

South Gippsland Water
Supplement to
Water Supply Code of Australia
WSA 03-2011-3.1

Melbourne Retail Water Agencies Edition Version 2.0

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1 Introduction

This document (this Supplement) is to be used as a supplement to the Water Supply Code of Australia WSA 03-2011-3.1 Melbourne Retail Water Agencies (MRWA) Edition Version 2.0 (the Code) including the MRWA Standard Drawings.

This supplement applies to reticulation, distribution and transfer water mains constructed by South Gippsland Water or assets that will be gifted to South Gippsland Water by developers upon completion.

2 Requirements

South Gippsland Water has adopted the requirements of the MRWA WSA 03 Code along with use of the MRWA standard drawings with the amendments specified in Section 3 of this supplement.

Further References are specified in Section 4 of this supplement.

3 Amendments to WSA 03-2011-3.1 MRWA Edition Version 2.0

3.1 Table 1. Amendments to Part 0 Glossary of Terms Abbreviations and References

No amendments

3.2 Table 2. Amendments to Part 1 Planning and Design

| WSA Section | Amendment |
|-------------|---|
| 1.2.3 | Add paragraph: Any exceptions to the WSA Code and South Gippsland Waters supplement are to be specifically identified and justified on the concept plan. South Gippsland Water reserves the right to reject any concept plan that does not comply with its requirements or the requirements of the code. |
| 3.5 (ii) | Hydrostatic Test Pressure shall be a minimum of 1000kPa |
| 4.1 | <ul style="list-style-type: none">South Gippsland Water have a preferred manufacturer list that can be found on the South Gippsland Water Website (South Gippsland Water Preferred Manufacturer List Technical Specification NAM-001). In addition, any products demonstrated to meet the requirements of MRWA and included on the MRWA portal will be considered. <p>The following specific limitations shall apply to water supply system products:</p> |

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| | <ol style="list-style-type: none"> 1. PN16 PE pipe is preferred 2. For reticulation mains series 2 PVC-O pipe or series 2 PVC-M pipe may also be accepted. 3. Elastomeric seals for PVC pipe shall be EPDM 4. GRP pipe shall not be used. |
| 5.1.1 | The co-ordinate system shall be GDA 94 MGA |
| 5.2.3 | Add to paragraph: A "Loop Main" and "Link Main" shall be used to achieve a secondary water feed to any new development and to eliminate dead ends with in Cul-de-sacs. |
| 5.10 | <p>Temporary ends of water mains \geqDN80 shall be terminated with 90- degree 'Duck Foot' bends with hydrants. Hydrant tees shall not be used for terminating mains.</p> <p>Where ever practicable, permanent dead ends shall not be installed, DN100 Loop/Link mains shall be used as an alternative.</p> <p>Where dead ends cannot be avoided approval shall be sought from South Gippsland Water.</p> <p>If approval is given the below applies: Wash out assemblies shall be installed to terminate <DN80 sized mains in court bowls, cul-de-sacs and on dead ends (drawing MRWA-W-109, detail D)</p> |
| 5.11.2 | <p>Add to first paragraph: Connections for property services shall not be directly installed on the following:</p> <ul style="list-style-type: none"> • Transfer Mains • Distribution Mains • Trunk Mains <p>Connections for property services to the above shall be made using a rider main as per the following drawing: ASCNW-0518A</p> |
| 5.13 (e) | <p>Where AC pipelines that are to be disused or made redundant are located in private property they must be removed and disposed of in accordance with legislative requirements.</p> <p>Where AC pipelines exist within a road reserve they can be decommissioned in situ in accordance with South Gippsland Water requirements. (Refer to Section 11.5.2)</p> |
| 7.8 | Water mains permanently located above ground shall be of either ductile iron cement lined or mild steel cement lined pipe and appropriately protected against corrosion (FBE coated or Sintakote® coated) |
| 8.2.2.2 | Spigot-Spigot, Socket-Socket, Flange-Flange gate valves are acceptable. Axial restraint is required on all valves. |
| 8.2.3 | Table MRWA 8.5, South Gippsland Water adopts CWW's criteria. |
| 8.2.4 | Table 8.2, South Gippsland Water adopts CWW's criteria. |
| 8.2.7.4 | Arrangement (A) is preferred. |
| 8.8.4 | Only spring loaded Hydrants shall be used. Valved Hydrants shall be installed in commercial & Industrial zones. |
| 8.8.8 | Table MRWA 8.6: CWW and CFA requirements shall be adopted. |
| 9.2.4 | Add to the list of information to be shown on design drawings: (ab) Assets to be disused. (ac) Residential driveway cross overs. |
| 9.2.7 | Any changes made to design drawings shall be clearly indicated by Surrounding the text or drawing changes in a cloud. |

3.3 Table 3. Amendments to Part 2 Construction

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| 11.2 | <p>South East Water’s preferred process shall be adopted with the addition of:</p> <p>(vii) Isolate all residential water services at the ferrule. (Only for new development works.)</p> <p>Where South Gippsland Water deem conditions require a testing and/or commissioning plan, these shall be developed by the contractor to the satisfaction of South Gippsland Water and submitted for approval at least 10 working days prior to any proposed works being carried out.</p> |
| 11.4.1 | <p>Delete clause and replace with:</p> <p>The developer or developers’ approved contractor undertaking the works shall ensure that all affected customers and property owners are fully briefed about the impact of their works on buildings, garden features, trees and vegetation, noise levels , out of hours work, traffic restrictions etc. before commencing work.</p> <p>Where water interruptions will occur South Gippsland Water (or their contractors) will provide notification to each property owner and resident who will be affected by the interruptions.</p> <p>South Gippsland Water (or their contractors) shall:</p> <ul style="list-style-type: none"> • Notify in writing each property Owner and resident who will be affected by the works using the “South Gippsland Water Interruption to Water Supply – planned work cards “or approved equivalent. • Complete the notification legibly and deliver a minimum of three (3) working days for residential and a minimum of five (5) working days for commercial customers, prior to the works commencing. The notification should be delivered to: <ul style="list-style-type: none"> (a) Owners and residents on both sides of the pipe track or reserve, where the works are located along the boundary of a private property. (b) Owners and residents of private properties on both side of the road where the works are located in a road service. • Advise each owner/resident in person, where practicable, of the work that will be undertaken within the property. • Where notifications are carried out by a contractor on behalf of South Gippsland Water then a plan showing the properties to which notifications shall be delivered shall be submitted to the contract Superintendent for approval. • South Gippsland Water Contractors shall keep documented evidence of contact details with all affected customers. <p>Accredited Contractors or Developer Design consultants shall make application to South Gippsland Water to shut down water mains at least 10 working days prior to proposed works.</p> |
| 11.5.2 (a)(i) | <p>The requirements for removing redundant AC pipe are as stated. Removal where necessary is to be carried out by appropriately registered and trained persons In accordance with relevant legislative requirements.</p> |

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| 11.9 | Under-pressure cut-ins shall be carried out by South Gippsland Water approved contractor or who have been awarded a contract by South Gippsland Water for the works. The list of accredited contractors is available on South Gippsland Waters website. |
| 12.1 | South Gippsland Water have a preferred manufacturer list. In addition, any products demonstrated to meet the requirements of MRWA and included on the MRWA portal will be considered. |
| 15.8 | Add paragraph at end: All property service (i.e ferrules) shall have a DN90 PVC riser with a screw on cap terminating 200-300mm below FSL. Screw on cap shall be fitted with metal washer for detection purposes. |

3.4 Table 4. Amendments to MRWA Standard Drawings

| Drawing | Amendment |
|-------------------------------------|---|
| MRWA-W-108 | CWW requirements shall be adopted. Refer Arrangement Figure 108-A. Note 4: Valve shall be provided in all residential cul-de-sacs. |
| MRWA-W-109 | Figure 109-D shall be used to terminate all DN63 PE dead ends where a loop main /link main cannot be achieved. Delete Figure 109-A Delete Figure 109-E |
| MRWA-W-111 | Delete Figure 111-A. All Pre-Tapped and under pressure tapings shall be made using Figures 111-B and 111-C Vertical Ferrule and Ferrule Bend only. Inline Ball Valves shall not be used. |
| MRWA-W-201 | Backfill and compaction shall be in accordance with MRWA Backfill Specification 04-03. 1-2006. Scoria shall not be used as embedment material. |
| MRWA-W-202 | The minimum cover for pipe \leq DN600 in residential non-trafficable areas shall be 600mm. |
| MRWA-W-203 | Where a water main crosses beneath a sewer, the water main shall have an approved sleeve extending at least 3m either side of the sewer. |
| MRWA-W-301 | Figure A, Replace text for top of marker post colours with: <ul style="list-style-type: none"> • BLACK (for Valves) • RED (For operation hydrants and Firefighting hydrants) Delete figure B and Detail C. Valve surrounds and markings shall comply with South Gippsland Water's Colour Standard for valve Surrounds. Refer to South Gippsland Water Cover Standard Colours Drawing ASCNW-0301 |
| MRWA-W-302 | All Valve surrounds shall be Square and comply with South Gippsland Water Colour Standard for Valve Surrounds. Refer to South Gippsland Water Cover Standard Colours Drawing ASCNW-0301 |
| MRWA 500 Series Drawing Nos. 1 & 1A | Delete Drawings. Replaced by South Gippsland Water Low Risk Connection Standard Drawing ASCNW-0501 |

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| MRWA 500 Series Drawing No. 6 | The spacers placed upstream and downstream of the meter shall comply with meter manufactures specifications for straight sections of pipe. |
| MRWA 500 Series Drawing No. 18 | Detail "TAPPING UNDER PRESSURE UP TO 50mm (BALL VALVE)" is not accepted. All other details are acceptable with square surface covers as per South Gippsland Water Cover Standard Colours Drawing ASCNW-0301 |

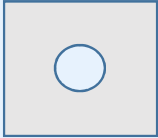
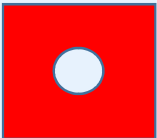
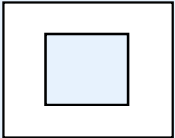
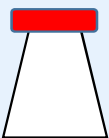
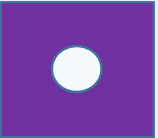
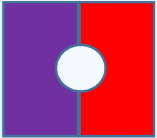
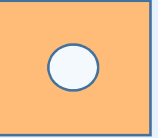
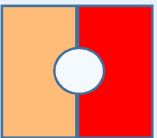

4 References

- South Gippsland Water Preferred Manufacturer List Technical Specification NAM-001

5 South Gippsland Water Standard Drawings

Note: within the below Standard Drawing Numbers the last 3 numbers refer to the equivalent MRWA standard drawing.

- South Gippsland Water Low Risk Connection Standard Drawing ASCNW-0501
- South Gippsland Water Cover Standard Colours Drawing ASCNW-0301
- South Gippsland Water Property Service connection Via Rider Main Standard Drawing ASCNW-0518A

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|---------------|-------------------------------|---|---|--|---|--|---|--|--|---------------------------|---|
| Potable Water | Valve Normally Open, Grey |  | Surround - Grey Plastic / Unpainted Concrete Inserted Cap - No colour | Valve Normally Closed, Red |  | Surround - Red Plastic / Red Paint Inserted Cap - No colour | Hydrant, White |  | Surround - White Plastic / White Paint Inserted Cap - No colour | Above Ground Hydrant, Red |  |
| | Non Drinking Water | Normal Operating Valve, Purple |  | Surround - Purple Plastic / Paint Inserted Cap - No colour | Valve Normaly Closed, Red/Purple |  | Surround - Purple Plastic / Paint with additional Red Paint Inserted Cap - No colour | <p>NOTES:</p> <p>1.Colours are in accordance with AS2700 : White: N14 White Red: R13 Signal Red Lilac: P23 Lilac Beige: X43 Beige Grey: N23 Neutral Grey</p> <p>2. Half-Half Valve Covers not commercially available. Red paint to be applied to appropriately valve cover as required</p> | | | |
| Sewer | Normal Operating Valve, Beige |  | Surround - Beige Plastic / Paint Inserted Cap - No colour | Valve Normaly Closed, Beige/Red |  | Surround - Beige Plastic / Paint with additional Red Paint Inserted Cap - No colour | | | | | |
| 2 | NM | 22/01/2019 | LA |  | | | | VALVE COVER STANDARD COLOURS | | | |
| 1 | NM | 2/11/2018 | GW | | | | | | | | |
| Rev | Drafted | Date | Approved | | | | | Drawing No: ASCNW - 0301 | | | |