



**DUBBO  
REGIONAL  
COUNCIL**

**TECHNICAL SCHEDULE**

**DRC-W203**

**WATER HYDRANT MAINTENANCE**

**TECHNICAL SCHEDULE DRC-W203 – WATER HYDRANT MAINTENANCE**

<b>CLAUSE</b>	<b>CONTENTS</b>	<b>PAGE</b>
DRC-W203.1	Scope .....	3
DRC-W203.2	Referenced Documents .....	3
DRC-W203.3	Labour, Plant and Materials .....	3
DRC-W203.4	Workplace Health AND Safety (WHS) .....	3
DRC-W203.5	Traffic.....	4
DRC-W203.6	Protection of the Environment.....	5
DRC-W203.7	Noise.....	5
DRC-W203.8	Customer Notification.....	5
DRC-W203.9	Location of Hydrants.....	6
DRC-W203.10	Water Supply.....	6
DRC-W203.11	Isolation of Water Mains .....	6
DRC-W203.12	Hydrant Inspection AND Maintenance .....	6
DRC-W203.13	Reporting.....	7
APPENDIX A	Hydrant Maintenance Report Sheet .....	8

## DCC-W203: WATER HYDRANT MAINTENANCE

### DRC-W203.1 SCOPE

This Specification applies to the routine maintenance of hydrants and their surrounds.

The work required to be performed under this Contract shall also comply with the referenced documents in Clause DRC-W203.2, unless specified otherwise herein.

### DRC-W203.2 REFERENCED DOCUMENTS

The following documents are referred to in this Specification. The latest version of the document including any published amendments shall apply unless noted otherwise. Where the drawings or a project specific specification are in conflict or inconsistent with these referenced documents, or this Specification, then the details on the drawings or project specific specification shall apply.

#### Dubbo Regional Council

DRC-W204	Water Hydrant Flushing and Dead End Flushing
Drawing STD5320	Hydrant Location Markers for Urban Roads

#### Australian Standards

AS1851-2012	Routine service of fire protection systems and equipment.
AS 3952-2002	Water supply—spring hydrant valve for waterworks purposes.
AS 4158-2003	Thermal-bonded polymeric coatings on valves and fittings for water industry purposes.

Works shall also comply with the current versions all relevant Australian Standards.

#### Water Services Association of Australia Standards

WSA03	Water Supply Code of Australia
WSA 17—2014	Standpipe and Hydrant Metering Code of Practice
WSA PS-267	Compliant Spring Hydrants

### DRC-W203.3 LABOUR, PLANT AND MATERIALS

The Contractor shall provide at its own cost and expense all labour, materials, plant, tools and equipment necessary for the proper and complete performance of the Contract.

### DRC-W203.4 WORKPLACE HEALTH AND SAFETY (WHS)

All costs associated with ensuring a safe work environment for the implementation of the works shall be deemed to be included in the tender price.

The Contractor shall ensure that in the performance of the works, the Contractor's employees, Sub-Contractors and employees of such Sub-Contractors shall observe the statutory Safety Regulations and Site Conditions for Contractors.

Within 28 days of the 'Date of Acceptance' and prior to the commencement of work, the Contractor shall submit to the Superintendent details of the Contractor's WHS Management System, including a Hazard and Risk Assessment and a Safety Plan specific to the Contract covering all of the Contractor's activities for the duration of the Contract.

The Contractor's Safety Plan shall include, but not necessarily be limited to the following:

- Safety inductions.
- Identification and accountability of personnel having specific responsibilities for safety and security matters.
- Safety procedures (including confined space entry and fall protection).
- Accident and loss reporting.
- Safety equipment.
- Statutory requirements.
- Safe working incentives and leadership.
- Occupational health and hygiene.
- Fire prevention.
- Storage and issue of materials.
- Confined space entry procedures, with valid confined space permits.
- Fall from heights procedures.
- Emergency procedures and contingency plans.
- Safety disputes procedures.

For works in confined spaces the Contractor is to conform to the requirements of the Work Health and Safety Act 2011 and AS 2865.

The Contractor shall provide medical treatment facilities and first-aid personnel to at least the minimum standards required by Workplace Health and Safety legislation.

As soon as possible following their occurrence, the Contractor shall report to the Superintendent any injuries likely to require medical treatment or involving lost time. In addition, the Contractor shall report to the Superintendent all injuries and near misses.

The Contractor shall manage and report all safety and security matters relating to his sub-contractors as if they were his own personnel.

Copies of the Safety Plan and records of all safety and security reporting over the duration of the Contract shall be held onsite and readily accessible for inspection by the Superintendent. The Superintendent shall carry out, from time to time, ad-hoc audits of the Contractor's safety systems onsite. The Contractor shall attend all safety audits. The cost for participation in safety audits shall be included in the tender price.

#### **DRC-W203.5 TRAFFIC**

The Contractor shall carry out the work in such a manner as to minimise interference to the flow of traffic and pedestrians and shall comply with the standard Principal requirements.

The Contractor shall develop and maintain a traffic management system that complies with the Transport for NSW (TfNSW) manual for *Traffic Control at Work Sites*, AS1742, SAA HB81 and satisfies the requirements of the relevant road authorities. The Contractor shall submit the Traffic Management Plan to the relevant road authority and the Superintendent at least seven (7) days prior to the commencement of works.

Traffic control and public safety devices are to be provided by the Contractor. Methods and devices are to comply with Australian Standards, WorkCover Authority requirements, Roads and Traffic Authority requirements, and any other relevant standards of practice.

The Contractor shall not divert traffic onto any temporary routes or close any roadway without prior written approval from the Superintendent.

Where traffic or parked vehicles make it impracticable or hazardous to carry out the work during normal working hours the Contractor may apply to the Superintendent for approval to perform the work outside of normal working hours.

#### **DRC-W203.6 PROTECTION OF THE ENVIRONMENT**

All work shall be carried out in such a manner as to avoid nuisance and/or damage to the environment. The Contractor shall comply with the requirements of the conditions of approval imposed by Council and the NSW Environment Protection Authority. No variation in costs or extensions of time will be considered due to these requirements.

Toxic chemicals shall not be used without the prior written approval of the Superintendent.

#### **DRC-W203.7 NOISE**

The Contractor shall conduct operations such that noise and other objectionable nuisance associated with the works are minimised. Where in the opinion of the Superintendent, operations are such as to warrant complaints on account of excessive noise or other nuisances, the Superintendent shall have the power to instruct that all work will cease until such time as the problem is rectified by the Contractor.

#### **DRC-W203.8 CUSTOMER NOTIFICATION**

If a water supply interruption is necessary under this Contract the Principal shall be responsible for placing media advertisements advising affected customers according to the work program supplied by the Contractor.

The Contractor shall give the Superintendent seven days' notice of the proposed work so that the Principal can arrange notification to affected customers.

The Superintendent will also arrange for notices to be published in a local newspaper (and electronic media?) indicating the water mains to be cleaned, the anticipated start date and the likely duration of the cleaning.

### **DRC-W203.9 LOCATION OF HYDRANTS**

Hydrant valve locations will be shown on the plans supplied by the Principal. The Contractor is responsible for the location of hydrants.

If work cannot be undertaken by the Contractor due to failure to locate a surface fitting after all reasonable effort has been made by the Contractor, notification is to be given to the Superintendent who will then arrange for the surface fitting to be located by the Principal's staff. If the Principal's staff locate the fitting within 2 m and less than 300 mm below the surface, the Principal reserves the right to charge the Contractor a fee to cover the Principal's staff time for the location works.

### **DRC-W203.10 WATER SUPPLY**

Water is available for the purposes of this Contract from the Principal's hydrants at no charge to the Contractor for water used. The Contractor may supply its own Council approved metered standpipe fitted with a reduced pressure zone (RPZ) backflow device, or he may hire a standpipe and RPZ backflow prevention valve from the Principal for use with this Contract. The RPZ valve is to be fitted whenever the standpipe is in use.

The Superintendent may direct where standpipes are to be affixed.

The Contractor is to take all due care whilst using standpipes to ensure that no damage is done to the hydrant or main. The cost of repairing any damage to any of the Principal's assets shall be borne by the Contractor.

### **DRC-W203.11 ISOLATION OF WATER MAINS**

The Principal shall operate valves to isolate the subject water main prior to the cleaning operation and shall operate valves to recharge the subject water main at the completion of the cleaning operation.

Any single incidence of water supply interruption under this Contract is not to exceed six (6) hours, and is not to occur outside the hours of 9.00 am to 3.00 pm, Monday to Friday.

### **DRC-W203.12 HYDRANT INSPECTION AND MAINTENANCE**

#### **Inspection**

The Contractor shall measure and record the following:

- The general condition of the hydrant fitting, cover and surrounds.
- The distance between the top of the hydrant and the underside of the surface cover. (Hydrants should have been installed so that this distance should be between 100 mm and 200 mm).
- The height of the hydrant cover in relation to the surrounding surface.
- Leaking hydrants. These must reported to the Superintendent within two (2) days.

#### **Cleaning**

The hydrant cover/box is to be cleaned of all debris.

## Flushing of Hydrants

Flushing of hydrants is to be carried out generally in accordance with the procedures in DRC-W204 Water Hydrant Flushing and Dead End Flushing, however the amount of water required to flush the hydrant is to be the minimum amount required to demonstrate that the hydrant is operational.

## Markers

The Contractor shall fix a marking plate opposite each hydrant in a manner and position as shown on **Standard Drawing STD 5320** or otherwise approved by the Superintendent.

Where there is no kerb face, the Contractor shall fix the relevant marking plate with approved adhesive at the top of a post, or on an existing wall or fence facing the hydrant or otherwise approved by the Superintendent.

## Posts

The Contractor shall install posts at right angles to the main facing towards the hydrant as required. The post shall be white in colour and be either 100 mm square reinforced concrete with 20 mm chamfers, a powder coated metal post, recycled plastic post with recesses for marker plates or any other post approved by the Principal. When installed the top of the post shall be 1200 mm above the ground and installed to a depth of at least 500 mm into the ground.

## Raised Reflective Pavement Markers (RRPMs)

To assist in the night time location of fire hydrants the Contractor shall affix RRPMs on the road pavement opposite the hydrant in accordance with **Standard Drawing STD 5320**, or as otherwise approved by the Superintendent.

Installation of RRPMs shall be undertaken under safe traffic control conditions and RRPMs are to be protected from traffic until the adhesive has fully set.

## Clearing

The Contractor shall clear the lid and surrounds of any overgrown grass and shrubs to a distance of at least 1 m, and encourage residents' assistance in maintaining fire hydrants by mowing the surrounds and clearing shrubs, to ensure the hydrant is visible from both sides and avoid parking within 1 m of hydrants.

The Contractor shall replace all lids and other fittings immediately after completion of the work.

## DRC-W203.13 REPORTING

Details of the inspection and maintenance shall be recorded on the attached Hydrant Maintenance Report Sheet (Appendix A).

