



MATERIALS SCHEDULE							
ITEM NO.	ITEM	DESCRIPTION					
1	AIR VALVE	SIZED AS REQUIRED FOR DESIGN FLOW RATE, INCLUSIVE OF ISOLATION BALL VALVE. AIR VALVE AND BALL VALVE ASSEMBLY TO BE MOUNTED ATOP A BLANK PLATED EQUAL TEE TO ADVANTAGE AIR CAPTURE.					
2	UPSTREAM ISOLATION VALVE	TYPE (E.G. GATE, BUTTERFLY, BALL, GLOBE, ETC.) AS REQUIRED FOR APPLICATION. THE VALVE MUST LOCKED AT 100% OPEN DURING NORMAL OPERATION, TO MAINTAIN METER ACCURACY.					
3	RUBBER FLEXIBLE JOINT	JOINT TO ELIMINATE THERMAL PIPE MOVEMENT STRESSES AND MINIMISE VIBRATION TRANSFER TO METER BODY. TYPE DETERMINED BY PIPE MATERIAL AND APPLICATION					
4	PIPEWORK	STRAIGHT LENGTH OF PIPE FREE FROM DISTURBANCES (LENGTH AS PER TABLE OF DIMENSIONS). ID OF PIPE MUST EQUAL METER ID. CORROSION-RESISTANT MATERIALS INCLUDE STAINLESS STEEL, ALUMINIUM, COPPER, BRONZE AS PER SPECIFICATIONS OF AS4747.2. FLEXIBLE PIPES MAY BE USED E.G. HDPE, ABS, PVC HOWEVER THE DESIGN IS TO ENSURE THAT THE METER EMPLACEMENT AND METER ACCURACY IS NOT IMPACTED BY THERMAL EFFECTS (TEMPERATURE CHANGES OF PIPEWORK, FITTINGS AND WATER CONVEYED), AND THE METER BODY IS NOT EXPOSED TO STRESSES FROM EXPANSION/CONTRACTION OF THE SURROUNDING PIPEWORK.					
5	METER	PATTERN-APPROVED METER					
6	CHECK VALVE	ONE-WAY CHECK VALVE PREVENTING REVERSE FLOW AND ENSURE METER EMPLACEMENT REMAINS FULL					
7	PRESSURE GAUGE	100MM DIAMETER FACE, LIQUID FILLED ANALOGUE PRESSURE GAUGE, LOCATED DOWNSTREAM OF METER EMPLACEMENT					
8	INSPECTION PORT	DN50 TAPPING AND BALL VALVE INSPECTION PORT, LOCATED DOWNSTREAM OF METER EMPLACEMENT					
9	DOWNSTREAM ISOLATION VALVE	TYPE (E.G. GATE, BUTTERFLY, BALL, GLOBE, ETC.) AS REQUIRED FOR APPLICATION					
10	PIPE SUPPORTS	CORROSION-RESISTANT PIPE SUPPORTS DESIGNED FOR APPLICATION, MOUNTED ON SUITABLE FOOTING. NUMBER AND SPACING AS PER DESIGN					
11	(NOT USED)						
12	MARKER POST	GENERALLY CONSISTENT WITH WSAA DWG WAT-1300, BLUE OR WHITE IN COLOUR, MIN. 900MM HIGH (ABOVE-GROUND) AND CORROSION RESISTANT (350MM MIN. EMBEDMENT IN GROUND)					
13	BOLLARDS	1200MM HIGH, CONCRETE FILLED, DN100 HEAVY WALL HDG STEEL PIPE PAINTED WHITE OR YELLOW. NUMBER AS REQUIRED FOR PROTECTION FROM VEHICLE THOROUGHFARE. Ø450MM, 600MM DEEP MASS CONCRETE (N20, 20MM) FOOTING					
14	THRUST BLOCKS	CONCRETE THRUST BLOCKS AS PER DESIGN IN ACCORDANCE WITH WAT-1205					
15	HARD STAND	200MM DEPTH OF GRAVEL E.G. 20MM FINE CRUSHED ROCK, OR MIN. 20MPa CONCRETE SLAB TO AS 3600, FOR MINIMUM 2M BEYOND METER EMPLACEMENT EXTENTS					
16	MARKING TAPE	DETECTABLE, COMPLYING WITH AS 2648.1, MINIMUM WIDTH OF 100MM WITH INSCRIPTION "DANGER BURIED WATER MAIN BELOW"					

31/01/25 FOR INFORMATION

Description

Date

	TABLE OF	DIMENSIONS		
DIMENSION	DESCRIPTION	APPLICATION	VALUE	
A	STRAIGHT PIPE LENGTH OF UNIFORM CIRCULAR CROSS SECTION, FREE FROM FLOW DISTURBANCES* - UPSTREAM OF METER	AS LONG AS PRACTICABLE BEFORE METER UNIT, IN EXCESS OF (BY APPLICATION):		PUMP INTAKE LEVEL
		MINIMUM	10 X METER ID	
		METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK	10 X METER ID	
		METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK	20 X METER ID	TOP OF SCREENS
		PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE	15 X METER ID	
		PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	40 X METER ID	
		METER EMPLACEMENT AFTER PUMP	30 X METER ID	
В	STRAIGHT PIPE LENGTH OF UNIFORM CIRCULAR CROSS SECTION, FREE FROM FLOW DISTURBANCES* - DOWNSTREAM OF METER	AS LONG AS PRACTICABLE AFTER METER UNIT, IN EXCESS OF (BY APPLICATION):		
		MINIMUM	5 X METER ID	
		METER EMPLACEMENT DIAMETER SMALLER THAN SURROUNDING PIPEWORK	5 X METER ID	
		METER EMPLACEMENT DIAMETER LARGER THAN SURROUNDING PIPEWORK	5 X METER ID	
		PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S ON SAME PLANE	5 X METER ID	
		PIPE CHANGE IN DIRECTION (SINGLE OR MULTIPLE), BEND/S OUT OF PLANE	5 X METER ID	
		METER EMPLACEMENT AFTER PUMP	5 X METER ID	
С	METER EMPLACEMENT CLEARANCE	MINIMUM CLEARANCE FROM GROUND LEVEL TO UNDERSIDE OF PIPE	MIN. 600MM	BOTTOM OF SCREENS
D	METER EMPLACEMENT DEPTH OF COVER	DEPTH OF COVER TO TOP OF METER EMPLACEMENT PIPE & METER	MIN. 600MM	BOTTOM OF SCILLING
		DW STRAIGHTENERS, SCREENS, T & Y JUNCTIONS, CHECK VALVES, BENDS (SINGLE OR MULTIPLE; I ITERNAL PIPEWORK E.G. WELD BEADS, GASKETS, MISALIGNED FITTINGS/JOINTS, TAPPINGS, PROB		
				ВОТТОМ

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Project NON-URBAN WATER METERING - STANDARD DESIGNS

GROUNDWATER METER ASSEMBLY
GENERAL ARRANGEMENT PUB25/509

AN INSTALLATION GUIDE FOR DEMONSTRATION PURPOSES

Orawing Number Revision A