

# Check station weathers road rush

Southbound heavy vehicle checking station, Mount White



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A busy southbound section of the F3 Freeway just north of Sydney at Mount White recently welcomed a new heavy vehicle checking facility.

The design brief called for structural materials that would withstand continual heavy vehicle movements and exposure to varying weather conditions, be aesthetically appealing, need minimal maintenance and support rigorous safety standards.

The new NSW Roads & Traffic Authority (RTA) facility was designed to improve road safety through monitoring and enforcing compliance to driving hours, roadworthiness, legal mass limits and other strict road transport laws.

The new building provides for disabled access and amenities to AS1428 standard, a lunch room with storage and cooking facilities and an inspection room incorporating security, computer and communications equipment.

According to an RTA spokesperson, steel was the only suitable material for erecting the station superstructure through simple construction of a lightly clad portal frame.

Re-Build Welding & Fabrication was chosen to produce all of the steel components offsite for the new facility.

Re-Build's **Paul Neylan** said the job required provision of parts to tight tolerances and project timeframe with 38 pre-fabricated

parts specified and supplied within a month, all complying to very high work standards.

“For instance, all welds were required to be sand blasted to allow for thorough physical examinations to be carried out, as well as being pleasing to the eye,” he said.

The welds have to comply with the tough B204 standard and the coatings quality to B220.

The use of all hot dipped galvanised steel members and COLORBOND® cladding for the 45m long, 17.5m wide and over 6m high cover structure satisfactorily meets the above design criteria.

Steel grade 300MPa was used for bars and sections to AS3679 standard, grade 350MPa

for hollow sections to AS1163 and grade 450MPa for cold formed sections to AS1397. Sixteen steel reinforced pad footings support 410UB60 galvanised steel columns and rafter, and cladding material.

Steel was also used in the composite base of the station, with steel fibre reinforced concrete pavement to meet strength and durability requirement to withstand heavy vehicle movements.

The 14m by 3.35m inspection office is finished in COLORBOND® and LYSAGHT SPANDEK® metal wall cladding, roof sheets, edge trims and roof ventilators.

Steel fibre reinforced concrete pavement was used for the checking area floor and weigh-in-

motion slab and galvanised steel for exposed steel members.

At the time of going to press, Mr Neylan could report that all steelwork stayed in pristine condition with no reworking or rectifying of damage.

“Rather than using chains, all components were transported to site in slings so as not to damage the galvanised steel surfaces,” he said.

BMD Major Projects was awarded the contract for the construction works. The project cost A\$8.4 million and was jointly funded by the Australian and NSW Governments.

The new facility incorporates:

- Weigh-in-motion, Safe-T-Cam and other sensory systems to select heavy vehicles for inspection.
- TruckScan technology that enables heavy vehicles to be selected for inspection based on driver and vehicle compliance, registration status and vehicle offence history.
- A five-plate static weighbridge that will have the capacity to weigh B doubles.
- Vehicle inspection system that includes dynamic brake and suspension testing.
- A bypass lane to allow heavy vehicles which are not selected for static weighing or manual inspection to return to the freeway.

The new checking station started operating from 4 June.

#### Project Team

**Project Management:** RTA Project Management Services

**Builder:** BMD Major Projects

**Design:** Low & Hooke and EJE Architecture

**Steel Fabricator:** Re-Build Welding & Fabrication