

Legacy Way Tunnel Boring Machine

Project Description

Legacy Way is a 4.6km underground toll road that will link the Western Freeway at Toowong with the Inner City Bypass (ICB) at Kelvin Grove. Construction on the project is expected to take four years and be completed in 2014. Transcity will be responsible for the operations and maintenance of Legacy Way for 10 years after it opens. Transcity's design for the project includes: two parallel tunnels, one east-bound and one for west-bound, each containing two lanes for traffic, cross passages between the tunnels every 120m, a longitudinal ventilation system to manage in-tunnel air quality, fire protection and safety management systems and a free-flow electronic tolling system

Project:

Northern Link Tunnel Boring Machines (TBM)

Project Complete:

Nov 2011

Location:

Northern Link Brisbane

Client:

Herrenknecht

Project Owner:

Legacy Way

Value:

AU\$ 180,000

Client

Transcity is an integrated team comprising BMD Constructions, Italian company Ghella and Spanish company Acciona. This team will be supplemented by a number of locally based specialist companies to provide skills and knowledge to deliver Legacy Way.

Ghella is a privately owned Italian company that has expertise in tunnelling work around the world.

Acciona, one of Spain's largest corporations, is a global leader in infrastructure, renewable energy and water resource.

BMD Constructions is a wholly owned subsidiary of the BMD Group, and provides civil and industrial construction

GOVERNMENT AND INFRASTRUCTURE



ROAD

services.

Herrenknecht are supplying the Tunnel Boring Machines (TBM) to the consortium. They are the largest world wide suppliers of this equipment.

Challenge

Herrenknecht required a local company to build and supply industrial ducting for their TBM. The selected company had to be able to build this ductwork to fit in difficult areas with very tight tolerances and the pricing had to be competitive to fight international competition.

Scope of work

The scope was to design and build the industrial ventilation ducting so that it included many bends to enable it to match the complex the TBM structure.

Once the TBM had been constructed the supplier would be required to assemble the ducting as part of the trial

assembly. Once the client was satisfied the structure would be disassembled, before being reassembled once the TBM was in position to start tunnelling in the western freeway site.

Engineering Solution

HVAC was selected because they were able to manufacture to the highest quality in their in house plate shop. HVAC also had the capacity to install the ducting for both the trial assembly as well as when the TBM was in situ. HVAC is 9001:2008 certified with a local facility

Additional Information

For further information, please contact:

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