

# Australian Industry **ozWELD**

# WINS!

WTIA National Diffusion Networks  
Project (NDNP) funded by the  
Federal and State and Territory  
Governments and industry



**AusIndustry**

## **SUCCESS STORY NUMBER RT06:** REVIEW OF SUB-CONTRACTOR PROVES TOP WELDING CAPABILITIES – *Weathering steel bridge successfully built for VicRoads*

Product and Process Reviews (PPRs) were conducted for members of the Road Transport Industry Sectoral Project (ISPs) as an activity and benefit of the NDNP. VicRoads, the member in Victoria where the Project is also supported by the Department of Innovation, Industry and Regional Development, requested WTIA to review the performance of bridge construction sub-contractors on their behalf.

### **The project**

The 17km Craigieburn Bypass costing a total of \$306m, was opened to traffic in December 2005 by the Federal Minister for Local Government, Territories, and Roads, Mr Jim Lloyd and the Victorian Minister for Transport, Mr Peter Batchelor. The Craigieburn Bypass is expected to deliver more than \$1 billion worth of safety and economic benefits to Victoria.

### **Abigroup Contractors**

The design and construction all stages of the Craigieburn Bypass was carried out by Abigroup, one of Australia's largest and most highly experienced engineering contractors.

### **Hume Freeway Steel Pedestrian Bridge**

A feature of the Craigieburn Bypass is the Hume Freeway Pedestrian Bridge, an all tubular structural steel construction with cladding in weathering steel. Major steelwork components of the Pedestrian Bridge project were subcontracted by Abigroup to GFC Engineering and to J Furphy and Sons.

GFC Engineering fabricated the structural truss for the pedestrian bridge, while J.Furphy & Sons fabricated the curtain wall support steel work and the weathering steel cladding to the curtain wall and to the pedestrian bridge

**GFC Engineering** has as a core business the fabrication of large steel structures, including bridges, girders, form-work, shoring, high rise steel/concrete structures and buildings, carried out in their comprehensive fabrication and welding facility at Campbellfield.

**J. Furphy and Sons** is an Australian engineering icon, established in 1864, still family owned (5<sup>th</sup> generation) and operating from its base in Shepparton, Victoria. The company combines engineering, fabrication, galvanizing, laser cutting and metal supply into a single metals service centre.



*The Hume Freeway pedestrian bridge provides pedestrians and cyclists with a spectacular view of the Melbourne skyline*

### **Weathering steel**

Weathering steel has the unique characteristic that, under proper conditions, it corrodes by forming a dense and tightly adherent oxide barrier that seals out the atmosphere and retards further corrosion.

Environmental benefits also result from the use of weathering steel. The absence of both initial and maintenance painting eliminates emissions of volatile organic compounds from oil based coatings and the containment and disposal of contaminated blast cleaning debris over the life span of the structure.

### **Product and Process Review**

WTIA conducted a PPR on the welding activities of GFC Engineering on behalf of VicRoads and found them to be most impressive, with a Welding Management System in place and a nominated Welding Coordinator employed to overview all welding activities. Their well-equipped workshops included innovative and automated welding systems.

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