



# PUTTING PLANS INTO ACTION DOES NO HARM

The \$24 Million Ravensworth North MIA Project included both civil and construction works, with Daracon delivering in a 12 month time frame.

MAIN CONSTRUCTION COMPANY : Daracon Group  
CLIENT : Xstrata  
PROJECT VALUE : \$24 Million  
COMPLETION : January 2013  
GEOTECHNICAL TESTING : Coffey Information  
SURVEYOR : Singleton survey services  
DIVISIONAL MANAGER : Michael Rummery  
CONSTRUCTION SUPERINTENDANT : Rod Lang  
SITE SUPERVISOR : Allan Day  
PROJECT MANAGER : Rob Francis  
PROJECT ENGINEERS : Ben Café and Ashley Smith  
SAFETY COORDINATOR : Marie McKenzie

Having a culture of environmental and worker protection, and a long-term workforce which live it, helped Daracon achieve zero harm on the Ravensworth North project. The \$24 million contract for Xstrata comprised civil construction works to an existing Mine Infrastructure Area (MIA) to create a combined and expanded open cut coal mine complex expected to produce 8 million tonnes of coal per annum.

It was a 12 month, time-pressured undertaking, requiring 70 people on site at the peak of works, including approximately 45 Daracon direct employees and an extensive fleet of plant and equipment.

During the 12-month project timeframe, Daracon undertook 300,000m<sup>3</sup> of cut and fill; 230,000m<sup>3</sup> of cut to spoil; constructed 3km of reinforced concrete pipe drainage; 3km of open drain systems; 1,000m<sup>3</sup> of various concrete footpaths, headwalls and crossings; completed 32,000m<sup>2</sup> of asphalt and seals; 3.9km of concrete kerb and 250,000m<sup>3</sup> of pavement works.

The team also completed miscellaneous works which included; construction of large earth dams, a helipad; a carpark with capacity for 700+ light vehicles; construction of two major creek crossings each

being a quad cell helcor pipe at 3.6m Ø and 100m long as well as the installation of a 65m long 18m span Classic BEBO Arch.

Throughout, extensive erosion and sediment control measures were implemented to meet the stringent approval conditions which effectively meant zero surface water run-off from site.

“One of the big challenges on this project was the management of the environmental. There are sensitive issues around mine upgrades in the Hunter, so it was certainly front of mind for both Daracon and the client, Xstrata. Managing surface water run-off and erosion was a key requirement,” explained Daracon Quality and Environmental Systems Manager, Bob Murphy.

The site held other challenges, with a month required during the early works stage to locate services which had been installed over time by various mine operators. This was achieved using zero-dig vacuum excavation to provide definite locations of power, communications, gas and other subsurface services.

“There were a lot of hand-over dates during the project which required a high degree of coordination between the various contractors executing

other works on site” said Daracon project manager, Rob Francis. “The management of this was achieved by the collaborative nature of all of the contractors working on site and the proactive stance of the client.”

“With constructing the quad cells in the creek crossings, a major constraint was the potential upstream release of water from the adjacent power station at Bayswater during construction. The continual risk of release had a significant impact on the staging of works and associated environmental controls which included the lining with geofabric of all exposed areas. For safety reasons, a strict isolation procedure and lock out protocol was initiated within the creek area.

Daracon’s cross-functionality came to the fore in making the project more efficient. Daracon self-performed the works with its quarries undertaking crushing activities, with the processed fill material being hauled by Daracon’s plant and transport fleets. Again, Daracon demonstrated its diversity and breadth of internal capability by being able to provide internal capabilities such as project management and supervision, through to Daracon’s own plumbers, concreters, landscaping team and civil engineering expertise. Accuracy in detail works was achieved by the use of Daracon’s machine-controlled plant, including dozers, excavators and graders.

Safety was another imperative. The project works required a number of heavy lifts and involved difficult access area, a high degree of interaction between plant, people and other trades. The successful management of these risks was achieved because of a strong culture towards safety exhibited by the workforce and supported by the management and the client resulting in zero LITs.

“The project reached a successful conclusion, in large part, because of a good team and maintaining good communications with the client.” said Rob Francis.

An impressive achievement for the project was that Daracon were able to achieve zero harm, both from safety and environmental perspectives “Our workforce has been stable for a long term, many of our Plant Operators, Labourers and Supervisors have been with Daracon for 10-15 years. They have a familiarity with how we operate, have come to know what our client’s expectations are and their recognition and acknowledgement of the importance of safety and the environment is a cultural thing.” said Bob Murphy.

For more information contact Daracon, 17 James Street Wallsend NSW 2287, phone 02 4903 7000, fax 02 4951 1070, website www.daracon.com.au



## MESSAGE MASTERY FOR SAFER SITES

Myne Signs & Engraving (MSE) has been meeting the signage needs of projects across mining and civil construction, government and small business for 18 years. For the Ravensworth North project, their safety and general construction signage helped ensure a safe worksite.

MSE provides a complete signage and graphic service, delivering a level of service and project management which ensures a smooth, timely and cost-effective outcome.

The MSE range includes custom-engraved Stainless Steel, Brass and Traffolyte Labels; OH&S Safety Signs; general Compliance Signs; Traffic and Road signs; Lockout Labels and Custom Signage. They also provide

traffic cones, reflective tape, safety lamps, boats and vehicle signage, magnetic signage, vinyl lettering and digital printing. All the products can be tailored for specific site situations. All of MSE's Safety, Danger, Warning, Caution, Fire, Emergency and Hazchem signs are manufactured to Australian Standards, and all their Road Signage meets RTA standards. From their Mount Thorley Workshop, MSE supplies their products nationally, and even internationally - wherever clear and effective safety signage is required.

For more information contact Myne Signs & Engraving, Lot 20 Piercefield Road Mt Thorley NSW 2330 phone 02 6574 6880, fax 02 65746896, website [www.mynesigns.com.au](http://www.mynesigns.com.au)



## RUGGED VEHICLES FOR DEMANDING TASKS

From rugged utilities for mine sites through to pantechs for urban relocations, Newcastle Car and Truck Rental and their specialist division, Australian Industrial Vehicle Hire (AIVH), keep projects throughout the Newcastle and Hunter region moving. Whether it's a once-off or for months, the AIVH fleet is at your service.

Daracon are a regular user of AIVH vehicles, many of which are equipped with the necessary roof-mounted light and flags for work on mine sites like Ravensworth North. A range of vehicles were leased at various stages for the project, with AIVH able to provide specific models and sizes at short notice if required. As part of their service, vehicles are delivered to the worksite - so the client does not have to waste valuable time.

All AIVH vehicles are backed by a 24/7 breakdown service, with mobile mechanics and tyre repairers able to attend at short notice. The company guarantees that if the vehicle cannot quickly be fixed, it is replaced within 12 hours with an equivalent fit-for-purpose vehicle.

Newcastle Car and Truck Rental and AIVH have been in business for four years, founded on an understanding of the needs of the local construction, mining, and commercial sectors developed during the founding partners' decades of experience managing other vehicle rental operations.

The two divisions complement each other and reflect the mix of needs in the Newcastle and Hunter region. One division provides short-term hires of cars and trucks for recreation, business or personal use, the other, a fleet of 120 impeccably maintained, heavy-duty work vehicles including buses, dual cab and single cab utes, 4WDs, light trucks, pantechs, 7-seater bus trucks, tray back trucks, people movers and delivery vans. The company's experienced team can quickly modify vehicles to suit specific needs, and they have available a large range of accessories for special requirements.

AIVH can supply vehicles across New South Wales, Victoria, Queensland and South Australia. Their current clients include civil contractors working on mines, road projects, government projects and the major export infrastructure upgrade of the Number 3 Coal Terminal.

"Our goal is to offer good quality late model vehicles at rates consistently lower than those offered by the 'major' companies. To put it simply, we aim to be cheaper without sacrificing our core values of quality and service," said company spokesman, Carl Narraway.



For more information contact Newcastle Car and Truck Rental, Australian Industrial Vehicle Hire, website [http://www.aivh.com.au/what\\_we\\_do.html](http://www.aivh.com.au/what_we_do.html), phone 02 4940 0377

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