



Government  
of South Australia



CONSULTANT ACCREDITATION SCHEME

**WATER SUPPLY**  
**DESIGN**  
**DRAWING CRITERIA**  
**AND**  
**CHECKLIST**

Produced by SA Water Services  
Infrastructure Group

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### **For both water design and recycled water design**

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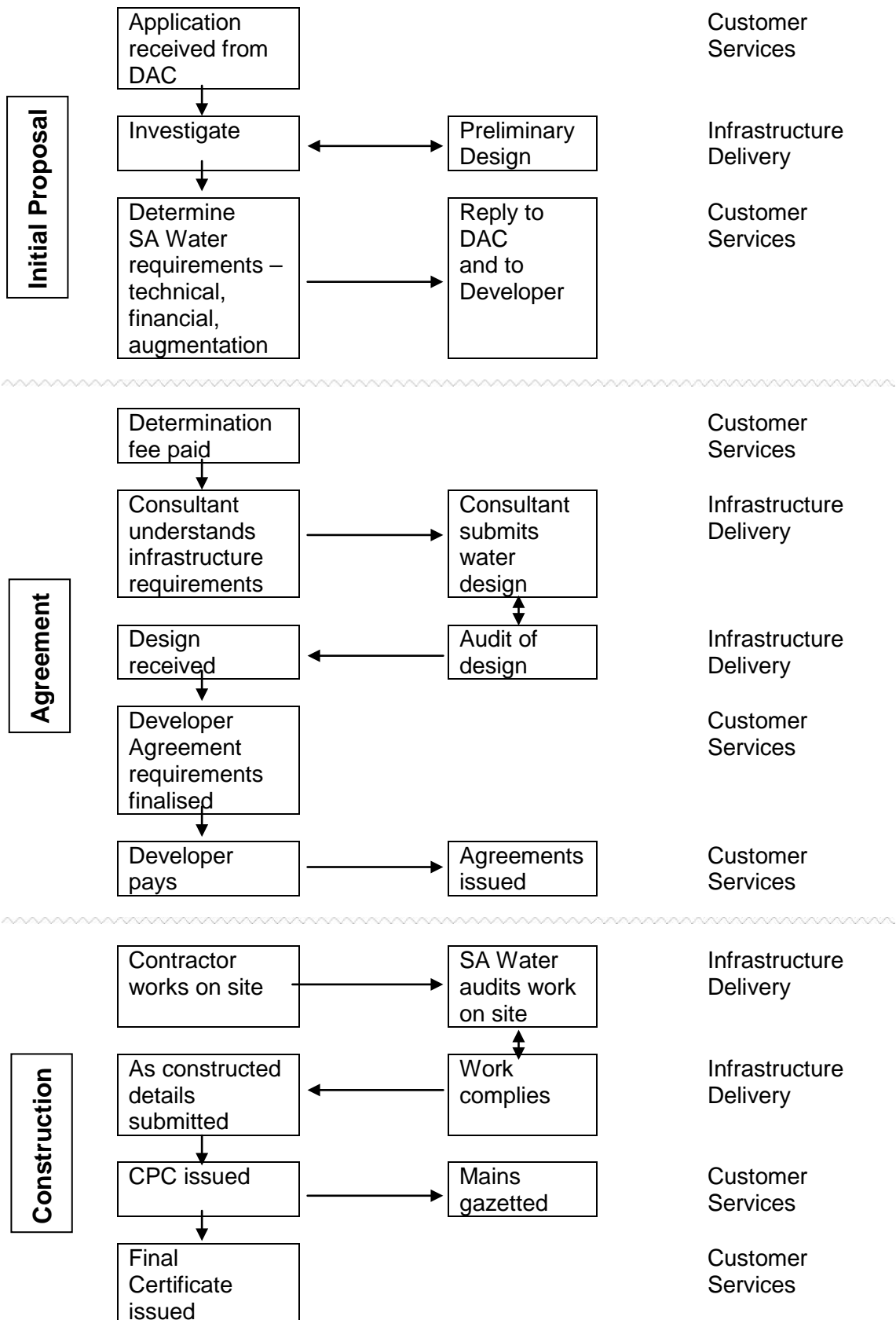
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## MAJOR LAND DEVELOPMENT WATER INFRASTRUCTURE FLOWCHART



## GENERAL

1. When a land division proposal is lodged, SA Water technical staff prepare a Preliminary Design to ensure that all internal subdivision and approach mains are sized accordingly and all link-up points are identified, whilst at the same time ensuring that SA Water's long term planning requirements are met.
2. A copy of the Preliminary Design will be made available to consultants. Alternative designs are acceptable providing SA Water's long term planning requirements are catered for and the alternative does not include an increase in easements and/or additional water main length.
3. A standard drawing template for consultants is available free from SA Water and will be e-mailed to consultants on request. Consultants will be advised when a change to the template or additional information is required on the drawings. The updated information will be available on the Corporate website.
4. Appendix A is a copy of the Audit Checklist, which will be used to ensure submitted designs meet the required criteria. It is recommended that Consultants also use the checklist to ensure everything has been covered prior to submitting the drawings for audit.
5. Appendix B is a copy of a typical Design Drawing showing the required line thicknesses and other layout standards. These criteria must be followed because clarity of the drawing is essential to SA Water, as the drawing needs to be scanned and reproduced for future reference.

## REQUIREMENTS

1. Clarity of drawings is essential. Consultant design drawings need to be scanned and reproduced – therefore the need to provide the line thicknesses and text heights detailed in Appendix B.
2. Drawing layout should be oriented so that the drawing text can be read looking from the bottom right of the drawing. Where possible the North Point should be upwards on the drawing sheet.
3. **Scales:**  
Because of SA Water's digitising equipment set-up, only the following plan scales can be accepted:  
Locality and Layout Plans 1:500 and 1:1000.  
An additional location plan (i.e. Scale 1:2500) may be necessary for large developments.
4. The Location Plan, Limit of Contract, Total Length of mains and a Tally of Fittings are to be included on sheet 31.
5. Drawings are to be submitted for initial auditing on A1 size sheets.
6. All design drawings submitted, including the initial submission, must be checked and signed by the responsible Consulting Engineer. Drawings will be returned immediately if they have not been signed by the Consulting Engineer.

7. When the consultant has been advised the drawings are satisfactory, the drawings are to be resubmitted for issue on both A1 and A3 size sheets.
  - One copy at A1 size and one copy at A3 size.
8. As a minimum, design drawings must be submitted on good quality (80 gsm) paper. Do not fold or tightly roll the drawings when submitting for issue, as it can create problems during printing of additional copies. (Multiple copies of the drawings are required for contract documentation, and for issue to various contractors, inspectors and regional staff.)
9. The Consulting Engineer's Title block is to contain the company's current information e.g. phone number, fax number, printed name below signature etc. No company logos are permitted

### **“AS CONSTRUCTED” DRAWINGS**

1. “As Constructed” drawings can be updated electronically.
2. It is no longer necessary to cross out the old text and distances; however this will still be accepted.
3. “As Constructed” drawings to be submitted on A1 sheets at the plan scales of 1:500 or 1:1000. See Appendix C for drawing requirement details.
4. Drawings can be submitted on good quality paper of 80gsm minimum thickness. Tracing paper is not acceptable.
5. “As Constructed” drawings are to be signed off by the responsible person, whether it is a licensed surveyor or chartered engineer.

**Note: The Consultant Accreditation Process applies only to Water supply designs greater than 100 metres in length**

## **SUPPORTING DOCUMENTATION**

### Appendices

- A Audit Checklist
- B Typical Design Drawing
- C Example of As-Constructed information

(Appendices B & C to be included at a later date)

## **AUDIT CHECKLIST**

### **FOR LAND DEVELOPMENT WATER SUPPLY DESIGNS**

**THE WATER SUPPLY CODE OF AUSTRALIA SUPPLEMENTED BY THE SA WATER STANDARDS IS TO BE ADHERED TO FOR ANY WATER SUPPLY DESIGN PROPOSAL.**

**Water Supply Design Drawings will ultimately be utilised as the permanent SA Water record of assets constructed. So clarity, neatness and accuracy are of utmost importance.**

#### **1. PRELIMINARY PROCEDURES**

All drawings to

- Conform to the current sheet layout.
- Clearly and neatly provide the appropriate design information.
- Contain correct drawing numbers.
- Contain correct docket numbers.
- Contain correct land development numbers.
- Contain correct contract numbers.
- Possess appropriate scales.
- Bear the signature of a Chartered Engineer

#### **2. LOCALITY / LAYOUT SHEETS**

**Do the Locality / Layout sheets:**

- Meet with the required drafting standards
- Provide an accurate and complete limits of contract – Work by Constructor and Work by SA Water (at Developer's Expense)
- Contain accurate and complete foot notes e.g. conformation with common service trench, or special connection
- Provide the Total Length of Mains
- Provide a Tally of Fittings
- Contain a North Point

- Provide a drawing of the Subdivision at a scale of 1: 1000 or 1: 500
- Provide Land Division/Stage Boundaries
- Provide road names and lot numbers
- Provide ties to all structures and surface fittings (e.g. Tees, Bends, FPs, SVs, etc)
- Provide chainages to all structures and surface fittings (e.g. Tees, Bends, FPs, SVs, etc)
- Show cross referencing to existing infrastructure and reference to any future water main (size) and ensure future water mains commence from the subdivision boundary
- Provide information about existing and proposed services and meters (i.e. size, number, location, to be cut-off or shifted, installed by, etc)
- Show that all allotments in the subdivision/ stage are serviced by the design
- Show services to the correct size and type according to the SA Water and WSAA Standards
- Show that water appurtenances are in their correct allocation of space
- Show that there is no conflict between water mains and other existing or proposed services e.g. Sewers, stormwater etc
- Indicate all easement requirements and the correct sizes
- Contain appropriate amendment notices where an amendment has been made