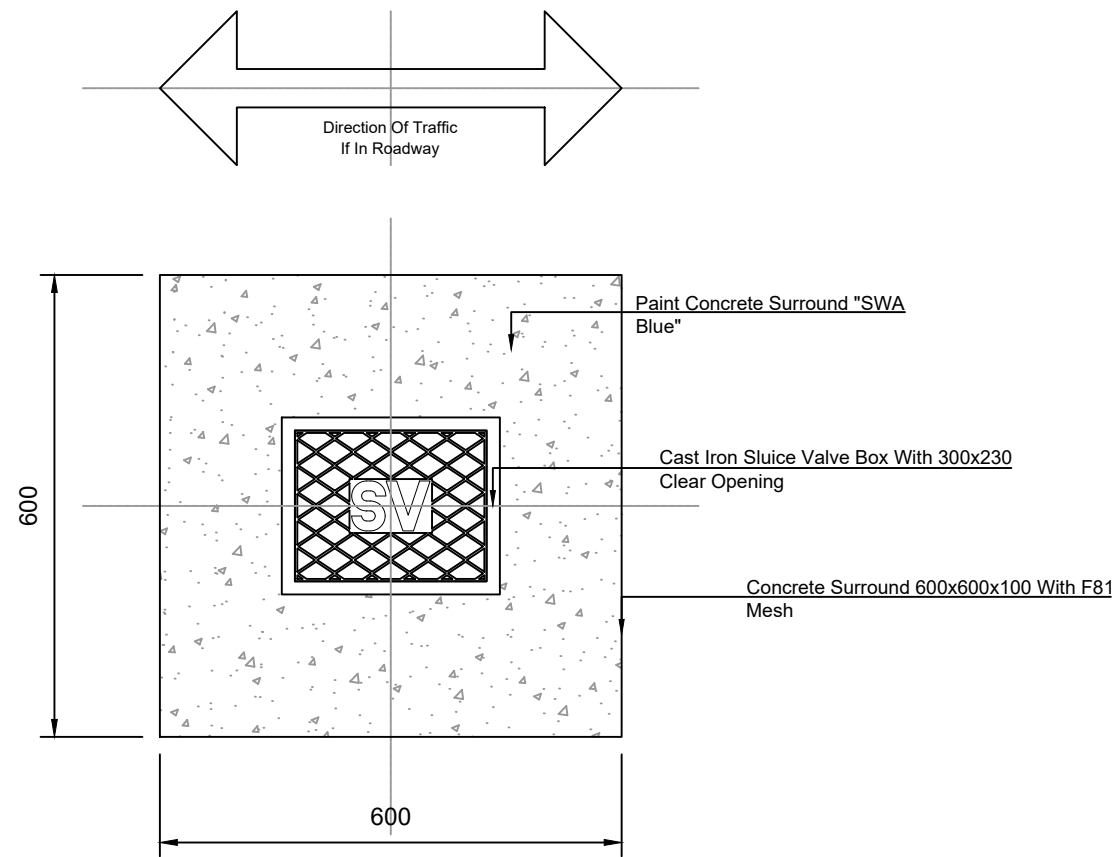
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **FORD CROSSING DETAILS**

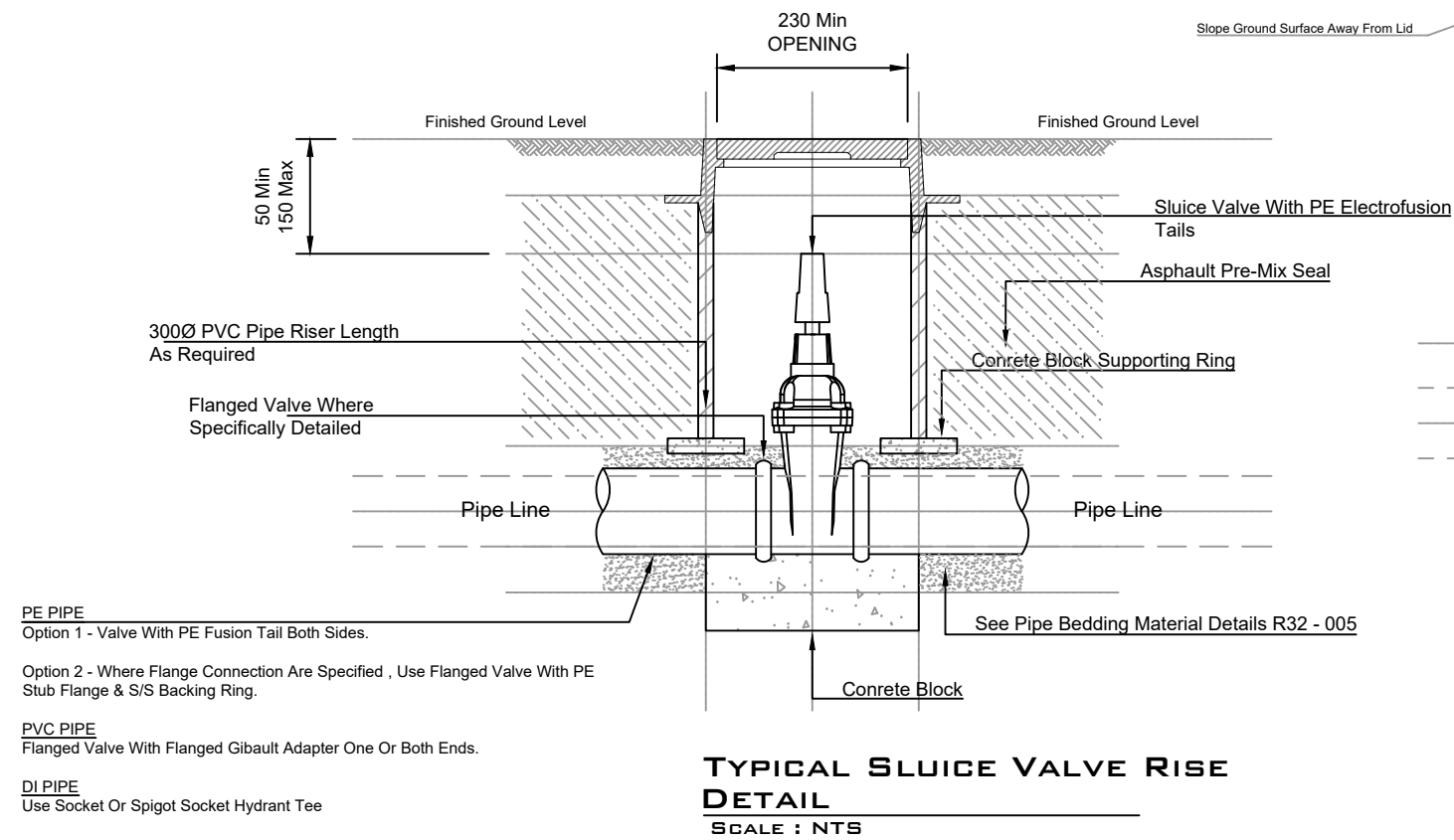
SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



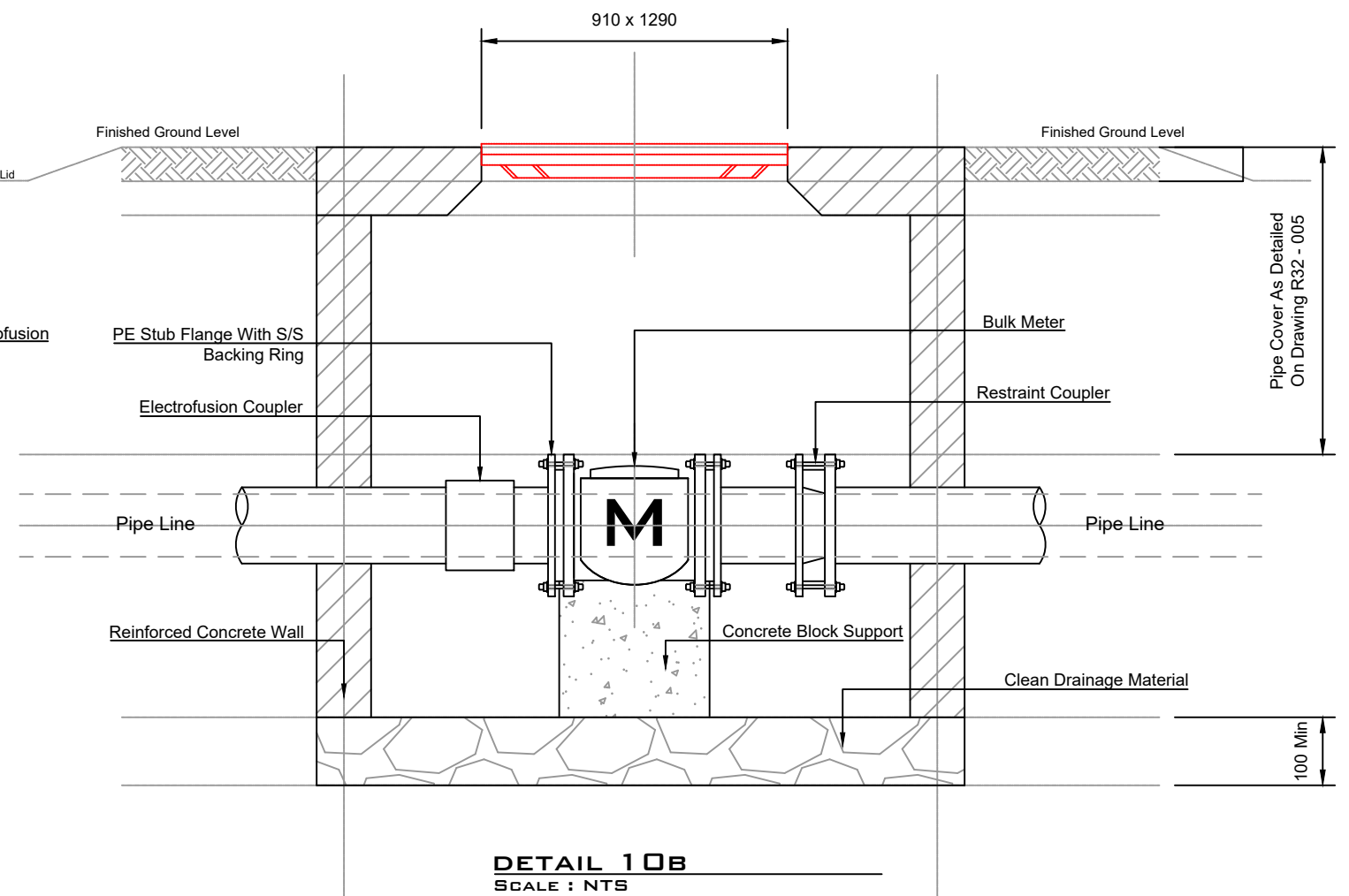
SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: NTS	DRAWING NUMBER: S23 - 013	



SLUICE VALVE LID DETAIL
SCALE : NTS



TYPICAL SLUICE VALVE RISE DETAIL
SCALE : NTS



DETAIL 10B
SCALE : NTS

FOR CONSTRUCTION

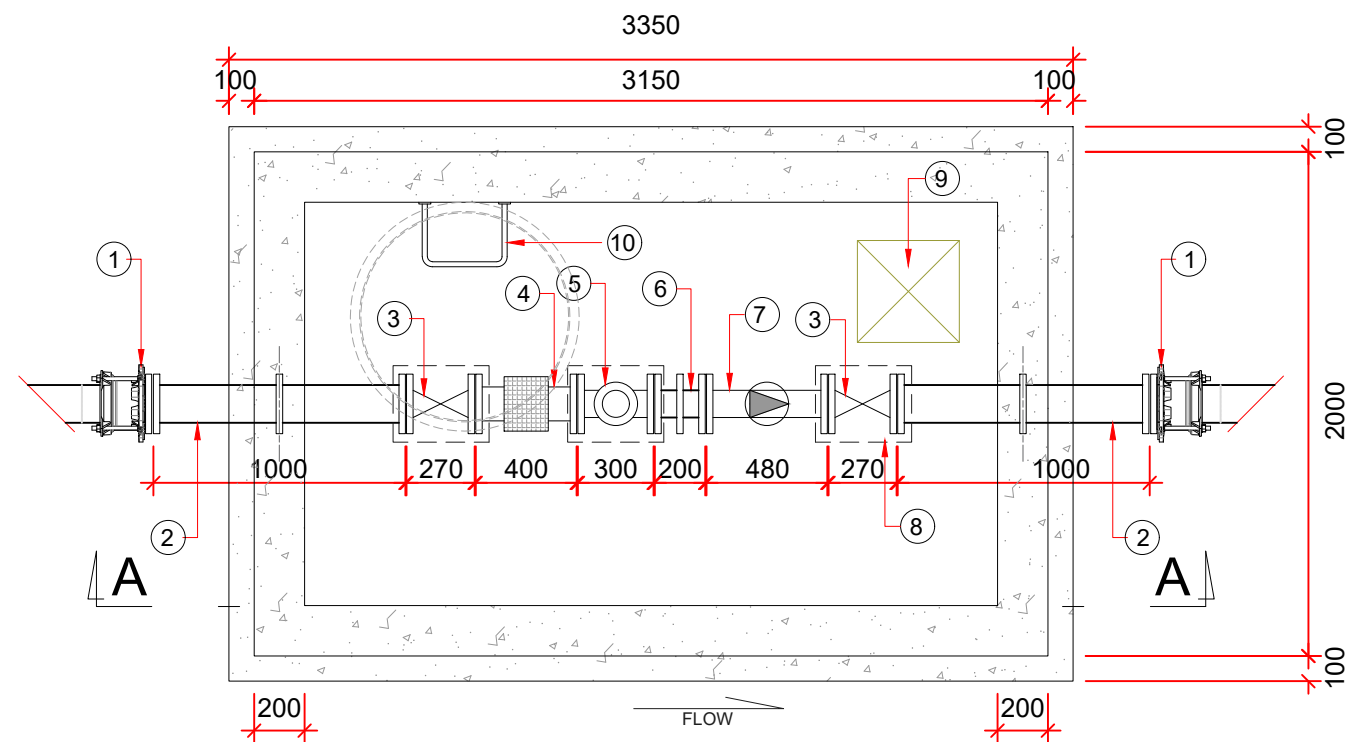
BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---		---	--
DRAWN:	--	---		---	--
DSGN CHECKED:	--	---		---	--
DWG CHECKED:	--	---		---	--
APPROVED:	--	---		---	--

PROJECT TITLE:
MAUGA & SAMALAEULU NETWORK

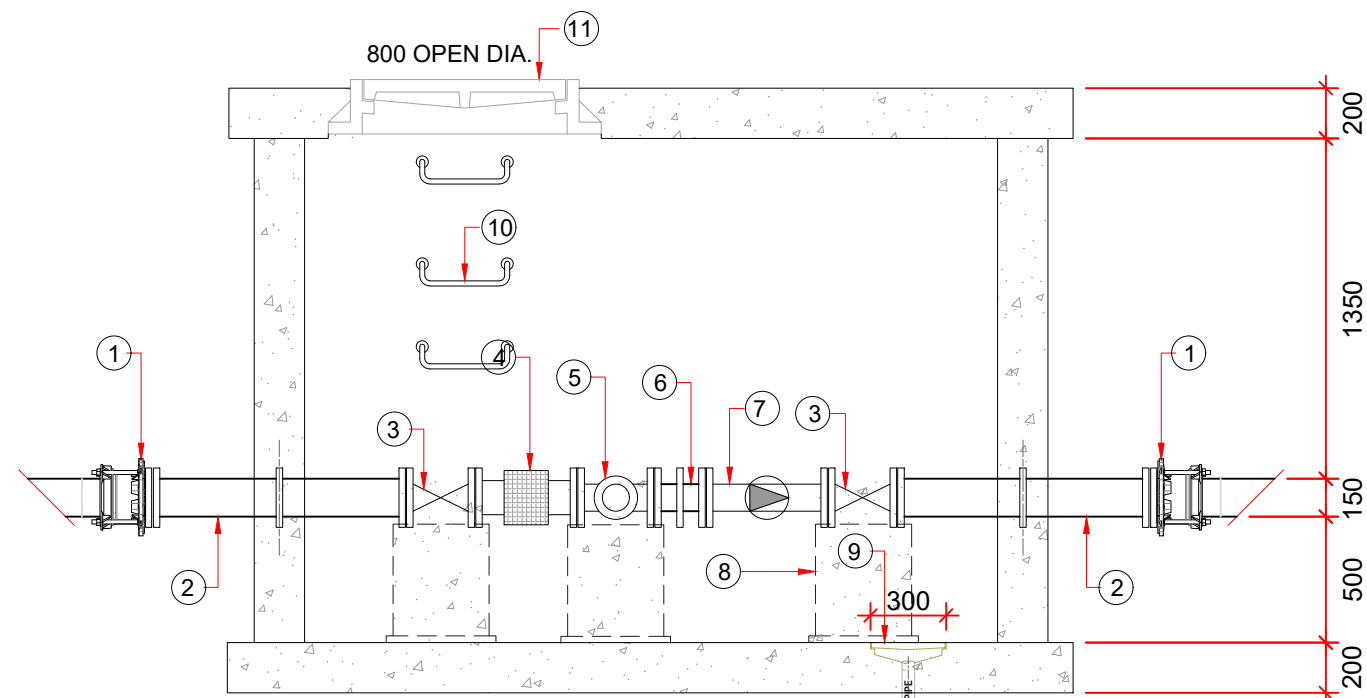
DRAWING TITLE:
VALVE CHAMBER DETAIL

SAMOA WATER AUTHORITY
Level 2 TATTE Building
Apia, Sogi
Ph: +685 20409
Fax: +685 21298

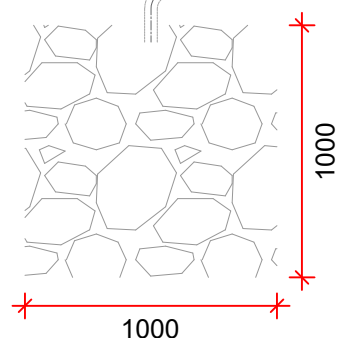
SIZE A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION 00
SCALE: NTS	DRAWING NUMBER: S23 - 014	



1 150MM Ø PRV Chamber Plan
SCALE - 1:30



1A SECTION A - A
SCALE - 1:30



150MM Ø PRV COMPONENT LIST	
1	DN150 FLANGE ADAPTOR
2	DOUBLE FLANGED SPOOL 1000MM DI PN16 DN150 WITH PUDDLE FLANGE
3	DN150 SLUICE VALVE
4	DN150 Ø STRAINER
5	DN150 FLOW METER
6	DN150 DISMANTLING JOINT
7	DN150 Ø PRESSURE REDUCING VALVE
8	CONCRETE SUPPORT
9	300MM X 300MM DRAINAGE SUMP
10	RUNG LADDERS @ 300MM CTRS
11	GALVANISED, HINGED & LOCKABLE 800MM OPENING CARRIAGEWAY COVER


FOR CONSTRUCTION

BY:	DATE:	REV:	DESCRIPTIONS:	DATE:	APPROV:
DESIGNED:	--	---	---	---	---
DRAWN:	--	---	---	---	---
DSGN CHECKED:	--	---	---	---	---
DWG CHECKED:	--	---	---	---	---
APPROVED:	--	---	---	---	---

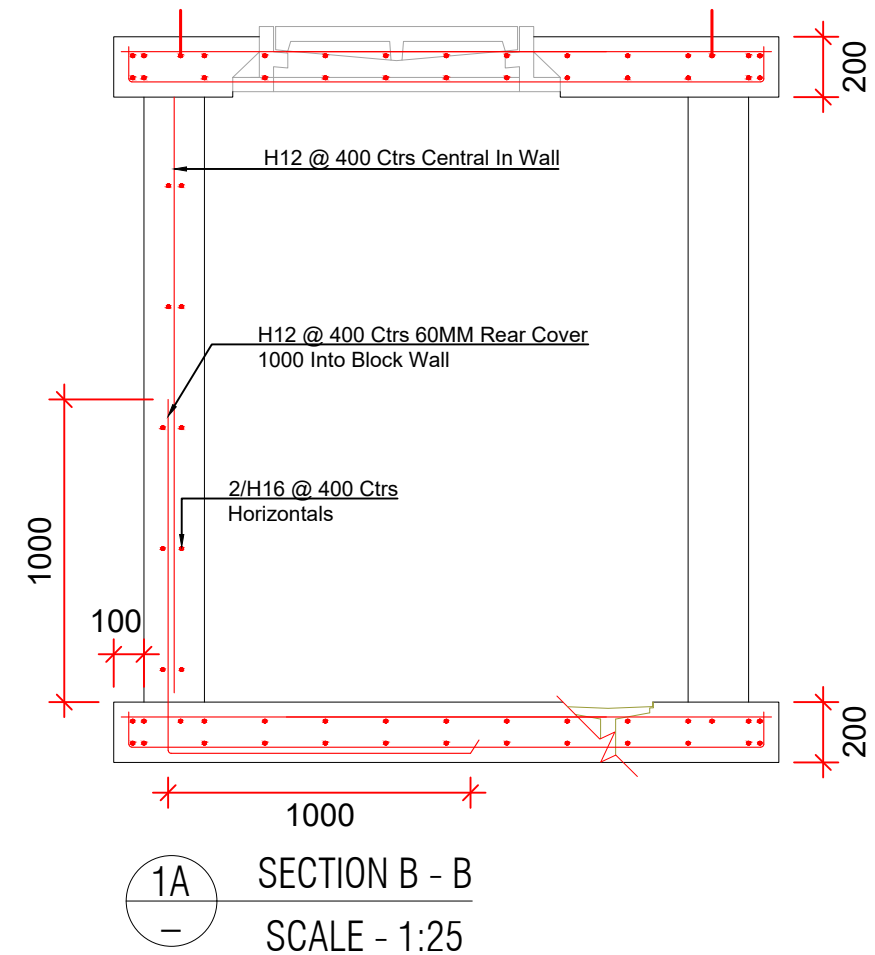
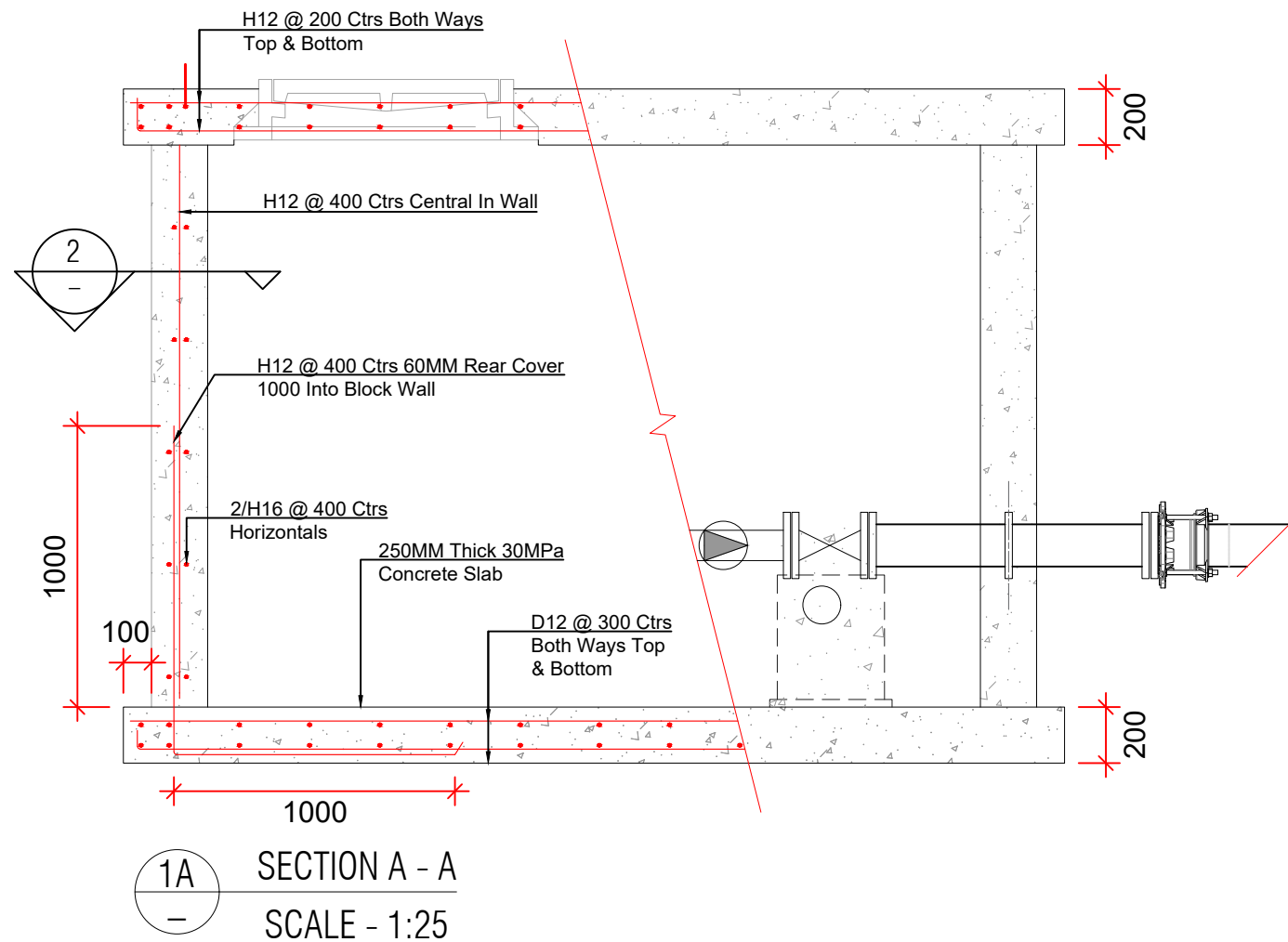
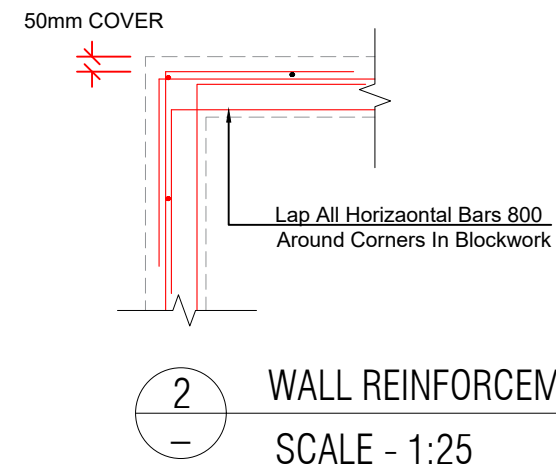
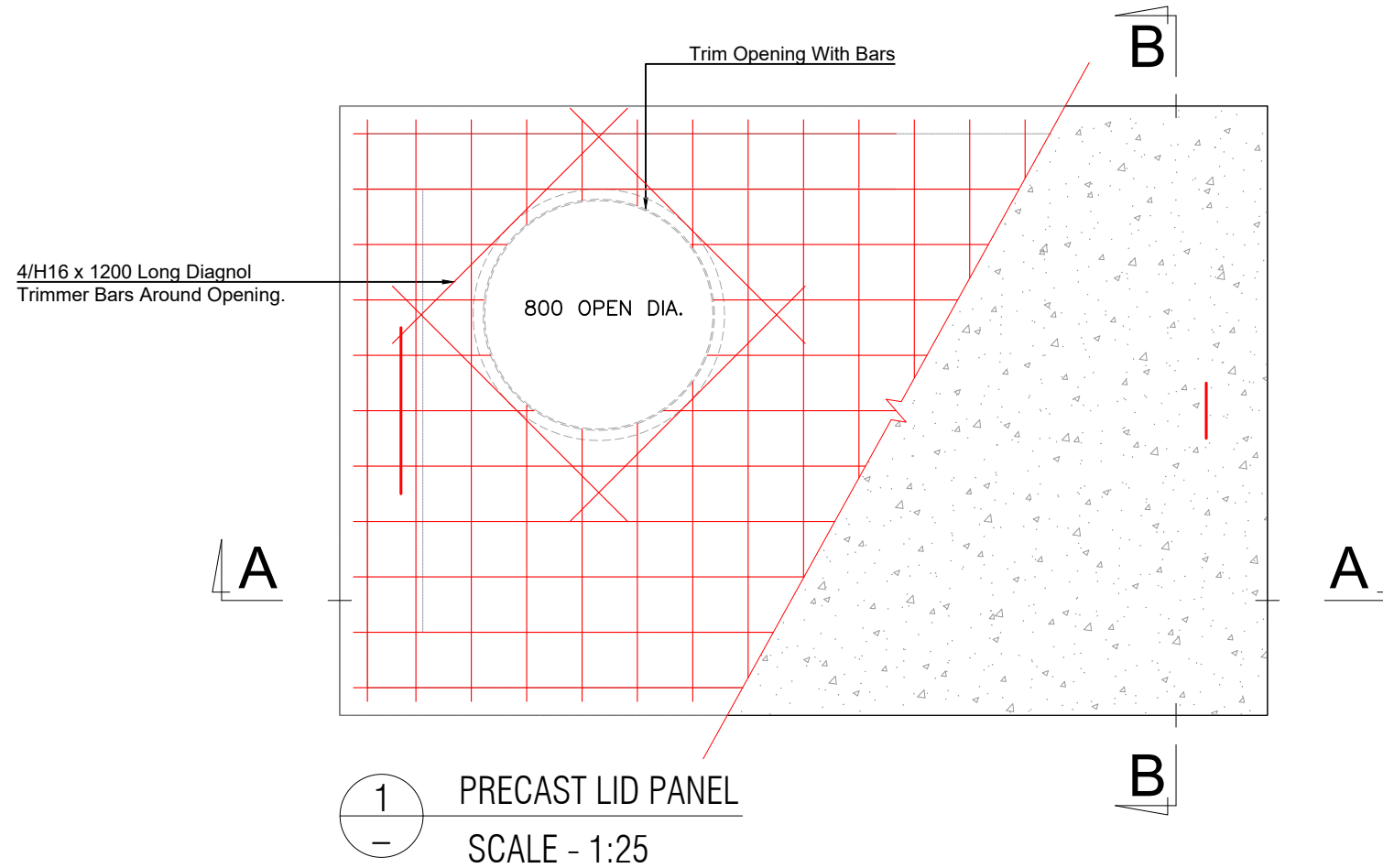
PROJECT TITLE: MAUGA & SAMALAEULU NETWORK

DRAWING TITLE: 150MM PRV CHAMBER PLAN PLAN LAYOUT

SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE:	CONTRACT NUMBER:	REVISION:
A3	SWA - S23 / 2024	00
SCALE:	DRAWING NUMBER:	
AS SHOWN	S23 - 015	




FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--				
DRAWN:	--				
DSGN CHECKED:	--				
DWG CHECKED:	--				
APPROVED:	--				

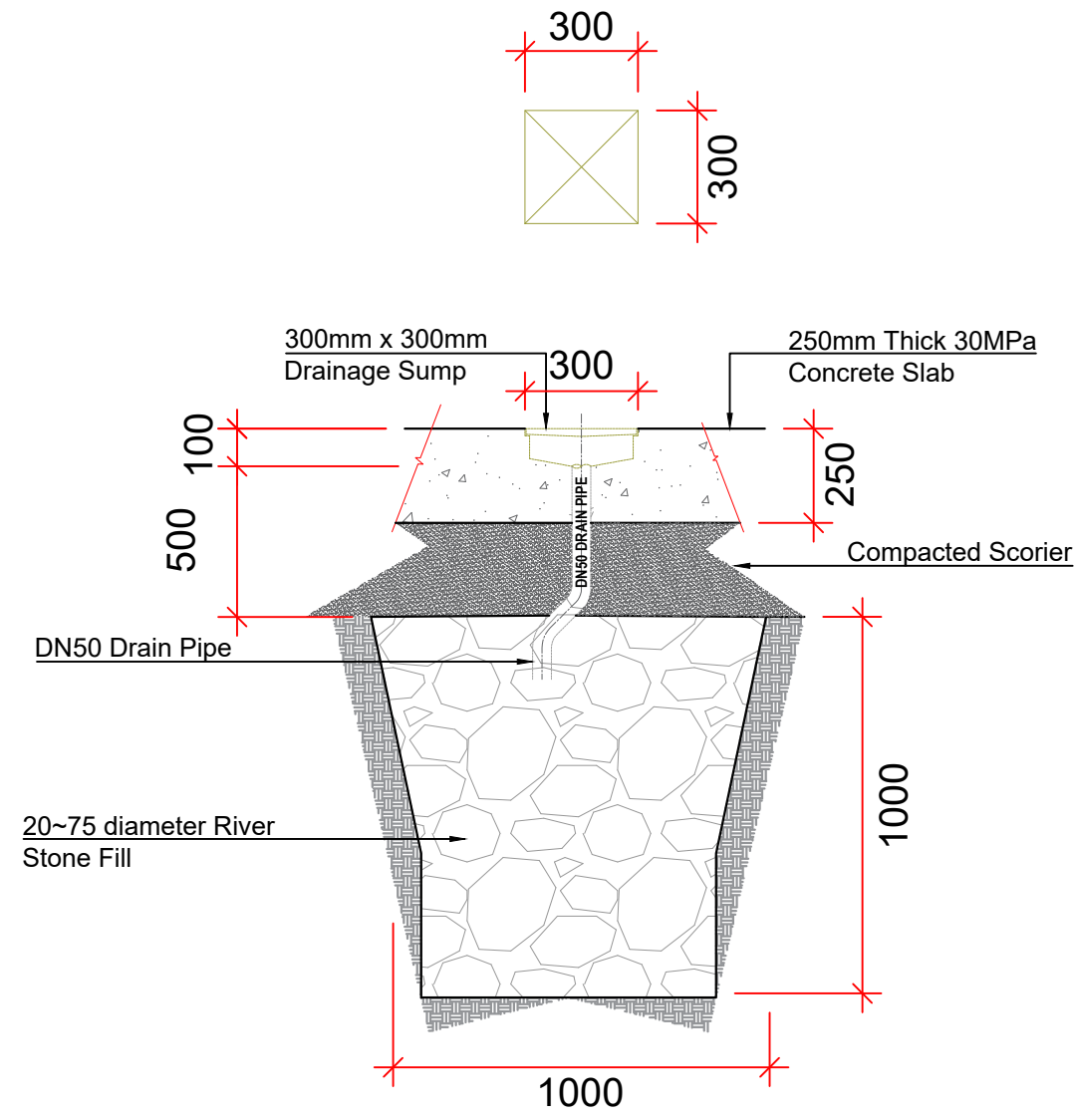
PROJECT TITLE: MAUGA & SAMALAEULU NETWORK

DRAWING TITLE: 150MM PRV CHAMBER REINFORCEMENT DETAIL

SAMOA WATER AUTHORITY
Level 2 TATTE Building
Apia, Sogi
Ph: +685 20409
Fax: +685 21298



SIZE	CONTRACT NUMBER	REVISION
A3	SWA - S23 / 2024	00
SCALE	DRAWING NUMBER	
AS SHOWN	S23 - 016	




DRAINAGE SUMP / SOAK PIT DETAIL
SCALE - 1:20


FOR CONSTRUCTION

DESIGNED:	BY:	DATE:	REV:	DESCRIPTIONS:	DATE:	APRVD:
---	---	---	---	---	---	---
DRAWN:	---	---	---	---	---	---
DSGN CHECKED:	---	---	---	---	---	---
DWG CHECKED:	---	---	---	---	---	---
APPROVED:	---	---	---	---	---	---

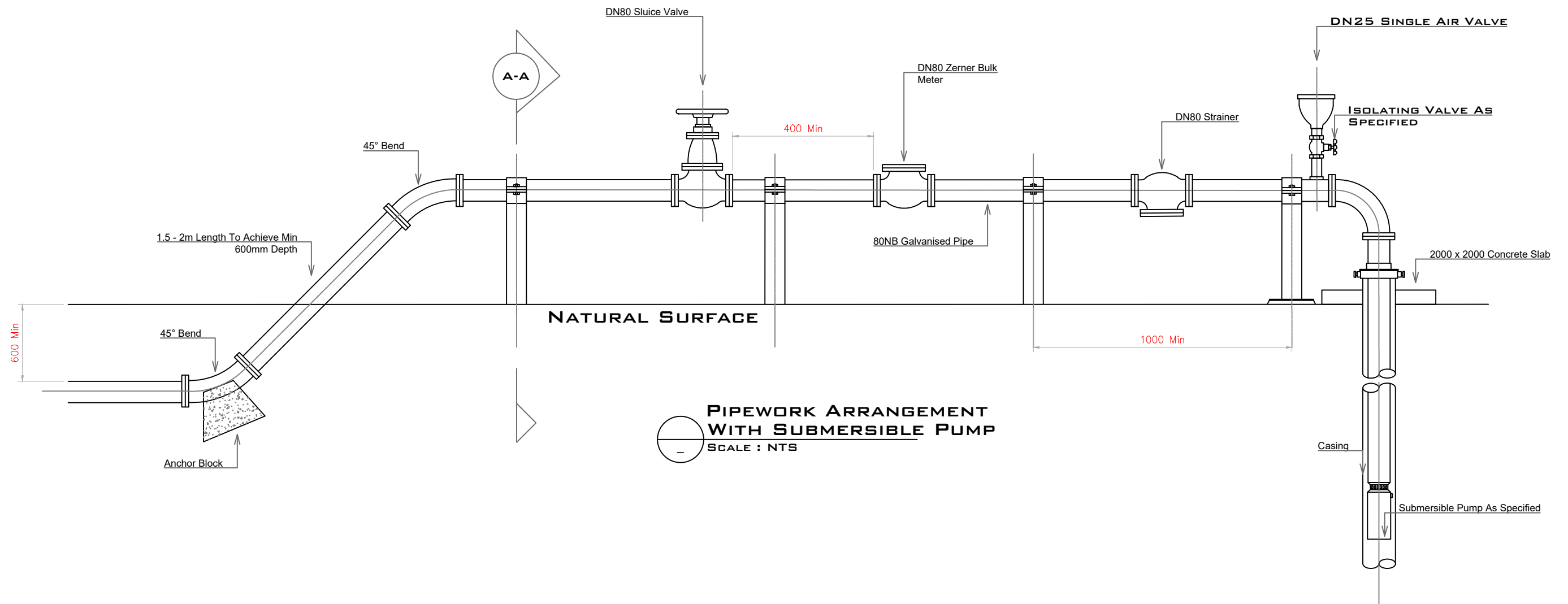
PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **150MM PRV CHAMBER SOAK PIT & DRAINAGE**

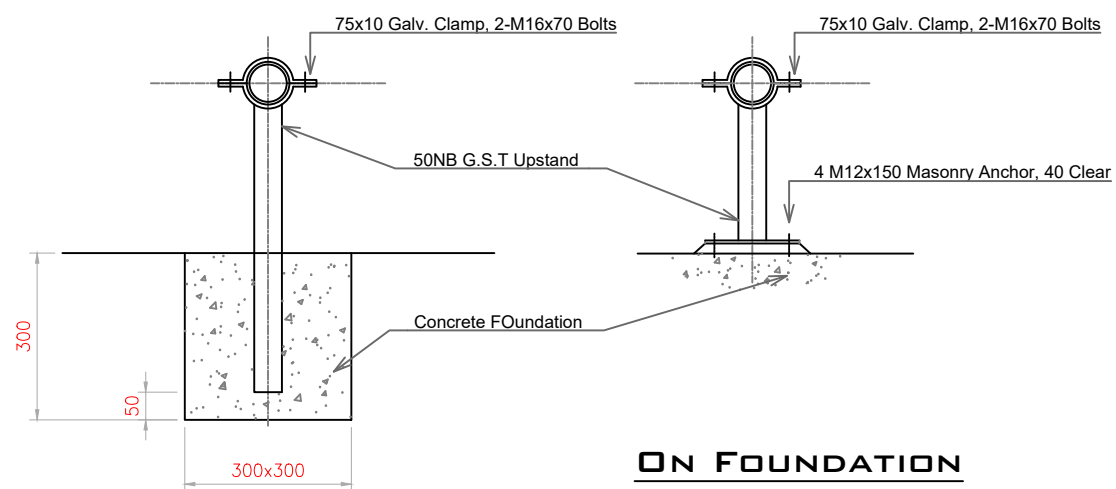
SAMOA WATER AUTHORITY
 Level 2 TATTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298



SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: AS SHOWN	DRAWING NUMBER: S23 - 017	



PIPEWORK ARRANGEMENT WITH SUBMERSIBLE PUMP
SCALE : NTS



PIPE PEDESTAL DETAIL
A-A SCALE : NTS

NOTES:

1. ALL NUTS BOLTS AND STEEL PLATES SHALL BE PAINTED WITH TWO COATS OF INORGANIC ZINC SILICATE.
2. ALL PIPE CONNECTIONS TO FLANGED FITTINGS USING GI FLANGED THREADED SOCKET ADAPTORS. (FLANGES DRILLED TO SUIT)
3. CONCRETE MUST BE ORDINARY CONCRETE 17.5MPA
4. STRAINER AS NECESSARY

FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--	---		---	--
DRAWN:	--	---		---	--
DSGN CHECKED:	--	---		---	--
DWG CHECKED:	--	---		---	--
APPROVED:	--	---		---	--

PROJECT TITLE: **MAUGA & SAMALAEULU NETWORK**

DRAWING TITLE: **PUMP BORE ARRANGEMENT**

SAMOA WATER AUTHORITY
Level 2 TATTE Building
Apia, Sogi
Ph: +685 20409
Fax: +685 21298

SIZE: A3	CONTRACT NUMBER: SWA - S23 / 2024	REVISION: 00
SCALE: NTS	DRAWING NUMBER: S23 - 018	

MINIMUM PIPE COVER

LOCATION	MINIMUM COVER #
NON ROADWAYS	450
ROADS/ROAD RESERVES	600
MAJOR ROADWAYS/EMBANKMENTS	750

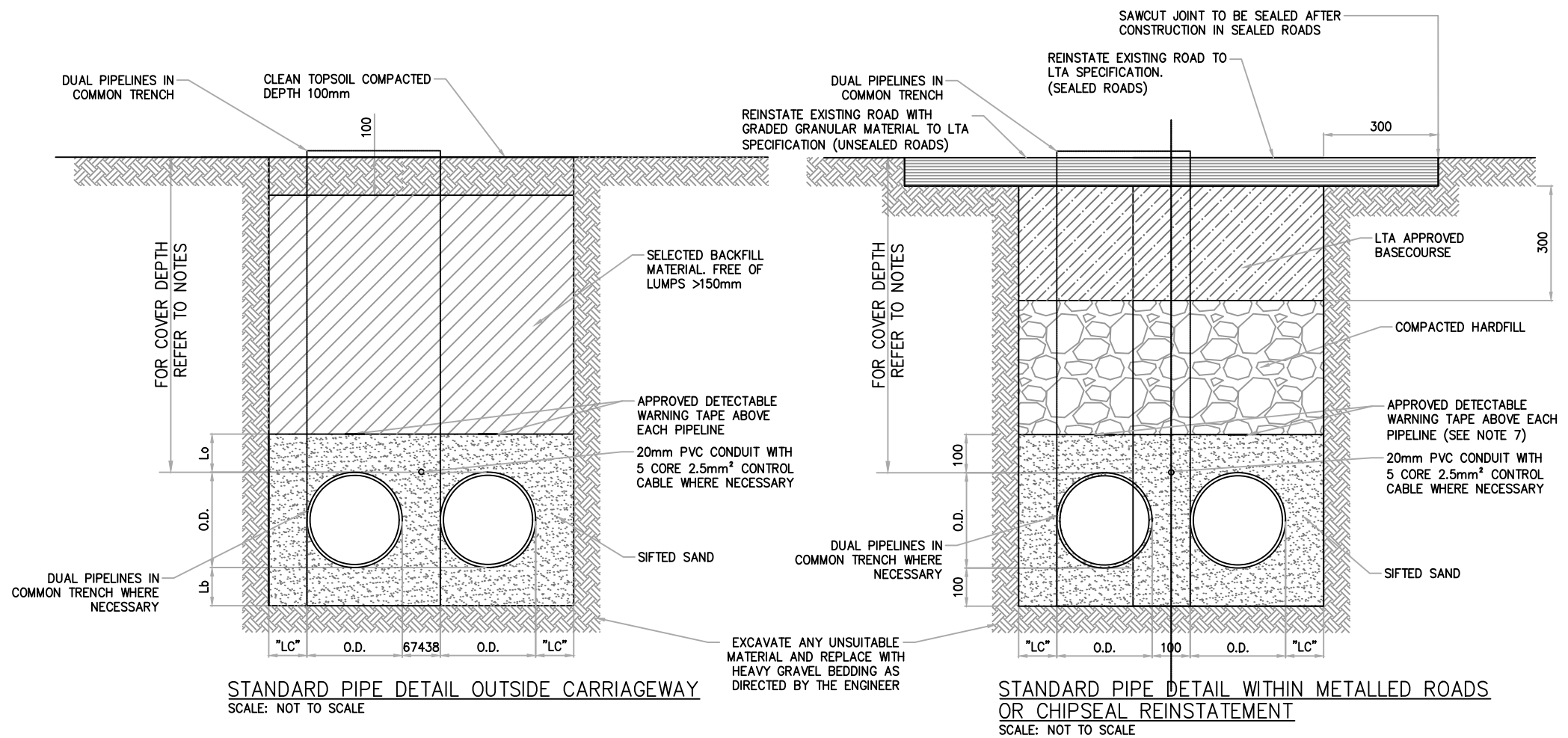
BEDDING & OVERLAY DEPTH

PIPE SIZE (DN)	'Lb' (min)		'Lo' (min)	
	DI STEEL	PVC PE	DI STEEL	PVC PE
50 - ≤ 80	100	100	100	150
100 - ≤ 450	100	150	150	200
>450 - ≤ 900	150	150	150	300

TRENCH CLEARANCE

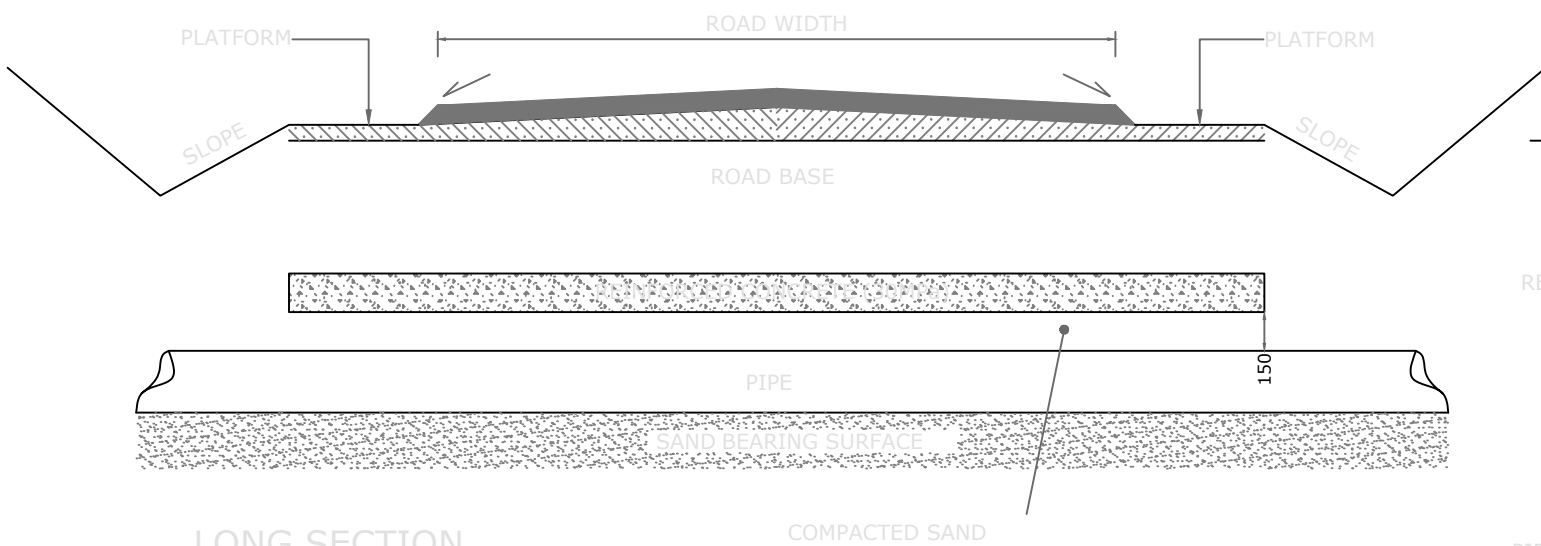
NOMINAL DIAMETER (DN)	MINIMUM CLEARANCE "Lc"
≤ 150	100
> 150 - ≤ 300	150
> 300 - ≤ 450	200
> 450 - ≤ 900	300

TRENCH WIDTH TO BE SUFFICIENT TO SAFELY LAY THE PIPE AND COMPACT THE SIDE SUPPORT ZONE



STANDARD PIPE DETAIL OUTSIDE CARRIAGEWAY
SCALE: NOT TO SCALE

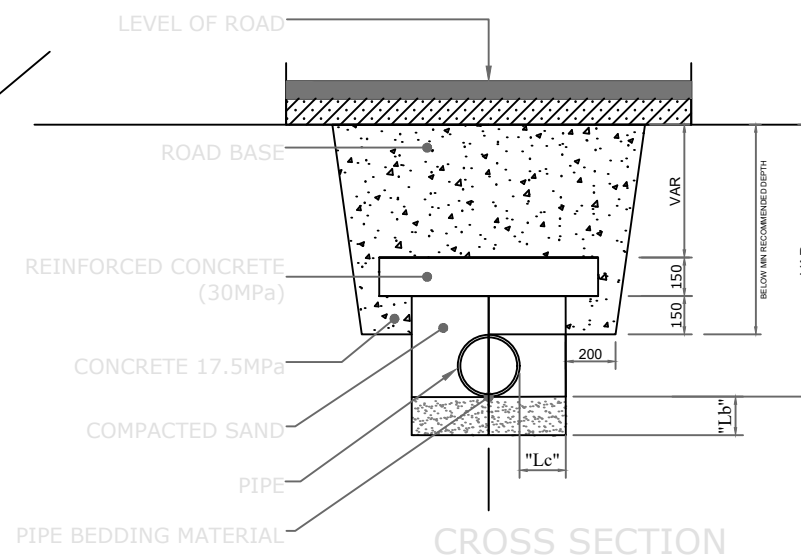
STANDARD PIPE DETAIL WITHIN METALLED ROADS OR CHIPSEAL REINSTATEMENT
SCALE: NOT TO SCALE



LONG SECTION

COMPACTED SAND

PIPE ROAD CROSSING



CROSS SECTION

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS
2. SIDES OF EXCAVATION TO BE KEPT VERTICAL TO AT LEAST 150 ABOVE PIPE.
3. ALL BACKFILL IS TO BE COMPACTED IN 150 MAX LAYERS TO OBTAIN MAXIMUM DENSITY.
4. ALL ROAD REINSTATEMENT IS TO FULLY COMPLY WITH CURRENT LAND TRANSPORT AUTHORITY SPECIFICATIONS.
5. EMBEDMENT TYPES TO BE SPECIFIED ON DESIGN DRAWINGS.
6. A REDUCED DEPTH OF COVER MAY BE CONSIDERED FOR DI SUBJECT TO APPROVAL OF THE ENGINEER
7. NON-DETECTABLE TAPE MAY BE USED FOR METALLIC PIPES.

FOR CONSTRUCTION

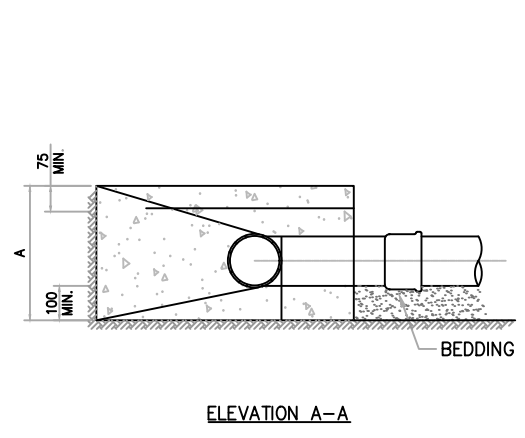
BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

PROJECT TITLE:	MAUGA & SAMALAEULU NETWORK
----------------	---------------------------------------

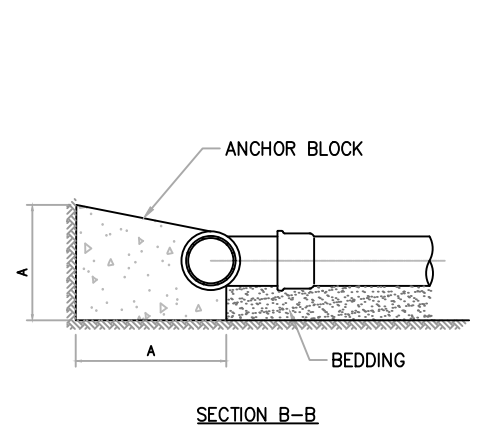
DRAWING TITLE:	PIPE TRENCH AND BEDDING DETAIL
----------------	---------------------------------------

SAMOA WATER AUTHORITY
 Level 2 TAITTE Building
 Apia, Sogi
 Ph: +685 20409
 Fax: +685 21298

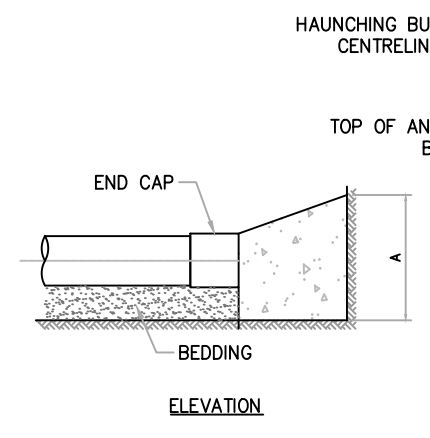
SIZE	CONTRACT NUMBER	REVISION
A3	SWA - S23 / 2024	00
SCALE:	DRAWING NUMBER:	
AS SHOWN	S23 - 019	



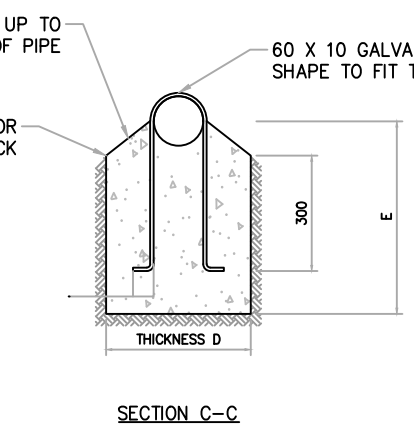
ELEVATION A-A



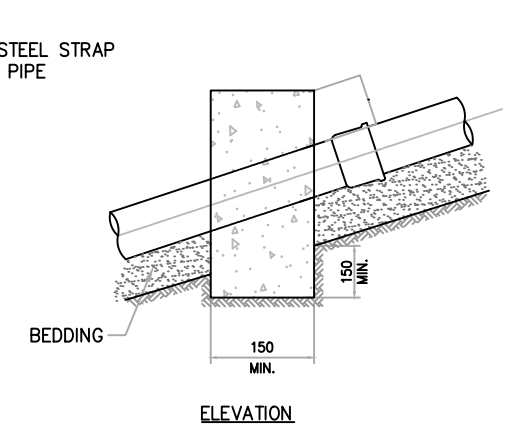
SECTION B-B



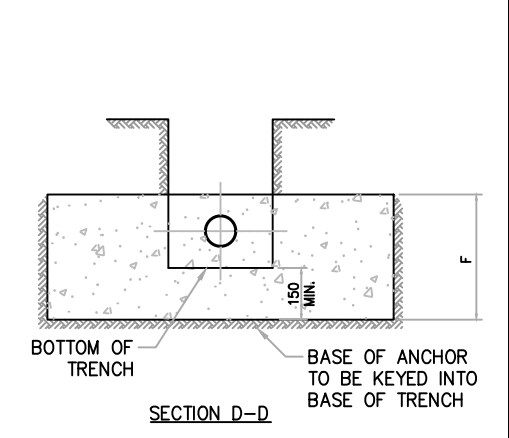
ELEVATION



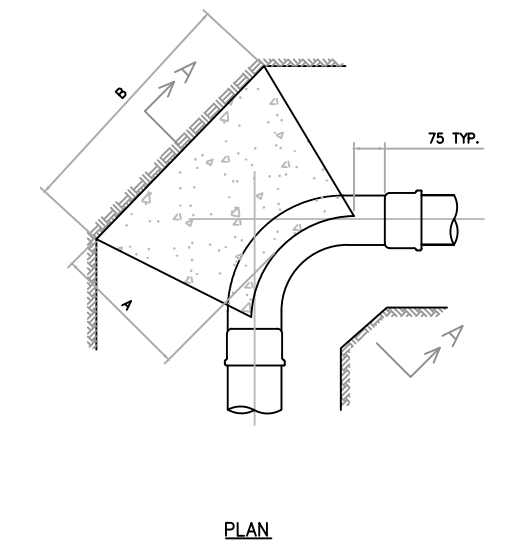
SECTION C-C



ELEVATION

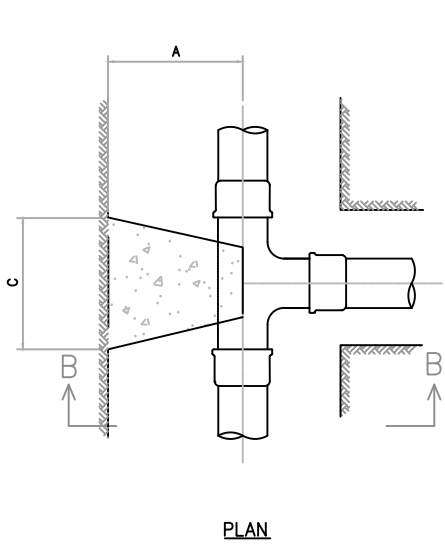


SECTION D-D



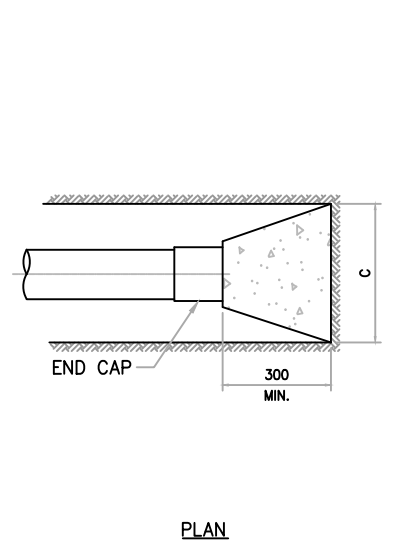
PLAN

BEND DETAIL
UP TO PN 12.5
SCALE: NOT TO SCALE



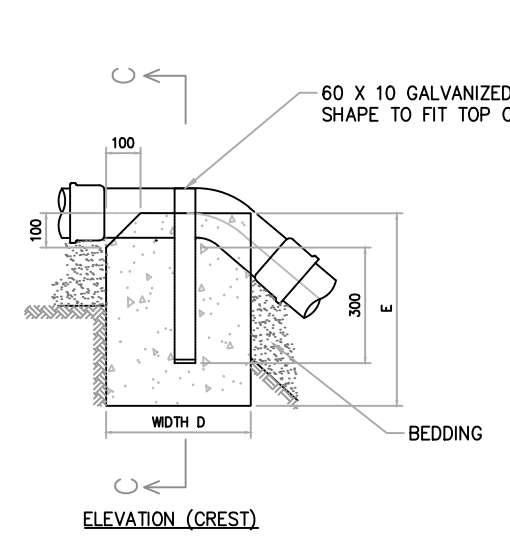
PLAN

TEE DETAIL
SCALE: NOT TO SCALE



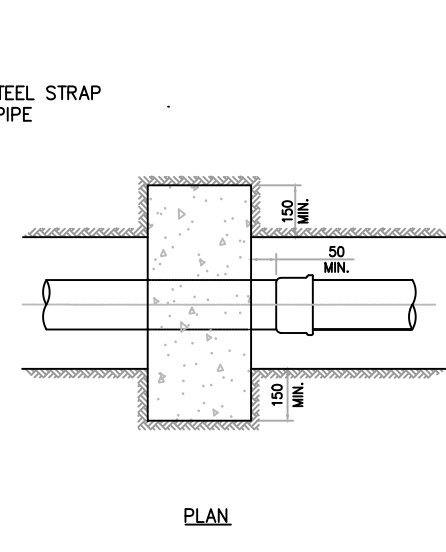
PLAN

END CAP DETAIL
SCALE: NOT TO SCALE



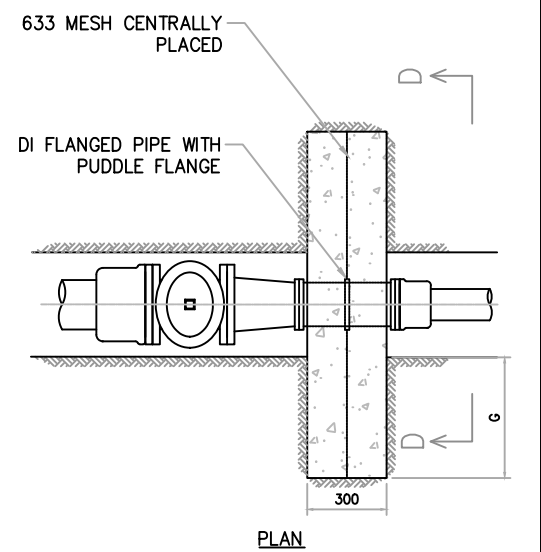
ELEVATION (CREST)

VERTICAL OVER BEND DETAIL
UP TO 45°
SCALE: NOT TO SCALE



PLAN

ANTI SCOUR BLOCK DETAIL
SCALE: NOT TO SCALE



PLAN

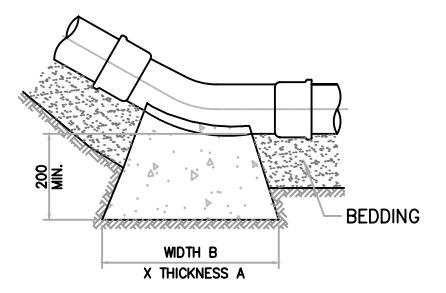
ANCHOR BLOCKS AT REDUCERS
SCALE: NOT TO SCALE

PIPE DIA.	A	B	C	D	E
75	250	450	300	600	700
100	300	600	400	700	800
150	450	800	550	800	1200
200	550	1250	900	1000	1500
300	700	1400	950	1300	1750

ANCHOR BLOCK
DIMENSIONS

NOTES:

1. ANCHOR BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL.
2. PIPELINES TO BE WRAPPED WITH A PROTECTIVE MEMBRANE PRIOR TO CASTING TO PROTECT AGAINST ABRASIVE DAMAGE.
3. ANCHOR BLOCKS ARE TO BE FORMED WITH MINIMUM CLEARANCE OF 50 mm FROM ANY PIPE JOINTS
4. PRECAST SOLID CONCRETE KERB BLOCKS PLACED AGAINST UNDISTURBED SOIL ARE TO BE USED FOR 50NB ANCHORS, IN PLACE OF POURED CONCRETE BLOCKS.
5. CONCRETE SHALL BE ORDINARY CONCRETE (17.5MPa)
6. FOR 45° BENDS USE B/2.
7. THE INNER FACE OF THE BLOCK SHALL NOT BE OF A LESSER THICKNESS THAN THE DIAMETER OF THE FITTINGS AND SHALL NOT IMPAIR ACCESS TO BOLTS.



VERTICAL BEND (SAG) DETAIL
UP TO 45°
SCALE: NOT TO SCALE

GRADIENT	SPACING
1 : 2	6000
1 : 3	11000
1 : 4	13000
1 : 5	17000
1 : 6	22000

ANTI-SCOUR BLOCK SPACING

PIPE DIA.	F	G
100-150	300	200
100-200	500	400
150-200	500	250
150-300	600	325

REDUCER BLOCK DIMENSIONS

FOR CONSTRUCTION

BY	DATE	REV	DESCRIPTIONS	DATE	APRVD
DESIGNED:	--				--
DRAWN:	--				--
DSGN CHECKED:	--				--
DWG CHECKED:	--				--
APPROVED:	--				--

PROJECT TITLE:
MAUGA & SAMALAEULU NETWORK

DRAWING TITLE:
ANCHOR BLOCKS DETAIL

SAMOA WATER AUTHORITY
Level 2 TATTE Building
Apia, Sogi
Ph: +685 20409
Fax: +685 21298

SIZE	CONTRACT NUMBER	REVISION
A3	SWA - S23 / 2024	00
SCALE	DRAWING NUMBER	
NTS	S23 - 020	