



# WSA 03 Water Supply Code of Australia

2020 Bega Valley Shire Addendum



PO Box 492, Bega NSW 2550  
**P.** (02) 6499 2222  
**F.** (02) 6499 2200  
**E.** [council@begavalley.nsw.gov.au](mailto:council@begavalley.nsw.gov.au)  
**W.** [begavalley.nsw.gov.au](http://begavalley.nsw.gov.au)

**ABN.** 26 987 935 332  
**DX.** 4904 Bega

# Contents

Part 1: Design .....	2
Section 2 – System Planning .....	2
Subsection 2.2.4 Non-drinking water as drinking water substitution .....	2
Subsection 2.3.2 – Dual water supply systems .....	2
Subsection 2.3.4 – Peak Demands .....	2
Section 3.....	2
Subsection 3.3 Pressure Class of System Components.....	2
Subsection 3.5 - System Test Pressure.....	2
Section 4 – Products and Materials.....	2
Subsection 4.6 – Steel Pipeline Systems .....	3
Subsection 4.7 – GRP pipeline systems.....	3
Subsection 5.2.4 – Reduced size mains.....	3
Table 5.1 – Design requirements for reduced size drinking water mains in Court Bowls, Cul-de-sacs and dead ends.....	3
Table 5.2 – Default easement guidelines .....	3
Subsection 5.4.16 – Marking Tape .....	3
Subsection 5.4.16.2 – Mains .....	3
Subsection 5.9 – Connection of new mains to existing mains.....	3
Subsection 5.11.3 – Services, outlets and meters.....	3
Section 7 – Structural Design .....	3
Subsection 7.4.2 – Pipe Cover .....	3
Table 7.2.....	3
Section 8 – Appurtenances .....	4
Subsection 8.2.2.2 – Gate Valves .....	4

## Part 1: Design

### Section 2 – System Planning

#### Subsection 2.2.4 Non-drinking water as drinking water substitution

No substitution for non-drinking water shall be permitted.

#### Subsection 2.3.2 – Dual water supply systems

No dual water supply systems shall be permitted

#### Subsection 2.3.4 – Peak Demands

An average annual demand for water shall be 170 kL/ET/a. peak demands shall be determined as per subsections 2.3.4.2 and 2.3.4.3

#### Subsection 2.4 – System Configuration

Bega Valley Shire Council requires that dead end mains are minimised. In cul-de-sacs, there will be a reduced diameter return with 50 mm PN16 HDPE. 100 mm mains shall terminate no earlier than the second last lot on a cul-de-sac. i.e. no more than 2 lots serviced off the 50 mm reduced diameter main return. The system shall be configured to enable flushing of each diameter main individually.

## Section 3

### Subsection 3.3 Pressure Class of System Components

Minimum pressure rating of water pipes is PN16

### Subsection 3.5 - System Test Pressure

The minimum test pressure for all reticulation mains shall be 1500 kPa.

Trunk mains shall be tested to 1500 kPa, or 1.25 times the operating pressure, whichever is the greatest.

## Section 4 – Products and Materials

Reticulation Component		Colour
Pipe	PVC-O	Plain blue
	HDPE	Plain blue or black + blue stripe
	Ductile iron	Blue sleeving or plain with marker tape
Fitting	No specific colour requirement	
Valve (spindle cap)	Blue coating	
Hydrant (claws)	Blue coating	
Hydrant lids	white	
Stop valve – normally open lid	yellow	
Stop valve – normally closed lid	blue	
Stop valve – fire service lid	red	
Marking tape	Blue or green	

--	--

### Subsection 4.6 – Steel Pipeline Systems

Only stainless steel permitted

### Subsection 4.7 – GRP pipeline systems

No GRP pipeline systems permitted

### Subsection 5.2.4 – Reduced size mains

Reduced size mains are permitted in Cul-de-sacs, where the number of properties serviced is a maximum of 2. The minimum reduced size main diameter shall be 50 mm HDPE.

**Table 5.1 – Design requirements for reduced size drinking water mains in Court Bowls, Cul-de-sacs and dead ends**

PE reduced size main	Min service pressure	Max length of reduced size main	Limiting Factor			Flushing Point required at end of main
			Length (m)	OR	Number of DN20 properties connected	
63/50	30	50	50		2	NA

### Table 5.2 – Default easement guidelines

The minimum easement width for all water mains is 3.0 metres.

### Subsection 5.4.16 – Marking Tape

#### Subsection 5.4.16.2 – Mains

Only detectable marking tape shall be used.

### Subsection 5.9 – Connection of new mains to existing mains

Under pressure cut ins are not generally approved. Inserted tee is the preferred method of connection.

### Subsection 5.11.3 – Services, outlets and meters

Split services are only permitted (and in fact required) for services on the same lot (duplex, units, mixed use development, etc).

## Section 7 – Structural Design

### Subsection 7.4.2 – Pipe Cover

**Table 7.2**

Minimum depth in all instances shall be 600 mm, unless specified by another agency (e.g. TfNSW, NPWS, Forestry Corp, etc)

Minimum covers shall be established from the obvert of pipe and invert of the other structure.

In cut betters, the 600 mm cover shall be such that any driveway final surface (where driveways are reasonably anticipated) shall have 600 mm cover over the final (predicted) driveway level.

## **Section 8 – Appurtenances**

### **Subsection 8.2.2.2 – Gate Valves**

Valves shall be right turn close (Clockwise close).

### **Subsection 8.8.8 Hydrant Spacing**

Hydrants shall be generally spaced at 90 m intervals with an absolute maximum of 120 m between hydrants. A hydrant shall be located within 60 m of a road intersection.