



## **BDR CAPABILITIES**

*Water Infrastructure*

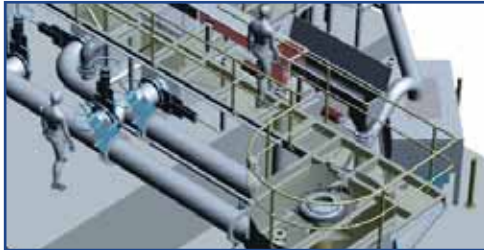


**WE DELIVER  
COMPLETE SOLUTIONS**

[www.bdrstainless.com.au](http://www.bdrstainless.com.au)



# OUR CAPABILITIES



## ENGINEERING / DESIGN

- 3D Design and Modelling
- 3D Laser Scanning
- Shop Detailing
- Mechanical Engineering
- Process Engineering
- HAZOP / CHAZOP / SID
- Structural Engineering
- RPEQ Certification
- Feasibility Studies
- Scope Development
- Reverse Engineering
- Engineering Management
- Project Management



## FABRICATION / WORKSHOP

- Structural Steel
- Access Systems
- CNC Brake Press, Guillotine
- Weld Positioners / Rollers
- Welding Machines, incl. Orbital
- Pressure Piping and Vessels
- Tanks, Chutes, Hoppers
- Hygienic Process Pipework
- Carbon Steel, Stainless
- Aluminium and Exotics
- NDT and Pressure Testing
- Full QA / QC / OH&S Process
- Factory Acceptance Test



## FABRICATION / INSTALLATION ON-SITE

- Water Infrastructure Installations
- Food & Beverage Installations
- On-site Fabrication & Installation
- Carbon Steel, Stainless
- Aluminium and Others
- Plant Shutdown Specialists
- Relocation & Decommissioning
- 3D Laser Scanning
- Fully Mobile Work Teams
- Full QA / QC / OH&S Process
- On-site Measure and Drafting
- On-site Commissioning
- Site Acceptance Test



## MAINTENANCE / SERVICES ON-SITE

- Emergency Services / Repairs
- Mechanical Breakdowns
- Mechanical Fitters
- Fabrication
- Planned Maintenance (PM's)
- RPZ Testing
- Fluid Clean Ups
- Pressure Cleaning
- Repairs to Valves and Pipes
- Line Marking
- Painting (Small Jobs)
- Full QA / QC / OH&S Process
- Project Management

## CONTACT US

OFFICE: ☎ 07 3393 6441 ✉ [enquiry@bdrstainless.com.au](mailto:enquiry@bdrstainless.com.au) 📍 34 Millennium Place, Tingalpa QLD 4173 POSTAL: PO Box 2219, Wellington Point QLD 4160





## OUR PROJECTS

### GREENBANK ELEVATED WATER RESERVOIR

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless was awarded the D&C of an Antenna Structure, Fall Arrest Davit Arm, Internal SS Ladder Modifications, Aluminium Platform, Hatch and Perimeter Hand Rails on top of the Elevated Water Reservoir.

**COMPLETED:** 2018

**CHALLENGES:** The greatest challenge was side mounting the Davit Arm on an elevated water tower approx. 40m above ground. The design involved engineering the Davit Arm to meet its load requirements for the Fall Arrest System but to also limit the number of cranes on install to just one.



### CAPALABA WATER TREATMENT PLANT

**PROJECT TYPE:** Drafting, Fabricate and Installation

**DESCRIPTION:** BDR Stainless was awarded the Fabrication and Installation of DN700 Stainless Steel Pipework and Pipe Supports.

**COMPLETED:** 2018

**CHALLENGES:** All stainless steel welding to ASME B31.3 as per BDR Stainless in house Weld Procedures and Welder qualifications. All welders were qualified to each procedure by a NATA approved laboratory before commencing any welding on this project. Full MDR and ITP'S supplied on completion of project with relevant hold points witnessed and inspected by our client.





## OUR PROJECTS

### TRAVIS ROAD YARRABILBA WATER RESERVOIR

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless was awarded the D&C of a Fall Arrest Davit Arm, Internal SS Ladder, Aluminium Platform and Hatch on top of the Water Reservoir.

**COMPLETED:** 2019

**CHALLENGES:** The Design needed to incorporate a 10° roof pitch whilst maintaining water proof platform as well as water tight Instrument Hatch and Access Hatch together with all other roof penetrations.



### MT CROSBY WATER TREATMENT PLANT

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and Certification (Form 15 & 16)

**DESCRIPTION:** BDR was awarded the D&C for an access system over, and supported by 1900mm OD Pipework.

**COMPLETED:** 2019

**CHALLENGES:** The Design required the majority of the Access Structure to be supported by the 1900mm steel pipework. This was achieved by validating the wall strength of the pipework and then designing saddle clamps to disperse the load of the structure evenly around the pipework and also support and secure the platform in place.







## OUR PROJECTS

### ILLaweena Water Reservoir 1 & 3

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless was awarded the D&C of a Fall Arrest Davit Arm, Internal FRP Ladder Modifications, Aluminium Platform, Hatch and Perimeter Hand Rails on top of two Water Reservoirs.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was designing a perimeter handrail that side mounted to the outside of the concrete water tank but also incorporate the 150mm overhang of roof sheeting. The unique design is now being considered as a standard design.



### BEAUDESERT Water Treatment Plant

**PROJECT TYPE:** Drafting and Fabrication

**DESCRIPTION:** DN600 spools with off-set DN450 branch (PN16 Flange) and straight DN250 branch.

**COMPLETED:** 2020

**CHALLENGES:** BDR development new Weld Procedures and Weld Methodologies to significantly improve fabrication efficiency whilst at the same time increase consistent and repeatable weld quality. Full MDR and ITP'S supplied on completion of project with relevant hold points witnessed and inspected by our client.





## OUR PROJECTS

### WURAGA ELEVATED WATER RESERVOIR

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless was awarded the Design, Engineering, Fabrication and Installation of a Fall Arrest Davit Arm, Internal Ladder, Platform and Hatch on top of the elevated water reservoir.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was side mounting the Davit Arm on an elevated water tower approximately 40m above ground. The design involved engineering the Davit Arm to meet its load requirements for the Fall Arrest System but to also limiting the number of cranes on install to just one.



### MOURA WATER TREATMENT PLANT

**PROJECT TYPE:** Fabrication of Stainless Steel Pipework and Mechanical Installation.

**DESCRIPTION:** BDR were awarded the mechanical installation of pipework, pumps and filters at the Moura WTP.

**COMPLETED:** 2018

**CHALLENGES:** BDR developed a clever project schedule, balancing pre-fabrication in our Brisbane based facility with on-site assembly to meet the tight project schedule. Project completion was 6 weeks early and within the forecast budget.







## OUR PROJECTS

### MOLENDINAR WATER TREATMENT PLANT

**PROJECT TYPE:** Rake Arm Fabrication, Assembly and Second Rake Arm Refurbishment.

**DESCRIPTION:** BDR Stainless was awarded the Fabrication and Mechanical Assembly of two Rake Arms and Rake Arm Extensions and also Refurbished two other Rake Arms and Rake Arm Extensions.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was working from 1982 Record Drawings which were difficult to interpret and in which many of the steel profile sizes are no longer available. Also the original set of Rake Arms required to be refurbished to the same as the newly fabricated set of Rake Arms requiring a full Engineering Assessment by BDR.



### BURPENGARY WATER TREATMENT PLANT

**PROJECT TYPE:** Design, Fabrication and Installation

**DESCRIPTION:** Fabricate and install the Stainless Steel Pipework, HDPE SDR11 Pipework, DICL Pipework and Valves. BDR was also awarded the design, fabrication and installation of new aluminium access walkway over Balance Tank.

**COMPLETED:** 2016

**CHALLENGES:** As the sewerage treatment plant was still in operation, BDR had stringent shut down periods set by Unity Water to install the internal pipework and nozzles for each tank. Both tanks were successfully back on-line within the allocated shut downs and there was no loss to production.



# BDR

## STAINLESS

(Aust) PTY LTD

## BDR

### SKILLED HIRE

*Labour with Equipment and Tools*

### CONTACT US

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