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Sean Houzey

CAREER SUMMARY

I have managed mechanical and civil projects in over nineteen years of service as a professional engineer. My career commenced in elevators and I moved into hydraulic services before engaging in water and wastewater projects. Since 2009, I have been involved in the successful delivery of water and wastewater capital works. My key skills and attributes include a thorough understanding of water and wastewater systems and underground services from both a construction and design perspective planning and document control.

CAREER HISTORY

Founder and Principal Consultant (Water and wastewater projects)

Quality ECS - Australia

July 2025 - Present

Responsibilities:

- Manage the business
- Provide Water and Wastewater Construction Project Management consultancy services
- Provide Water and Wastewater Construction Project Engineering consultancy services
- Provide Water and Wastewater solutions
- Scheduling (Primavera P6 and MS Project)

Project Manager (Water and wastewater projects)

Abergeldie - Australia

July 2021 - July 2025

Responsibilities:

- Manage Water and Wastewater projects from design to handover
- Manage project resources
- Manage project cash-flow
- Ensure safety, quality and environmental processes are implemented efficiently
- Provide guidance and leadership to project team
- Provide technical support and mentor Project Engineers
- Maintain professional relationship with clients
- Produce cash-flow and financial reports
- Maintain project schedule (Primavera P6 and MS Project)
- Manage variations

Senior Project Engineer (Water and wastewater projects)

Abergeldie - Australia

August 2020 - June 2021

Responsibilities:

- Carry out project engineering tasks (see below role)
- Mentor junior engineers
- Provide technical support for site engineers and supervisors
- Control the budget
- Review site engineers' quality documentation

Project Engineer (Water and wastewater projects)

Abergeldie - Australia

February 2018 - July 2020

Downer Utilities (Previously known as Tenix) - Australia

July 2009 - January 2017

Responsibilities:

- Implementing SQE Policies
- Preparing quality documentation, such as ITPs and checklists
- Preparing and updating drawings and quality documentation registers
- Contributing to project design including participation in constructability reviews
- Liaising with client, design team, subcontractors and project stakeholders
- Participating in meetings with client and subcontractors
- Preparing schedules of materials
- Preparing scope of works for RFQs
- Preparing procurement documentation and evaluating supplier and contractor proposals
- Preparing and coordinating construction plans throughout the duration of the projects
- Monitoring contractor performance; particularly technical and quality aspects
- Anticipating and resolving technical, installation and constructability matters by proactively involving relevant team members
- Undertaking technical investigations and providing concise recommendations and reports
- Delivering cost estimates for various aspects of the projects
- Planning and managing both underground service installations and work on existing mains
- Planning and managing mechanical works
- Providing technical support to supervisors
- Contributing to reports on project progression and forecasts
- Assisting with commissioning and handover of projects
- Controlling budgets of parts of projects
- Providing training to client operators

Mechanical Design Engineer (Water and wastewater projects)

Downer Utilities (Previously known as Tenix) - Australia

July 2015 - January 2017

Responsibilities:

- Implementing safety in design requirements
- Delivering designs to Australian Standards
- Conducting pressure loss calculations
- Sizing pipes and pumps
- Preparing datasheets and technical specifications
- Participating in HAZOP and CHAIR meetings
- Preparing and updating valves and equipment lists
- Assessing suppliers' technical specifications
- Producing material schedules
- Providing construction support to Downer construction team
- Preparing and giving presentations

Key Water and Wastewater D&C projects

Abergeldie key projects

Bribie Island and South Caboolture Sewage Treatment Plants – QLD (Client Unitywater) - (Jul 2023 – July 2025)

- Design and Construction of a new inlet work, new bioreactor diffusers and new blowers stainless piping at Bribie Island STP
- Design and Upgrade of the grit system at South Caboolture STP

Coolmunda Dam Variable Counterweights refurbishment – QLD (Client Sunwater) - (Apr 2023 – Feb 2024)

 Installation of a bespoke lifting frame on top of a dam to replace four of the dam's fourteen variable counterweights

Rouse Hill Water Recycling Plant - NSW (Client Sydney Water) - (Jan 2020 - Mar 2023)

 Sewage pump station D&C. Works included the construction of a concrete balance tank, mechanical equipment, odour control system, 2 electrical switchrooms and all buried services

Springvale Mine Water Treatment Plant - NSW (Client Veolia) - (Feb 2018 - Dec 2019)

 Construction of a mine water treatment plant using reverse osmosis technology. Works included the construction of pre-treatment, reverse osmosis, chemical and crystallisation systems

Downer key projects

Logan Water Alliance - QLD (Client Logan City Council) - (Mar 2015 - Jun 2015)

- Installation of DN150 DICL rising main (650m), DN225 PVC gravity main (120m) and DN180 PE rising main (75m micro tunnelling)
- Greenbank Pub Lane water pump station upgrade. Works included replacement of 2 existing pumps, installation of new underground pipe and switchboard upgrade

Nambour Sewage Treatment Plant - QLD (Client Unitywater) - (Mar 2013 - Feb 2015)

Nambour sewage treatment plant upgrade (D&C). Works included the construction of new inlet works, new membrane bioreactors, new blower building, new chemical dosing system, new dewatering system, new service water system and all buried services.

AAT Alliance - ACT (Client Icon Water) - (Jul 2009 - Feb 2013)

- Lower Molonglo Water Quality Control Centre Dewatering System upgrade. Works included the replacement of centrifuges and sludge transfer system
- Water mains upgrade across the ACT
- Cotter sewage pump station upgrade

Key Water and Wastewater Design only projects

Downer main design projects

- Point Lookout Wastewater Treatment Plant 30% design QLD (July-August 2015)
- Mareeba Wastewater Treatment Plant detailed design QLD (February–July 2016)

Production Manager (Joinery)

Prestige Joinery Sydney - Australia

February 2017 - November 2017

Project Engineer (Hydraulic services projects)

Alphanoor Electromechanical works LLC - UAE

July 2007 - July 2008

Design and Quality Control Engineer (Elevators projects)

Kay Systems (KONE lifts agent) - Lebanon

September 2003 - June 2007

QUALIFICATIONS AND PROFESSIONAL AFFILIATIONS

- Registered Professional Engineer of Queensland (RPEQ); BPEQ (2016 current)
- Chartered Professional Engineer (CPEng); Engineers Australia (2016 current)
- Certificate IV in Frontline Management; People and Performance Solutions (2015)
- Master of Mechanical Engineering; Lebanese University (2002)

SKILLS AND EXPERIENCE

- Project management
- Water and Wastewater D&C (since 2009)
- Managing mechanical and underground services installation
- Planning and managing work on existing mains
- Technical investigations
- Commissioning
- Scheduling (Primavera P6 and Microsoft Project)