



DUBBO REGIONAL COUNCIL

TECHNICAL SCHEDULE

DRC-W101

GENERAL CONSTRUCTION

TECHNICAL SCHEDULE DRC -W101 – GENERAL CONSTRUCTION

CLAUSE	CONTENTS	PAGE
DRC-W101.1	Compliance With Legislation _____	3
DRC-W101.2	Precedence _____	3
DRC-W101.3	Standards _____	3
DRC-W101.4	Drawings _____	4
DRC-W101.5	Existing Services _____	4
DRC-W101.6	Testing and Survey _____	4
DRC-W101.7	Working Areas _____	4
DRC-W101.8	Customer Focus _____	5
DRC-W101.9	Smooth Junctions _____	5
DRC-W101.10	Setting out the Works _____	5
DRC-W101.11	Site Meetings _____	6
DRC-W101.12	Work As-Executed Drawings _____	6
DRC-W101.13	Principal Supplied Items _____	6
DRC-W101.14	Scheduled Rates _____	6
DRC-W101.15	Quality Assurance _____	7
DRC-W101.16	Workplace Health and Safety _____	7
DRC-W101.17	Protection of the Environment _____	8
DRC-W101.18	Drainage _____	8
DRC-W101.19	Erosion and Sediment Control _____	8
DRC-W101.20	Dust and Mud _____	9
DRC-W101.21	Blasting _____	9
DRC-W101.22	Noise _____	10
DRC-W101.23	Ground Vibration _____	10
DRC-W101.24	Fire Precautions _____	10
DRC-W101.25	Preservation of Flora and Fauna _____	11
DRC-W101.26	Treatment of Liquid Wastes _____	11
DRC-W101.27	Wash Down of Plant and Equipment _____	12
DRC-W101.28	Disposal of Hazardous Material _____	12

DRC-W101: GENERAL CONSTRUCTION**DRC-W101.1 COMPLIANCE WITH LEGISLATION**

Comply with any relevant legislation including Local Government Ordinances relevant to the Work Under Contract (WUC). Provide adequate supervision of the work to ensure that the legislative requirements are strictly observed.

DRC-W101.2 PRECEDENCE

The order of precedence, unless the context requires otherwise, is as follows:

1. Project Drawings
2. Project Scope Statement
3. Project Specification
4. Technical Schedules
5. Special Conditions of Contract
6. General Conditions of Contract
7. Principal's Standards
8. WSAA (Water Services Association Australia) Codes
9. Australian Standards
10. International and other industry standards

DRC-W101.3 STANDARDS

Unless otherwise specified in the Contract, and where applicable, materials and workmanship shall be in accordance with the relevant WSAA Code in the first instance, followed by any relevant Australian Standard.

A standard applicable to the works shall be the edition last published 14 days prior to the closing date for tenders unless otherwise specified.

Overseas standards and other standard documents named in the Specification shall be applicable in the same manner as Australian Standards to relevant materials and workmanship.

Copies of any standards quoted or referred to in the Specification shall be kept on the site if so specified.

DRC-W101.4 DRAWINGS

The location of the various existing structures, features and underground services shown on the drawings and the dimensions of such, where given, are believed to be correct but do not purport to be absolutely so. They have been shown for the information of the Contractor, and information so given is not to be construed as a representation that such structures or features will be found or encountered as drawn or that such information is complete or accurate. The Principal does not warrant the correctness of such information provided by or on behalf of the Principal. The Contractor shall satisfy itself by such means as it considers appropriate as to the location of all existing structures or features that will be encountered or affected in the performance of the work under the Contract.

The Contractor shall check all drawings carefully and advise the Superintendent within 14 days of the issue of the drawings of any discrepancies, errors or omissions and full instructions will be furnished by the Superintendent to the Contractor should any discrepancies, errors or omissions be found.

Although drawings may have been prepared to scale, unless noted otherwise, work shall be based upon dimensions shown on the drawings and not on dimensions scaled from the drawings.

DRC-W101.5 EXISTING SERVICES

Where existing utility services are shown on the drawings, the Principal does not represent that the information shows completely the existing or planned conditions and does not warrant the correctness of any interpretation, deduction or conclusion shown in these records.

The Contractor shall prove the locations of services prior to construction and comply with all requirements of relevant authorities and utility companies for the protection of and any temporary or permanent relocation of existing services

DRC-W101.6 TESTING AND SURVEY

All testing and survey as required by the Technical Schedule shall be arranged and carried out by the Contractor and all test results and survey records made available to the Superintendent and Council. The cost of all such testing and survey shall be borne by the Contractor.

DRC-W101.7 WORKING AREAS

The Principal will not be responsible for the safe-keeping of any of the Contractor's plant, equipment, tools, materials or other property. The Contractor may provide, and pay for, any security fencing considered necessary around any office, workshop or storage area, subject to the Superintendent's approval.

If existing fencing is cut or altered by the Contractor, or if there is no existing site fencing, the Contractor shall provide and maintain temporary fencing to the satisfaction of the Superintendent during the Contract to prevent unauthorised entry into the property, and shall reinstate the fencing and remove temporary fencing on completion of the work.

The Contractor shall erect appropriate regulatory, hazard, emergency information and fire signs, in accordance with AS 1319 Safety signs for the occupational environment, at prominent locations around the working areas and temporary site facilities. Signs shall include, but are not limited to, mandatory signs for personal protection such as eye, head and foot protection, and 'DANGER' signs such as 'DANGER, Construction Site. No Unauthorised Access'. All words on word-message signs shall be approved by the Superintendent prior to sign manufacture or purchase.

DRC-W101.8 CUSTOMER FOCUS

The Contractor shall have a clear customer focus when carrying out the WUC and shall be pro-active in managing the Works to eliminate any potential causes of complaints. The Contractor is the front line of the Principal's customer service on this project and the Contractor's performance impacts greatly on the public's perception of the Principal. Therefore, the Contractor shall carry out and complete the WUC in a manner that results in minimal inconvenience or impact on the customers, and preserves or enhances the Principal's reputation with customers.

The Contractor shall ensure that all their employees and sub-contractors are suitably trained and understand the requirements of this document. The Contractor shall provide adequate supervision to ensure their staffs complies with this Specification.

DRC-W101.9 SMOOTH JUNCTIONS

Construction work carried out under this Contract adjacent to or adjoining existing works, shall make smooth junctions with the existing work.

DRC-W101.10 SETTING OUT THE WORKS

The Superintendent will provide 'Permanent Marks' as shown on the drawings. The Superintendent will also establish 'Bench Marks' related to the Level Datum.

Before any of the given survey marks on the base lines or the various control lines are affected by the Works, the Contractor shall transfer such survey marks to side positions clear of operations and shall note, and inform the Superintendent in writing, of the extent of such movement.

The Contractor shall give the Superintendent not less than two full working days' notice of the intention to perform any portion of the relocation of survey control, establishment of recovery pegs, or setting out or levelling, so that suitable arrangements can be made for checking of the work by the Superintendent. If no such notification is given and a control mark is disturbed or destroyed, then the cost of re-establishing the control shall be borne by the Contractor.

The Contractor shall provide and fix adequate recovery pegs in suitable locations adjacent to the elements of work to enable location and construction to be checked.

All pegs and profiles placed by the Contractor shall be removed on completion of work unless otherwise directed by the Superintendent.

DRC-W101.11 SITE MEETINGS

Regular site meetings will be held for the purpose of discussion of the progress and co-ordination of the WUC and any matters of doubt regarding the intent or interpretation of the drawings or the Specification. The Contractor shall arrange for relevant sub-contractors or their responsible representatives to be present at these meetings. The meetings will be held at a time nominated by the Superintendent.

The Superintendent shall also give the Principal 48 hours' notice of the date, time and location of the meetings. A representative of the Principal may attend these meetings.

The Superintendent or Superintendent's representative shall chair site meetings, keep minutes of the proceedings and shall provide copies of the minutes for the Contractor, all present at the meeting and others concerned with the matters discussed.

DRC-W101.12 WORK AS-EXECUTED DRAWINGS

The Contractor shall supply the Superintendent with fully marked-up and certified Work-as-Executed drawings for the whole of the Contract prior to issue of the Final Certificate. Electronic copies of the Contract Drawings will be supplied by the Principal in Autocad DWG format (unless noted otherwise) free of charge for this purpose. Work As-Executed drawings shall be signed off by the Contractor and a qualified surveyor or engineer. Work As-Executed survey shall be to the Map Grid of Australia (MGA) and Australian Height Datum (AHD).

DRC-W101.13 PRINCIPAL SUPPLIED ITEMS

Items listed in the Project Scope to be supplied by the Principal will be supplied, delivered and unloaded by the Principal free of cost to the Contractor at points to be nominated. The Contractor shall give the Superintendent notice of the time delivery of Principal Supplied Items are required.

If any Principal Supplied Item is found to be damaged or defective the Contractor shall so inform the Superintendent within two days of taking delivery of such item. If the Contractor does not report damage or defect, it shall be deemed that the item was free from damage or defect when received. The Contractor shall then be responsible for any replacement or making good, as may be directed by the Superintendent.

The Contractor shall be responsible for the storage, protection and insurance of all Principal Supplied Items received.

DRC-W101.14 SCHEDULED RATES

Requirements in respect of all matters specified in this General Specification shall be considered as part of the WUC and unless specified otherwise, may not be provided with specific scheduled rates in the Schedule in respect thereof. Where no specific scheduled rates are detailed, these requirements shall be deemed to be included in the other Contract scheduled rates.

DRC-W101.15 QUALITY ASSURANCE

The Contractor shall undertake Quality Assurance in accordance with the General Conditions and Special Conditions of Contract.

DRC-W101.16 WORKPLACE HEALTH AND SAFETY

The Contractor shall undertake Workplace Health and Safety in accordance with the General Conditions and Special Conditions of Contract and all legislative requirements. All costs associated with ensuring a safe work environment for the implementation of the works shall be deemed to be included in the Contract 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 have included, but not necessarily be limited to:

- 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, 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 Contract price.

DRC-W101.17 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 all relevant environmental legislation, any Impact Statement and Assessment Report or Review of Environmental Factors for the subject matter of the WUC, the conditions of approval (if any) imposed by the Environment Protection Authority and/or consent authority for the works. No variation in costs or extensions of time will be considered due to these requirements.

The Contractor shall plan and carry out the works to avoid erosion, contamination and sedimentation of the site and its surroundings.

Herbicides and other toxic chemicals shall not be used on the site without the prior written approval of the Superintendent.

DRC-W101.18 DRAINAGE

The Contractor shall provide for the effectual diversion of surface water from the works and provide and ensure proper flushing for storm and subsoil water across and beyond the Works at all times. The flow of stormwater and drainage along existing gutters and water tables shall not be interrupted.

The Contractor shall provide efficient pumping equipment onsite and shall keep trenches and excavations dewatered at all times during construction.

All permanent retention basins, and temporary erosion and sedimentation control shall be completed prior to commencement of earthworks.

DRC-W101.19 EROSION AND SEDIMENT CONTROL

All proper precautions shall be taken by the Contractor to prevent the erosion of soil by wind or water from land used or occupied by the Contractor and to prevent the deposition of soil in watercourses during execution of work under the Contract. Existing soil binding vegetation and established ground surfaces shall not be disturbed unless necessary for the purpose of the works.

The Contractor shall design, supply, install, maintain and operate drainage systems to remove surface run-off and ground water from excavations from the Site. The Contractor shall implement wherever practicable the recommendations set out in the Landcom publication Managing Urban Stormwater: Soils and Construction (2004).

All surface run-off and ground water from excavations shall be collected and conveyed to settling ponds and oil traps as required, prior to discharge into the environment. All discharges to watercourses or drains shall meet the relevant requirements of the Environment Protection Authority and Council.

The Contractor shall ensure that all water is discharged in a condition and manner so as not to cause erosion or pollution, or nuisance to other persons within or adjacent to the site.

The Contractor shall prepare and submit to the Superintendent an Erosion and Sediment Control Plan prior to the commencement of the works. This Plan shall include the management of all erosion and sediment risks including:

- A. Exposure of soils to erosion by wind and/or water due to the removal of vegetation, pavement, concrete or other surface coverings.
- B. Soil run-off from stockpiles or disturbed areas polluting waterways or drains.
- C. Pollution of soils and groundwater by seepage of liquid wastes.

If in the opinion of the Superintendent the Contractor's operations cause erosion hazards, the Contractor shall at its own cost undertake soil conservation methods in these areas when directed by the Superintendent. Soil conservation measures shall include, but not be limited to, stabilisation of embankment slopes by grassing or similar means to control erosion and the construction of cut-off drains to prevent soil deposition outside the site.

DRC-W101.20 DUST AND MUD

The Contractor shall not cause a dust nuisance onsite, and shall take positive action to prevent dust from blowing off the site that may cause nuisance or safety issues to the Principal's employees, neighbours and the general public. The Contractor shall minimise the impact that his activities have onsite by providing appropriate measures such as watering, sprinklers or other approved dust suppression methods to keep the dust down. The Contractor shall control the speed of traffic, and shall arrange his works so that the wind does not cause a dust problem.

The Contractor shall not traffic mud or spoil on to roads that belong to the Council or the Principal. The Contractor shall promptly remove any reported deposits on to roadways. The Contractor shall also ensure that trucks are not overloaded, and that they are filled in a manner so debris cannot fall from the truck during transport and end up on roadways.

DRC-W101.21 BLASTING

Blasting will not be permitted without the specific approval of the Superintendent, relevant regulator and affected owners of assets within the vicinity.

Where approval for blasting is granted, the Contractor shall prepare a blasting plan that includes management of the blasting and means to be used to satisfy the requirements of AS 2187 and the approving parties.

DRC-W101.22 NOISE

The Contractor shall only use plant that has effective residential class silencers fitted to all engine exhausts and fitted engine covers, and ensure that the sound pressure level for any piece of equipment, or operation shall be within the limits prescribed by AS 2436.

The Contractor shall ensure that noise emanating from the construction site when measured at any noise sensitive location (such as a residential premise), as determined by the Environment Protection Authority's publication Environmental Noise Control Manual, shall not exceed an assigned L10 sound pressure level threshold (noise level exceeded for 10% of the sample time). The intent of this requirement is to avoid excessive noise and long periods of elevated noise that is reasonably anticipated to annoy or adversely affect the adjacent community.

Operational hours of plant, including the entry and/or departure of heavy vehicles, shall be restricted to 7 am to 6 pm Monday to Friday, 7 am to 1 pm on Saturday and at no times on Sundays or public holidays. Work outside of the hours specified shall not be undertaken without the prior approval of the Superintendent.

The Contractor will be responsible for any damage and compensation payments as a result of non-observance of the above requirements. No claim by the Contractor arising out of these requirements will be considered by the Superintendent.

DRC-W101.23 GROUND VIBRATION

It is the intent of this Specification that ground vibration levels, transmitted from operating items of plant in the vicinity of residential premises shall not exceed levels that are close to the lower level of human perception inside the premise nor will cause structural damage to the building. Practices and vibration thresholds acceptable shall be determined in accordance with current Statutory Regulations.

Ground vibrations generated by construction works shall not exceed a peak particle velocity (V_R max) limit of 5 mm/s when measured within 1 metre of any residential premise

The Contractor shall be responsible for any damage and compensation payments as a result of non-observance of the above requirements. No claim by the Contractor will be considered by the Superintendent.

DRC-W101.24 FIRE PRECAUTIONS

The Contractor shall provide, operate and maintain adequate fire-fighting equipment for the protection of the WUC and its Constructional Plant. The Contractor shall take all necessary measures to prevent fire during the execution of work under the Contract and damage to or destruction by fire of the vegetation in and surrounding the area of the site arising from the Contractor's operations.

If any of the Contractor's constructional plant is powered by an internal combustion engine, then that plant shall be fitted with fully working and efficient spark emission control devices in accordance with AS 1019, and carry a charged fire extinguisher.

The Contractor shall comply with the requirements of the Rural Fires Act and regulations made there under, and shall ensure that all persons on the site observe these requirements.

The Contractor shall take notice, and implement appropriate work strategies, of any announcements by the Rural Fire Service, particularly the notification of the annual 'Fire Danger Period', 'Total Fire Ban' days and 'Fire Danger Ratings of Severe, Extreme and Catastrophic'.

DRC-W101.25 PRESERVATION OF FLORA AND FAUNA

The Contractor shall not destroy, remove or clear trees and vegetation without the prior written permission of the Superintendent.

The Contractor shall take such measures as are necessary to prevent its employees and sub-contractors from hunting, disturbing any natural habitat, capturing or destroying animals and birds within the Site and all neighbouring areas and along the accesses to the site.

Whenever clearing is required as part of the WUC, the extent of clearing shall be subject to approval of the Superintendent. All cleared material including trees stumps, roots, brush, rubbish, and any objectionable matter shall be disposed of in a lawful manner. Burning of material will not be permitted unless otherwise approved in writing by the Superintendent.

DRC-W101.26 TREATMENT OF LIQUID WASTES

The Contractor shall inspect all plant and equipment to be used for oil and fuel leakage before it enters the site, and shall inspect all plant and equipment at regular intervals (at least daily) during the period that they are on the site.

In order to minimise the risk of polluting a watercourse all servicing and fuelling of the Contractor's plant and equipment shall be carried out at locations remote from any watercourse.

Under no circumstances shall the Contractor allow any plant or equipment to enter any watercourse or allow it to continue to operate, if the plant or equipment is found to be leaking oil or fuel. Entry of oil, grease or fuel into any watercourse is prohibited. Drainage from any area likely to be contaminated as such shall be effectively diverted to a suitable collection point. The Contractor shall provide, operate and maintain adequate facilities for the collection of leaking fuels, lubricants, oils, greases, and the like, and for the transportation and lawful disposal of these materials off the site.

If pollution of the soil occurs from the Contractor's plant and equipment or spillage of any contaminant, then all contaminated soil shall be removed from the site and disposed of as in accordance with the requirements of the EPA.

DRC-W101.27 WASH DOWN OF PLANT AND EQUIPMENT

To assist in controlling the spread of soil borne diseases and fungi, all plant and equipment required for the construction of the WUC shall be washed down before any such plant or equipment is brought into the vicinity of the site. Prior to commencement of the WUC, all plant and equipment may be inspected by the Superintendent upon arrangement with the Contractor.

The wash-down of plant and equipment by the Contractor shall remove all soil accumulated on the plant or equipment. The Contractor shall also wash down all plant and equipment before the plant or equipment leaves the site.

DRC-W101.28 DISPOSAL OF HAZARDOUS MATERIAL

All hazardous materials known or identified at the time of tendering that are to be removed from the site shall be carefully handled, loaded, transported and disposed of in accordance with Environment Protection Authority's requirements and any other legislative requirements, which may be applicable to the hazardous material.

The Contractor shall properly identify any other hazardous material encountered during the execution of work under the Contract prior to handling. The Superintendent will direct the Contractor on the special provisions for removal and disposal of the hazardous material by the issue of a variation under the Contract.