

# JASON WADDELL

Bachelor of Engineering  
University of Western Australia (1992)

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## PROFILE

- **Engineering industry experience since 1993**
- **Control systems:** specification, design, configuration, installation, commissioning and support
- **Project work:** new installations and existing plant; operational and maintenance engineering and support; Team leading, project management, work in a team or solo
- **Industry experience:** material and product handling, mineral processing, utilities, food & beverages, manufacturing
- **Process and plant management:** plant operation/performance analysis and recommendations; process and operation optimisation and tuning; production reporting and delay accounting; key performance indicators
- **Computer systems:** LAN/WAN topology over copper, fibre and wireless; SOEs, user and software management

## EXPERTISE

- **PLC programming:** Schneider Modicon Quantum, M340; Allen Bradley PLC5, SLC500, Control Logix; GE 9030, 9070, Series 6; Siemens S7, 505; Coopers RTUs, ABB 800xA; Micromax; Square D; HIMA Safety Systems; Harris(GE) D series RTUs; HWT(Serck) RTUs; Miri RTUs
- **HMI Configuration:** Citect, Wonderware, Panelview & Panelview Plus, ABB 800xA, Datavue
- **Programming:** Cicode, VB (MSAccess/MSExcel), dBase/Clipper, PerlScript, JavaScript, Pascal/C, AutoCAD
- **Design:** Feasibility Studies, User requirements, Proposals, Functional Specifications, Detailed Design Specifications, Project Standards, Electrical Drawings and Schematics, P&IDs, Testing, Installation and Commissioning documents
- **Support:** Procedures/Work Instructions, Preparation and delivery of Training Courses, Process analysis, tuning and optimisation

## EXPERIENCE

- Jan 2016 - **TEC Systems / GHD for Horizon Power**  
& ongoing **Murchison Radio Astronomy Power Station and other Mid West Power Stations**
- Design specifications for a greenfields power station and expansion of existing power stations. Citect, RTU, PLC and Mesh Radio implementation across a state-wide system. Documentation development and implementation of Factory Acceptance Testing, Installation, Site Acceptance Testing and Site Commissioning. Support and performance monitoring.
- Nov 2010 - **SKM/Jacobs for Rio Tinto Expansion Projects**  
Dec 2015 **Cape Lambert Port B**
- Functional specifications and project standards design. Implementation of a large Schneider PLC and Wonderware system as part of a Perth based development team. Test documentation development, Factory Acceptance Testing, installation, Site Acceptance Testing, Site Commissioning. Support, training, performance monitoring, maintenance, ongoing modifications.
- Jan 2009 – **SKM for Vale**  
Nov 2010 **Serra Sul Mine, Brasil**
- Control system design and recommendation; function specification and technical specification writing.
- Jun 2008 - **SKM for Rio Tinto Expansion Projects**  
Jan 2009 **Cape Lambert Port B**
- Feasibility study, HMI and PLC vendor investigation, comparison and recommendation; scope, standards, functional specification writing.
- Oct 2007 - **Imperium Systems / Water Automation Pty Ltd for**  
& ongoing **Water Corporation**  
**Wanneroo Ground Water Treatment MIEX Plant**
- Process analysis/plant performance review, recommendation and implementation, scope writing, project management, design, PLC and Citect implementation on live plant, testing, commissioning and performance monitoring feeding back into design.
- Jul 2007 – **Oil and Energy Corporation**  
Dec 2010 **Rotary Kiln upgrade, Port Hedland**
- Switchboard design and construct; Instrumentation, PLC and Panelview Plus design, configuration, installation and commissioning; process analysis and fault finding, site support.

- Jul 2006 – **Water Automation Pty Ltd for Water Corporation**  
 Sep 2007 **Water Corporation Northern Ground Water Treatment Plants**
- Onsite maintenance, support, faultfinding and debugging of existing Citect and PLC installations. Process control improvement investigation and integration. Documentation and As-Building of control system.
- Aug 2006 – **Oil and Energy Corporation**  
 Nov 2006 **Rotary Kiln, Port Hedland**
- Design, installation, configuration and commissioning of instrumentation and datalogging facilities.
- Sep 2004 – **MPDJV Joint Venture for BHP Iron Ore**  
 Sep 2006 **Rapid Growth Project, Nelson Point and Finucane Island**
- Feasibility Studies, Design and Functional Specification documentation for port production expansion. Configuration and Programming modifications to existing GE9070 and Allen Bradley Control Logix PLCs.
- Feb 2003 – **MPDJV Joint Venture for BHP Iron Ore**  
 Jul 2004 **Port Area Capacity Expansion Project, Nelson Point and Finucane Island**
- Design and implementation of Allen Bradley Control Logix and Citect in a Perth based development team. Configuration and Programming in RSLogix and Citect version 5.42 to BHP Iron Ore standards. Design Specification, Standards and Test documentation writing. Factory Acceptance Testing.
- Jul 2002 – **PCT for Western Mining**  
 Jan 2003 **Olympic Dam Operations**
- Design, implementation and commissioning of an Emergency Shutdown and Fire Detection safety system. Configuration and programming of networked HIMA systems, implementation of OPC connectivity from HIMA to existing Citect and Allen Bradley PLCs.
- Jun 2002 **Industrial Automation**  
**SMRC Waste Composting and Treatment Plant**
- Design and implementation of a Citect system.
- Mar 2002 – **ESI Environment Solutions**  
 Jun 2002 **Beenyup Waste Water Treatment Plant**
- Onsite redesign and upgrade of an existing Citect System.

- Nov 2001 - **Tox Free Solutions Australia**  
 Feb 2002 & ongoing **Kwinana Toxic Waste Treatment Plant**  
 Design, implementation and programming of an Allen Bradley SLC500/Citect system for plant process control. Site installation, commissioning and support.
- Jan 2000 - **Water Corporation of Western Australia**  
 Oct 2001 **IIMAC (Integrated Information, Monitoring and Control) SCADA**  
 Development of standards for a statewide SCADA system. Development of a Citect shell to suit all future Water Corporation Citect systems. Upgrade of existing Ademco Alarm Diallers Citect master station.
- Nov 1999 - **BHP DRI**  
 Dec 1999 **Port Hedland Beneficiation Plant**  
 Citect Cicode redesign and implementation for high level system functionality. Alarm system filtering designed for Citect and implemented via modifications to "signals database" system auto-generation engine. Y2k procedure writing, miscellaneous Citect modifications and enhancements.
- Oct 1999 - **PCT for Water Corporation of Western Australia**  
 Nov 1999 **Belmont Transfer Station**  
 Implementation of GE9030 PLC code from logic diagrams for intelligent 6 pump transfer station control in a 4 PLC ethernet network.
- Jul 1999 - **PCT for Goodman Fielder**  
 Oct 1999 **Malaga Buttercup Bakery**  
 Recipe and Batching PLC SLC500 software design and implementation. Citect OIS design and configuration. Site installation, commissioning and support.
- May 1999 - **CSW for Great Central Mines, Jundee Operations**  
 Jul 1999 **Nimary Gold Mine**  
 Redesign and upgrade of existing Datavue for Windows system to Citect version 5, commissioning, installation of a small network, integration of another Citect system and some PID loop modifications in the existing Micromax PLC system.
- May 1999 **CSW for CBH**  
**Kwinana Grain Terminal**  
 Citect Y2k audit and upgrade.

- Apr 1999 - **CSW for Western Power,**  
 May 1999 **Muja Power Station**  
 Citect Consultancy, Configuration of the Muja "shell", network planning, training and production of necessary documentation required for Western Power inhouse configuration.
- Mar 1999 - **CSW for Midland Brick**  
 Apr 1999 **Midland Brick Facility, Midland**  
 Citect Y2k audit and upgrade, modifications to Citect communication with Micromax PLCs, site commissioning and support.
- Feb 1999 - **CSW for Meadow Lea Foods**  
 Mar 1999 **Bunbury Oil Plant**  
 Support for both Citect and PLC, in Perth and on site.
- Jan 1999 - **CSW for BHP Iron Ore**  
 Feb 1999 **Dust Suppression**  
 Citect Upgrade and Y2k audit on the Citect version 2 system, upgrade to version 5 and to site standards, and integration into the main PMAC system. Site commissioning.
- Jan 1999 **CSW for Hamersley Iron**  
**Brockman Minesite**  
 Citect Y2k audit.
- Nov 1998 - **CSW for Hamersley Iron**  
 Jan 1999 **Marandoo Minesite**  
 Citect upgrade, redesign and configuration of Citect. Design of new network topology. Site commissioning and installation.
- Oct 1998 **CSW for BHP Iron Ore, Nelson Point**  
**Stacker 6 VLAN**  
 Implementation of Virtual LAN for fibre connection of stackers and reclaimers to main system.
- Oct 1998 **CSW for BHP Iron Ore**  
**Newman Stacker 2**  
 Documentation of the PLC ladder into flow diagrams.
- Aug 1998 **CSW for Peters & Brownes**  
**Ice Cream Plant, Balcatta**  
 Site analysis and design specification report for an ice cream bar counter.

- Jul 1998 - **CSW for BHP Iron Ore**  
 Aug 1998 **Nelson Point Car Dumper 1**  
 Upgrade, proposal, scope, configuration and support of the Citect system. Site commissioning.
- Jun 1998 - **CSW for BHP DRI**  
 Jul 1998 **Port Hedland Beneficiation Plant**  
 Site secondment for general Citect system work.
- Mar 1997 - **CSW for BHP Iron Ore**  
 Jun 1998 **Nelson Point Port Facility PMAC 2 (CEP)**  
 Team leader for 5 people tasked with the Citect upgrade in a total team of 20. Design, scope writing, supervision, site commissioning, site personnel training and site support.
- Aug 1996 - **CSW for BHP DRI**  
 Mar 1997 **Port Hedland HBI Plant**  
 Secondment to Perth based BHPDRI project team. Consultancy role for the 3 engineering sections each developing Citect portions. Design and standards creation.
- Mar 1996 - **CSW for Western Mining Corporation**  
 Aug 1996 **Goldfields Gas Conversion Project**  
 Design and configuration of Citect and PLC programs as part of a team of 5.
- Feb 1996 - **CSW for Western Mining Corporation**  
 Mar 1996 **Leinster & Mount Keith Power Stations**  
 Citect upgrade to the WMC shell for Leinster and Mount Keith power stations.
- Nov 1995 - **CSW for Western Mining Corporation**  
 Feb 1996 **Kalgoorlie Nickel Smelter Acid Plant**  
 Secondment to Signet to formulate standards and to design and configure a WMC Citect shell project. Consultation to shell users.
- Oct 1995 - **CSW for Western Mining**  
 Nov 1995 **Mount Keith Mills**  
 Programming of PLCs from logic diagrams for the operation of 4 mills.
- Aug 1995 - **CSW Control Systems**  
 Oct 1995 Proposal writing, Citect support and performing Citect training.

- Jul 1995 - **CSW for BHP Iron Ore**  
 Aug 1995 **Nelson Point Port Facility**  
 Citect System PLC/Citect memory remapping to improve the communications performance. Site commissioning.
- Apr 1995 - **CSW for Introl Pty Ltd Telemetry System**  
 Jul 1995 **New Zealand Police SCADA**  
 Citect configuration, creation of a Citect shell, site commissioning and support, assistance with the commissioning of a radio and X25 RTU network. On site technical personnel training.
- Aug 1994 - **CSW for BHP Iron Ore**  
 Apr 1995 **Nelson Point Port Facility PMAC**  
 On site for 6 months; 24x7 support, training, maintenance and documentation. Procedure creation.
- Jan 1994 - **CSW for Wesfi**  
 May 1994 **Welshpool MDF Plant**  
 Site secondment for support; PLC programming, Citect for DOS, Xycom terminal configuration, training and procedure writing.
- Nov 1993 - **CSW for Robe River Iron Associates**  
 Jan 1994 **Cape Lambert Port Handling Facility**  
 Citect upgrade from Version 1 to Version 2 and the addition of the yard stackers and reclaimers PLC information into the main system. One week site commissioning.
- Jan 1993 - **CSW for BHP Iron Ore**  
 Nov 1993 **Nelson Point Port Facility**  
 Citect configuration in a team of 25. Citect system drawing/animation and producing database tools to bulk produce configuration.
- Nov 1992 **Access Power Pty Ltd**  
 Jan 1993 Repair of DC motor controllers, construction of a hard-wired cubicle controlling several pumps and motors as part of a gold mine lime plant.