

DRAWING LEGEND

- BF : Bag Filter
- BWP: Bore well pump
- BV : Butterfly Valve
- GV : Gate Valve
- MV : Motorized Valve
- PG : Pressure gauge / Transmitter
- HPP : High pressure Pump
- PV : Pressure Vessel
- CV : Check Valve
- FM : Rotary Flow meter
- T : Flow meter - Totalizer
- TP : Transfer Pump
- TK : Tank
- QIT : Conductivity meter
- CP : CIP Pump
- DEG : Degasify Unit
- CL : Chlorine dosing unit
- V : Ball Valve
- UV : UV Disinfection unit
- UF : Ultra filtration unit
- ARV : Air Relief Valve

ARCH. DESIGN: -

STRUC. DESIGN: -

DRAWN BY: -

DATE: FEBRUARY 2019

CLIENT: -

NOTES:

-

PROJECT: WATER AND SANITATION

CONTENTS: TYPICAL DRAWINGS

SCALE: -

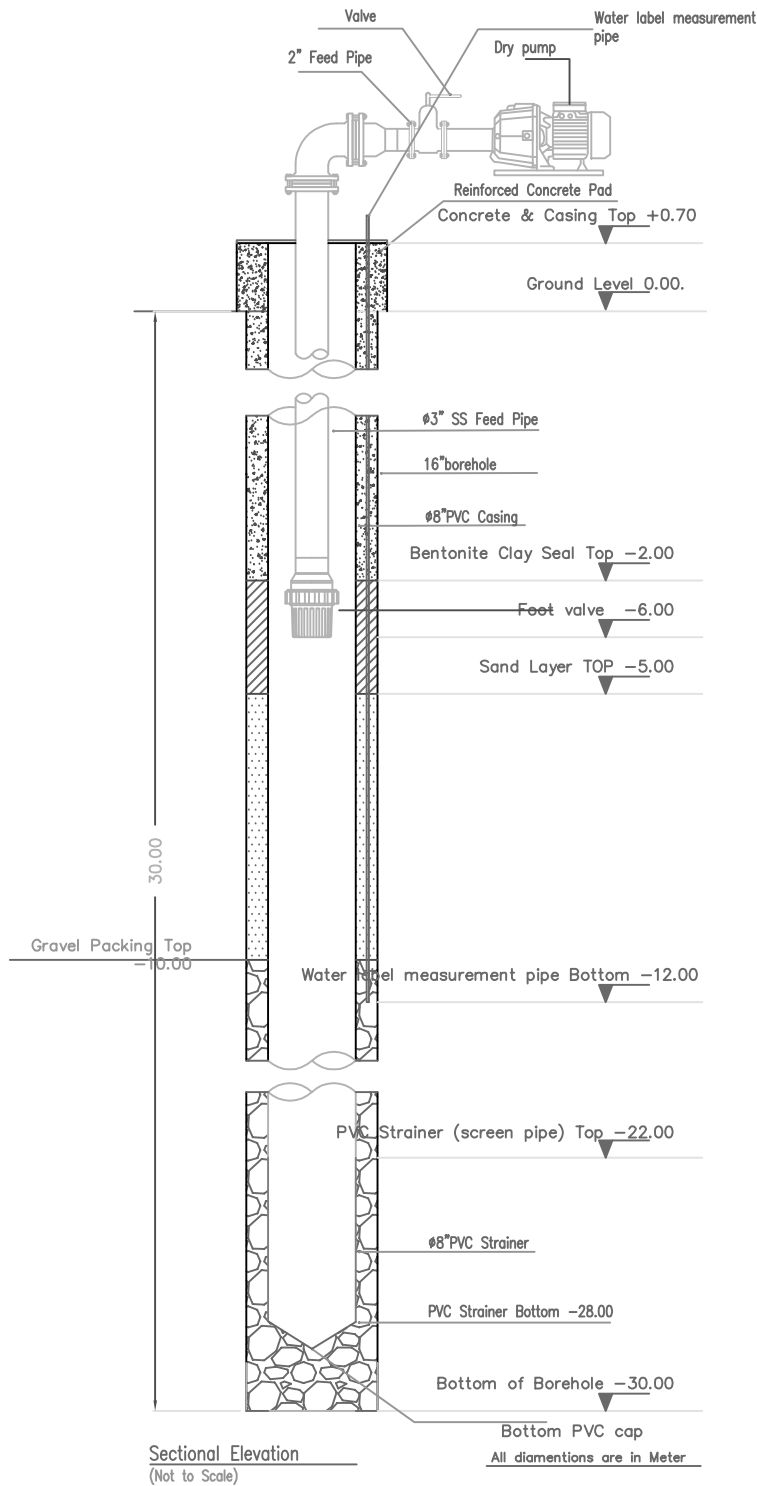
FILE:

DWG NO: TYP/W01

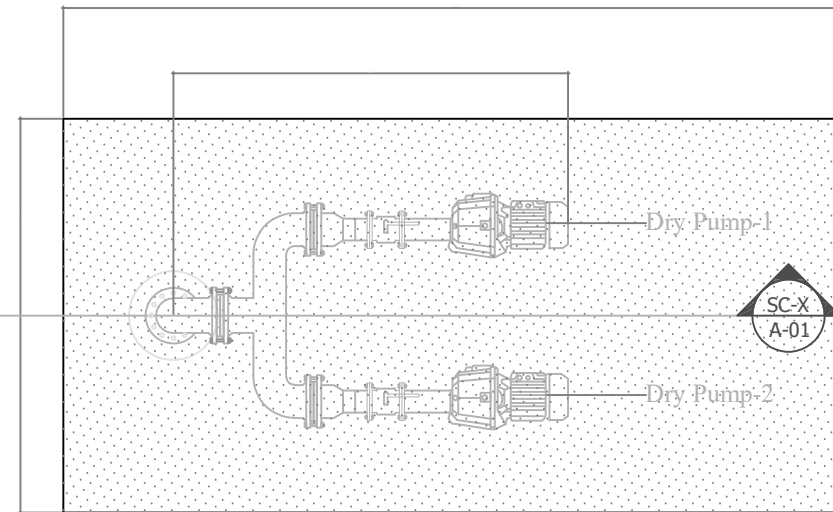


MINISTRY OF NATIONAL PLANNING &
INFRASTRUCTURE

AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES
TEL: +960 3004300, FAX: +960 3004301

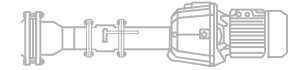
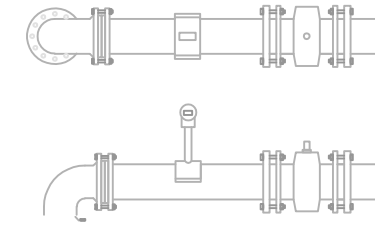
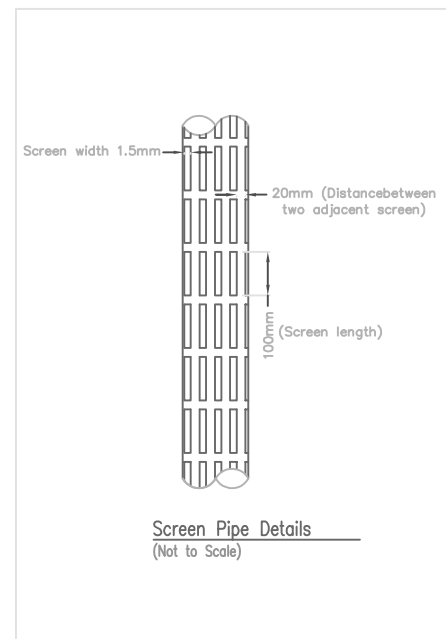


SC-X
A-01



WELL HEAD - PLAN

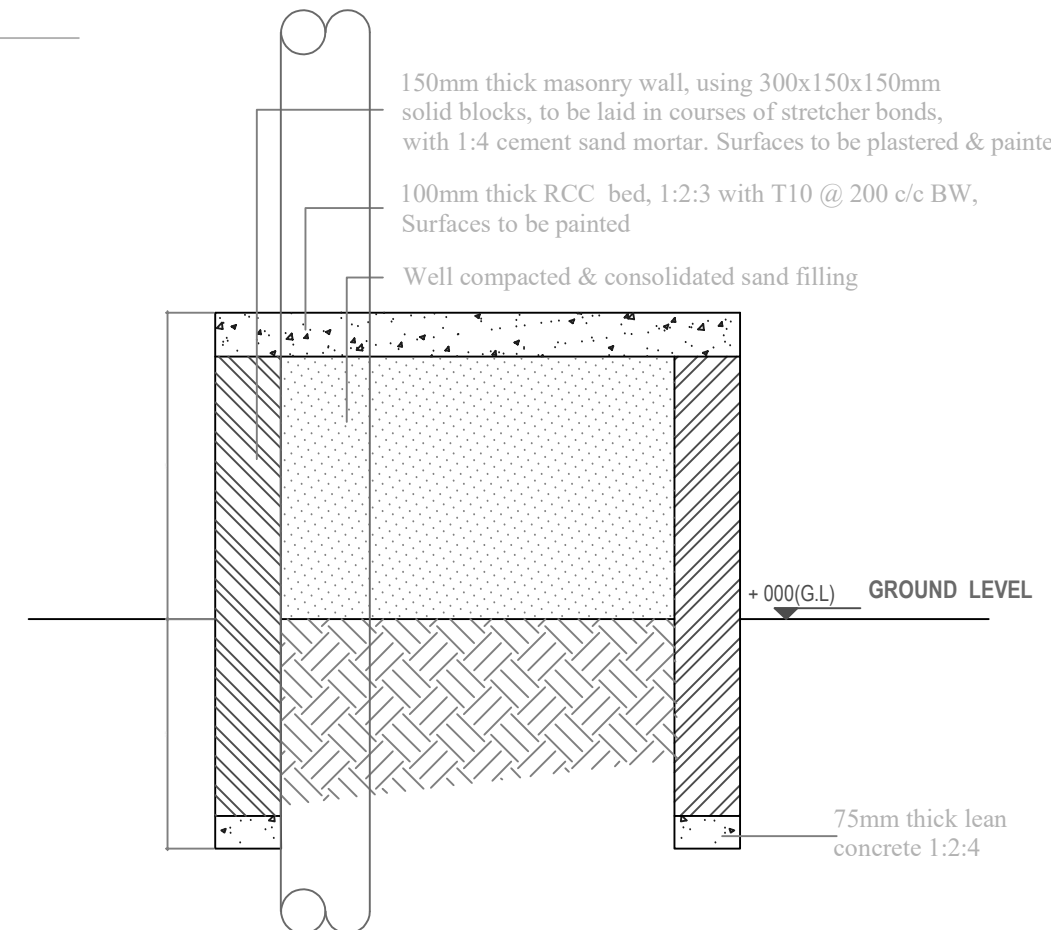
SCALE 1:20



150mm thick masonry wall, using 300x150x150mm solid blocks, to be laid in courses of stretcher bonds, with 1:4 cement sand mortar. Surfaces to be plastered & painted


100mm thick RCC bed, 1:2:3 with T10 @ 200 c/c BW, Surfaces to be painted

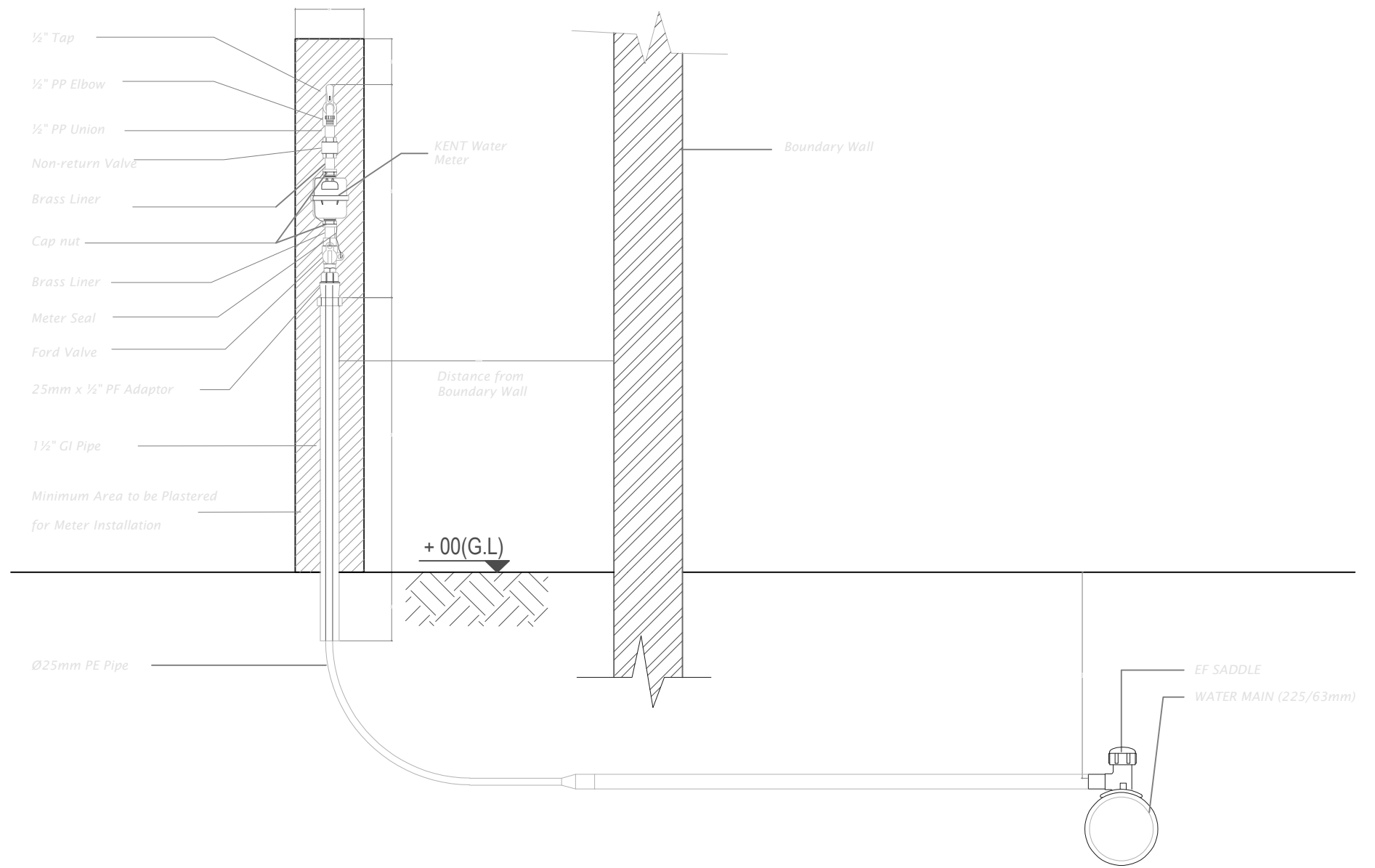
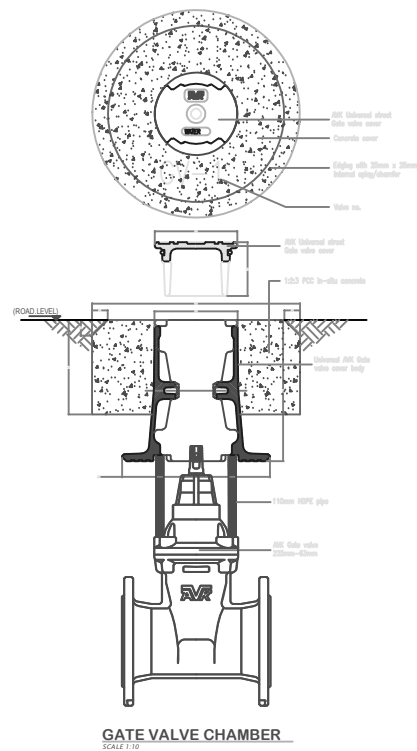
Well compacted & consolidated sand filling




SECTION X-X

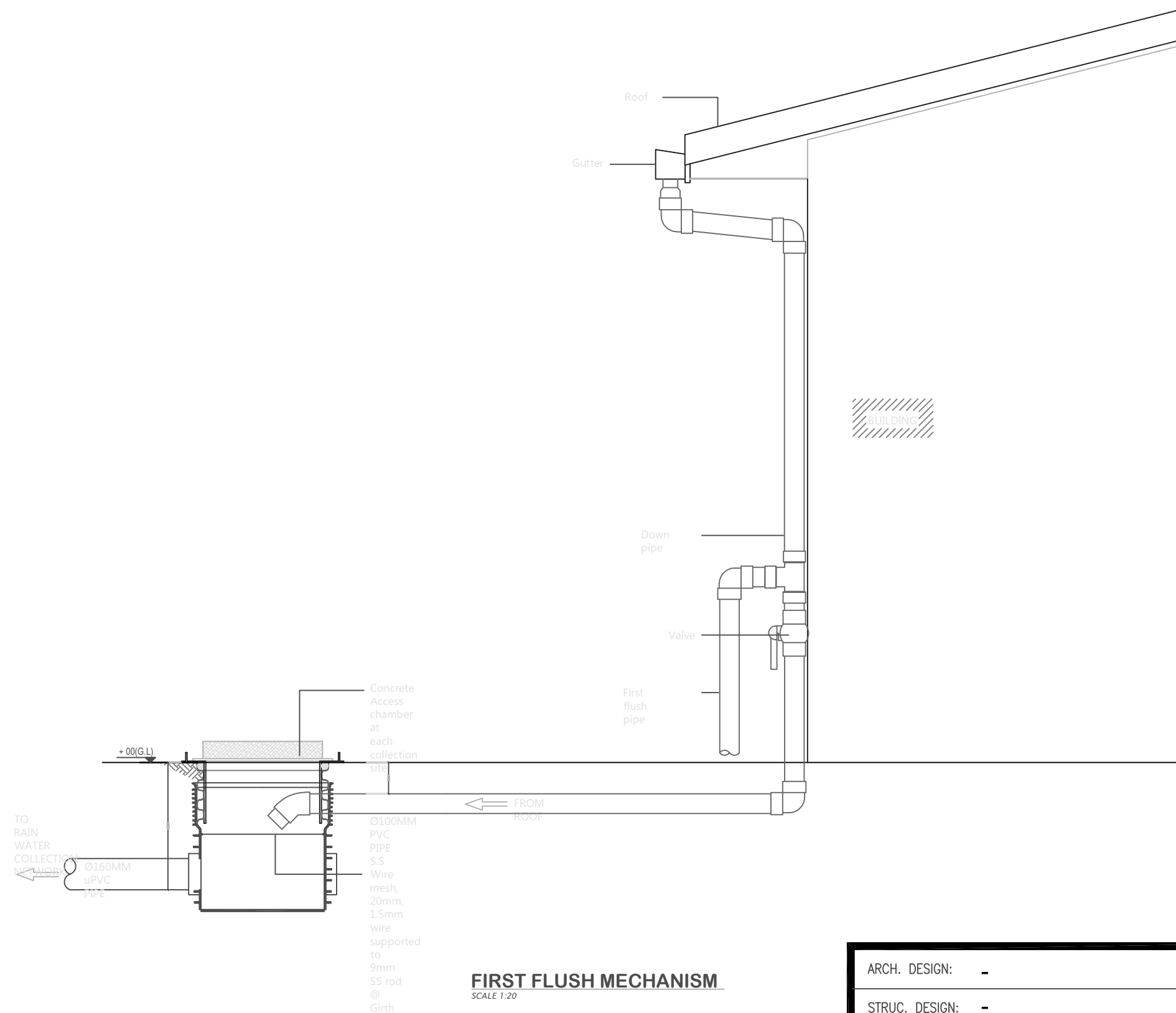
SCALE 1:20

ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/W02
NOTES: -	FILE:	
		 <p>MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE</p> <p>AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301</p>




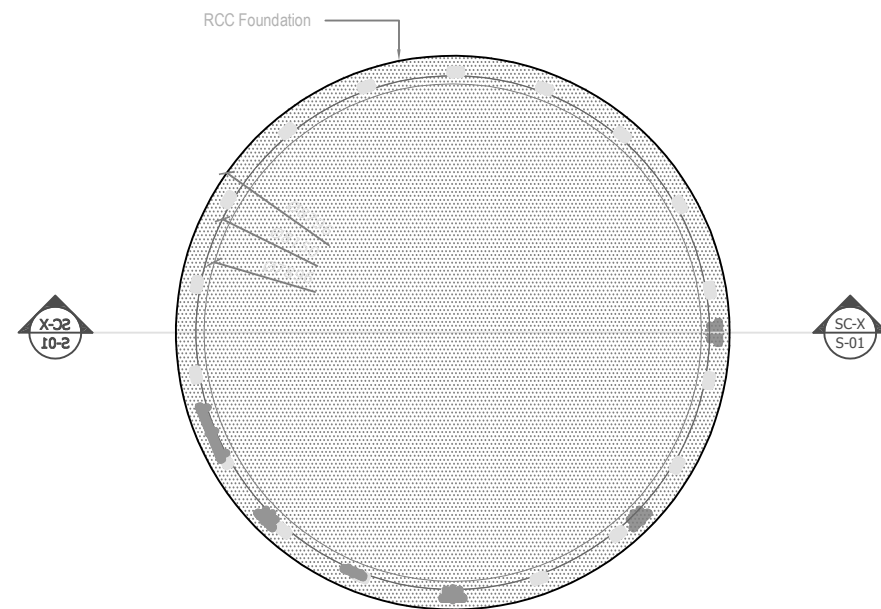
HOUSE CONNECTION DETAIL
SCALE 1:10

ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/W03
NOTES: -	FILE:	
 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301		

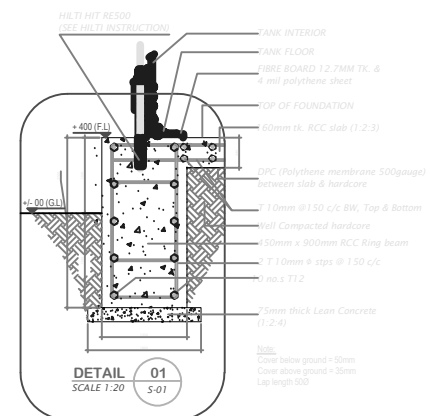


FIRST FLUSH MECHANISM
SCALE 1:20

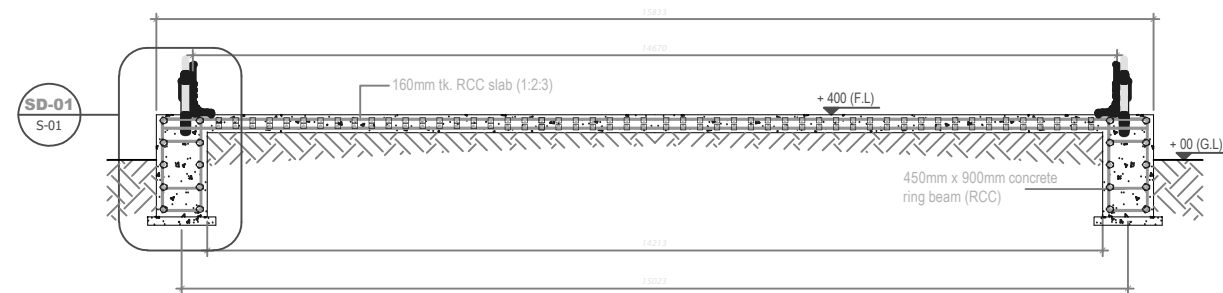
ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -		
DATE: FEBRUARY 2019		
CLIENT: -	SCALE: -	DWG NO: TYP/W04
	FILE:	
NOTES: -	<div><div>MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE</div><div>AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301</div></div>	



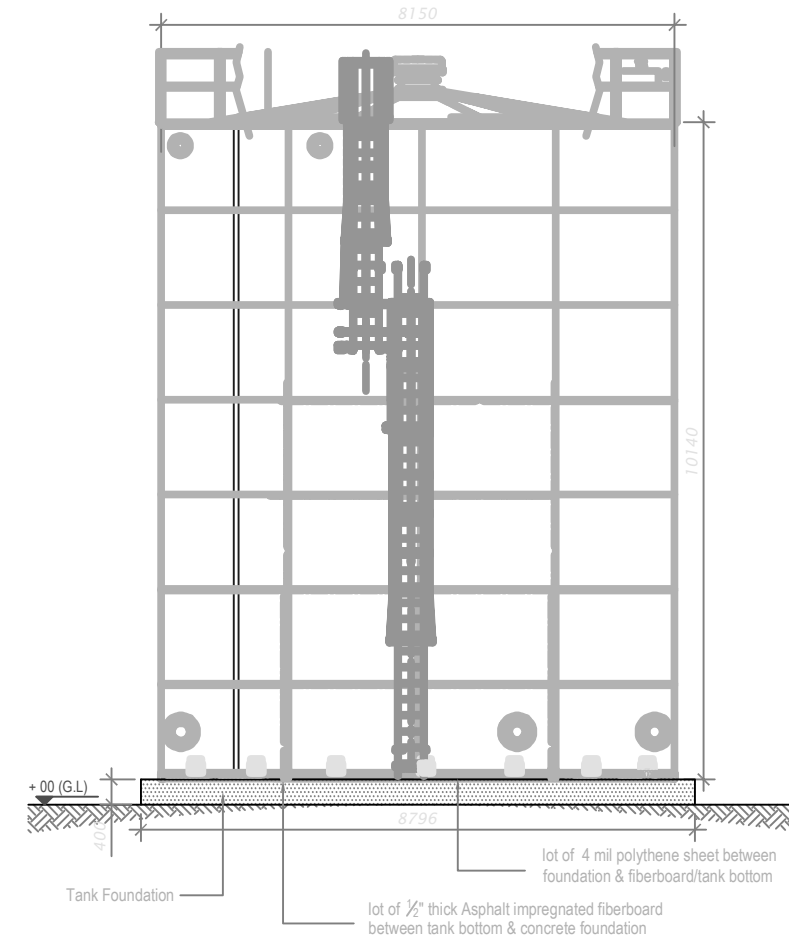
PRODUCT WATER TANK & FOUNDATION PLAN
SCALE 1:100




DETAIL 01
SCALE 1:20
S-01

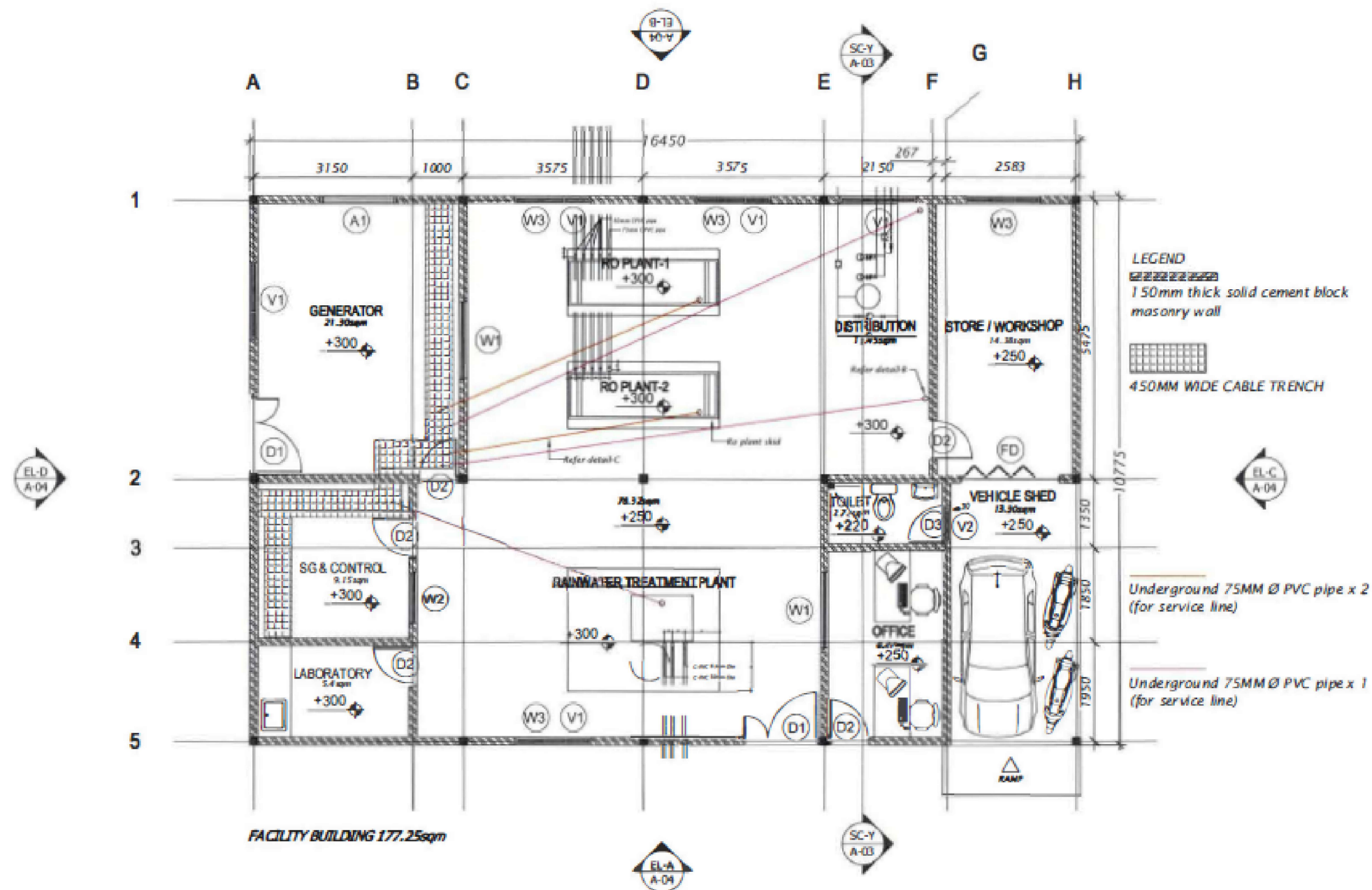



SECTION X-X (01)
SCALE 1:50

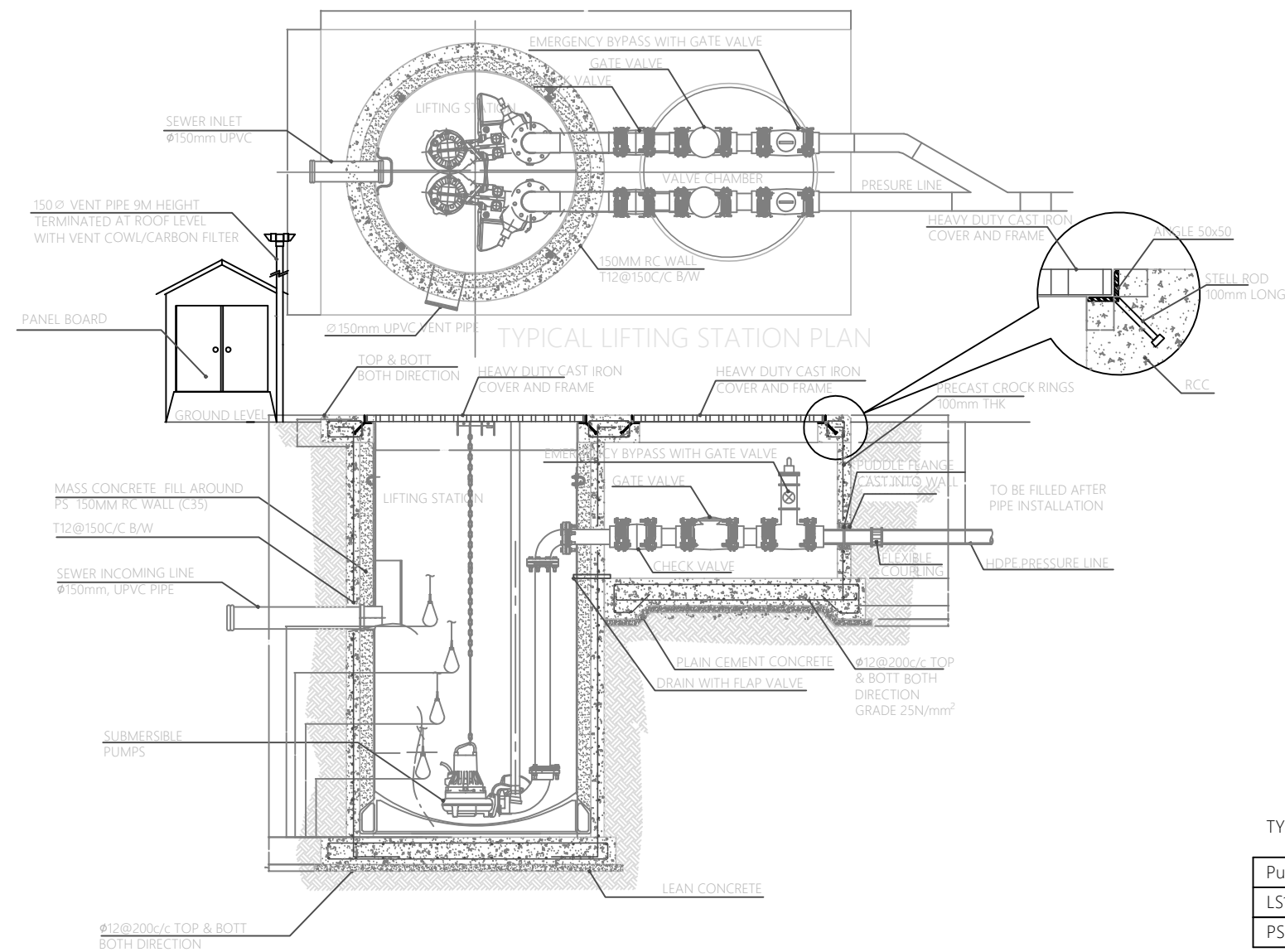


PRODUCT WATER TANK & FOUNDATION - ELEVATION
SCALE NTS

ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -		
DATE: FEBRUARY 2019	SCALE: - DWG NO: TYP/W05	
CLIENT: -		
NOTES: -	FILE:	<div><p>MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE</p><p>AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301</p></div>



ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/W06
NOTES: -	FILE:	
 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301		



LIST OF MAIN INSTRUMENTS OF PREFAB PUMPING STATION:

1. SEWAGE PUMPS (1 DUTY & 1 STANDBY)
2. POWER CABLE
3. AUTO-COUPLING WITH 400 SS GUIDE RAIL
4. STAINLESS STEEL (316) SUSPENSION CHAIN
5. CABLE WITH FLOAT CONTROL AND WEIGHT
6. DISCHARGE PIPE
7. PUDDLE FLANGE
8. PE LINING
9. BITUMEN EMULSION AND 500MICRON POLYTHENE SHEET PROTECTION TO EXTERNAL CONCRETE SURFACES
10. CONSTRUCTION JOINT/WATER BARS
11. MANHOLE COVER DOUBLE SEAL DUCTILE HEAVY DUTY CAST IRON/SS316 COVER
12. 1000 VENT PIPE WITH VENT COWL AT TOP OR CONNECTED TO NEAREST BUILDING VENT PIPE

NOTE:-

- PUMPS, PIPE WORK, FITTINGS AND CONTROL PANEL SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- POSITION OF CONTROL PANEL AND VENT PIPE TO SUIT LOCATION/NEAREST VILLA M&E ROOM.
- ALL STRUCTURAL CONCRETE SHALL BE OF GRADE C35A.
- ALL CASTINGS SHALL BE DONE USING SULPHATE RESISTANT PORTLAND CEMENT TO BS 4027:1996.
- ALL STRUCTURAL REINFORCEMENT SHALL BE EPOXY COATING OF NON-PRE-STRESSED REINFORCEMENT TO ASTM-A775/A775M.

TYPICAL PUMP STATION DESIGN DETAILS

(15 YEARS)

Pump	Diameter (DIA)	Depth (D)	Inlet depth	Pump Capacity	Head	Levels			
						L1	L2	L3	L4
LS1	2.0m	3.55m	2.744m	XX l/s	X m	0.300m	0.423m	0.573m	0.723m
PS&O	2.2m	3.70m	2.637m	XX l/s	XX m	0.300m	0.560m	0.710m	0.860m

ARCH. DESIGN: -

STRUC. DESIGN: -

DRAWN BY: -

DATE: FEBRUARY 2019

CLIENT: -

NOTES:

-

PROJECT: WATER AND SANITATION

CONTENTS: TYPICAL DRAWINGS

SCALE: -

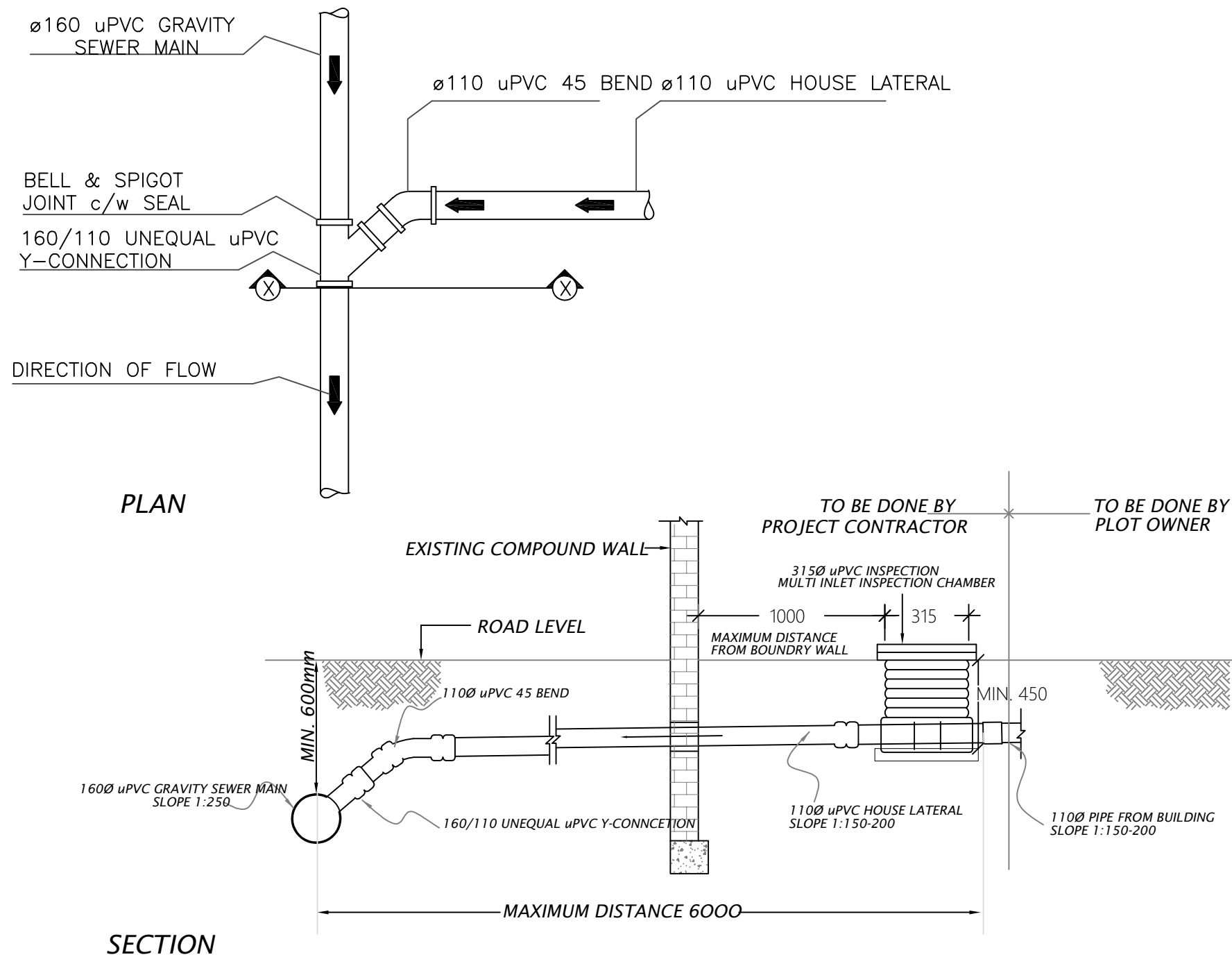
FILE:

DWG NO: TYP/S01




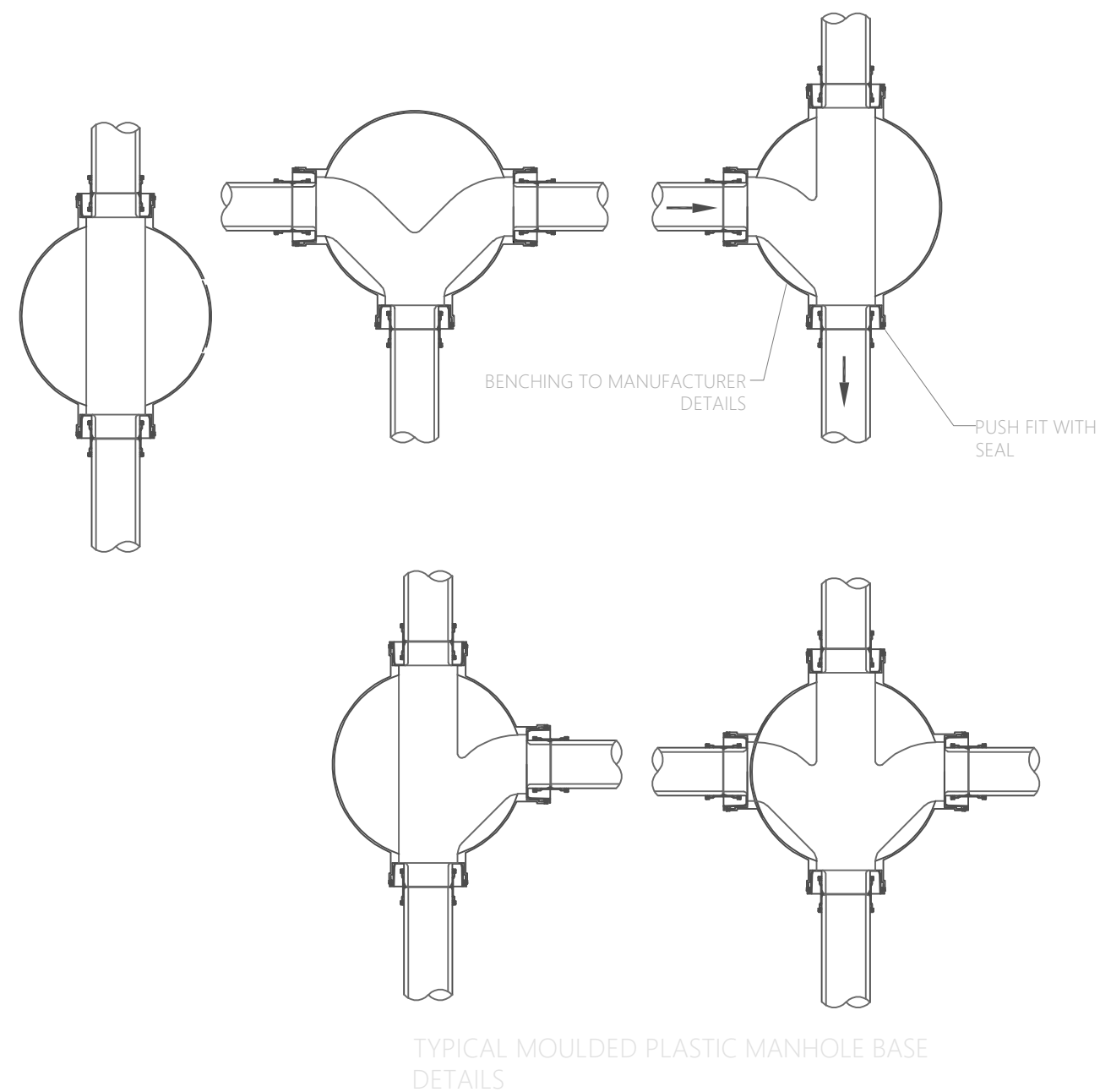
MINISTRY OF NATIONAL PLANNING &
INFRASTRUCTURE

AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES
TEL: +960 3004300, FAX: +960 3004301




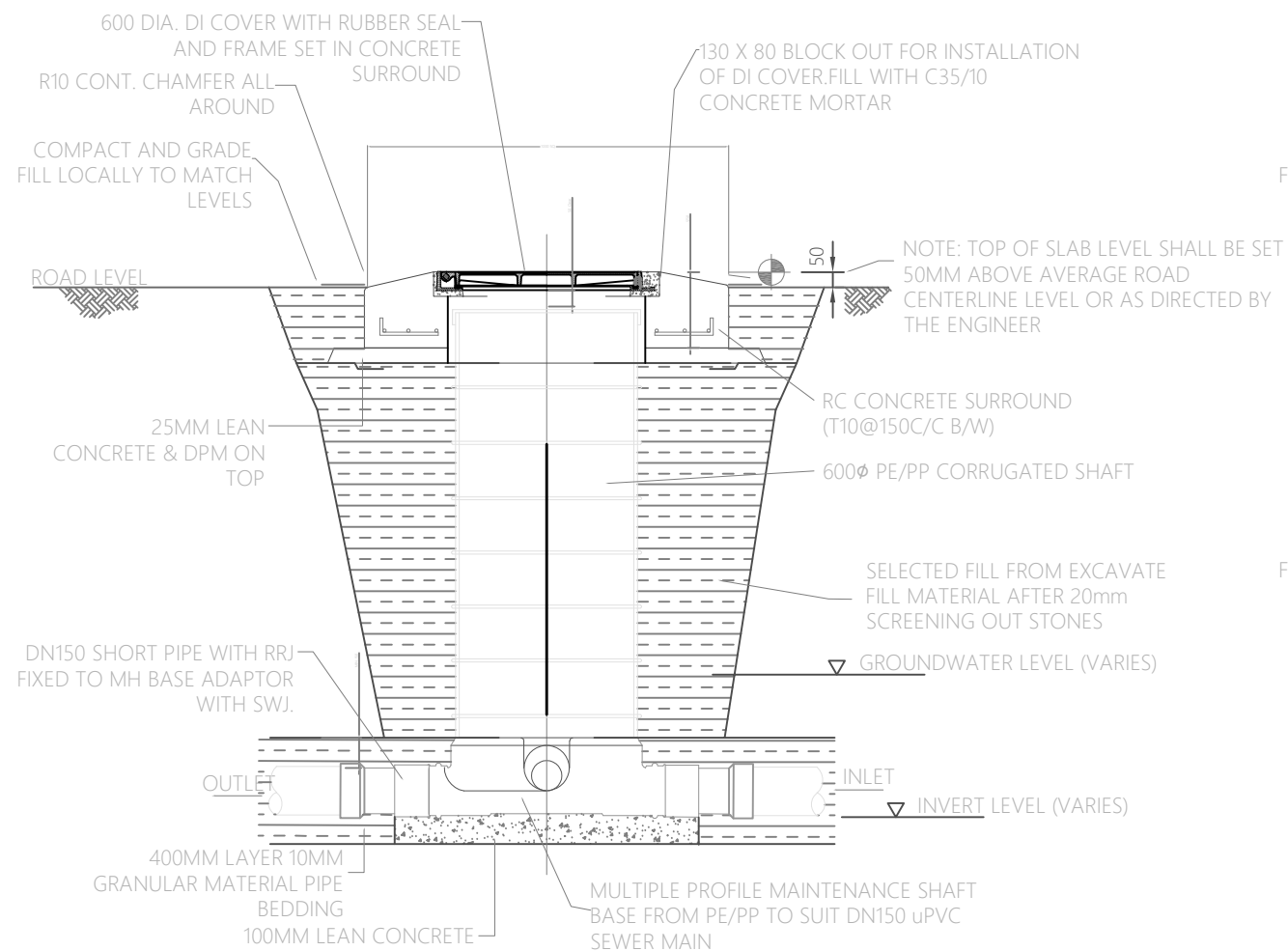
TYPICAL HOUSE CONNECTION DETAILS 01
NTS

ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/S02
NOTES: -	FILE:	
	 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301	

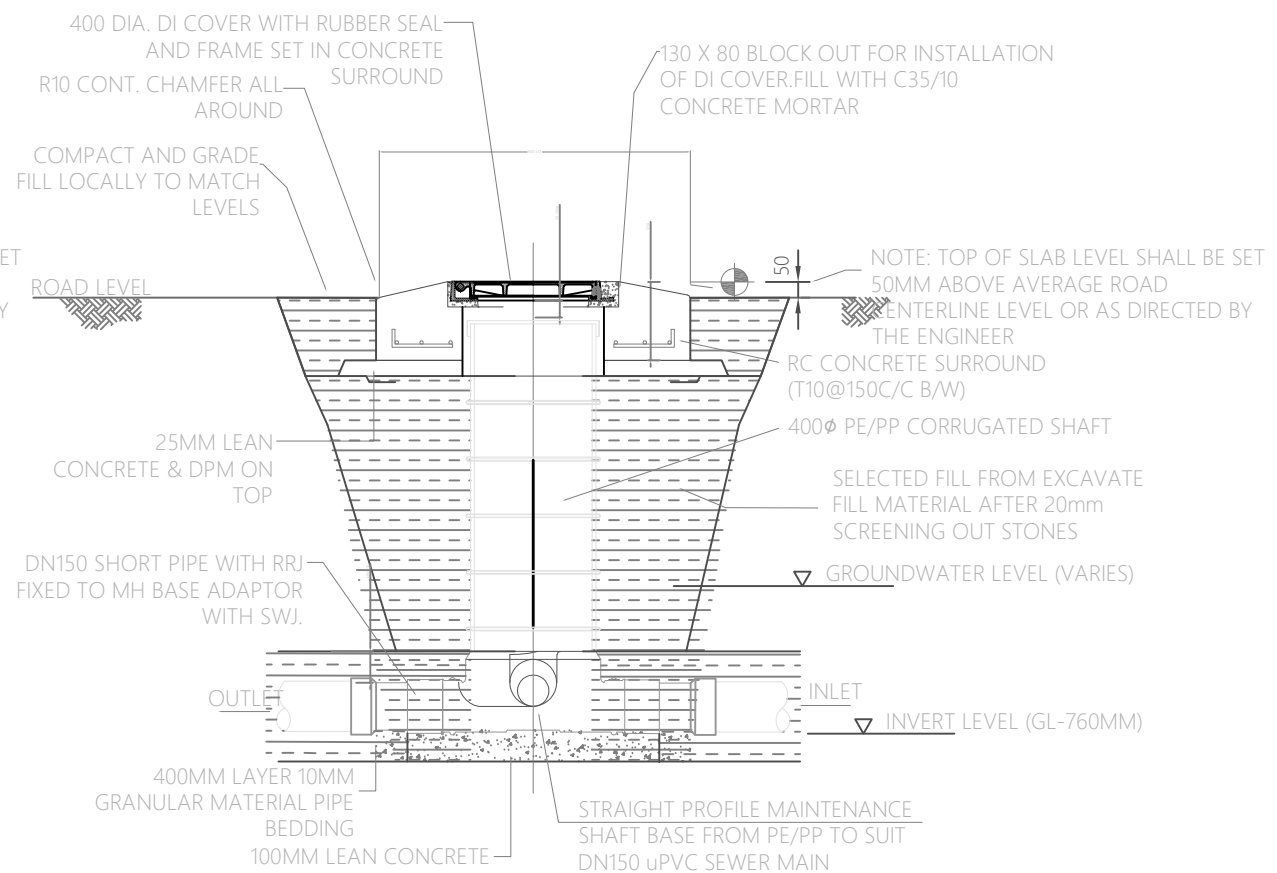


TYPICAL MANHOLE BASE DETAILS 02
NTS

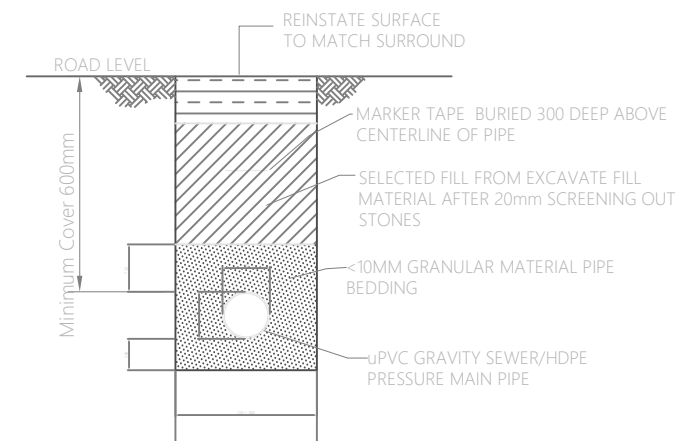
ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -		
DATE: FEBRUARY 2019		
CLIENT: -	SCALE: -	DWG NO: TYP/S03
	FILE:	
NOTES: -	<div><div>MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE</div><div>AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301</div></div>	



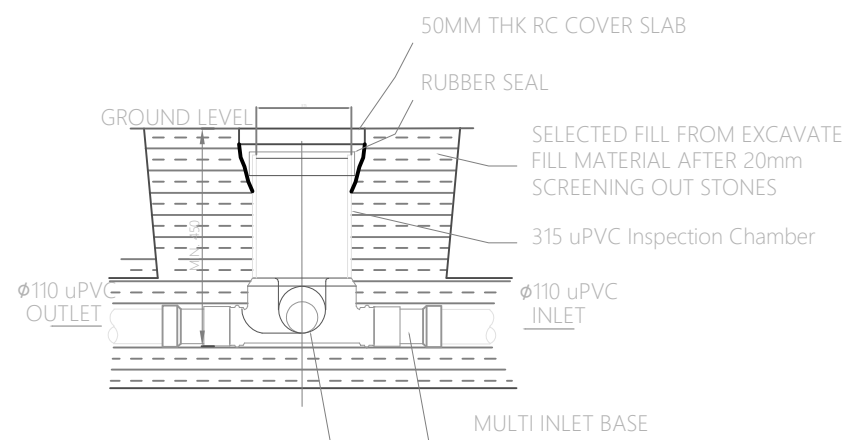
ELEVATION - MAINTENANCE SHAFT (MH)
Scale 1:20




ELEVATION - MS/ CLEANOUT (CO)
Scale 1:20

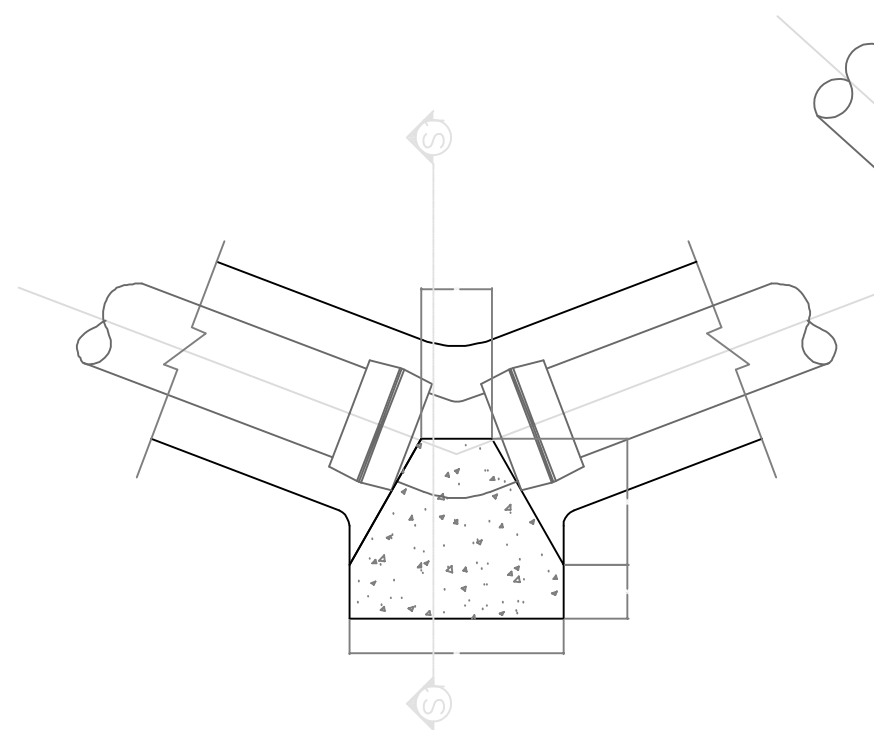


TRENCH & BEDDING DETAILS
Scale 1:20

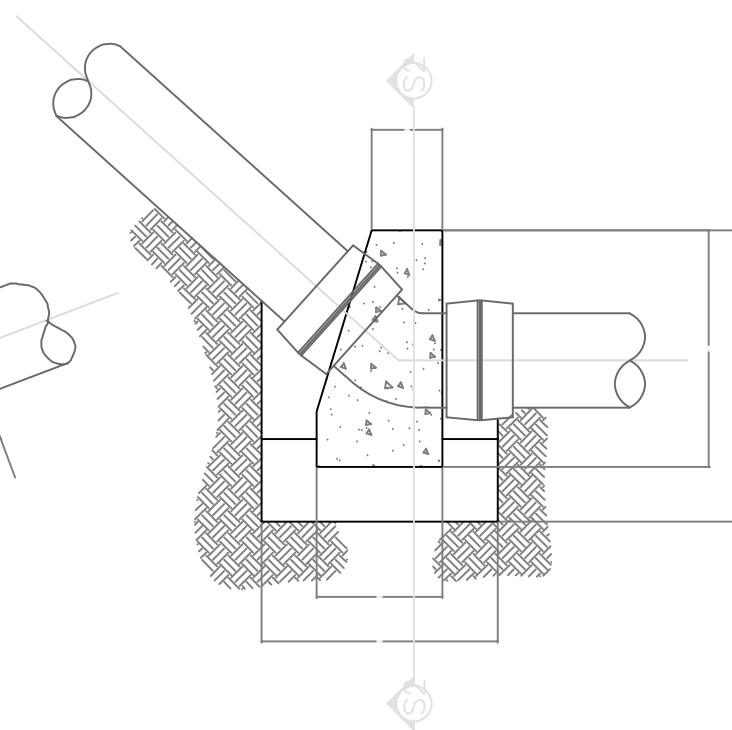


MULTI INLET HOUSE ISPECTION CHAMBER (IC)
Scale 1:20

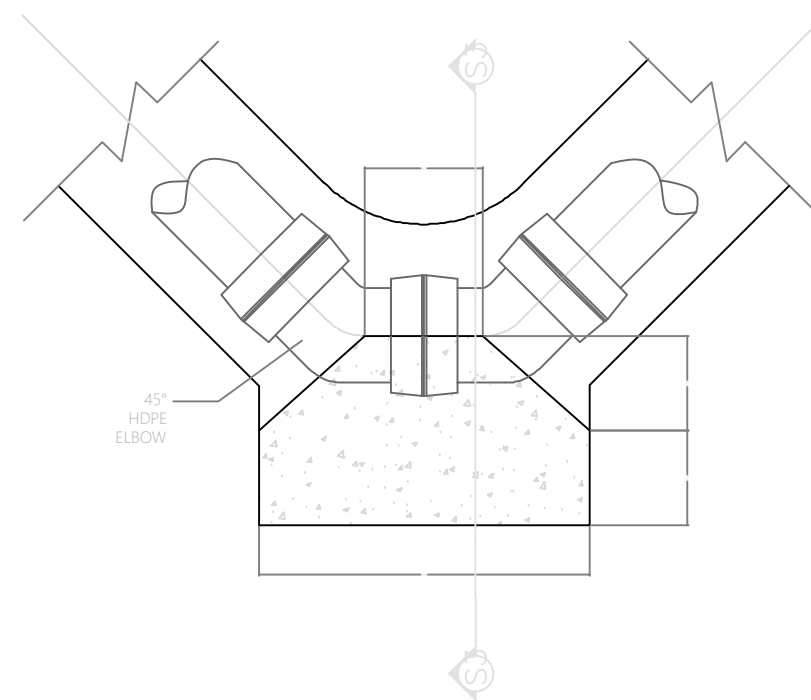
ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	SCALE: -	
DATE: FEBRUARY 2019	DWG NO: TYP/S04	
CLIENT: -	FILE: -	
NOTES: -		
 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301		



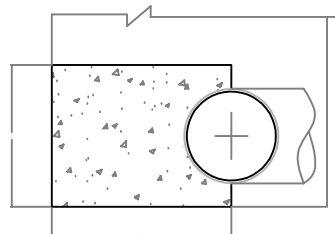
HORIZONTAL 45° BEND
NTS



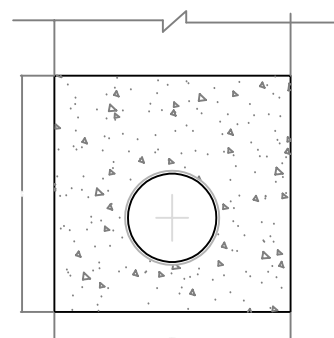
VERTICAL 45° BEND
NTS



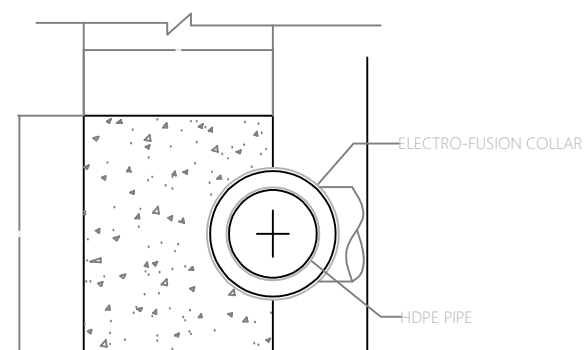
HORIZONTAL 90° BEND
NTS



SECTION S1-S1
NTS




SECTION S2-S2
NTS

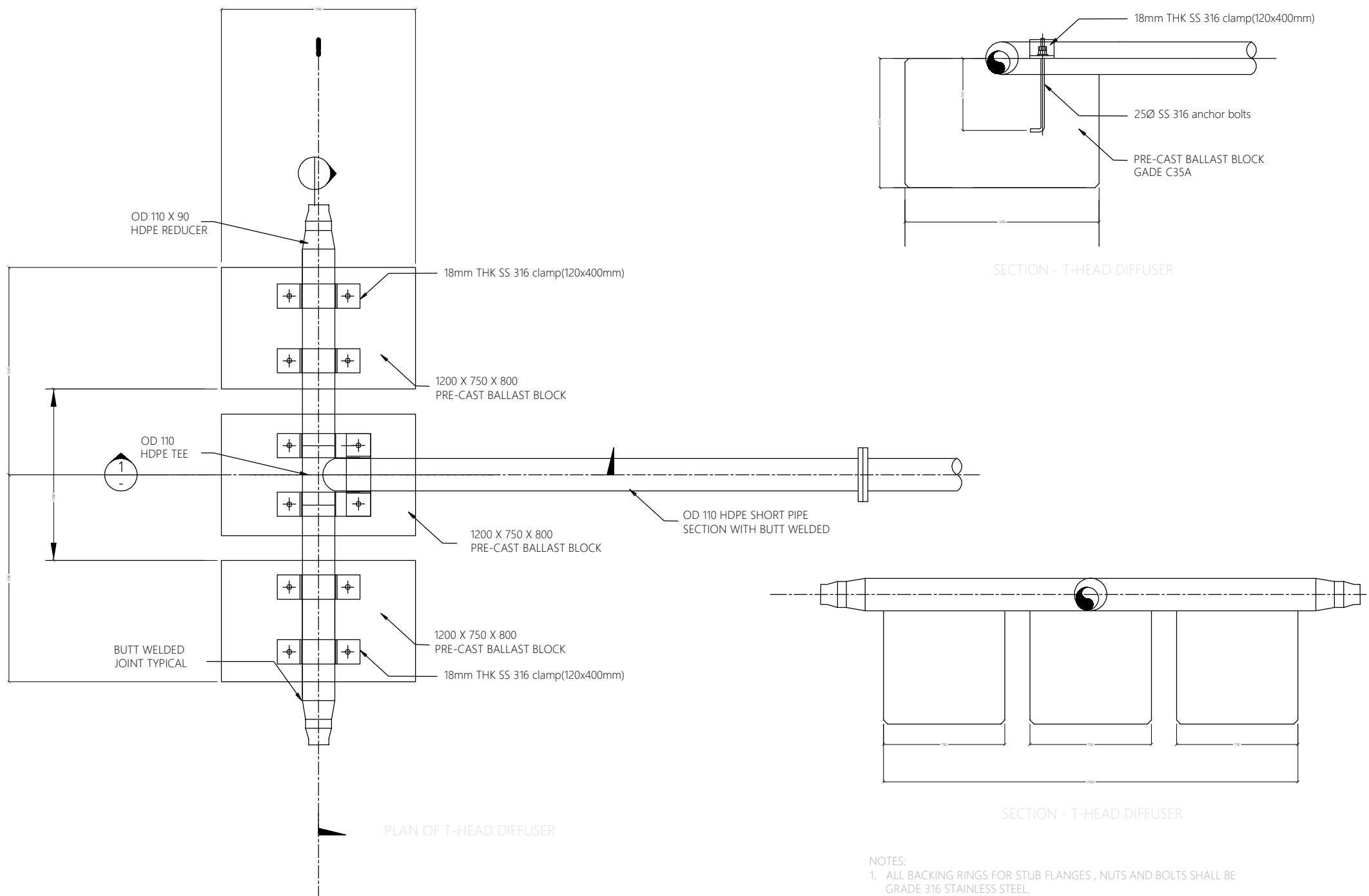


SECTION S3-S3
NTS

THRUST BLOCK DETAIL - FORCE MAINS ONLY
SCALE 1:20

THRUST BLOCK DETAILS
NTS


ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/S06
	FILE:	
NOTES: -		 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301



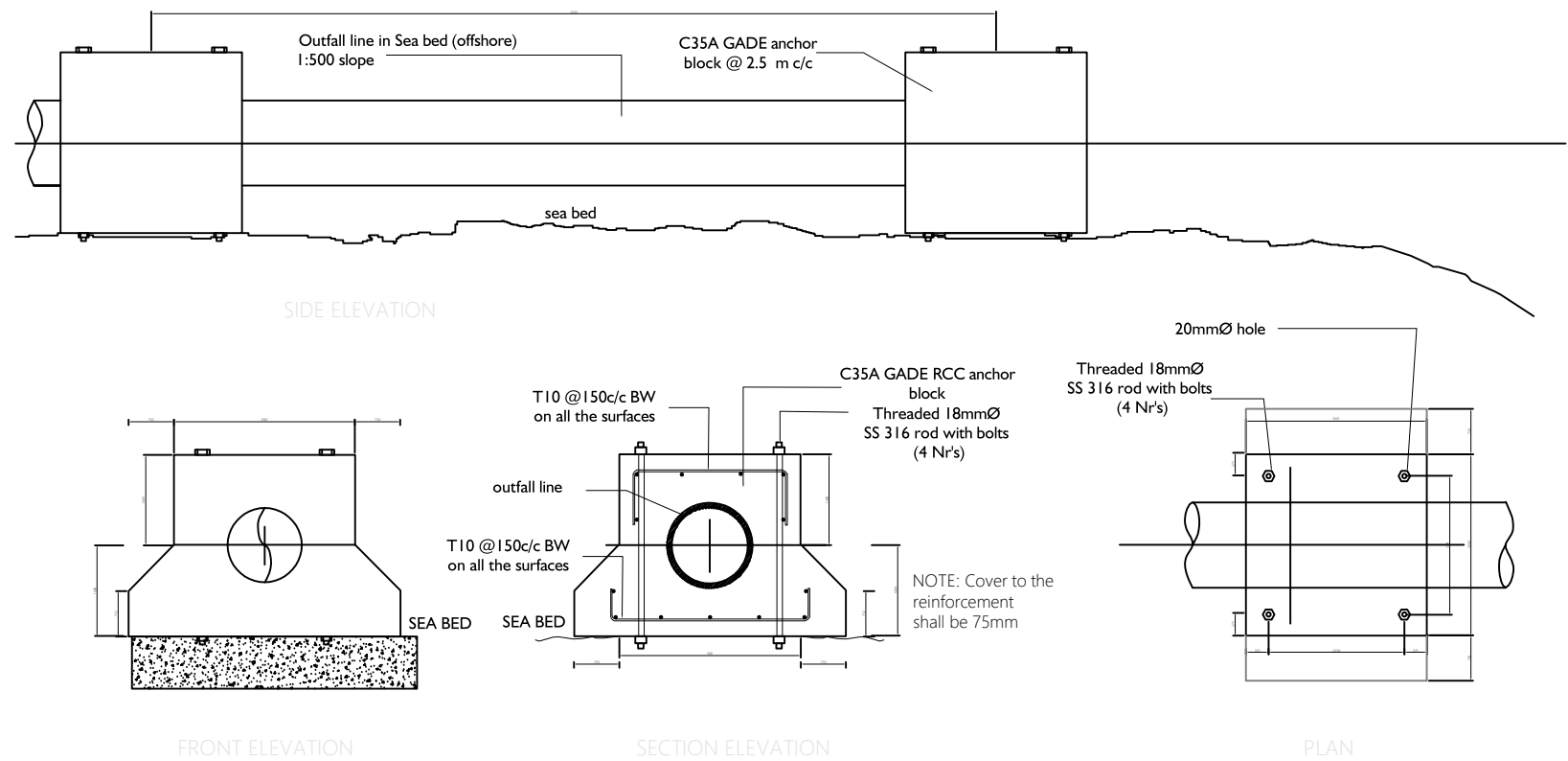
T-HEAD DIFFUSER DETAILS
NTS

NOTES:

1. ALL BACKING RINGS FOR STUB FLANGES , NUTS AND BOLTS SHALL BE GRADE 316 STAINLESS STEEL.
2. ALL PIPE WORK SHALL BE BEDDED ON 10MM THICK NEOPRENE RUBBER SEAT IN SEMICIRCULAR RECESS MATCHING THE O.D. THE PIPE.
3. FABRICATE SPECIFIC PIPE CLAMPS TO PROVIDE FIRM CLAMPING ACTION ACCORDING TO PIPE O.D.
4. ALL STRUCTURAL CONCRETE SHALL BE OF GRADE C35A.
5. ALL CASTINGS SHALL BE DONE USING SULPHATE RESISTANT PORTLAND CEMENT TO BS 4027:1996.
6. ALL STRUCTURAL REINFORCEMENT SHALL BE EPOXY COATING OF NON-PRE-STRESSED REINFORCEMENT TO ASTM-A775/A775M.


ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -	DATE: FEBRUARY 2019	
CLIENT: -	SCALE: -	DWG NO: TYP/S07
NOTES: -	FILE:	
 MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES TEL: +960 3004300, FAX: +960 3004301		

SEA OUTFALL LINE & ANCHORING DETAILS



BALLAST BLOCK DETAIL
NTS

- NOTES:
1. ALL BACKING RINGS FOR STUB FLANGES , NUTS AND BOLTS SHALL BE GRADE 316 STAINLESS STEEL.
 2. ALL PIPE WORK SHALL BE BEDDED ON 10MM THICK NEOPRENE RUBBER SEAT IN SEMICIRCULAR RECESS MATCHING THE O.D. THE PIPE.
 3. ALL STRUCTURAL CONCRETE SHALL BE OF GRADE C35A.
 4. ALL CASTINGS SHALL BE DONE USING SULPHATE RESISTANT PORTLAND CEMENT TO BS 4027:1996.
 5. ALL STRUCTURAL REINFORCEMENT SHALL BE EPOXY COATING OF NON-PRE-STRESSED REINFORCEMENT TO ASTM-A775/A775M.

ARCH. DESIGN: -	PROJECT: WATER AND SANITATION	
STRUC. DESIGN: -	CONTENTS: TYPICAL DRAWINGS	
DRAWN BY: -		
DATE: FEBRUARY 2019		
CLIENT: -	SCALE: -	DWG NO: TYP/S08
	FILE:	
NOTES: -	<div><div></div><div><div>MINISTRY OF NATIONAL PLANNING & INFRASTRUCTURE</div><div>AMEENEE MAGU, MAAFANNU, MALE', 20392, REPUBLIC OF MALDIVES</div><div>TEL: +960 3004300, FAX: +960 3004301</div></div></div>	