



PLAN GENERAL ARRANGEMENT OF AIR VALVE & FITTINGS FOR 300Ø PIPE SCALE 1:20

PIPE DIA	S.NO	SPECIALS & FITTINGS	QUANTITY
150	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 150 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 150 MM DIA FLANGE ADAPTER	1
	5	DN 150 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 150 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 150 DI/PE ADAPTER	2
	8	DN 150 DI COLLAR	2
	9	DN 150 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
200	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 200 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 200 MM DIA FLANGE ADAPTER	1
	5	DN 200 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 200 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 200 DI/PE ADAPTER	2
	8	DN 200 DI COLLAR	2
	9	DN 200 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
250	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 250 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 250 MM DIA FLANGE ADAPTER	1
	5	DN 250 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 250 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 250 DI/PE ADAPTER	2
	8	DN 250 DI COLLAR	2
	9	DN 250 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
300	1	DN 80 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 80 MM DIA	1
	3	DN 300 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 300 MM DIA FLANGE ADAPTER	1
	5	DN 300 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 300 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 300 DI/PE ADAPTER	2
	8	DN 300 DI COLLAR	2
	9	DN 300 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
350	1	DN 100 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 100 MM DIA	1
	3	DN 350 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 350 MM DIA FLANGE ADAPTER	1
	5	DN 350 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 350 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 350 DI/PE ADAPTER	2
	8	DN 350 DI COLLAR	2
	9	DN 350 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
400	1	DN 100 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 100 MM DIA	1
	3	DN 400 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 400 MM DIA FLANGE ADAPTER	1
	5	DN 400 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 400 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 400 DI/PE ADAPTER	2
	8	DN 400 DI COLLAR	2
	9	DN 400 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
450	1	DN 150 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 150 MM DIA	1
	3	DN 450 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 450 MM DIA FLANGE ADAPTER	1
	5	DN 450 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 450 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 450 DI/PE ADAPTER	2
	8	DN 450 DI COLLAR	2
	9	DN 450 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2
500	1	DN 150 DOUBLE AIR VALVE	1
	2	DI GATE VALVE 150 MM DIA	1
	3	DN 500 DI ALL FLANGED TEE WITH 80 MM BRANCHING	1
	4	DN 500 MM DIA FLANGE ADAPTER	1
	5	DN 500 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	6	DN 500 DI FLANGED SPIGOT PIPE WITH WELDED PUDDLE FLANGE	1
	7	DN 500 DI/PE ADAPTER	2
	8	DN 500 DI COLLAR	2
	9	DN 500 DI SHORT LENGTH FLANGED - SPIGOT PIECE	2

**NOTES:**  
 1. ALL DIMENSIONS ARE IN MM  
 2. FOR LOCATION AND DEPTHS OF GATE VALVE CHAMBER REFER TO DRAWINGS OF PIPELINE PLANS AND PROFILES.  
 3. THE SPECIALS AND PIPE FITTINGS SHALL BE SELECTED TO SUIT THE SUPPLY PIPE LINE  
 4. ALL THE VALVES, SPECIALS AND PIPES INSIDE THE CHAMBER SHOULD BE OF DUCTILE IRON  
 5. GATE VALVE SHALL COMPLY WITH BS 5150 & AIR VALVE SHALL COMPLY WITH AWWA C-572  
 6. DI PIPE & FITTING SHALL COMPLY WITH BS 4772  
 7. BUILDING MATERIALS:-  
 DESCRIPTION OF BUILDING MATERIALS IS AS FOLLOWS  
 C 30 / 20 / 5  
 MAXIMUM SIZE OF AGGREGATE  
 SULPHATE RESISTANT CEMENT

**8. CONCRETE:**  
 A. MIXES SHALL COMPLY WITH BS 8110  
 B. MINIMUM 28 DAY CHARACTERISTIC STRENGTH IN ACCORDANCE WITH BS 8110  
 9. COVER TO REINFORCEMENT TO BE 50MM.  
 10. THE STEEL USED SHALL BE OF FY 350 GRADE.  
 11. THE TANKING SHALL BE WITH TWO LAYERS OF BITUMINOUS PAINT FOR EXTERNAL SURFACES OF VALVE CHAMBER  
 12. GATE VALVE CHAMBER TO BE PROVIDED FOR PIPE DIA 200 TO 300 MM  
 13. MH COVER SHOULD COMPLY TO BS EN 124 CLASS D400

**ABBREVIATIONS**  
 PIL - PIPE INVERT LEVEL.  
 MS - MILD STEEL.  
 DI - DUCTILE IRON.  
 PE - POLY ETHYLENE  
 RCC -REINFORCED CEMENT CONCRETE  
 PCC - PLAIN CEMENT CONCRETE

No.	DATE	DESCRIPTION	DRG. No.	DESCRIPTION
		REVISION	REFERENCE DRAWINGS	

**CLIENT**  
 MINISTRY OF ENVIRONMENT AND ENERGY  
 MALE REPUBLIC OF MALDIVES

**PROJECT**  
 CONSULTANCY SERVICES FOR SURVEY, DESIGN OF WATER SUPPLY FACILITIES IN THE ISLAND SH. FOAKAIDHOO, MALDIVES

**TITLE**  
 TYPICAL DRAWING OF AIR RELEASE VALVE CHAMBER

**IN/TC**  
 SHAH TECHNICAL CONSULTANTS PVT. LTD., INDIA  
 In Association With  
 DEVELOPMENT TECHNOLOGIES MALDIVES, MALDIVES

APPROVED	CHECKED	DESIGNED	DRAWN
SSS	SSS	RKC	SSN

SCALE: AS SHOWN DATE: APRIL 2017 DRAWING No: Sh. Foakaidhoo/WS/08 REVISION: 0