

General Installation Notes

These notes should be read in conjunction with the water metering & servicing guidelines and water meter valving drawings as applicable.

1. The property service pipe & water meter assembly must be installed by an appropriately qualified person.
2. Meter assembly installations shall comply with AS/NZS 3500.1:2003 & relevant Water Corporation requirements.
3. All pipes, valves and fittings must be WaterMark approved.
4. Meter assembly pipe work and fittings shall be in approved metallic material.
5. Non metallic material & fittings shall not form part of any water meter assembly.
6. Copper risers must be appropriately lagged to provide 6mm annular clearance when encased in concrete.
7. The meter assembly shall be horizontal. If an alternative arrangement is necessary, prior consent is required from the relevant Water Corporation.
8. For 32mm+ services, a dirt box supplied by the Water Corporation is required with all meters, with the exception of electro- magnetic water meters.
9. Where the installation is for class 'A' recycled water, the installations must comply with the relevant standards.
10. Where valving/pipework configurations vary from the arrangements shown in these drawings (1-16), consultation with the relevant Water Corporation is required.
11. The meter assembly is defined as all relevant componentry necessary to enable the connection of the property to the water supply network. The meter assembly must include provision for isolation of the mains water supply servicing the property, and replacement of any water meter.
12. Containment backflow prevention is required on all new general and fire service water connections. Maintenance of the device is the responsibility of the property owner.
13. The type of containment backflow prevention device fitted shall be appropriate to the hazard rating of individual sites and must be installed in accordance with the relevant drawing.
14. Backflow prevention devices shall be readily removable for maintenance/replacement.
15. For high/medium hazard properties a testable containment backflow prevention device shall be fitted.
16. Where testable containment backflow prevention devices are required, the inlet and outlet isolating valves must be resilient seated.
17. The outlet thread of the testing ferrule must be capped.
18. Galvanised Wrought Iron (GWI) pipe shall not form part of the installation upstream of any non return valve.
19. Inlet isolation valve (3) may alternatively be located below ground with a cover to finished surface level.
20. General water meter arrangements greater than 100mm to be assessed on a case by case basis and configurations may vary.
21. An isolating valve shall be installed in an accessible position outside the building i.e. shop
22. No service branches are to be connected from the meter assembly above ground unless approved by the relevant Water Corporation.

Metering of Fire Services

1. All fire services must be metered. The type of water meter employed will be assessed by the relevant Water Corporation.
2. Prior specific consent is required from the relevant fire authority to incorporate inline water meters for fire hydrant services. (In accordance with Building Regulations Clause 309)
3. For fire services, an approved single check valve (testable) must be installed and approved resilient seated isolating valve must be installed immediately upstream and downstream of the device as a minimum.
In cases of heightened risk, a double detector assembly, or reduced pressure zone detector assembly is required.
Maintenance and repair of fire services are the owner's responsibility.
5. Where Electro- magnetic water meters require 240 volt power supply, the connection shall be direct wired with all work carried out by the owners electrical contractor.
6. Where below ground isolating valves are used on fire services, they must conform to AS2419 Section 8.5.9.
7. Each isolating valve located within the by-pass meter assembly is to be locked in the open position by the commissioning / device testing contractor. The lock is to be a Fire Authority keyed padlock A003.

DATE:

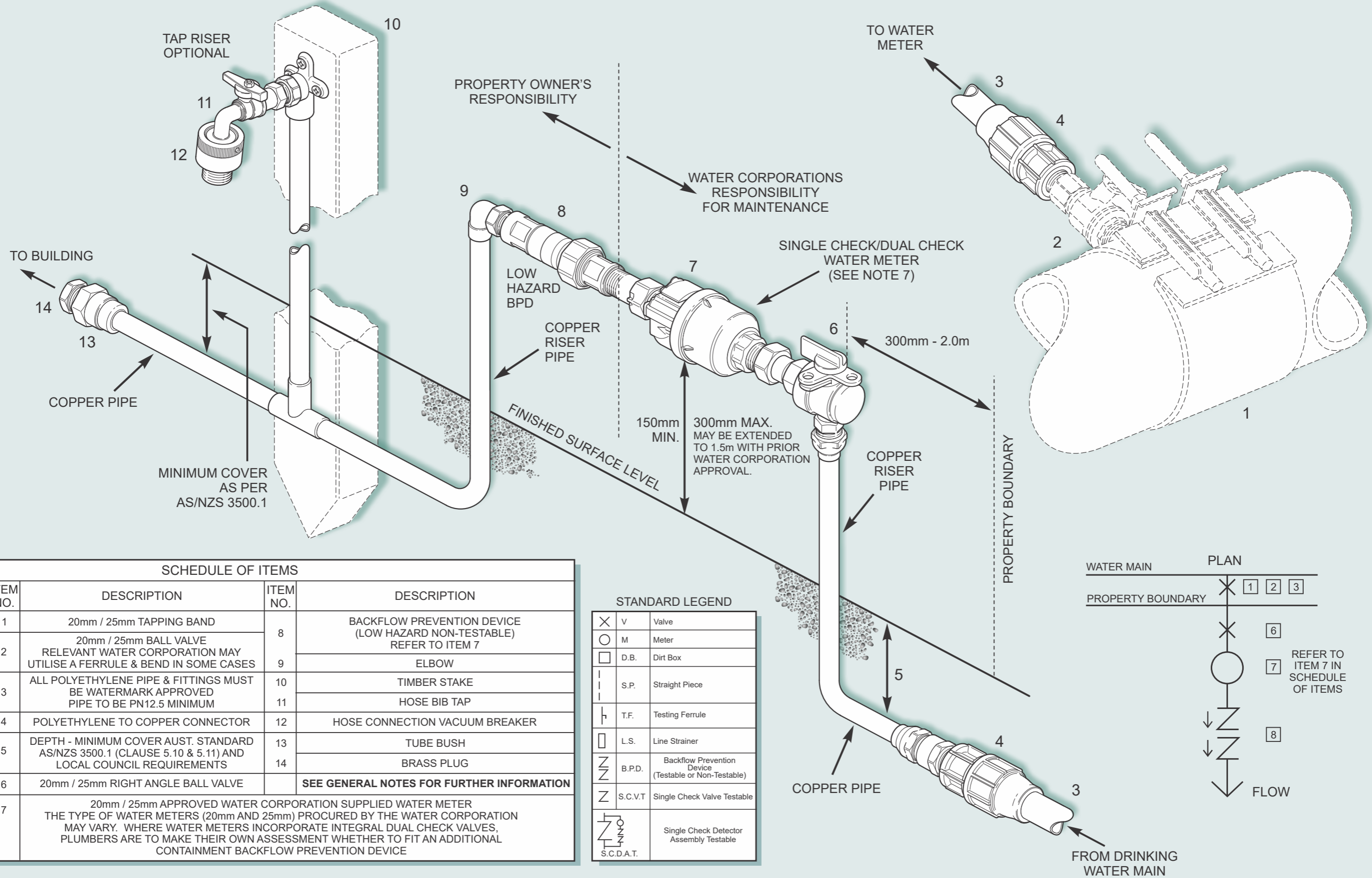
JULY
2017

WATER METER VALVING ASSEMBLY
(TYPICAL INSTALLATION NOTES)



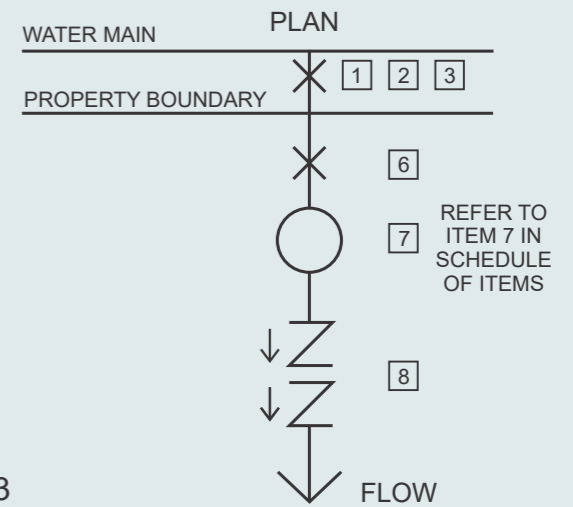
South East
Water





SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	20mm / 25mm TAPPING BAND	8	BACKFLOW PREVENTION DEVICE (LOW HAZARD NON-TESTABLE) REFER TO ITEM 7
2	20mm / 25mm BALL VALVE RELEVANT WATER CORPORATION MAY UTILISE A FERRULE & BEND IN SOME CASES	9	ELBOW
3	ALL POLYETHYLENE PIPE & FITTINGS MUST BE WATERMARK APPROVED PIPE TO BE PN12.5 MINIMUM	10	TIMBER STAKE
4	POLYETHYLENE TO COPPER CONNECTOR	11	HOSE BIB TAP
5	DEPTH - MINIMUM COVER AUST. STANDARD AS/NZS 3500.1 (CLAUSE 5.10 & 5.11) AND LOCAL COUNCIL REQUIREMENTS	12	HOSE CONNECTION VACUUM BREAKER
6	20mm / 25mm RIGHT ANGLE BALL VALVE	13	TUBE BUSH
7	20mm / 25mm APPROVED WATER CORPORATION SUPPLIED WATER METER THE TYPE OF WATER METERS (20mm AND 25mm) PROCURED BY THE WATER CORPORATION MAY VARY. WHERE WATER METERS INCORPORATE INTEGRAL DUAL CHECK VALVES, PLUMBERS ARE TO MAKE THEIR OWN ASSESSMENT WHETHER TO FIT AN ADDITIONAL CONTAINMENT BACKFLOW PREVENTION DEVICE	14	BRASS PLUG
SEE GENERAL NOTES FOR FURTHER INFORMATION			

STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
—	S.P.	Straight Piece
⊥	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable



DRAWING NUMBER:

1

SCALE:

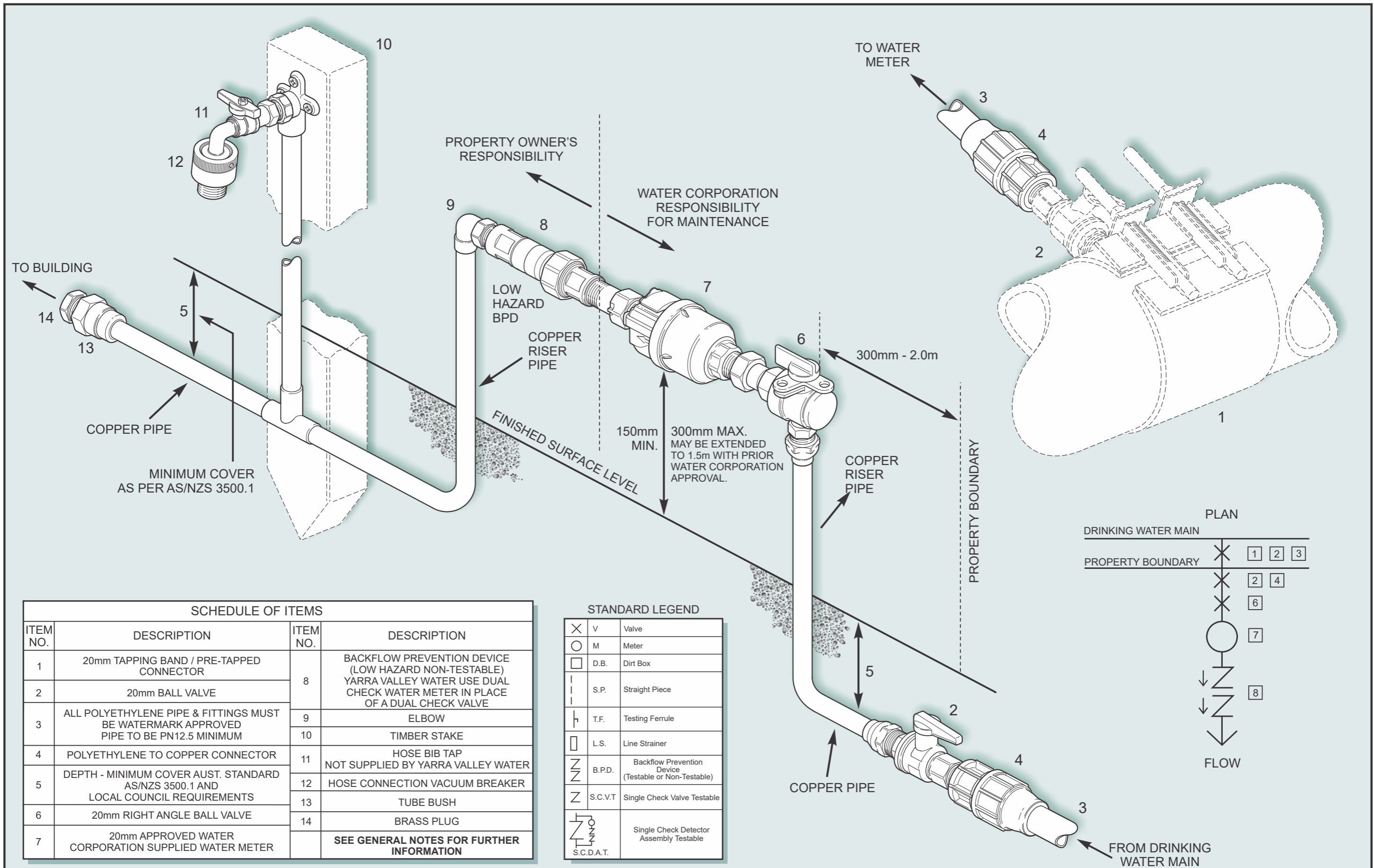
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DATE:

JULY 2017

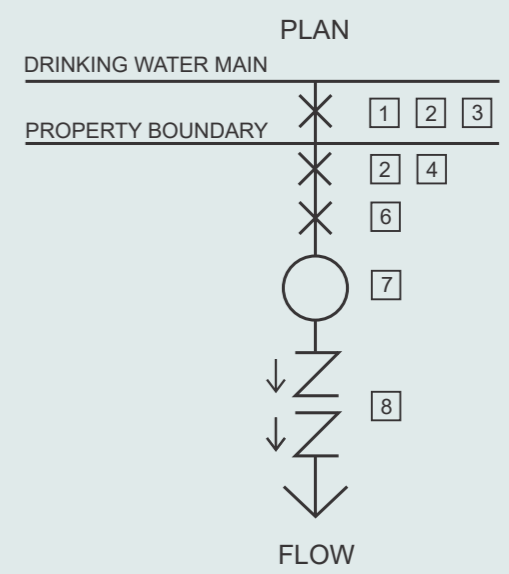
20 - 25mm GENERAL WATER SERVICE (WET TAPPING)
 LOW HAZARD
 RESIDENTIAL / COMMERCIAL / INDUSTRIAL
 TYPICAL ARRANGEMENT





SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	20mm TAPPING BAND / PRE-TAPPED CONNECTOR	8	BACKFLOW PREVENTION DEVICE (LOW HAZARD NON-TESTABLE) YARRA VALLEY WATER USE DUAL CHECK WATER METER IN PLACE OF A DUAL CHECK VALVE
2	20mm BALL VALVE		
3	ALL POLYETHYLENE PIPE & FITTINGS MUST BE WATERMARK APPROVED PIPE TO BE PN12.5 MINIMUM	9	ELBOW
4	POLYETHYLENE TO COPPER CONNECTOR	10	TIMBER STAKE
5	DEPTH - MINIMUM COVER AUST. STANDARD AS/NZS 3500.1 AND LOCAL COUNCIL REQUIREMENTS	11	HOSE BIB TAP NOT SUPPLIED BY YARRA VALLEY WATER
6	20mm RIGHT ANGLE BALL VALVE	12	HOSE CONNECTION VACUUM BREAKER
7	20mm APPROVED WATER CORPORATION SUPPLIED WATER METER	13	TUBE BUSH
		14	BRASS PLUG
			SEE GENERAL NOTES FOR FURTHER INFORMATION

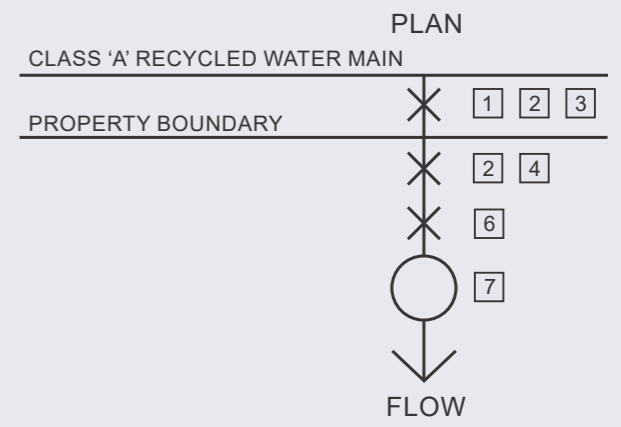
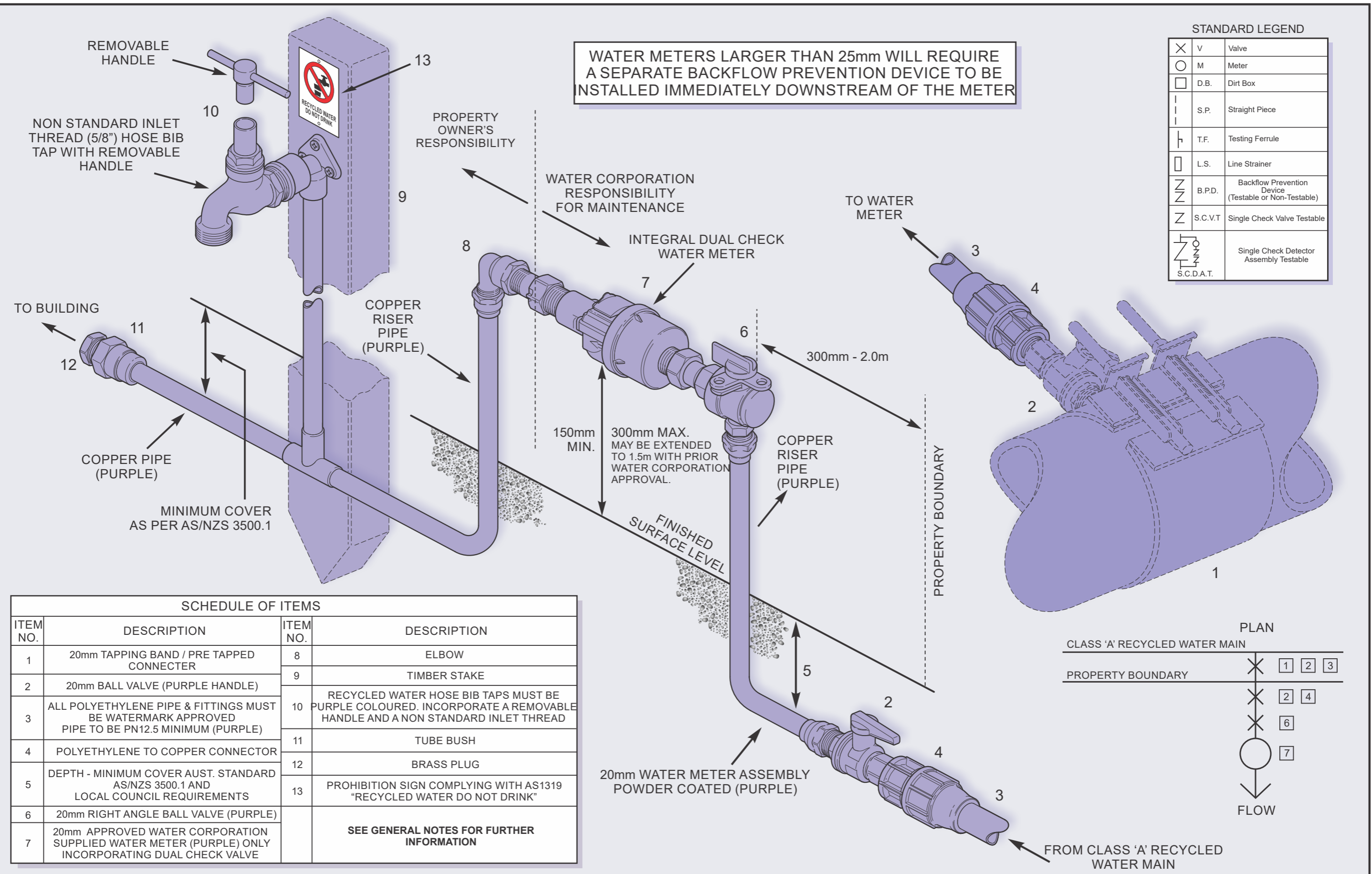
STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
⊥	T.F.	Testing Ferrule
□	L.S.	Line Strainer
∩	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
∩	S.C.V.T	Single Check Valve Testable
∩	S.C.D.A.T.	Single Check Detector Assembly Testable



WATER METERS LARGER THAN 25mm WILL REQUIRE A SEPARATE BACKFLOW PREVENTION DEVICE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER

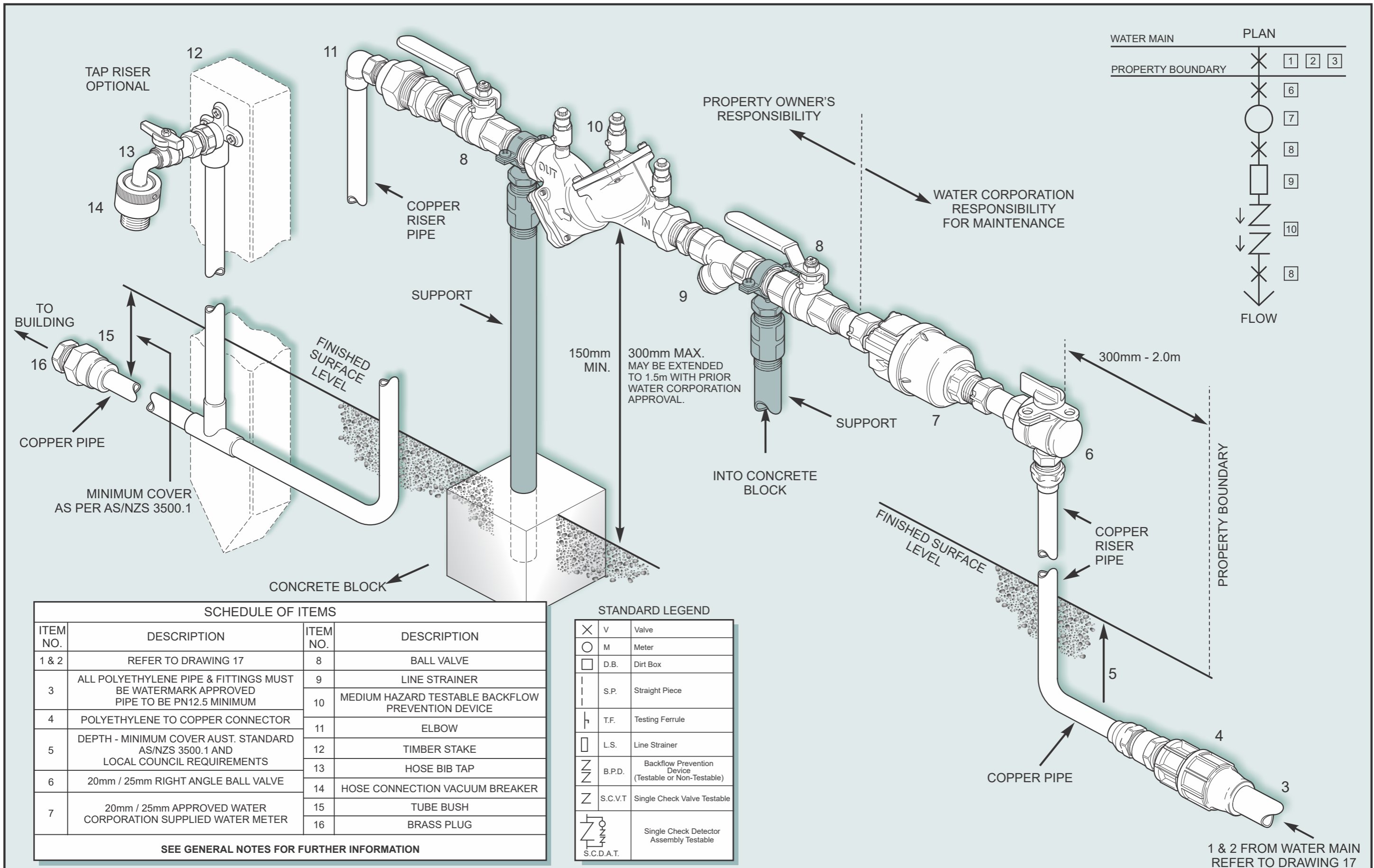
STANDARD LEGEND

⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
┌┐	T.F.	Testing Ferrule
┌┐	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable



SCHEDULE OF ITEMS

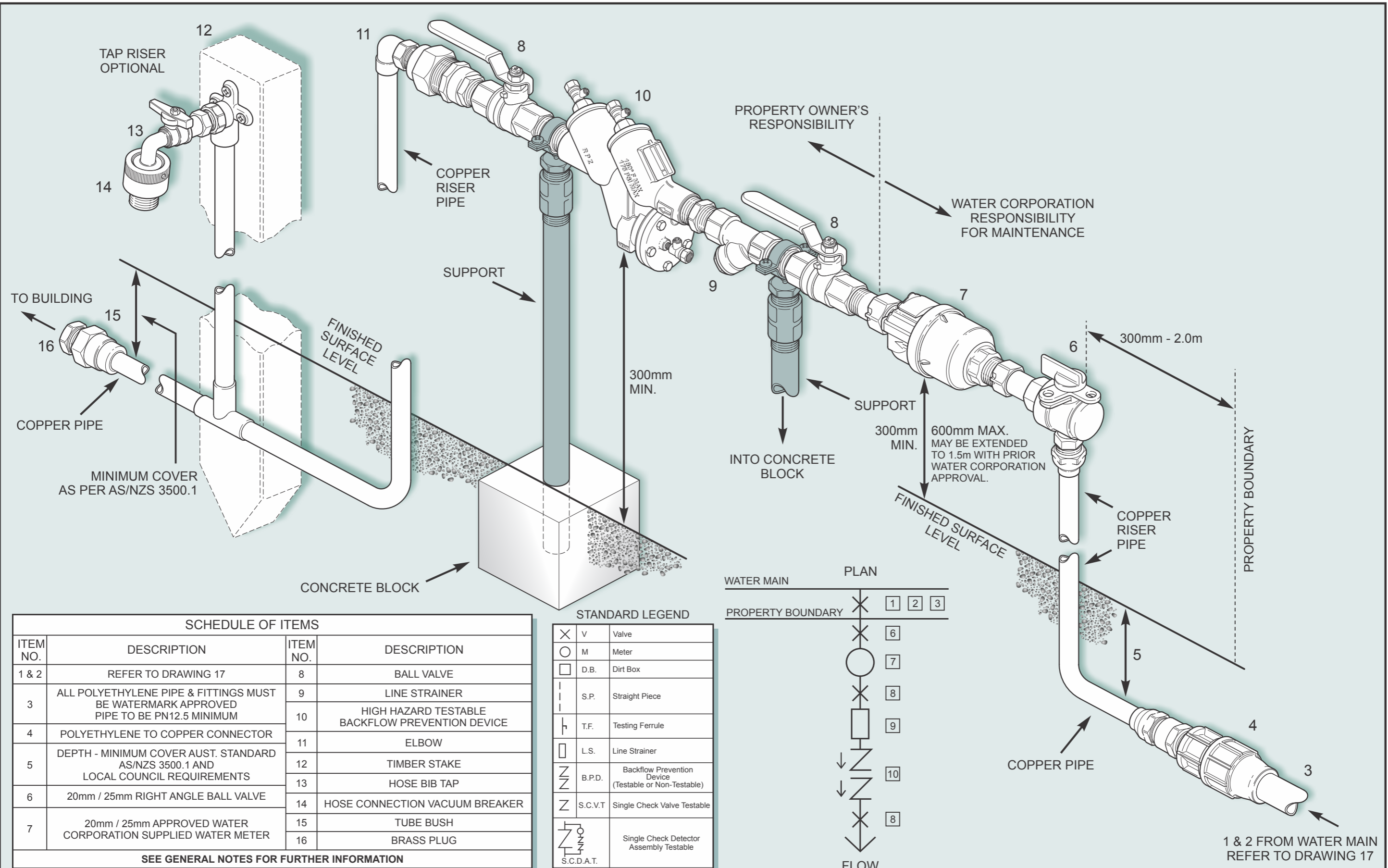
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	20mm TAPPING BAND / PRE TAPPED CONNECTER	8	ELBOW
2	20mm BALL VALVE (PURPLE HANDLE)	9	TIMBER STAKE
3	ALL POLYETHYLENE PIPE & FITTINGS MUST BE WATERMARK APPROVED PIPE TO BE PN12.5 MINIMUM (PURPLE)	10	RECYCLED WATER HOSE BIB TAPS MUST BE PURPLE COLOURED. INCORPORATE A REMOVABLE HANDLE AND A NON STANDARD INLET THREAD
4	POLYETHYLENE TO COPPER CONNECTOR	11	TUBE BUSH
5	DEPTH - MINIMUM COVER AUST. STANDARD AS/NZS 3500.1 AND LOCAL COUNCIL REQUIREMENTS	12	BRASS PLUG
6	20mm RIGHT ANGLE BALL VALVE (PURPLE)	13	PROHIBITION SIGN COMPLYING WITH AS1319 "RECYCLED WATER DO NOT DRINK"
7	20mm APPROVED WATER CORPORATION SUPPLIED WATER METER (PURPLE) ONLY INCORPORATING DUAL CHECK VALVE		SEE GENERAL NOTES FOR FURTHER INFORMATION



SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17	8	BALL VALVE
3	ALL POLYETHYLENE PIPE & FITTINGS MUST BE WATERMARK APPROVED PIPE TO BE PN12.5 MINIMUM	9	LINE STRAINER
4	POLYETHYLENE TO COPPER CONNECTOR	10	MEDIUM HAZARD TESTABLE BACKFLOW PREVENTION DEVICE
5	DEPTH - MINIMUM COVER AUST. STANDARD AS/NZS 3500.1 AND LOCAL COUNCIL REQUIREMENTS	11	ELBOW
6	20mm / 25mm RIGHT ANGLE BALL VALVE	12	TIMBER STAKE
7	20mm / 25mm APPROVED WATER CORPORATION SUPPLIED WATER METER	13	HOSE BIB TAP
		14	HOSE CONNECTION VACUUM BREAKER
		15	TUBE BUSH
		16	BRASS PLUG

SEE GENERAL NOTES FOR FURTHER INFORMATION

STANDARD LEGEND		
X	V	Valve
O	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
	T.F.	Testing Ferrule
□	L.S.	Line Strainer
Z	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
Z	S.C.V.T	Single Check Valve Testable
Z	S.C.D.A.T.	Single Check Detector Assembly Testable



DRAWING NUMBER:

3

SCALE:

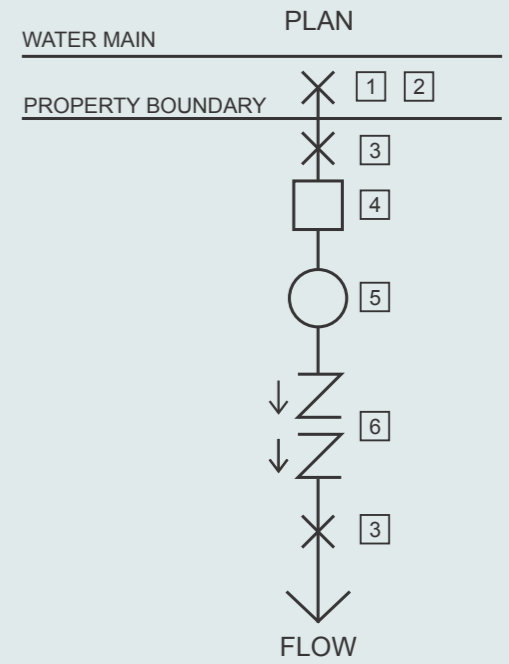
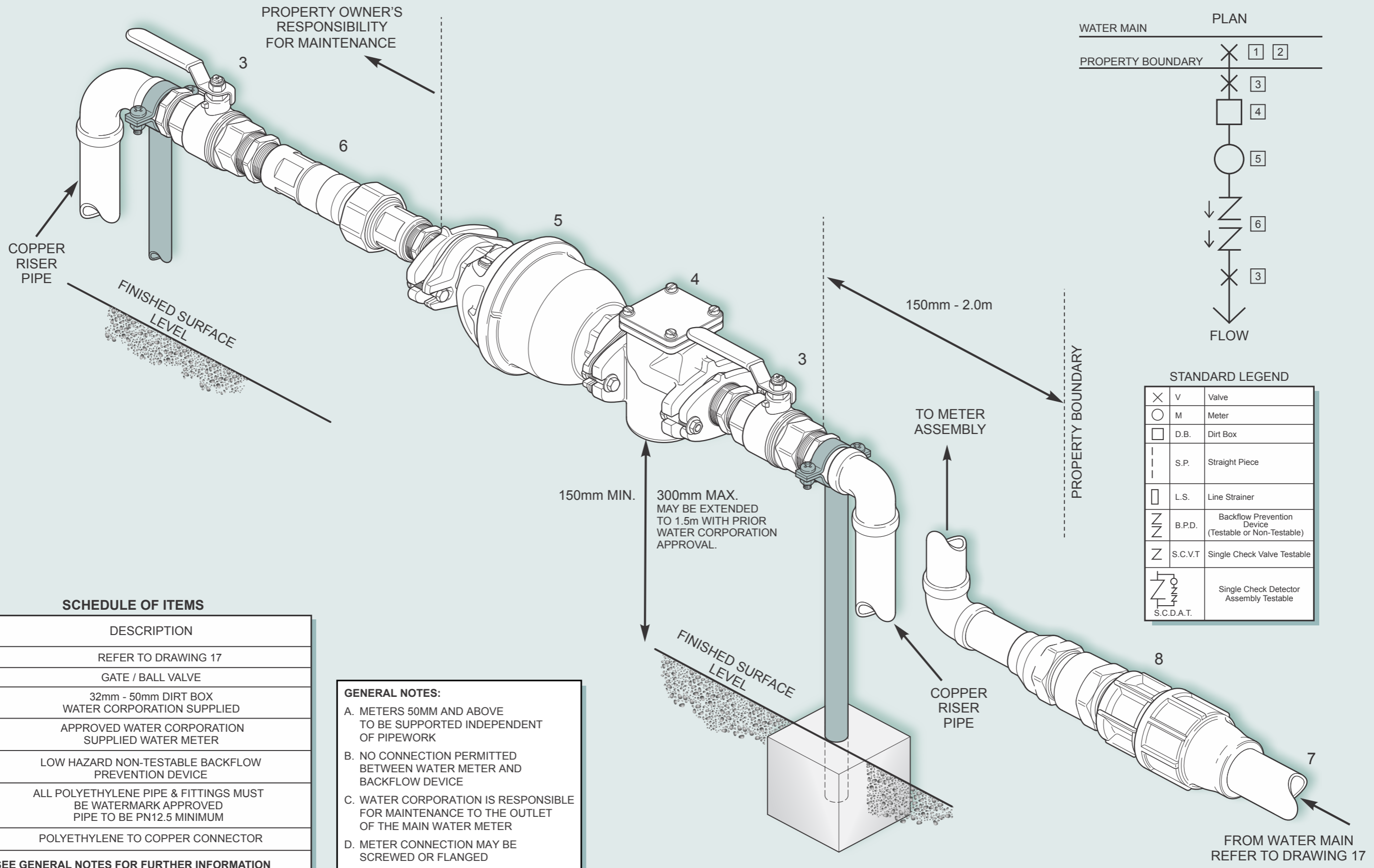
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DATE:

NOVEMBER 2024

20 - 25mm GENERAL WATER SERVICE
HIGH HAZARD
RESIDENTIAL / COMMERCIAL / INDUSTRIAL
TYPICAL ARRANGEMENT





STANDARD LEGEND

⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
---	S.P.	Straight Piece
▭	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T.	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable

SCHEDULE OF ITEMS

ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	GATE / BALL VALVE
4	32mm - 50mm DIRT BOX WATER CORPORATION SUPPLIED
5	APPROVED WATER CORPORATION SUPPLIED WATER METER
6	LOW HAZARD NON-TESTABLE BACKFLOW PREVENTION DEVICE
7	ALL POLYETHYLENE PIPE & FITTINGS MUST BE WATERMARK APPROVED PIPE TO BE PN12.5 MINIMUM
8	POLYETHYLENE TO COPPER CONNECTOR
SEE GENERAL NOTES FOR FURTHER INFORMATION	

GENERAL NOTES:

- A. METERS 50MM AND ABOVE TO BE SUPPORTED INDEPENDENT OF PIPEWORK
- B. NO CONNECTION PERMITTED BETWEEN WATER METER AND BACKFLOW DEVICE
- C. WATER CORPORATION IS RESPONSIBLE FOR MAINTENANCE TO THE OUTLET OF THE MAIN WATER METER
- D. METER CONNECTION MAY BE SCREWED OR FLANGED

DRAWING NUMBER:

4

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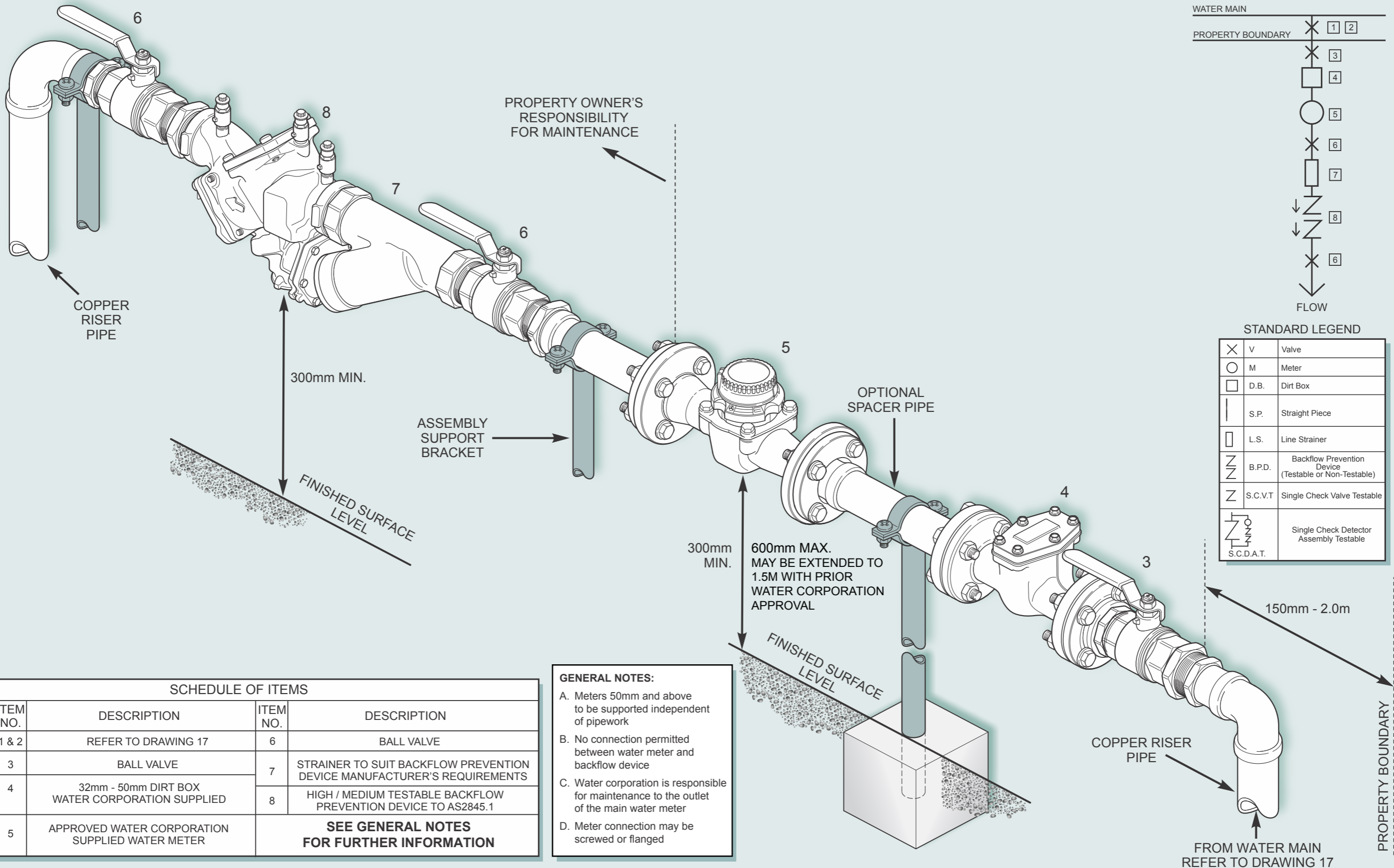
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DATE:

SEPTEMBER 2024

32 - 50mm GENERAL WATER SERVICE
LOW HAZARD
RESIDENTIAL / COMMERCIAL
TYPICAL ARRANGEMENT





SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17	6	BALL VALVE
3	BALL VALVE	7	STRAINER TO SUIT BACKFLOW PREVENTION DEVICE MANUFACTURER'S REQUIREMENTS
4	32mm - 50mm DIRT BOX WATER CORPORATION SUPPLIED	8	HIGH / MEDIUM TESTABLE BACKFLOW PREVENTION DEVICE TO AS2845.1
5	APPROVED WATER CORPORATION SUPPLIED WATER METER	SEE GENERAL NOTES FOR FURTHER INFORMATION	

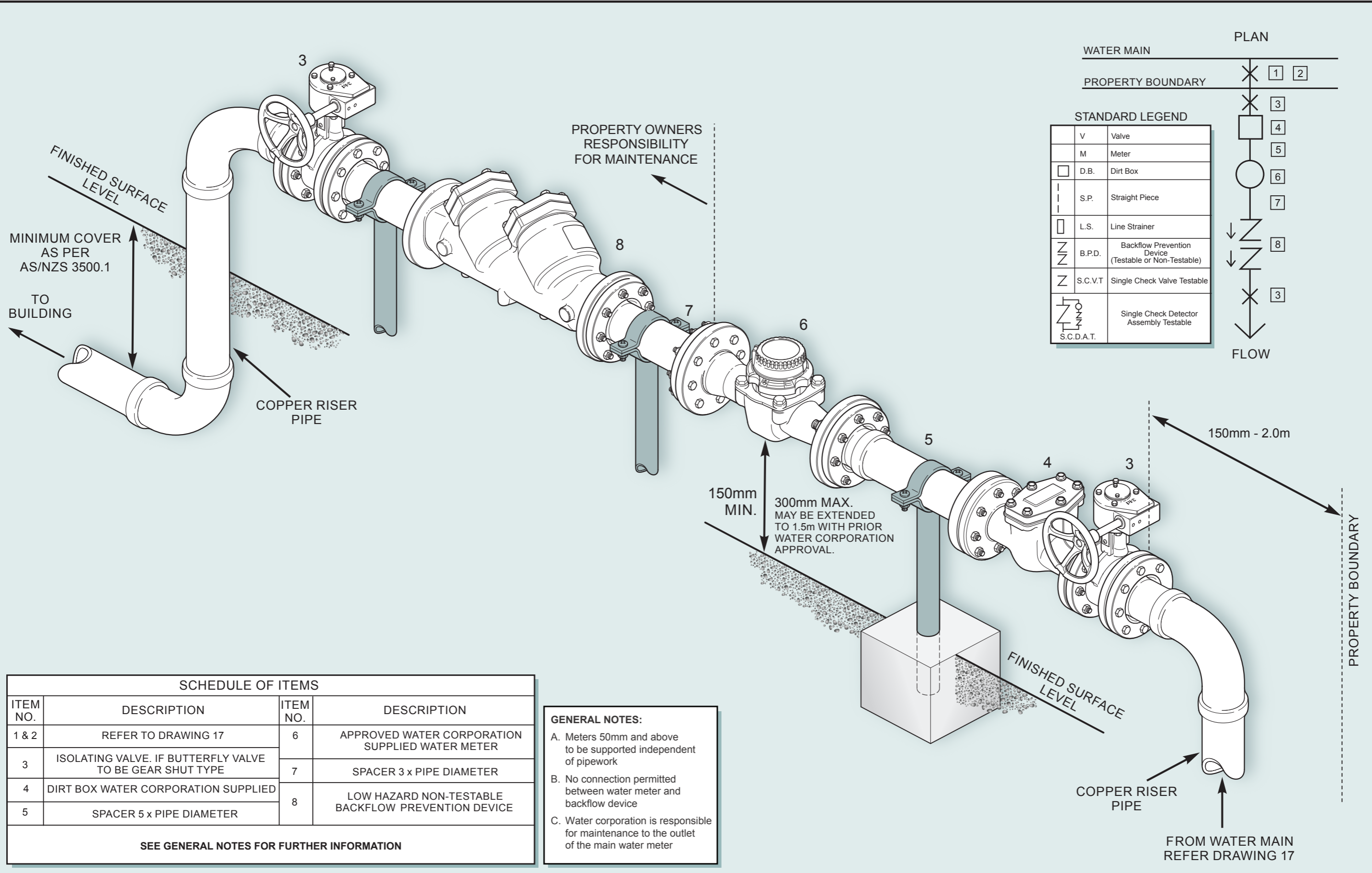
GENERAL NOTES:

A. Meters 50mm and above to be supported independent of pipework

B. No connection permitted between water meter and backflow device

C. Water corporation is responsible for maintenance to the outlet of the main water meter

D. Meter connection may be screwed or flanged



PLAN

WATER MAIN		✕	1	2
PROPERTY BOUNDARY		✕	3	
		□	4	
		—	5	
		○	6	
		—	7	
		⌌	8	
		⌌	3	
		↓		
				FLOW

STANDARD LEGEND

V	Valve
M	Meter
□	D.B. Dirt Box
—	S.P. Straight Piece
⌌	L.S. Line Strainer
⌌	B.P.D. Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T. Single Check Valve Testable
⌌	S.C.D.A.T. Single Check Detector Assembly Testable

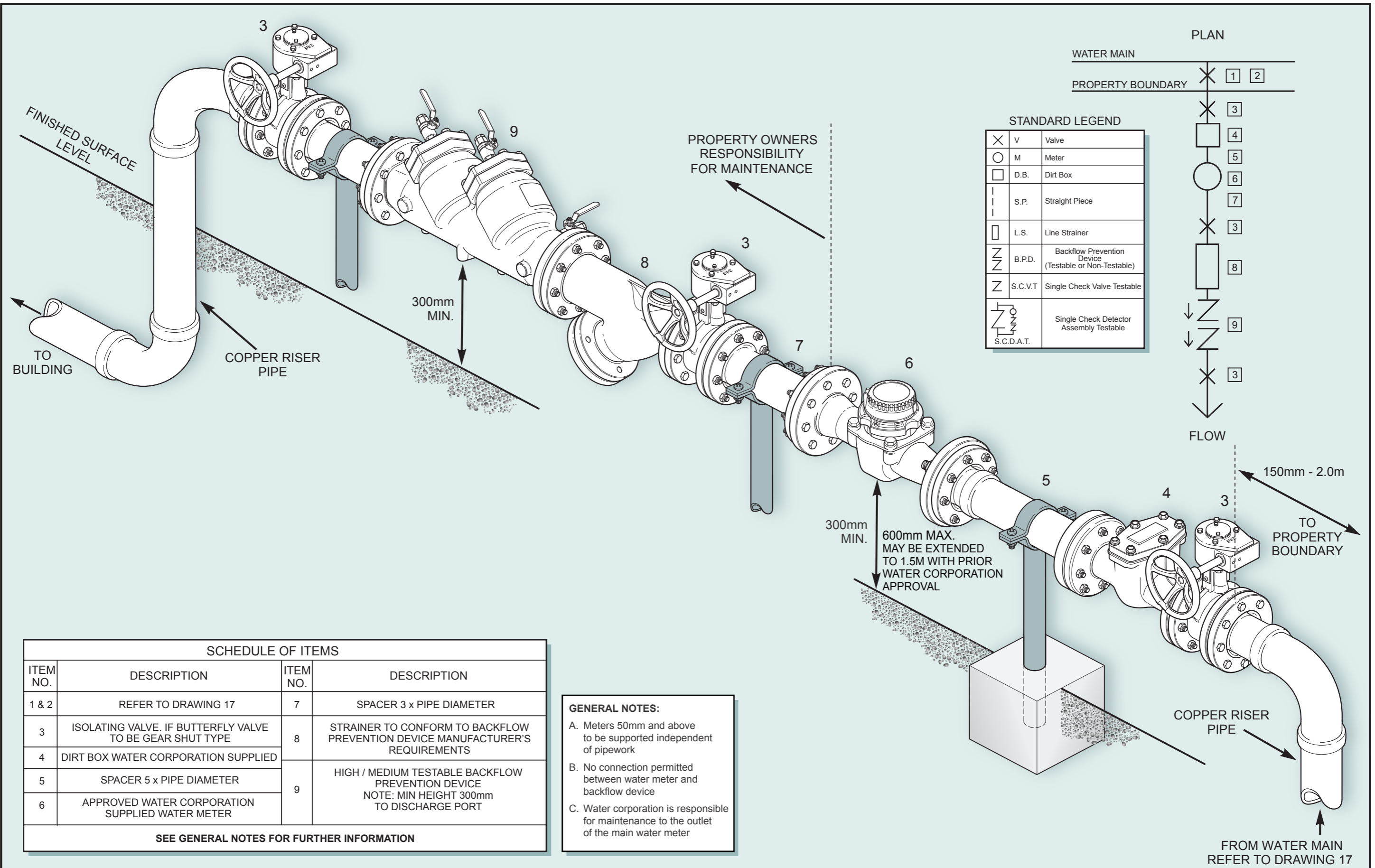
SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17	6	APPROVED WATER CORPORATION SUPPLIED WATER METER
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE	7	SPACER 3 x PIPE DIAMETER
4	DIRT BOX WATER CORPORATION SUPPLIED	8	LOW HAZARD NON-TESTABLE BACKFLOW PREVENTION DEVICE
5	SPACER 5 x PIPE DIAMETER		
SEE GENERAL NOTES FOR FURTHER INFORMATION			

GENERAL NOTES:

A. Meters 50mm and above to be supported independent of pipework

B. No connection permitted between water meter and backflow device

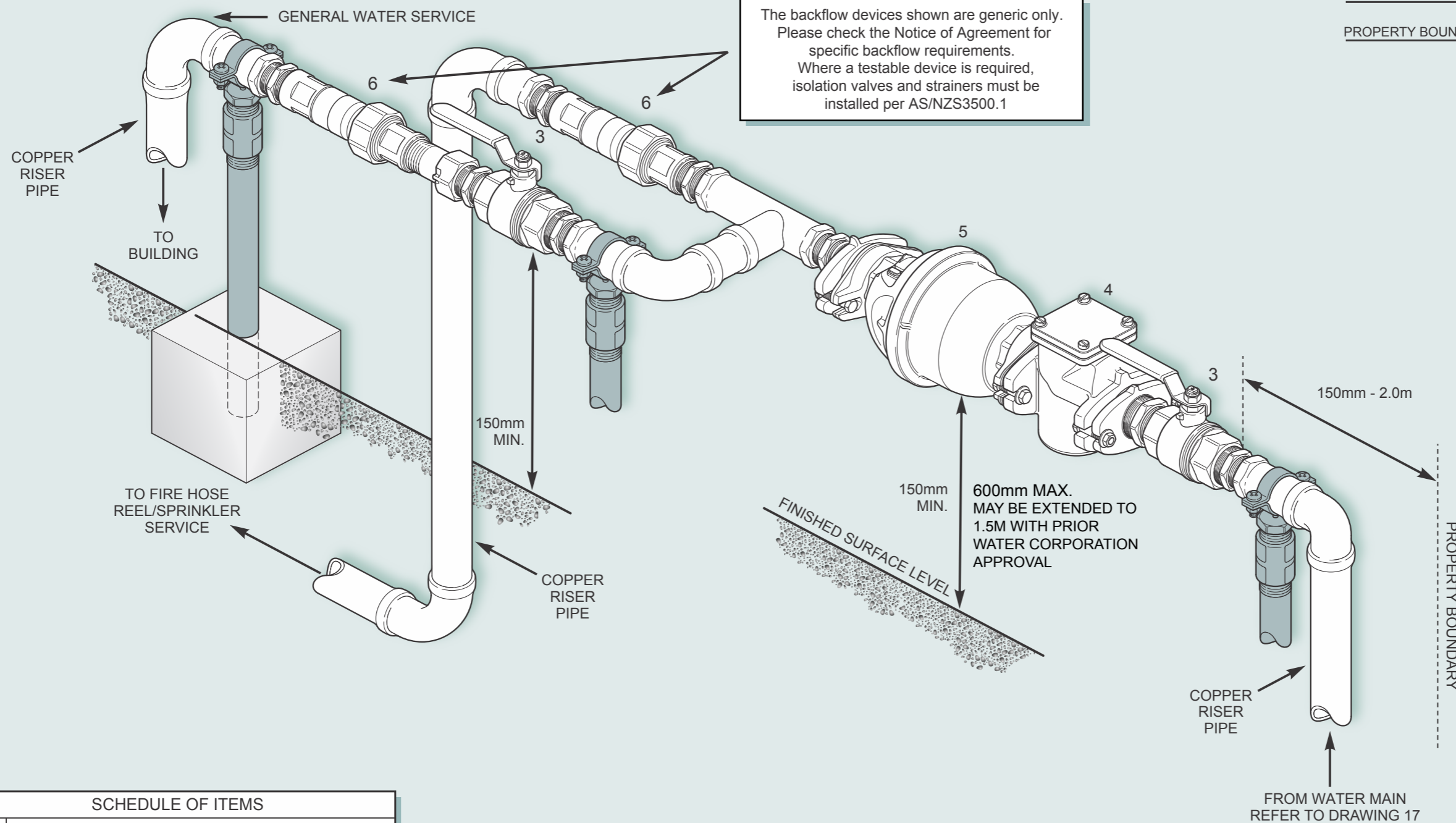
C. Water corporation is responsible for maintenance to the outlet of the main water meter



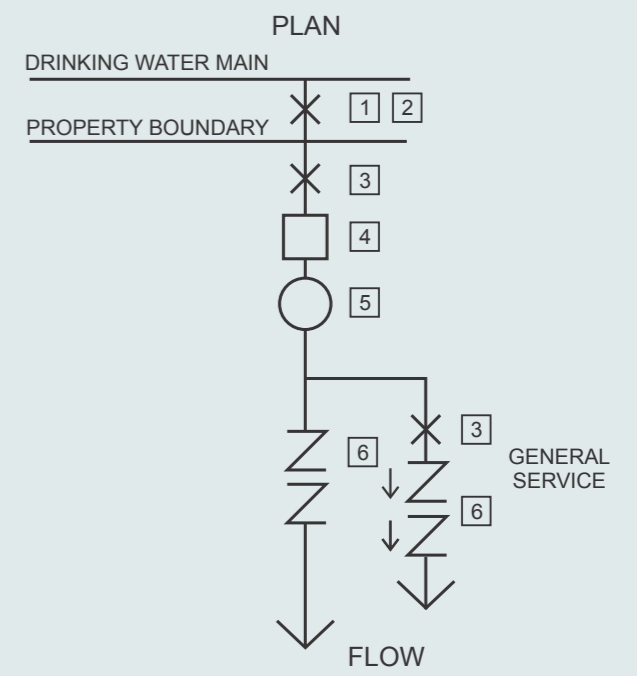
SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17	7	SPACER 3 x PIPE DIAMETER
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE	8	STRAINER TO CONFORM TO BACKFLOW PREVENTION DEVICE MANUFACTURER'S REQUIREMENTS
4	DIRT BOX WATER CORPORATION SUPPLIED	9	HIGH / MEDIUM TESTABLE BACKFLOW PREVENTION DEVICE NOTE: MIN HEIGHT 300mm TO DISCHARGE PORT
5	SPACER 5 x PIPE DIAMETER		
6	APPROVED WATER CORPORATION SUPPLIED WATER METER		
SEE GENERAL NOTES FOR FURTHER INFORMATION			

GENERAL NOTES:

- A. Meters 50mm and above to be supported independent of pipework
- B. No connection permitted between water meter and backflow device
- C. Water corporation is responsible for maintenance to the outlet of the main water meter



The backflow devices shown are generic only. Please check the Notice of Agreement for specific backflow requirements. Where a testable device is required, isolation valves and strainers must be installed per AS/NZS3500.1



STANDARD LEGEND

V	Valve
M	Meter
□	D.B. Dirt Box
---	S.P. Straight Piece
□	L.S. Line Strainer
Z	B.P.D. Backflow Prevention Device (Testable or Non-Testable)
Z	S.C.V.T. Single Check Valve Testable
Z	S.C.D.A.T. Single Check Detector Assembly Testable

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	GATE / BALL VALVE
4	DIRT BOX FOR 32mm + WATER CORPORATION SUPPLIED
5	APPROVED WATER CORPORATION SUPPLIED WATER METER
6	APPROPRIATE APPROVED BACKFLOW PREVENTION DEVICE
SEE GENERAL NOTES FOR FURTHER INFORMATION	

GENERAL NOTES:

A. METERS 50MM AND ABOVE TO BE SUPPORTED INDEPENDENT OF PIPEWORK

B. NO CONNECTION PERMITTED BETWEEN WATER METER AND BACKFLOW DEVICE

C. METER CONNECTION MAY BE SCREWED OR FLANGED

D. WHERE FIRE SERVICES HAVE HOSE REELS IN AREAS SUBJECT TO POTENTIAL INTERCONNECTION WITH CONTAMINANTS, THE TYPE OF BACKFLOW PREVENTION DEVICES INSTALLED AT THE WATER METER MUST BE RELEVANT TO THE HAZARD RATING OF THE PROPERTY.

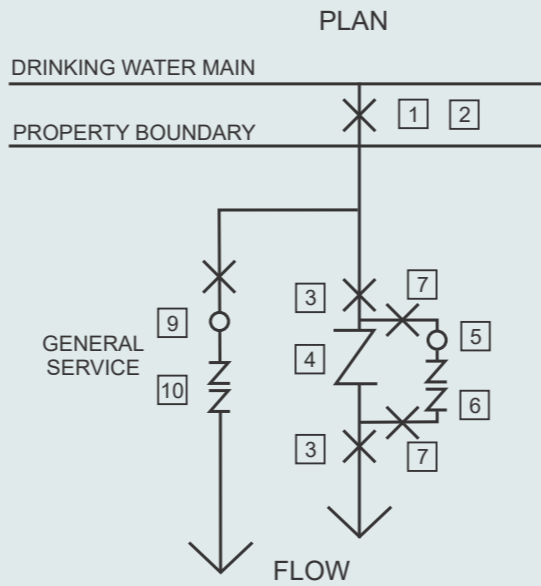
ON FIRE SERVICES, ANY USE OF NON-METALLIC PIPE ABOVE GROUND IS RESTRICTED TO UPSTREAM OF THE LAST UPTURNED BEND ON THE RISER TO THE ASSEMBLY.
NOTE: USE OF GALVANISED WROUGHT IRON PIPE (GWIP) IS PROHIBITED IN ANY PART OF THE INSTALLATION UPSTREAM OF THE ASSEMBLY.

FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 - 7

GENERAL SERVICE APPROPRIATE WATER METER, BPD AND VALVES TO COMPLY WITH INDIVIDUAL INSTALLATION

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	MINIMUM SINGLE CHECK DETECTOR ASSEMBLY TESTABLE. VALVE TO CONFORM TO AS/NZS2845
5	25mm BYPASS METER SUPPLIED BY WATER CORPORATION
6	25mm DUAL CHECK VALVE AS A MINIMUM
7	LOCKABLE BALL VALVES WITH A003 KEYED LOCKS
8	TEST PORT
9	WATER METER FOR GENERAL SERVICE
10	APPROPRIATE BDFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
—	S.P.	Straight Piece
⊥	T.F.	Testing Ferrule
□	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable



MAXIMUM HEIGHT OF WATER METER ASSEMBLY MAY BE EXTENDED TO 1.5m WITH PRIOR APPROVAL FROM THE RELEVANT WATER CORPORATION

APPROVED MATERIAL
 FINISHED SURFACE LEVEL
 MINIMUM COVER AS PER AS/NZS 3500.1
 FIRE SERVICE

CONCRETE BLOCK

150mm MIN. 300mm MAX.

150mm - 2.0m

PROPERTY BOUNDARY

1 & 2 FROM WATER MAIN REFER TO DRAWING 17

DRAWING NUMBER:

9

SCALE:

NOT TO SCALE

DATE:

JULY 2017

80mm+ FIRE HYDRANT / HOSE REELS WITH SINGLE CHECK DETECTOR ASSEMBLY TESTABLE TYPICAL ARRANGEMENT



ON FIRE SERVICES, ANY USE OF NON-METALLIC PIPE ABOVE GROUND IS RESTRICTED TO UPSTREAM OF THE LAST UPTURNED BEND ON THE RISER TO THE ASSEMBLY.
NOTE: USE OF GALVANISED WROUGHT IRON PIPE (GWIP) IS PROHIBITED IN ANY PART OF THE INSTALLATION UPSTREAM OF THE ASSEMBLY.

FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 - 7

GENERAL SERVICE APPROPRIATE WATER METER, BPD AND VALVES TO COMPLY WITH INDIVIDUAL INSTALLATION

MAXIMUM HEIGHT OF WATER METER ASSEMBLY MAY BE EXTENDED TO 1.5m WITH PRIOR APPROVAL FROM THE RELEVANT WATER CORPORATION

APPROVED MATERIAL
 FINISHED SURFACE LEVEL
 MINIMUM COVER AS PER AS/NZS 3500.1
 FIRE SERVICE

CONCRETE BLOCK

300mm MAX. MAY BE EXTENDED TO 1.5m WITH PRIOR WATER CORPORATION APPROVAL.

CONCRETE BLOCK

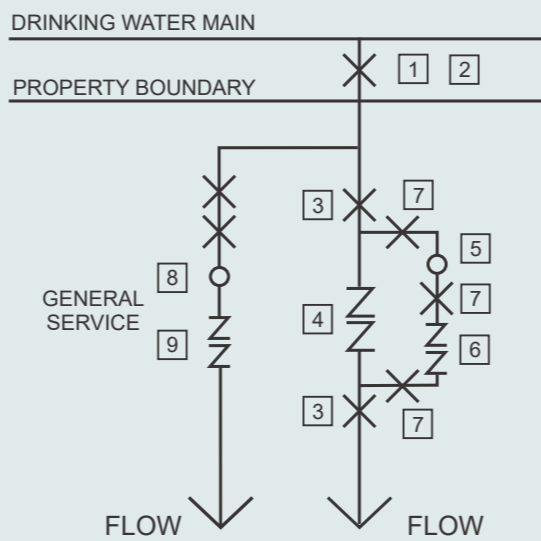
150mm MIN.

150mm - 2.0m

PROPERTY BOUNDARY

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	DOUBLE CHECK DETECTOR ASSEMBLY TESTABLE. VALVE TO CONFORM TO AS/NZS2845
5	25mm BYPASS METER SUPPLIED BY WATER CORPORATION.
6	DOUBLE CHECK VALVE TESTABLE
7	LOCKABLE BALL VALVES WITH A003 KEYED LOCKS
8	WATER METER FOR GENERAL SERVICE
9	APPROPRIATE BFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
┆	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
≡	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
Z	S.C.V.T	Single Check Valve Testable
⊕	S.C.D.A.T.	Single Check Detector Assembly Testable



APPROVED MATERIAL

1 & 2 FROM WATER MAIN REFER TO DRAWING 17

DRAWING NUMBER:

10

SCALE:

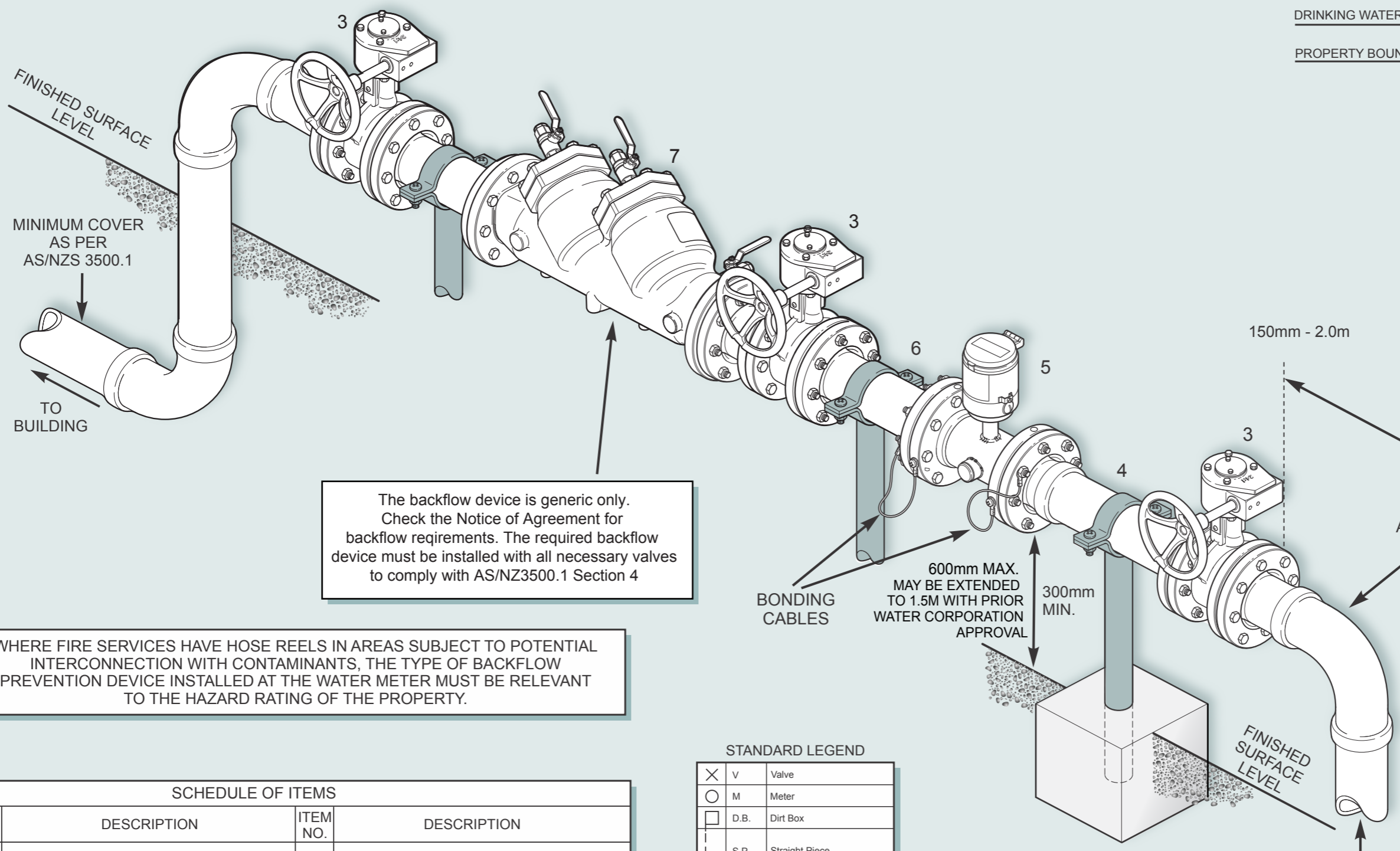
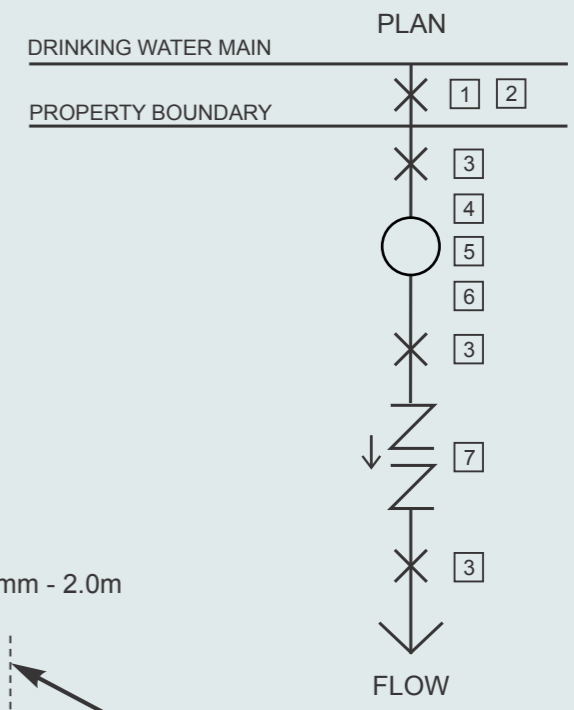
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DATE:

JULY 2017

80mm+ FIRE HYDRANT / HOSE REELS WITH DOUBLE CHECK DETECTOR ASSEMBLY TESTABLE TYPICAL ARRANGEMENT



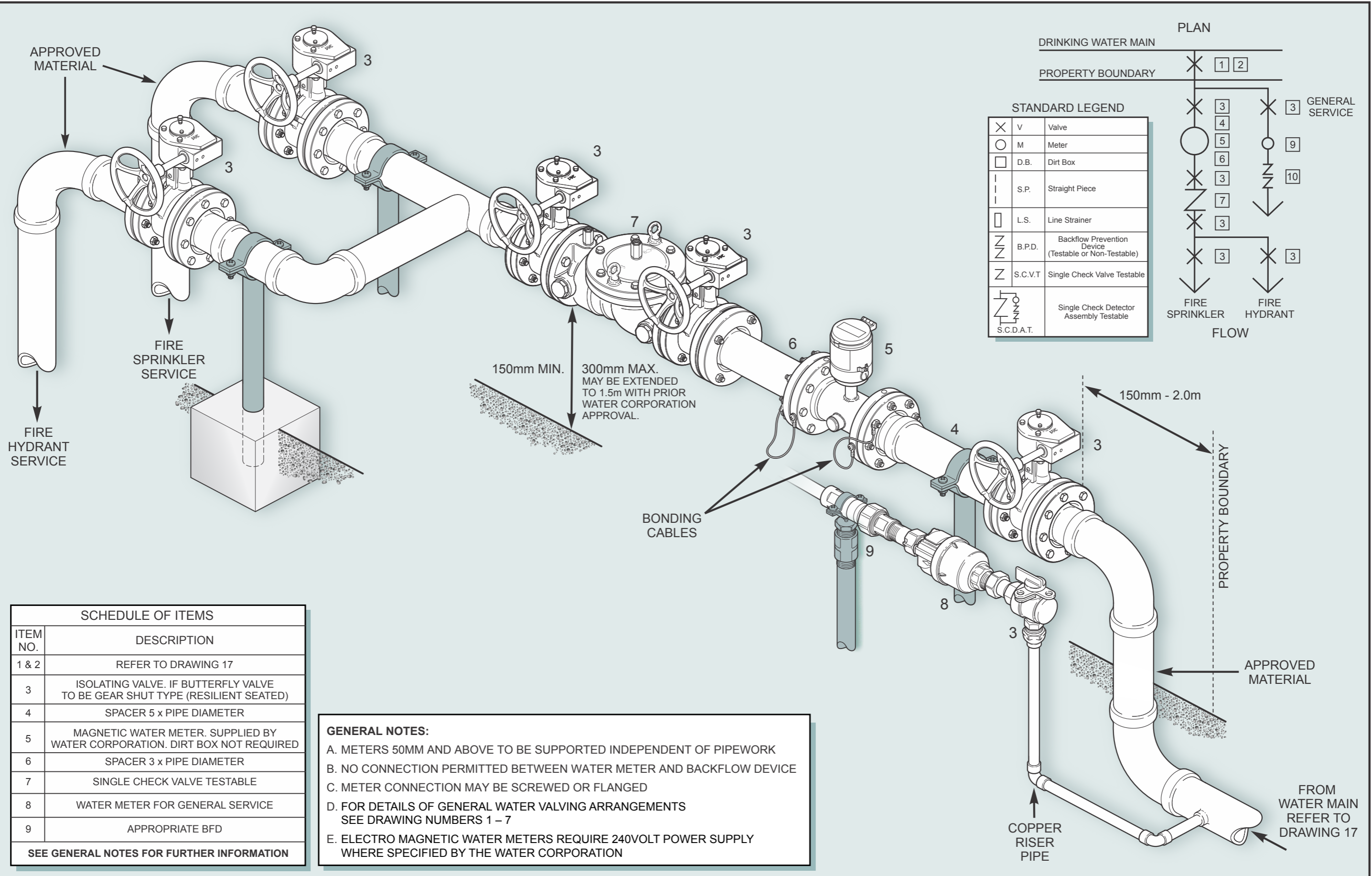


The backflow device is generic only. Check the Notice of Agreement for backflow requirements. The required backflow device must be installed with all necessary valves to comply with AS/NZ3500.1 Section 4

WHERE FIRE SERVICES HAVE HOSE REELS IN AREAS SUBJECT TO POTENTIAL INTERCONNECTION WITH CONTAMINANTS, THE TYPE OF BACKFLOW PREVENTION DEVICE INSTALLED AT THE WATER METER MUST BE RELEVANT TO THE HAZARD RATING OF THE PROPERTY.

SCHEDULE OF ITEMS			
ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17	6	SPACER 3 x PIPE DIAMETER
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE	7	BACKFLOW PREVENTION DEVICE AND ASSOCIATED VALVING TO BE RELEVANT TO HAZARD RATING - CHECK NOTICE OF AGREEMENT
4	SPACER 5 x PIPE DIAMETER		
5	APPROVED WATER CORPORATION SUPPLIED WATER METER	METERS 50mm AND ABOVE TO BE INDEPENDENTLY SUPPORTED FROM PIPE WORK	
SEE GENERAL NOTES FOR FURTHER INFORMATION			

STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
□	L.S.	Line Strainer
∩	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
∩	S.C.V.T	Single Check Valve Testable
∩	S.C.D.A.T.	Single Check Detector Assembly Testable



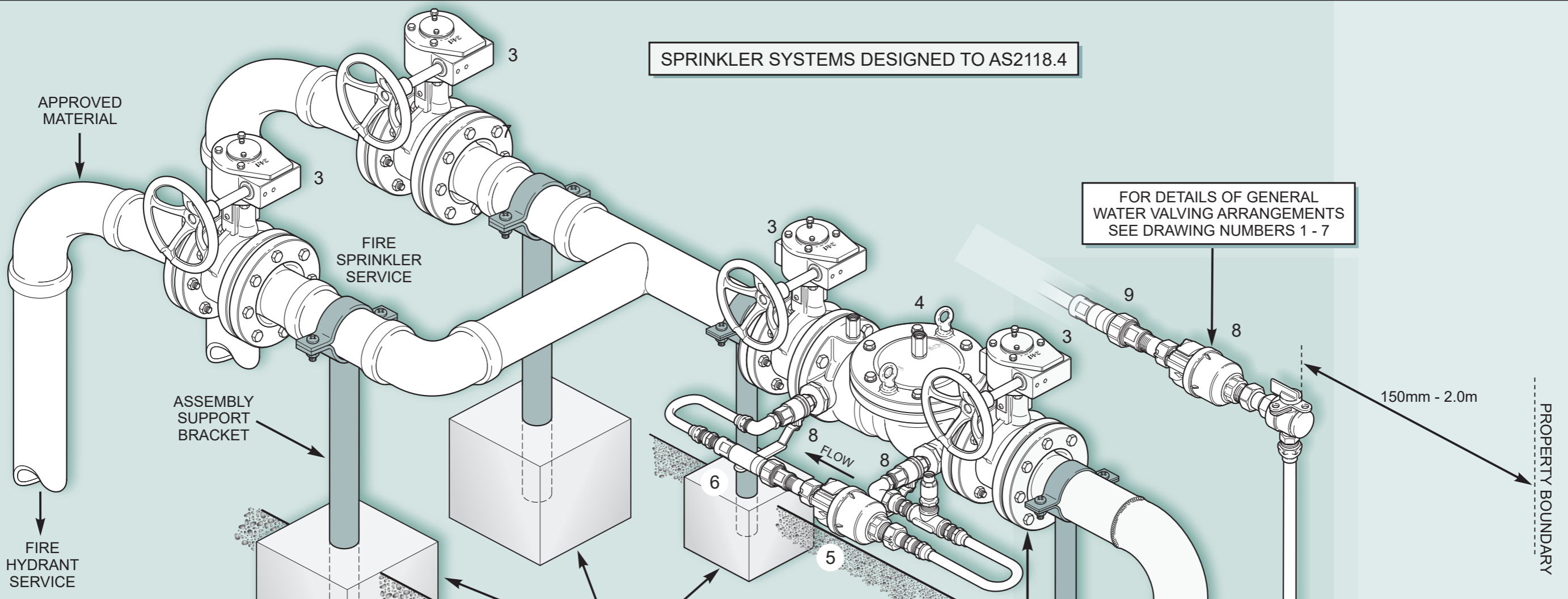
SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SPACER 5 x PIPE DIAMETER
5	MAGNETIC WATER METER. SUPPLIED BY WATER CORPORATION. DIRT BOX NOT REQUIRED
6	SPACER 3 x PIPE DIAMETER
7	SINGLE CHECK VALVE TESTABLE
8	WATER METER FOR GENERAL SERVICE
9	APPROPRIATE BFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

GENERAL NOTES:

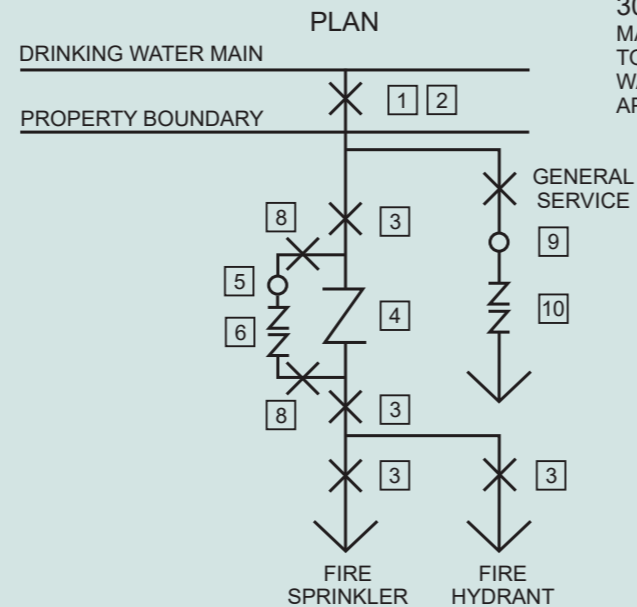
- A. METERS 50MM AND ABOVE TO BE SUPPORTED INDEPENDENT OF PIPEWORK
- B. NO CONNECTION PERMITTED BETWEEN WATER METER AND BACKFLOW DEVICE
- C. METER CONNECTION MAY BE SCREWED OR FLANGED
- D. FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 – 7
- E. ELECTRO MAGNETIC WATER METERS REQUIRE 240VOLT POWER SUPPLY WHERE SPECIFIED BY THE WATER CORPORATION

SPRINKLER SYSTEMS DESIGNED TO AS2118.4

FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 - 7



SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED) VALVE TO CONFORM TO AS/NZS2845
4	MINIMUM SINGLE CHECK DETECTOR ASSEMBLY (TESTABLE)
5	25mm BYPASS METER SUPPLIED BY WATER CORPORATION.
6	25mm DUAL CHECK VALVE AS MINIMUM
7	ISOLATING VALVE
8	LOCKABLE BALL VALVES WITH A003 KEYED LOCKS
9	WATER METER FOR GENERAL SERVICE
10	APPROVED BFD
METERS 50mm AND ABOVE TO BE INDEPENDENTLY SUPPORTED FROM PIPE WORK	
SEE GENERAL NOTES FOR FURTHER INFORMATION	



150mm MIN. 300mm MAX. MAY BE EXTENDED TO 1.5m WITH PRIOR WATER CORPORATION APPROVAL.

STANDARD LEGEND		
×	V	Valve
○	M	Meter
□	D.B.	Dirt Box
—	S.P.	Straight Piece
⊥	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable

1 & 2 FROM WATER MAIN REFER TO DRAWING 17

DRAWING NUMBER:

12A

SCALE:

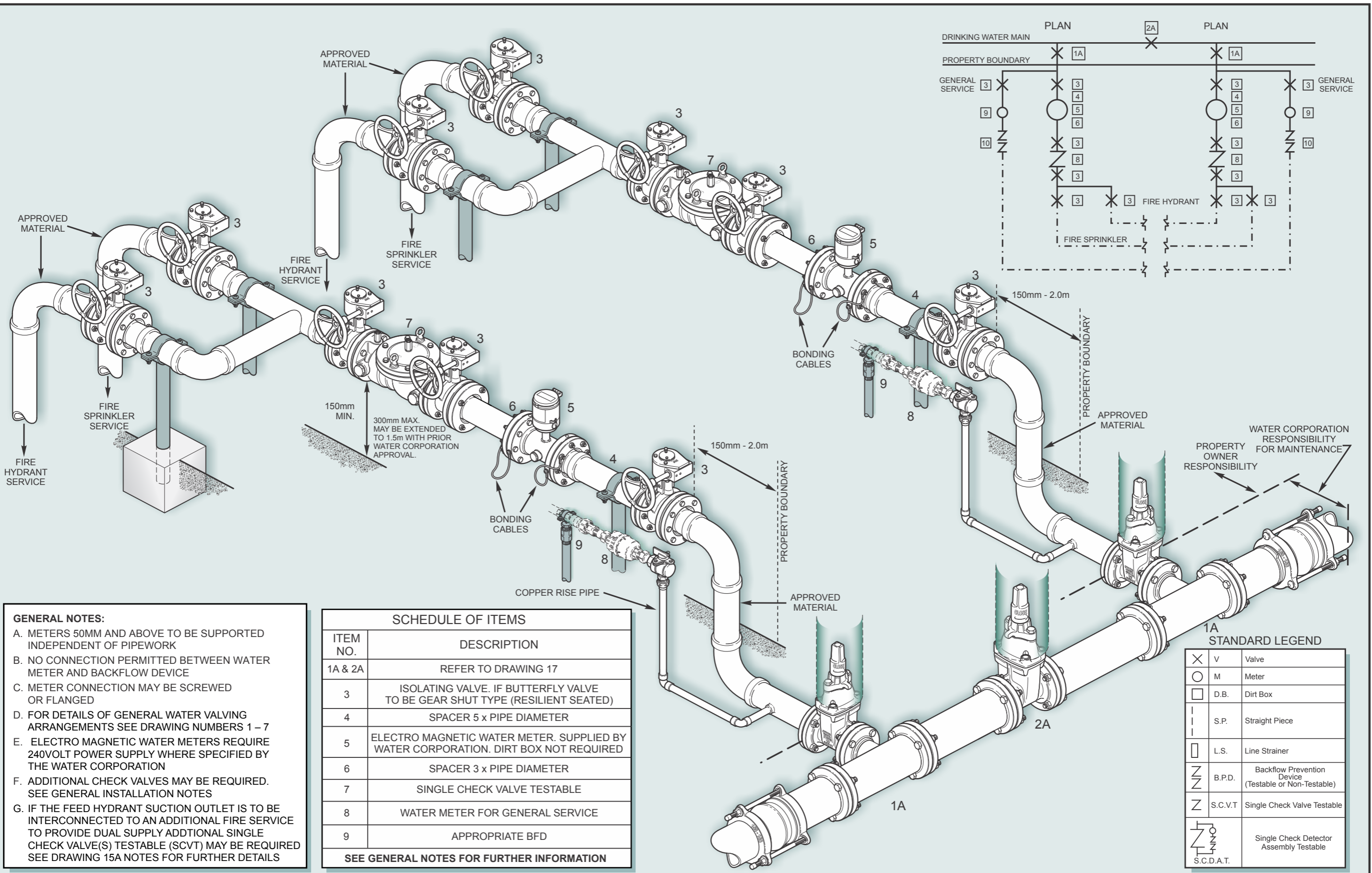
NOT TO SCALE

DATE:

AUGUST 2019

FIRE SPRINKLER & HYDRANT SERVICE SINGLE CHECK DETECTOR ASSEMBLY (TESTABLE) (NO BOOSTER PUMPS) TYPICAL ARRANGEMENT





GENERAL NOTES:

- A. METERS 50MM AND ABOVE TO BE SUPPORTED INDEPENDENT OF PIPEWORK
- B. NO CONNECTION PERMITTED BETWEEN WATER METER AND BACKFLOW DEVICE
- C. METER CONNECTION MAY BE SCREWED OR FLANGED
- D. FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 – 7
- E. ELECTRO MAGNETIC WATER METERS REQUIRE 240VOLT POWER SUPPLY WHERE SPECIFIED BY THE WATER CORPORATION
- F. ADDITIONAL CHECK VALVES MAY BE REQUIRED. SEE GENERAL INSTALLATION NOTES
- G. IF THE FEED HYDRANT SUCTION OUTLET IS TO BE INTERCONNECTED TO AN ADDITIONAL FIRE SERVICE TO PROVIDE DUAL SUPPLY ADDITIONAL SINGLE CHECK VALVE(S) TESTABLE (SCVT) MAY BE REQUIRED SEE DRAWING 15A NOTES FOR FURTHER DETAILS

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1A & 2A	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SPACER 5 x PIPE DIAMETER
5	ELECTRO MAGNETIC WATER METER. SUPPLIED BY WATER CORPORATION. DIRT BOX NOT REQUIRED
6	SPACER 3 x PIPE DIAMETER
7	SINGLE CHECK VALVE TESTABLE
8	WATER METER FOR GENERAL SERVICE
9	APPROPRIATE BFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

1A STANDARD LEGEND

✕	V	Valve
○	M	Meter
□	D.B.	Dirty Box
—	S.P.	Straight Piece
□	L.S.	Line Strainer
∑	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
∑	S.C.V.T.	Single Check Valve Testable
∑	S.C.D.A.T.	Single Check Detector Assembly Testable

DRAWING NUMBER:
12B

SCALE:
NOT TO SCALE

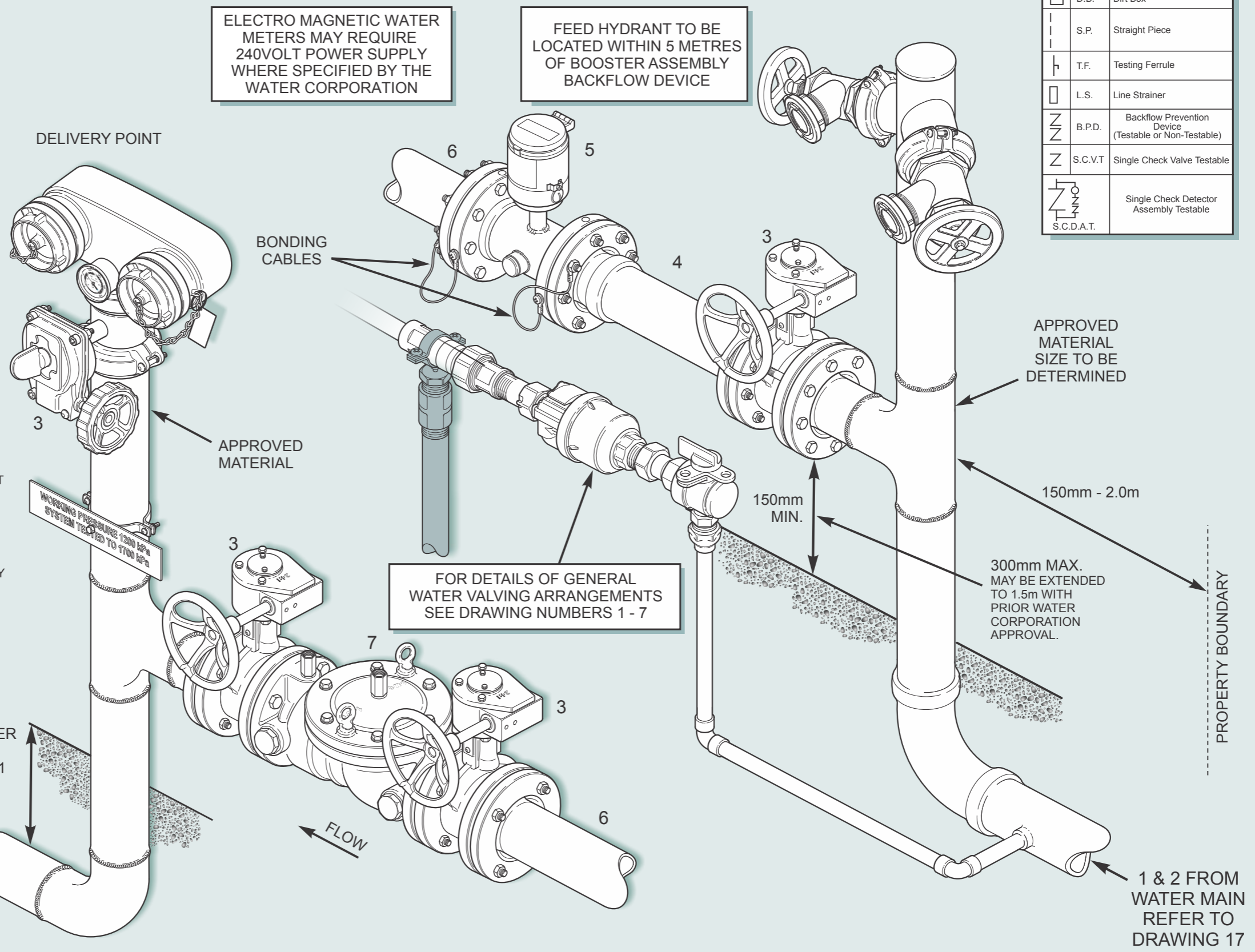
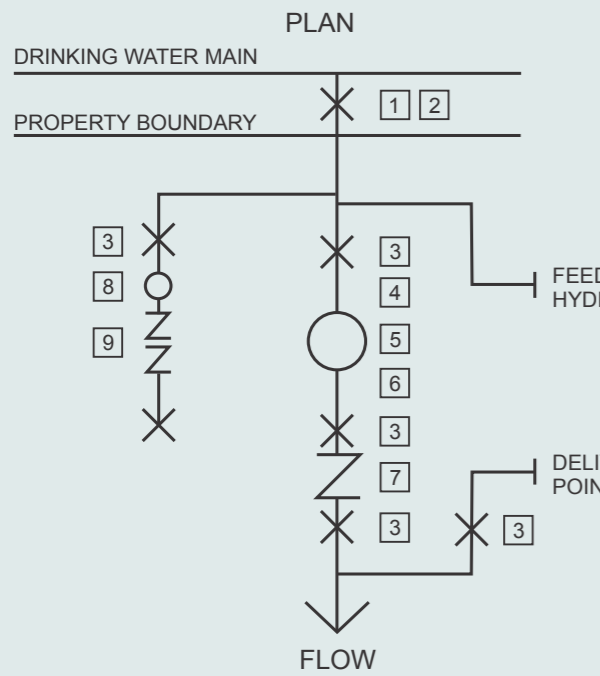
DATE:
SEPTEMBER 2024

INTERCONNECTED FIRE SPRINKLER/HYDRANT AND GENERAL SERVICES SAME WATER MAIN CONNECTION TYPICAL ARRANGEMENT



SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SPACER 5 x PIPE DIAMETER
5	ELECTRO MAGNETIC FLOW WATER METER. SUPPLIED BY WATER CORPORATION. DIRT BOX NOT REQUIRED
6	SPACER 3 x PIPE DIAMETER
7	SINGLE CHECK VALVE TESTABLE
8	WATER METER FOR GENERAL SERVICE
9	APPROPRIATE BFD
METERS 50mm AND ABOVE TO BE INDEPENDENTLY SUPPORTED FROM PIPE WORK	
SEE GENERAL NOTES FOR FURTHER INFORMATION	

STANDARD LEGEND		
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
	S.P.	Straight Piece
⊥	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
∩	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
∩	S.C.V.T.	Single Check Valve Testable
⊥		Single Check Detector Assembly Testable
S.C.D.A.T.		



ELECTRO MAGNETIC WATER METERS MAY REQUIRE 240VOLT POWER SUPPLY WHERE SPECIFIED BY THE WATER CORPORATION

FEED HYDRANT TO BE LOCATED WITHIN 5 METRES OF BOOSTER ASSEMBLY BACKFLOW DEVICE

FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 - 7

DRAWING NUMBER:
13

SCALE:
NOT TO SCALE

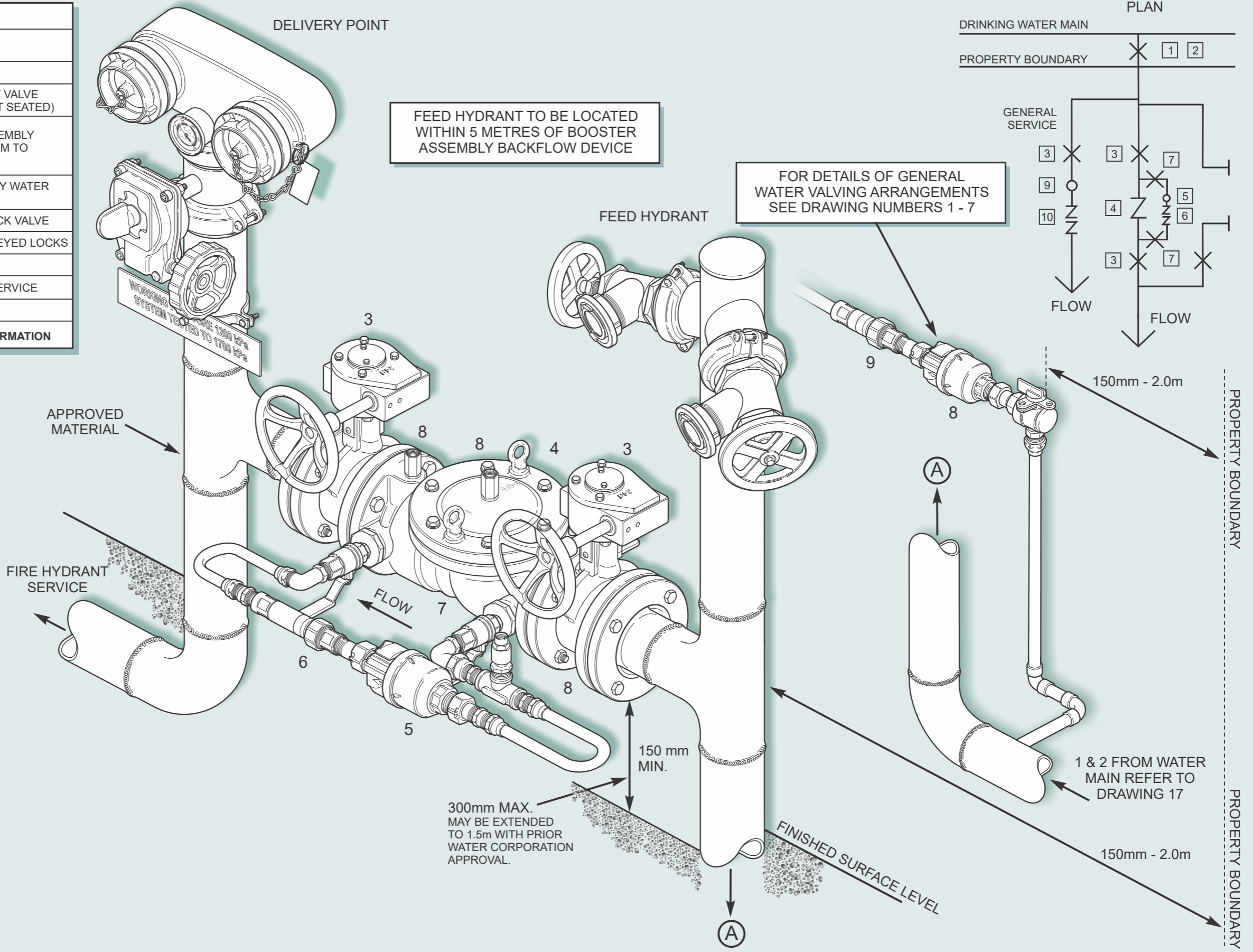
DATE:
SEPTEMBER 2024

BOOSTER CONNECTION AROUND METER
FIRE SPRINKLER SUPPLY
TYPICAL ARRANGEMENT



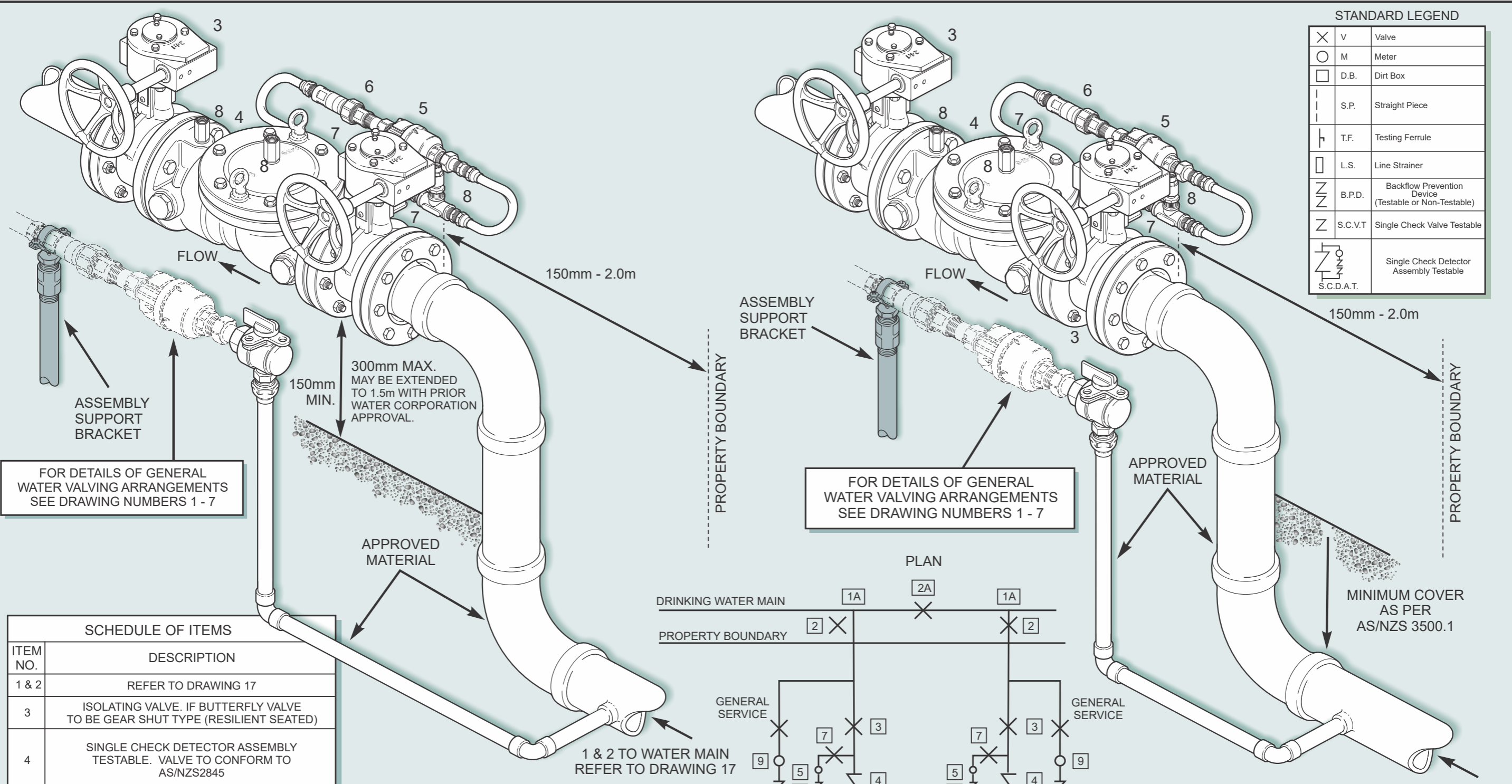
SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SINGLE CHECK DETECTOR ASSEMBLY TESTABLE. VALVE TO CONFORM TO AS/NZS2845
5	25mm BYPASS METER SUPPLIED BY WATER CORPORATION.
6	25mm DUAL SPRING LOADED CHECK VALVE
7	LOCKABLE BALL VALVES WITH A003 KEYED LOCKS
8	TEST PORT
9	WATER METER FOR GENERAL SERVICE
10	APPROPRIATE BFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

STANDARD LEGEND		
X	V	Valve
O	M	Meter
□	D.B.	Dirt Box
—	S.P.	Straight Piece
┆	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
∩	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
Z	S.C.V.T	Single Check Valve Testable
⌋	S.C.D.A.T.	Single Check Detector Assembly Testable



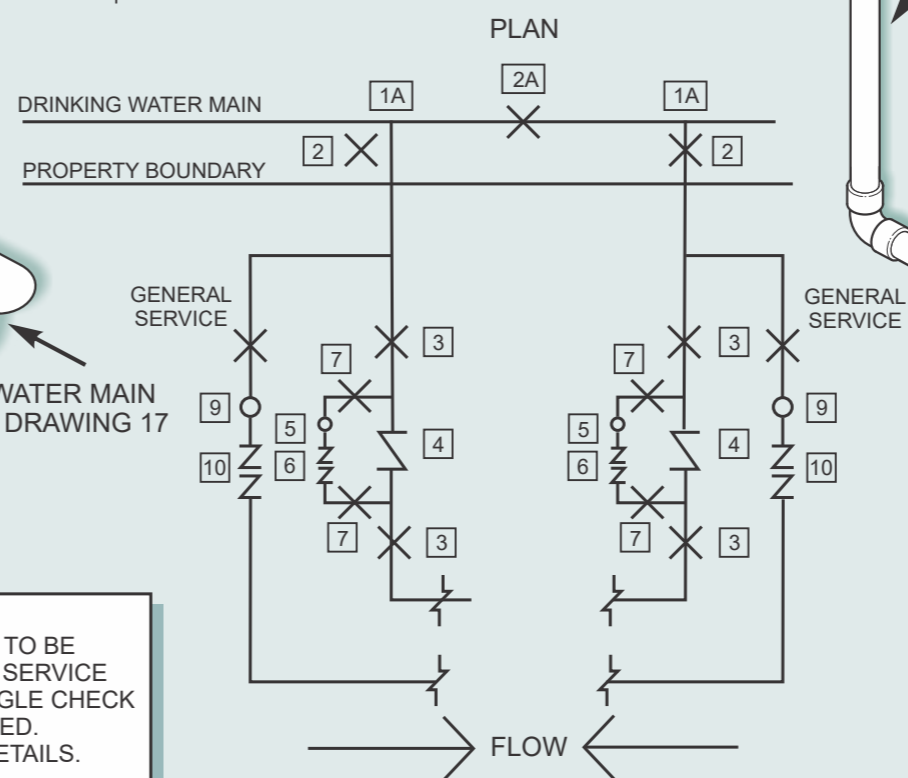
STANDARD LEGEND

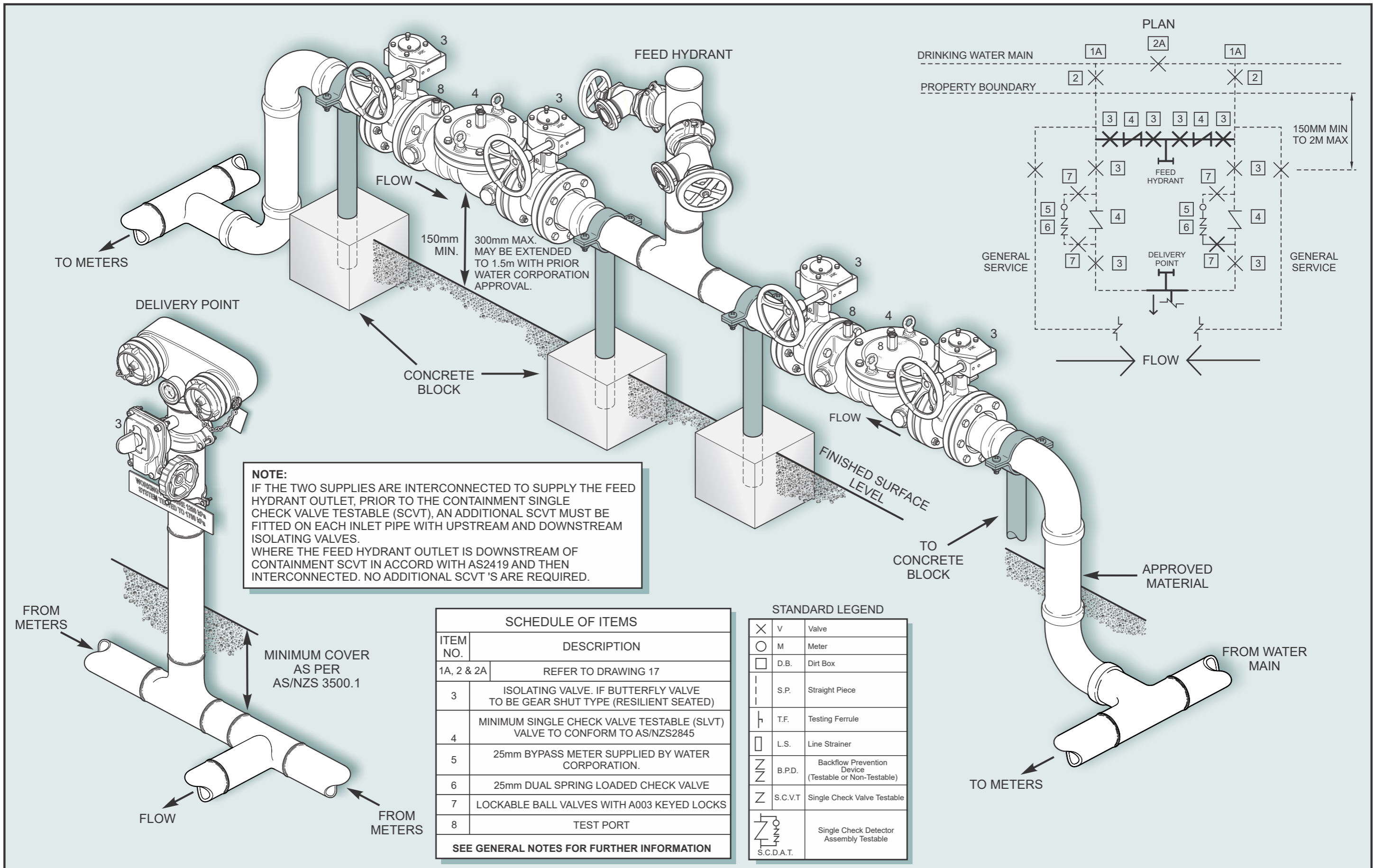
⊗	V	Valve
○	M	Meter
□	D.B.	Dirt Box
—	S.P.	Straight Piece
┆	T.F.	Testing Ferrule
▭	L.S.	Line Strainer
⌌	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
⌌	S.C.V.T	Single Check Valve Testable
⌌	S.C.D.A.T.	Single Check Detector Assembly Testable



SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SINGLE CHECK DETECTOR ASSEMBLY TESTABLE. VALVE TO CONFORM TO AS/NZS2845
5	25mm BYPASS METER SUPPLIED BY WATER CORPORATION.
6	25mm DUAL SPRING LOADED CHECK VALVE
7	LOCKABLE BALL VALVES WITH A003 KEYED LOCKS
8	TEST PORT
9	WATER METER FOR GENERAL SERVICE
10	APPROPRIATE BFD
SEE GENERAL NOTES FOR FURTHER INFORMATION	

NOTE:
IF THE FEED HYDRANT SUCTION OUTLET IS TO BE INTERCONNECTED TO AN ADDITIONAL FIRE SERVICE TO PROVIDE DUAL SUPPLY ADDITIONAL SINGLE CHECK VALVE(S) TESTABLE (SCVT) MAY BE REQUIRED. SEE DRAWING 15A NOTES FOR FURTHER DETAILS.





DRAWING NUMBER:

15A

SCALE:

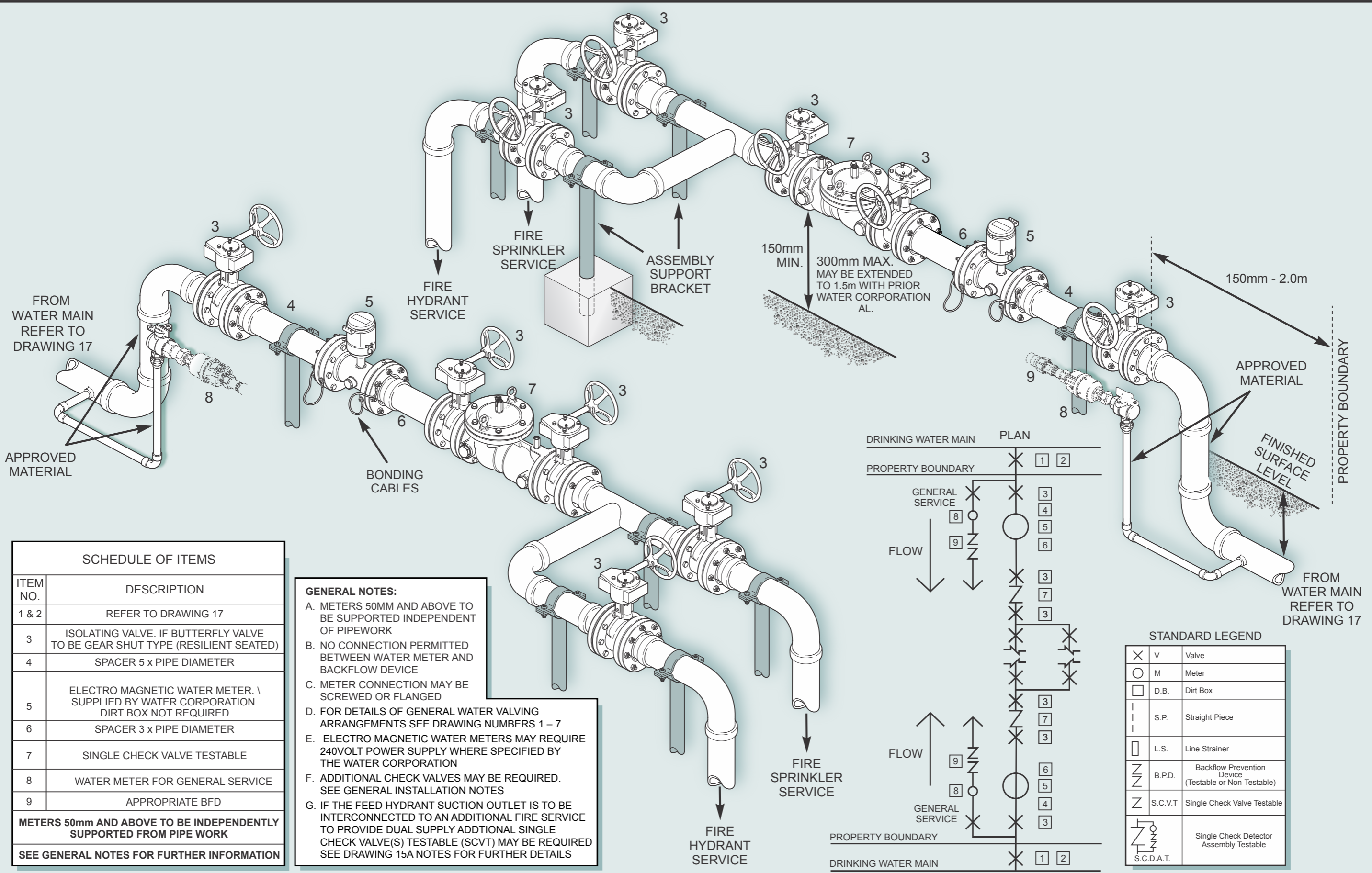
NOT TO SCALE

DATE:

JULY 2017

INTERCONNECTION SUPPLY TO FEED HYDRANT - TYPICAL ARRANGEMENT RELATING TO DRAWINGS 15 & 16



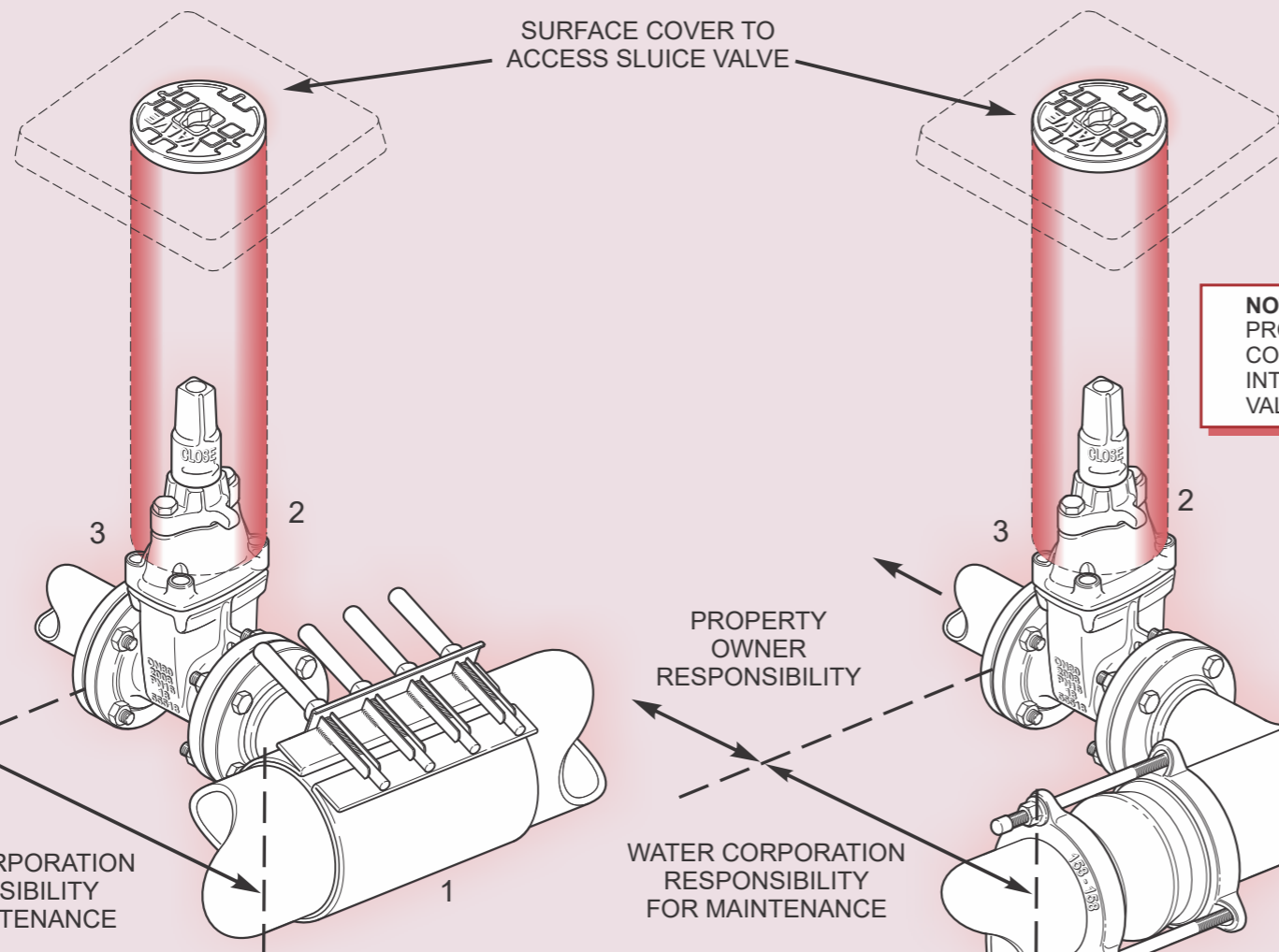


SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1 & 2	REFER TO DRAWING 17
3	ISOLATING VALVE. IF BUTTERFLY VALVE TO BE GEAR SHUT TYPE (RESILIENT SEATED)
4	SPACER 5 x PIPE DIAMETER
5	ELECTRO MAGNETIC WATER METER. \ SUPPLIED BY WATER CORPORATION. DIRT BOX NOT REQUIRED
6	SPACER 3 x PIPE DIAMETER
7	SINGLE CHECK VALVE TESTABLE
8	WATER METER FOR GENERAL SERVICE
9	APPROPRIATE BFD
METERS 50mm AND ABOVE TO BE INDEPENDENTLY SUPPORTED FROM PIPE WORK	
SEE GENERAL NOTES FOR FURTHER INFORMATION	

- GENERAL NOTES:**
- A. METERS 50MM AND ABOVE TO BE SUPPORTED INDEPENDENT OF PIPEWORK
 - B. NO CONNECTION PERMITTED BETWEEN WATER METER AND BACKFLOW DEVICE
 - C. METER CONNECTION MAY BE SCREWED OR FLANGED
 - D. FOR DETAILS OF GENERAL WATER VALVING ARRANGEMENTS SEE DRAWING NUMBERS 1 - 7
 - E. ELECTRO MAGNETIC WATER METERS MAY REQUIRE 240VOLT POWER SUPPLY WHERE SPECIFIED BY THE WATER CORPORATION
 - F. ADDITIONAL CHECK VALVES MAY BE REQUIRED. SEE GENERAL INSTALLATION NOTES
 - G. IF THE FEED HYDRANT SUCTION OUTLET IS TO BE INTERCONNECTED TO AN ADDITIONAL FIRE SERVICE TO PROVIDE DUAL SUPPLY ADDITIONAL SINGLE CHECK VALVE(S) TESTABLE (SCVT) MAY BE REQUIRED SEE DRAWING 15A NOTES FOR FURTHER DETAILS

STANDARD LEGEND

×	V	Valve
○	M	Meter
□	D.B.	Dir Box
—	S.P.	Straight Piece
□	L.S.	Line Strainer
Z	B.P.D.	Backflow Prevention Device (Testable or Non-Testable)
Z	S.C.V.T	Single Check Valve Testable
Z	S.C.D.A.T.	Single Check Detector Assembly Testable



NOTE :
 PROPERTY OWNERS RESPONSIBILITY INCLUDE
 CONNECTING BOLTS/NUTS/GASKET AND PIPING
 INTO THE PROPERTY FROM OUTLET OF SLUICE VALVE

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1	TAPPING BAND
1A	TEE
2	FERRULE/BALL/GATE/SLUICE VALVE SUPPLIED BY WATER CORPORATION AT OWNERS COST
2A	DIVIDE VALVE
3	PIPE & FITTINGS MUST BE WATERMARK APPROVED
TAPPING HOLE DIMENSIONS AS PER TAPPING GUIDELINES	

PROPERTY OWNER RESPONSIBILITY

PROPERTY OWNER RESPONSIBILITY

SURFACE COVER TO ACCESS SLUICE VALVES AND DIVIDE VALVE

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

PROPERTY OWNER RESPONSIBILITY

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

TAPPING UNDER PRESSURE GREATER THAN 50mm

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

2

DIVIDE VALVE TAPPING (MULTIPLE TEE INSERTIONS GREATER THAN 50mm WITH DIVIDE VALVE)

PROPERTY OWNER RESPONSIBILITY

PROPERTY OWNER RESPONSIBILITY

THE USE OF CLASS 'A' RECYCLED WATER FOR FIRE FIGHTING PURPOSES MAY BE CONSIDERED SUBJECT TO SPECIFIC WATER BUSINESS REQUIREMENTS.

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

TAPPING UNDER PRESSURE UP TO 50mm (BALL VALVE)

TAPPING UNDER PRESSURE UP TO 50mm (FERRULE & BEND)

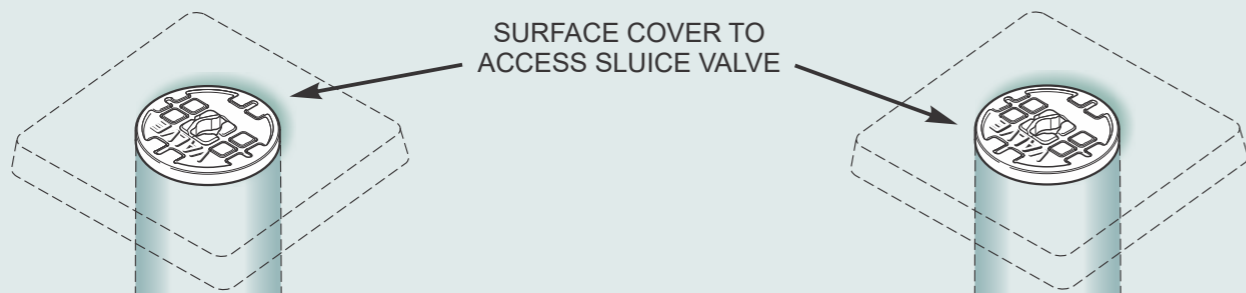
DRAWING NUMBER:
17

SCALE:
NOT TO SCALE

DATE:
JULY 2017

PRIVATE FIRE SERVICE TAPPING CONFIGURATIONS
TYPICAL ARRANGEMENT

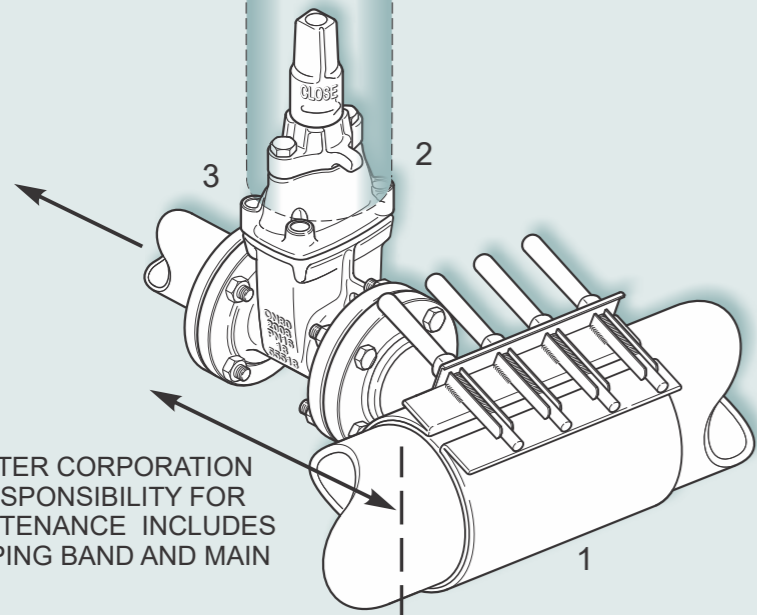




SURFACE COVER TO ACCESS SLUICE VALVE

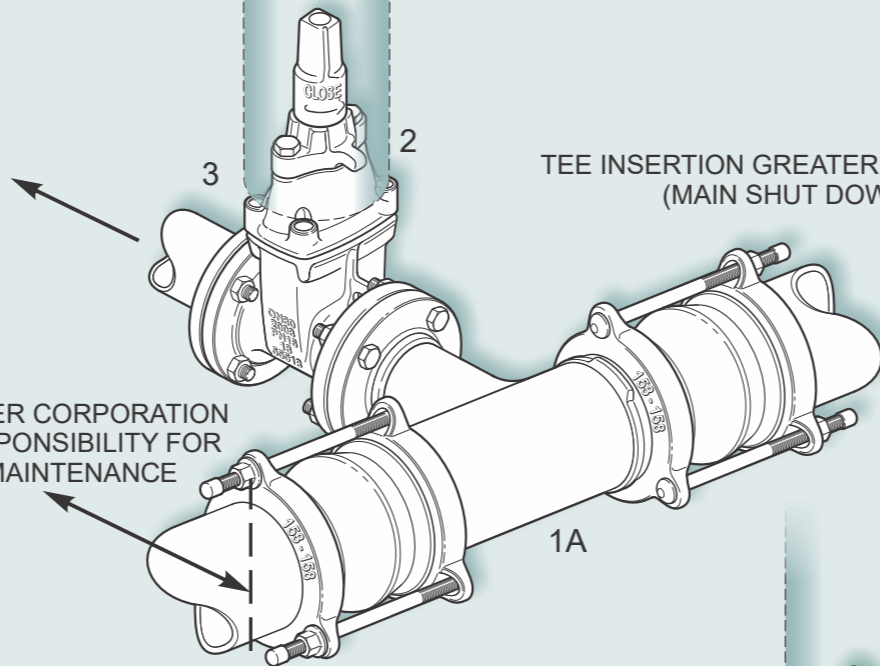
NOTE :
 IN ACCORDANCE WITH WATER (ESTIMATION, SUPPLY & SEWERAGE) REGULATIONS 2014, THE WATER CORPORATION IS RESPONSIBLE TO MAINTAIN THE GENERAL/RECYCLED WATER SERVICE FROM THE WATER MAIN TO THE PROPERTY
 FOR DETAILS SEE OUR WATER METERING & SERVICING GUIDELINES SECTION ON RESPONSIBILITIES

SCHEDULE OF ITEMS	
ITEM NO.	DESCRIPTION
1	TAPPING BAND
1A	TEE
2	FERRULE/BALL/GATE/SLUICE VALVE SUPPLIED BY WATER CORPORATION AT OWNERS COST
2A	DIVIDE VALVE
3	PIPE & FITTINGS MUST BE WATERMARK APPROVED
TAPPING HOLE DIMENSIONS AS PER TAPPING GUIDELINES	



WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE INCLUDES TAPPING BAND AND MAIN

TAPPING UNDER PRESSURE GREATER THAN 50mm

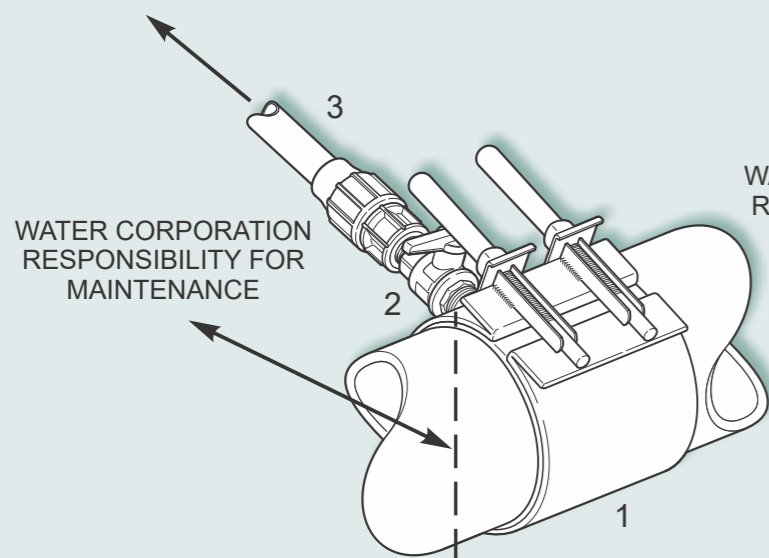


TEE INSERTION GREATER THAN 50mm (MAIN SHUT DOWN)

SURFACE COVER TO ACCESS SLUICE VALVES AND DIVIDE VALVE

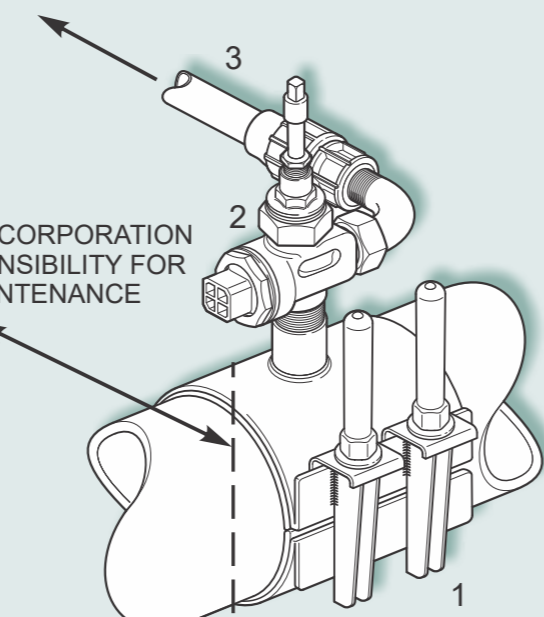
WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE



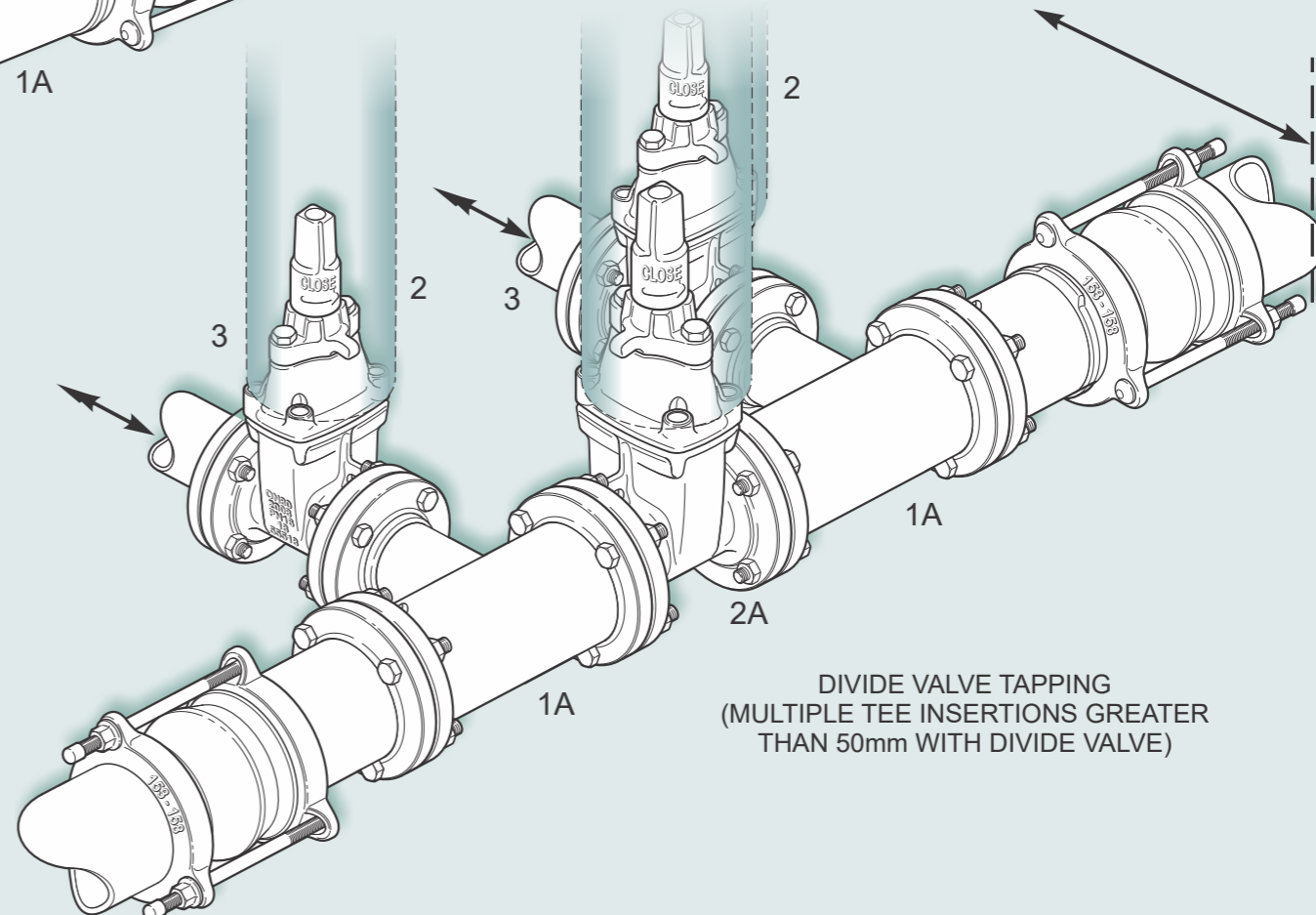
WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

TAPPING UNDER PRESSURE UP TO 50mm (BALL VALVE)



WATER CORPORATION RESPONSIBILITY FOR MAINTENANCE

TAPPING UNDER PRESSURE UP TO 50mm (FERRULE & BEND)



DIVIDE VALVE TAPPING (MULTIPLE TEE INSERTIONS GREATER THAN 50mm WITH DIVIDE VALVE)

DRAWING NUMBER:

18

SCALE:

NOT TO SCALE

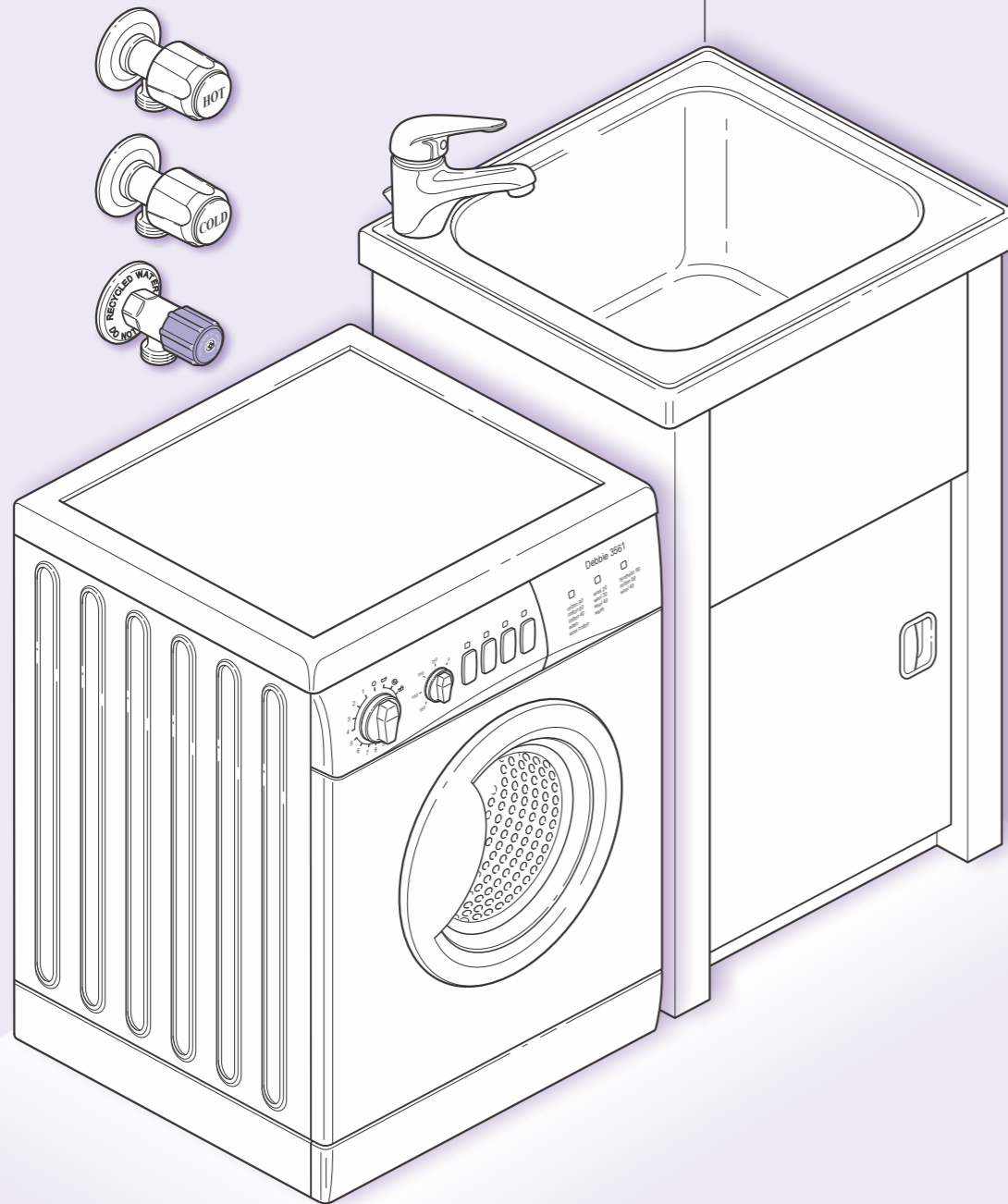
DATE:

JULY 2017

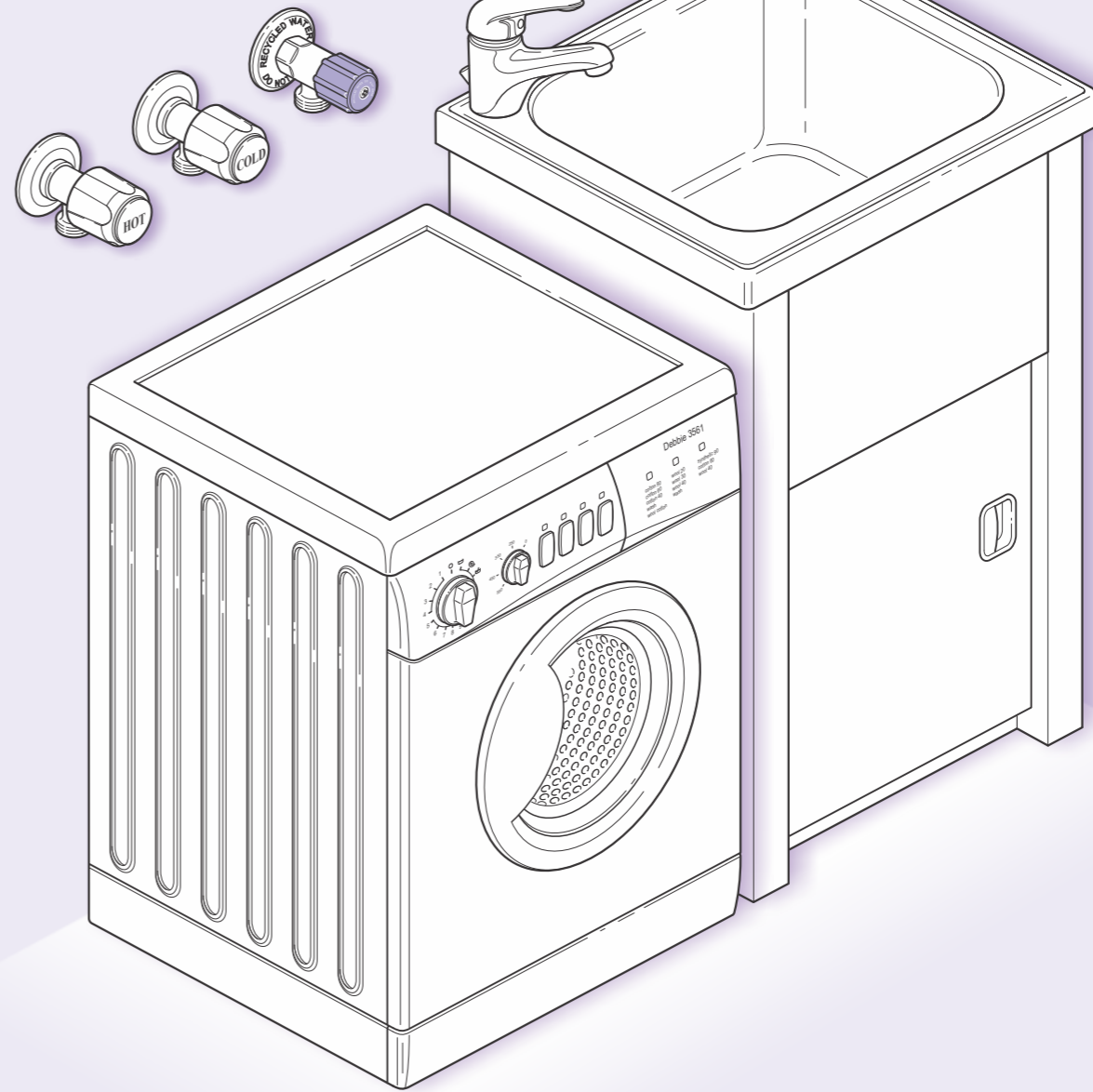
DRINKING/RECYCLING WATER TAPPING CONFIGURATIONS
 TYPICAL ARRANGEMENT



WHERE WASHING MACHINE STOP TAPS ARE INSTALLED VERTICALLY, RECYCLED WATER TAP **MUST** BE AT THE BOTTOM



WHERE WASHING MACHINE STOP TAPS ARE INSTALLED HORIZONTALLY, RECYCLED WATER TAP **MUST** BE TO THE RIGHT



RECYCLED WATER WASHING MACHINE STOP TAP SPECIFICATIONS

NON-STANDARD (5/8") FEMALE INLET THREADED STOP TAP WITH PURPLE HANDLE AND STANDARD 3/4" OUTLET

NON-STANDARD (5/8") MALE LUGGED ELBOW

COVER PLATE WITH LASER ETCHED PROHIBITION WARNING COMPLYING WITH AS1319 STATING "RECYCLED WATER DO NOT DRINK"

DRAWING NUMBER:

19

SCALE:

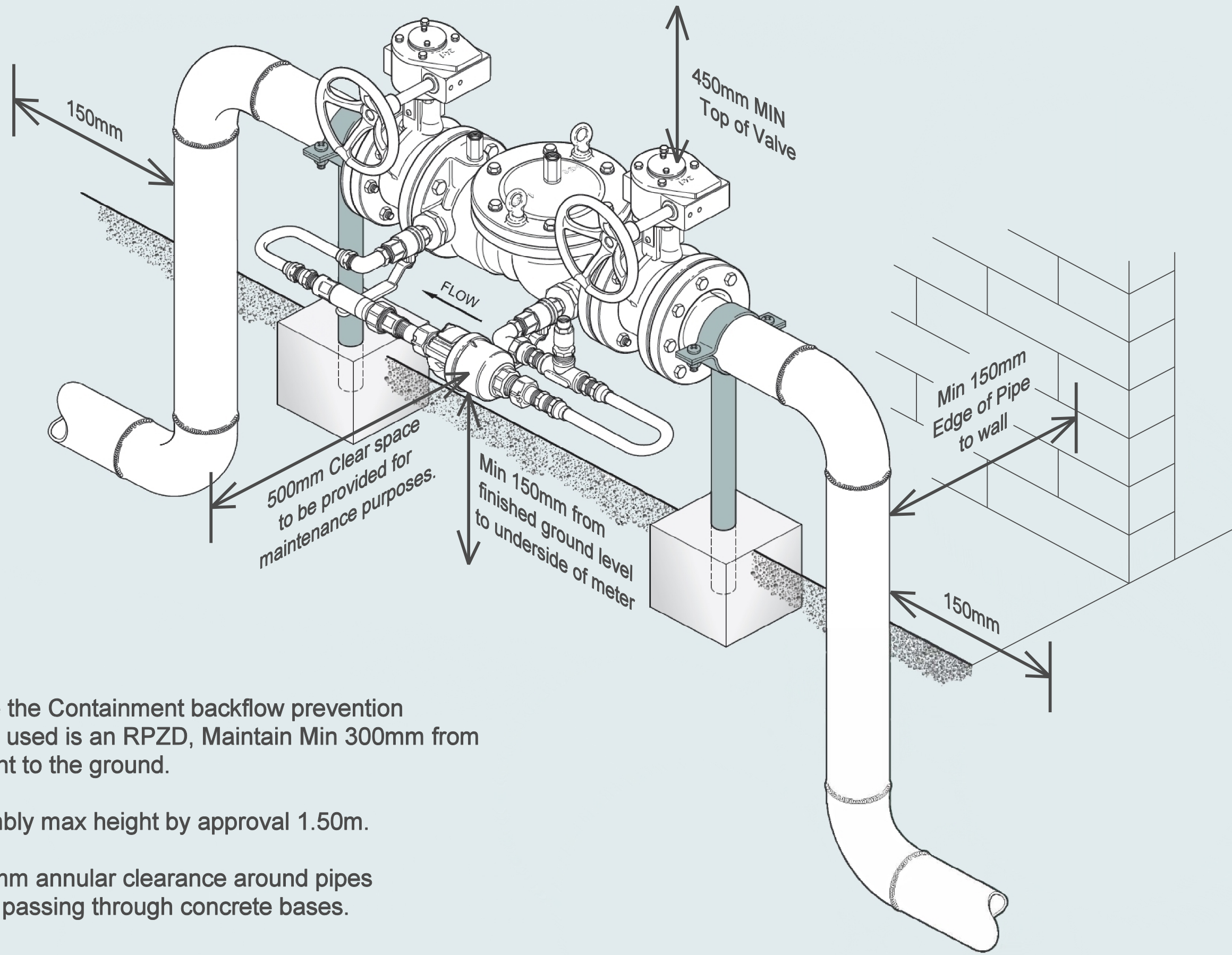
NOT TO SCALE

DATE:

JULY 2017

REQUIREMENTS FOR CLASS 'A' RECYCLED WATER FOR USE WITH WASHING MACHINES TYPICAL ARRANGEMENT





Notes:

- Where the Containment backflow prevention device used is an RPZD, Maintain Min 300mm from the vent to the ground.
- Assembly max height by approval 1.50m.
- Min 6mm annular clearance around pipes where passing through concrete bases.

DRAWING NUMBER:

20

SCALE:

NOT TO SCALE

DATE:

AUGUST 2014

MINIMUM CLEARANCES FOR METER ASSEMBLIES IN CONFINED SPACES

