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# **CAPABILITY STATEMENT**

### **OUR COMPANY**

Ferrier Engineering excels in providing mechanical, structural, and process RPEQ design and drafting services, with a particular emphasis on the water and wastewater treatment industries. Our innovative solutions, reliable results, and tailored services ensure efficient and sustainable outcomes for your unique challenges. With extensive experience in managing multi-disciplinary projects, our team guides projects from the concept stage through to detailed design. By leveraging detailed CAD models created in-house, we offer clear and comprehensive designs for stakeholders to review throughout the project lifecycle, reducing miscommunication and enhancing overall efficiency.

### CORE COMPETENCIES

Our experience and skill set lie in Mechanical, structural and process Design. We adopt the use of laser scanning technology on our projects to capture 1:1 scale data. This allows us to develop detailed 3D CAD models through to fabrication drawings.

Our workflow involves the use of detailed 3D models to ensure crucial design details from multiple disciplines are captured and ensure a cohesive design is produced prior to the construction phase.

### **SERVICES**

- Mechanical / Structural Analysis (Spacegass, Strand7, Idea Statica)
- Process Design—P&ID, Process Flow Diagram, Process
  Control Narrative, Functional Description
- 3D Laser Scanning and Site Setout (Trimble X7, Faro Focus M70, Trimble R1)
- ⊕ 3D CAD Modelling (Autodesk Inventor)
- Fabrication Drawings including supply of files for CNC for processing of beams and plates
- ⊕ Design Review Facilitation—HAZID, HAZOP, CHAIR

## SOME OF OUR PARTNERS













### PAST PROJECTS

#### **Quilpie Sewage Treatment Plant**

Ferrier Engineering were engaged to perform mechanical and hydraulic design and manage 3D model for a new sewage treatment plant in Quilpie.

#### Key Responsibilities:

- 3D Model management of full plant
- Structural / mechanical design
- Hydraulic design
- Design of process Pipework
- Design and drafting of steelwork
- Chainage drawings for buried pipework

#### Luggage Point Citric Acid Dosing System

Ferrier Engineering were engaged to design a new citric acid dosing system which reused existing infrastructure.

#### Key Responsibilities:

- Scanning of water treatment plant
- Process design & documentation— Supply of control philosophy, Revised P&ID's
- Hydraulic review of existing pumps
- Design process pipework

#### As Founding of FRP Tank

Ferrier Engineering were engaged to measure and produce dimensional drawings for an existing FRP Tank.

#### Key Responsibilities:

- Measurement of Existing Tank with Laser Scanning
- Converting of Point Cloud Data to 3D CAD model
- Creation of Dimensional Drawings



