**Project**

Specification for the supply and installation

 of a new irrigation storage tanks

Gundagai Golf Course

**Client**

Cootamundra Gundagai Regional Council

**Contract No:**

GGC\_TA\_2312

Date

30 September 2024

Revision A





**COPYRIGHT**

Water Wise Consulting has given, Cootamundra Gundagai Regional Council “The Principal” and invited parties the rights to copy either whole or part of the document set for the express purpose of preparing or obtaining quotes for the work. The use the document either, whole or in part for any other purpose will be in breach of copyright.

Table of Contents

[1 PRELIMINARIES 1](#_Toc178402020)

[1.1 WORKS 1](#_Toc178402021)

[1.2 PROJECT OVERVIEW 1](#_Toc178402022)

[1.3 WORKS BY THE PRINCIPAL 1](#_Toc178402023)

[1.4 TECHNICAL ENQUIRIES 1](#_Toc178402024)

[1.5 SET-OUT 1](#_Toc178402025)

[1.6 DEFECTIVE WORKS 1](#_Toc178402026)

[1.6.1 NON-CONFORMING WORKS 2](#_Toc178402027)

[1.7 SECURITY 2](#_Toc178402028)

[1.8 STORAGE COMPOUND 2](#_Toc178402029)

[1.9 SITE AMENITIES 2](#_Toc178402030)

[1.10 SITE CLEANING 2](#_Toc178402031)

[1.10.1 NOTICE TO CLEAN UP 2](#_Toc178402032)

[1.11 ACCESS TO SITE 2](#_Toc178402033)

[1.11.1 DELIVERIES VEHICLES 3](#_Toc178402034)

[1.11.2 DELIVERIES, HANDLING AND STORAGE 3](#_Toc178402035)

[1.12 EXISTING NON-IRRIGATION SERVICES 3](#_Toc178402036)

[1.13 DEFECTS AND LIABILITY PERIOD 3](#_Toc178402037)

[1.14 GUARANTEES AND WARRANTIES 3](#_Toc178402038)

[1.14.1 DEVIATIONS FOR GUARANTEES AND WARRANTIES 3](#_Toc178402039)

[1.15 PRACTICAL COMPLETION 3](#_Toc178402040)

[1.16 WORKS RISK ASSESSMENT 4](#_Toc178402041)

[1.17 DILAPIDATION REPORT 4](#_Toc178402042)

[2 INSTALLATION 4](#_Toc178402043)

[2.1 MACHINERY 4](#_Toc178402044)

[2.2 WASTE / UNSUITABLE MATERIAL 4](#_Toc178402045)

[2.2.1 CONTAMINATED SOILS 4](#_Toc178402046)

[2.3 MEASUREMENT OF ROCK AND IMPORTED FILL 5](#_Toc178402047)

[2.4 HARD GROUND 5](#_Toc178402048)

[2.5 EXCESS SPOIL 5](#_Toc178402049)

[2.5.1 TEMPORARY STOCKPILES 5](#_Toc178402050)

[2.6 TRUCKS 5](#_Toc178402051)

[2.7 IRRIGATION STORAGE TANKs 5](#_Toc178402052)

[2.8 TANK BASE PREPARATION 6](#_Toc178402053)

[2.9 TANK BASE COMPACTION TEST 6](#_Toc178402054)

[3 SUPERVISION 7](#_Toc178402055)

[3.1 HOLD POINT AND WITNESS POINTS 7](#_Toc178402056)

[3.2 WARRANTY CERTIFICATE 8](#_Toc178402057)

[3.3 QUALITY ASSURANCE CERTIFICATE 8](#_Toc178402058)

[3.4 QUALITY ASSURANCE CERTIFICATE 9](#_Toc178402059)

[4 CONTRACT TERMS AS4000:1997 10](#_Toc178402060)

# PRELIMINARIES

## WORKS

The works will include but not be limited to:

* Preparation of the tanks site to the manufacturer’s requirements.
* Supply and construction of two 500 kL storage tanks to hold recycled water.
* Undertake repairs and rectification as required during the defects and liability period,
* Coordinate works with other trades.

## PROJECT OVERVIEW

The Principal has complete works on their waste water treatment plant, with the treated water to be used both on the adjacent golf course and playing fields. This works package is to construct the necessary pumping system to allow:

* Irrigation of the playing fields directly from the treated water storage tank
* Supply water to the irrigation storage tank and dam for irrigation of the golf course
* Allow smaller watering needs to be supplied directly from the treated water tank (via jockey pump)
* Transfer water from the dam (on course) to the irrigation holding tank

## WORKS BY THE PRINCIPAL

The Principal and or their Representative will undertake the following works:

* Supervision of work.

## TECHNICAL ENQUIRIES

All technical enquires relating to the project are to be made to:

Peter Brueck

Water Wise Consulting

Email peter@wwconsulting.com.au

Phone 0411 425 831

Email peter@wwconsulting.com.au

## SET-OUT

The set-out of the works will be done by the Principal’s Representative.

**No installation is to occur without approval of the set-out being given.**

It remains the Contractor’s responsibility to maintain the set-out markings during the construction period.

## DEFECTIVE WORKS

Where it is discovered that work has been undertaken by the Contractor or their Sub-Contractors is not in accordance with the drawings or specification, the Principal or their Representative has the right to halt all works and direct the Contractor to undertake or arrange its rectification immediately. The Contractor remains liable for all costs associated with the rectification works, including all cost incurred by the Principal or other parties affect by the defect.

Where the Contractor does not undertake the rectification in the allotted time or completes the rectification work in a sub-standard manner the Principal or their Representative has the right to arrange for the rectification to be undertaken by another company.

All costs incurred by the Principal will be deducted from monies owed to the Contractor. Should moneys withheld by the Principal be insufficient to cover the cost, the Principal has the right to seek re-imbursement from the Contractor. In the case of defective works by a Sub-Contractor the Principal will hold the Head Contractor responsible for all costs.

### NON-CONFORMING WORKS

The Principal is not bound to accept any 'non-conforming works'. If the Principal chooses to accept the work as 'Non-Conforming', a credit shall be applied to the contract sum and be calculated by establishing the total cost of rectifying the non-conforming works less the value of the non-conforming works as accepted by the Principal.

## SECURITY

Contractors remain wholly responsible for the security of any plant, equipment amenities and materials.

## STORAGE COMPOUND

The Contractor is to arrange for the storage of all plant and equipment.

All pipe and machinery must be stored in the location agreed to by the Principal.

## SITE AMENITIES

The Contractor and its staff may use the site amenities including toilets, power, and water. The Principal reserves the right to deny site amenities to the Contractor if they consider the amenities are being abused or misused.

In the case of abuse or misuse, the Contractor will be required to arrange amenities.

## SITE CLEANING

The site is to remain clean and tidy always. The Contractor is to ensure that all rubbish including pipe off cuts, packaging etc., **is collected daily and either stored in commercial rubbish bins or disposed of offsite**.

**The Contractor is not to use the site rubbish bins for disposal of any waste.**

### NOTICE TO CLEAN UP

If the Principal or Principal’s Representative determine that the Contractor is not meeting its obligation to keeping the site clean, they may issue a notice to clean up, the Contractor will be required to immediately undertake the actions as set-out in the notice.

If the Contractor fails to act on the notice, the Principal has the right to arrange for the works to be done either “in house” or by others and deduct the cost from the Contractors payments.

## ACCESS TO SITE

The Principal will indicate site access paths. These paths are to be used for all vehicle and machinery movements.

### DELIVERIES VEHICLES

The Contractor must escort all delivery vehicles which are required to drive onto the course.

No vehicles shall drive on the Course Proper at any time unless specifically approved by the Principal.

### DELIVERIES, HANDLING AND STORAGE

The Contractor shall provide and pay for all transportation required to deliver and remove materials and equipment. Contractors must have available sufficient labour and equipment to take delivery while ensuring ‘safe manual handling practices’ are adhered to.

Materials shall be delivered to the site and handled in accordance with manufacturer’s recommendations.

## EXISTING NON-IRRIGATION SERVICES

Existing services (such as drains, watercourses, public utility, and other services) obstructing the works or if damaged while performing the work, shall be dealt with as follows:

* Water or gas if the services are to be continued- repair, divert, and relocate as required.
* Obsolete services- cut and seal or disconnect and make safe as required.
* Electrical and communication- damaged cables are to be replaced between the nearest connection points **repairing only is not acceptable unless approved by the Principal**.
* For services that are to be diverted, instruction to proceed must be sought from the Principal’s Representative before proceeding.
* Prior to commencement of work, the Contractor must establish the location of all existing services utilising the services/database of Dial Before You Dig (“DBYD”) <https://www.1100.com.au/> and a DBYD-Certified services locator, as necessary.

## DEFECTS AND LIABILITY PERIOD

**For a 12-month period from the date of practical completion**, the Contractor will at their cost remain liable for the repair or replacement of any part of the works that is discovered to be faulty. The Contractor will also be liable for the cost of repair relating to any damage or claims that may arise due to the fault or failure.

## GUARANTEES AND WARRANTIES

Obtain and ensure that the Principal will have the benefit of warranties or guarantees as specified in the contract or offered by suppliers, including warranties or guarantees that are obtained by, or offered to the Sub-Contractors of the Contractor.

### DEVIATIONS FOR GUARANTEES AND WARRANTIES

Where the Contractor and or Suppliers offers guarantees or warranties that do not meet the stated terms or have conditions associated, these must be submitted with the tender. Failure to disclose will be taken as unconditional acceptance and for the periods stated.

## PRACTICAL COMPLETION

A 'Practical Completion Certificate' will be issued once the requirements of [FINAL INSPECTION AND HAND OVER](#_FINAL_INSPECTION_AND) have been met.

The certificate will be dated the next calendar day after the date that the works have been deemed to be ‘practically complete’.

## WORKS RISK ASSESSMENT

The Contractor is required to undertake their own risk assessment of the site and works, the assessment is to include but not be limited determining the possible loss to the Contractor due to:

* Theft.
* Vandalism.
* Act of nature including flood or bushfire.
* Other users of the racecourse property.

## DILAPIDATION REPORT

The Contractor is to prepare a dilapidation report prior to commencing work, the report is to identify:

* Any existing damage to roads, paths, fencing, structures etc,
* The state of health and cover of any grass surfaces that will be excavated and specified to be reinstated.

If the Contractor neglects to undertake the dilapidation report, it will be considered they accept the existing irrigation system is fully operational and without fault. The Contractor will be held responsible for all costs associated with the repair to the system if after any new works are undertaken a fault is discovered.

# INSTALLATION

## MACHINERY

The Contractor is to ensure that proposed machinery chosen to excavate trenches will effectively excavate the ground on site.

## WASTE / UNSUITABLE MATERIAL

Waste/unsuitable material is defined as material not natural to the site which cannot be used as back fill material without bedding material being used to protect the pipe (Examples may include concrete, building waste, tree stumps etc), and cannot be excavated by the nominated machinery.

As a guide.

* Manually operated tools Sharp pointed crowbar
* Chain trencher 65 HP with unworn teeth and points equal to a Ditchwitch RT55 with Alligator combo chain.
* Backhoe 70 HP with unworn bucket teeth equal to tiger teeth
* Excavator 5 ton with unworn bucket teeth equal to tiger teeth

### CONTAMINATED SOILS

Contaminated soils are to be considered to include any material considered a health risk *(e.g., Asbestos) or may affect the longevity of the system.*

Where the Contractor identifies contaminated soils, they are to.

* Stop all excavations immediately and notify the Principal’s Representative.

The Principal’s Representative is to give direction to the Contractor as to the treatment of the material. Any extra cost associated with the treatment will be calculated using the rate submitted.

## MEASUREMENT OF ROCK AND IMPORTED FILL

Measurement of rock will be taken as the:

* Cubic metre of the void excavated and not of the loose measurement of material removed.

The rate stated in the bill of material is to include the supply and placement of bedding material and removal of the rock to a nominated stockpile located on site.

## HARD GROUND

Hard ground is determined as clean compacted material consisting of soils, sands, or individual rocks of a size smaller than 100 mm in diameter.

**No variation will be given for excavation in 'hard ground**'.

## EXCESS SPOIL

All excess trench spoil is to be stockpiled on site in a location to be determined by the Principal.

Stockpiles are to be established for re-useable and waste material.

### TEMPORARY STOCKPILES

Temporary stockpiles may be placed in the areas they are working on and then allow to transport to a site nominated by the Principal. No stockpiles shall be established within the alignment of a racing or training track under any circumstances.

## TRUCKS

The maximum size of any truck used to transport the spoil around site is to be 5 ton.

The Contractor is to allow for machinery capable of excavating the various ground conditions found on site.

No variations for costs or delays will be given for “hard going”.

Any damage caused by the Contractors machinery must be repaired to the original or better condition by the Contractor at their cost.

## IRRIGATION STORAGE TANKS

The contractor is to arrange for the supply and construction of zicalum coated panel tanks with a gross capacity of a minimum 500 kL.

The tank is to be supplied with

* 1 x Ladder
* 1 x Roof vent
* 1 x DN250 flanged outlet
* 1 x DN100 inlet
* 1 x DN200 inlet
* 1 x DN100 overflow

Tank is to be equal to a Pioneer Tank GTi501.

It remains the contractor’s responsibility to prepare the site to the requirements of the tank manufacturer.

## TANK BASE PREPARATION

The Contactor is to undertake all necessary ground works to prepare the site so it meets the requirements of the tank manufacturers specification/ construction drawings.

## TANK BASE COMPACTION TEST

Once the site has been cleared, levelled and compacted and prior to the bedding material being placed the Contract is to arrange for a “bearing load test” to be undertaken to prove the base meets the requirements of the tank manufacturer.

# SUPERVISION

All works will be over seen by the Principal’s Representative. The Representative will have the authority to stop works at any time if it is discovered the works are not to specification. They will also be empowered to direct the Contractor to carryout rectification works if it is discovered the works do not comply with the specification. If the Contractor does not undertake and rectify works within a reasonable time (maximum allowable time to rectify is 5 working days from notification) the Principal has the right to engage another Contractor to carry out rectification works and deduct any cost from money owed to the Contractor in accordance with the General Conditions of Contract. These works will not affect any warranty obligation of the Contractor.

## HOLD POINT AND WITNESS POINTS

For clarification,

* A ‘Hold Point’ is an identified point in the construction process that the Contractor shall not proceed beyond without a direction from the Principal’s Representative.
* A ‘Witness point’ is a point which provides the Principal’s Representative with an opportunity to inspect/test the work at its discretion; however no contractual obligation is implied. The activity can proceed without approval of the Principal.”

If the Contractor chooses to proceed without having a hold point inspected the Principal may instruct the Contractor to excavate the completed works to allow for inspection. All costs associated with the excavating and making good will be borne by the Contractor.

|  |  |  |  |
| --- | --- | --- | --- |
| **Works** | **Witness by****See bottom of table for clarification of abbreviations** | **Hold Point** | **Witness Point** |
| **Preliminary** |  |  |  |
| Project management plan | P or R | # |  |
| Site specific plan | P or R | # |  |
| Installation program | P or R |  |  |
| Review of maintenance manuals | P or R | # |  |
| **Construction** |  |  |  |
| Establishment of site  | P or R |  | # |
| Establishment of stockpile security and containment | P or W | # |  |
| Setout | P or R | # |  |
| Damage to any service or utility | P or R | # |  |
| Repair of any service or utility | P or R | # |  |
| Measurement of rock excavation | P or R | # |  |
| Tank site preparation | P or R | # |  |
| Base compaction test results | P or R | # |  |
| Erection of tanks | P or R |  | # |
|  |  |  |  |
| Damage to any service or utility | P or W | # |  |
| Repair of any service or utility | P or W | # |  |
| Measurement of rock excavation | P or W | # |  |
| Main trench and installation  | P or W |  | # |
| Trench and installation  | P or W |  | # |
| **Testing** |  |  |  |
| Pressure testing and commissioning | P or R, SC | # |  |
| Final inspection  | P or R, SC | # |  |
|  |  |  |  |
| **Witness Abbreviations** |  |  |  |
| P= Club Representative |  |  |  |
| C=Contractor |  |  |  |
| R= Principals Representative |  |  |  |
| SC= Sub Contractor |  |  |  |

##  WARRANTY CERTIFICATE

A warranty certificate is to be issued to the Principal indicating the period of warranty, including terms and conditions that relate to warranty.

The certificate is to be dated one day after Practical Certificate is issued.

## QUALITY ASSURANCE CERTIFICATE

The Contractor is to supply as part of the operations manual a signed Quality Assurance Certificate.

The certificate is to be dated one day after Practical Certificate is issued and is to be presented in original form no later than 2-days after Practical Completion has been issued. Any reduction in retention monies held will not be released until the certificate is issued to the Principal.

## QUALITY ASSURANCE CERTIFICATE

**(Not required to be completed as part of submission)**

Project Irrigation Tanks at:

 Gundagai Treatment Plant (Irrigation works)

Contract Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Stage of Works \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Related Documents Specification \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Drawings \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

As the duly authorised officer for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(company name) ,

ABN\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(full name) holding the position of

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ herby certify that the works completed by our company including works undertaken by our Company or Sub Contractors has been carried out in accordance with the above stated documentation.

Should it be discovered that any works completed by our Company or our Sub Contractors are faulty regardless if it falls within the warranty period, our company will rectify the fault at no cost to the Principal. This includes the repair of any associated works, structures, or grounds, affected by failure or rectification works.

This agreement is limited to the works which related to that which was undertaken by our company or our Sub Contractors and does not include any alterations that may be needed in the future due to changes in site conditions, or changes to any authority’s rules or codes which may occur after the date of practical completion.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Witness Signature

Date \_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Witness Name (print)

# CONTRACT TERMS AS4000:1997

**ANNEXURES TO THE GENERAL CONDITIONS OF CONTRACT**

**PART A**

Annexure to the Australian Standard General Conditions of Contract AS 4000-1997

This Annexure must be completed and, subject to any Special Conditions of Contract will be attached to the General Conditions of Contract and will form part of the Contract.

|  |  |
| --- | --- |
| * + - 1. **Item**
 |  |
| 1. Principal (clause 1) | ABN  |
| 2. Principal’s address |  |
| 3. Contractor (clause 1) | ABN |
| 4. Contractor’s address |  |
| 5. Superintendent (clause 1) |  |
| 6. Superintendent’s address |  |
| 7. (a) Date for practical completion (clause 1)OR(b) Period of time for practical completion (clause 1) | As per agreed program |
| 8. Governing law (clause 1(h)) | New South Wales |
| 9. (a) Currency (clause 1(g)) | Australian dollars |
| (b) Place for payments (clause 1(g)) | Unless otherwise agreed, at the Principal’s address |
| (c) Place of business of bank (clause 1(d)) | Not applicable |
| 10. Bills of quantities (subclause 2.2) | .  |
| (a) Alternative applying (subclause 2.2) | Alternative 1 |
| (b) If Alternative 2 applies, is the bill of quantities to be priced? (subclause 2.2) | Not used |
| (c) Lodgement time (subclause 2.3(b)) | Tender submission |
| 11. Quantities in schedule of rates, limits of accuracy (subclause 2.5(b)) | 10% |
| 12. Provisional sum, percentage for profit and attendance (clause 3) | Not used |
| 13. Contractor’s security(a) Form (clause 5) | (b) [An approved unconditional undertaking given by a financial institution approved by the Principal](c) OR(d) [Retention moneys] |
| (b) Amount or maximum percentage of contract sum (clause 5) | 5% of the Contract Sum |
| (c) If retention moneys, percentage of each progress certificate (clause 5 and subclause 37.2) | 10%, until the limit in Item 13(b) |
| (d) Time for provision (except for retention moneys) (clause 5) | Within 28 days of date of Principal's notice of acceptance |
| (e) Additional security for unfixed plant and materials (subclauses 5.4 and 37.3) | Nil |
| (f) Contractor’s security upon certificate of practical completion is reduced by (subclause 5.4) | 50% of amount held |
| 14. Principal’s security |  |
| (a) Form (clause 5) | Not applicable. |
| (b) Amount or maximum percentage of contract sum (clause 5) | Nil. |
| (c) Time for provision (clause 5) | Not applicable. |
| (d) Principal’s security upon certificate of practical completion is reduced by (subclause 5.4) | Not applicable. |
| 15. Principal-supplied documents (subclause 8.2) | 1 copy of the drawings and specification. |
| 16. Time for Superintendent’s direction about documents (subclause 8.3) | 14 days |
| 17. Subcontract work requiring approval (subclause 9.2) | All subcontract work of a value greater than $5,000.00 |
| 18. Novation (subclause 9.4) | Nil. |
| 19. Legislative requirements(a) Those excepted (subclause 11.1) | Nil. |
| (b) Identified WUC (subclause 11.2(a)(ii)) | Nil. |
| 20. Insurance of *the Works (*clause 16)(a) Alternative applying | Alternative 1. Contractor shall insure. |
| (b) Provision for demolition and removal of debris | Not applicable. |
| (c) Provision for consultants’ fees | Not applicable. |
| (d) Value of materials or things to be supplied by the *Principal* | Nil |
| e) Additional amount or percentage | NIL |
|  |  |
| 21. Public liability insurance (clause 17)(a) Alternative applying | Alternative 1 applies. Contractor shall insure. |
| (b) Amount per occurrence shall be not less than | $20 million |
| 22. Time for giving possession (subclause 24.1) | 14 days from order |
| 23. *Qualifying causes of delay* Causes of delay for which EOTs will not be granted (page 3, paragraph (b)(iii) of clause 1 and subclause 34.3) | Lack of supply of productLack of labour and machinery |
| 24. Liquidated damages, rate (subclause 34.7) | $440.00 per day |
| 25. Bonus for early *practical completion* (subclause 34.8) | Nil. |
| 26. Delay damages, other *compensable causes* (page 1, clause 1 and subclause 34.9) |  |
| 27. *Defect’s liability period* (clause 35) | 12 months |
| 28. Progress Claims (subclause 37.1)(a) Times for progress claimsOR(b) Stages of *WUC* for progress claims | Last Tuesday of the month |
| 29. Unfixed plant and materials for which payment claims may be made (subclause 37.3) | Not applicable. |
| 30. Interest rate on overdue payments (subclause 37.5) | Nil.  |
| 31. Time for *Principal* to rectify inadequate possession (subclause 39.7) | 14 days |
| 32. Arbitration (subclause 42.3)(a) Person to nominate an arbitrator | The President of the Institute of Arbitrators, Australia  |
| (b) Rules for arbitration | Rules 5-18 of the Rules of The Institute of Arbitrators, Australia for the Conduct of Commercial Arbitration |
| (c) Appointing Authority under UNCITRAL Arbitration Rules | Not applicable. |