

## HIGHEST QUALITY RESULTS ACHIEVED

raigieburn Train Maintenance Facility is an outstanding showcase of the comprehensive ability of Aus Iron Industries P/L when it comes to the design, fabrication and erection of structural and architectural steel work. In undertaking the design and construct contract of all the structural steel elements for the 1400 tonne, 20,000 sq meter structure, Aus Iron needed to maintain a strong focus on resource management, logistics, flexibility in scheduling and a dedication to delivering the highest quality of work.

"Coordination between the engineer, architect and shop detailer was critical due to ongoing design changes," said Aus Iron Project manager, Dale Ekers.

"The assembly of the 103 facade awning beam frames that 'wrapped' around the perimeter of the structure was a difficult process. The majority of the frames requiring a different radius and alternating from on face to edge form. We had to ensure that tight tolerances were maintained, as the frames created a continuous 'band' around the building that required to be consistent to achieve the desired appearance."

Established in 1999, Aus Iron Industries has fast developed into one of Victoria's leading companies for structural steel fabrication and erection, and are also recognized specialists in manufacturing Permanent Stair Metal Formwork. Aus Iron Industries is an ASI member and has ISO 9001 Quality management systems and ISO 14001 Environmental management systems accreditation. Other recent major projects include AMII Park, fabricating four of the complex roof shells and all of the façade's cantilevered light towers; and in excess of 3000 tonne of structural and architectural steel work for Melbourne Airport Terminal and Retail expansion.

The company operates three fabrication workshops and a paint shop, all with over head craneage up to 12.5 tonne SWL. Recent investments in equipment include the procurement of an automatic drill beam line, a plasma processing plant and a shot blast beam line.

Aus Iron's sister steel erection company, Aus Truestyle, was established in 1987 and as well as Victorian rigging crews has personnel nation-wide installing transmission towers for the resource and communication industries. Aus Truestyle has an impressive 10 crane fleet ranging from – 20 tonne through to 130 tonne truck mounted, PPM, and all terrain disciplines.

"Although this project has had its challenges the result is an incredible train maintenance facility for Victoria. It was once again a pleasure to work with the team at John Holland, together successfully completing a high quality structure on budget and on time. We would like to take this opportunity to thank all the sub contractors and suppliers who played a part in completing our scope on this project with us," said Dale.





## CRAIGIEBURN MAINTENANCE FACILITY - FIRST OF ITS KIND IN VICTORIA

A ustralia-wide experience in railway engineering and project management enables global engineering, construction and services company KBR to meet the needs of any rail project, including Australia's largest and most modern train maintenance facility in Craigieburn, Melbourne.

Located in the Craigieburn Stabling Yard, 30 km north of Melbourne's CBD, the Craigieburn Train Maintenance Facility (CTMF) is longer than two soccer pitches and is equipped with the latest inspection, lifting, and crane equipment.

The CTMF has the capacity and capability for heavy and light maintenance for all Melbourne train types in the one facility. This is achieved through three inspection roads and one lift road accommodating for six-car sets, a first for Victorian train maintenance facilities, which until now have only had the capacity to accommodate three-car sets.

The entire design was coordinated with existing and planned works, interfacing with the Craigieburn Train Wash, Craigieburn Drivers Amenities, and Craigieburn Stabling Roads.

KBR delivered the preliminary design validation and detailed design, incorporating the track, civil and overhead traction design. KBR's unique design of overhead traction within a building, combined with

WWW.ANCR.COM.AU

the necessary sectioning requirements, allows trains to partially move within the building while maintenance works are in progress. The overhead electrical system is split into 12 sections, each able to be powered up or down as required.

To ensure the safe operation of maintenance activities for the user, a complex, interlocking system was incorporated with the overhead design, access platforms, and cranes. KBR was able to deliver a solution that met the end users' safety requirements and functional objectives.

KBR is a global engineering, construction, and services company supporting the energy, hydrocarbon, government services, minerals, civil infrastructure, power, industrial, and commercial markets. We have operated in Australia for more than 50 years, and service six key market sectors here – transport, defence, facilities, hydrocarbons, minerals and water. www.kbr.com

## KBR

Gabriel Ambrosini Industry Director Rail Vic/Tas Level 3, 441 St Kilda Road Melbourne VIC 3000

- t. 03 9828 5333
- e. gabriel.ambrosini@kbr.com www.kbr.com