

HOUSING IN SOUTHERN AFRICA
01 Sep 2011, p.16

Innovative award winner

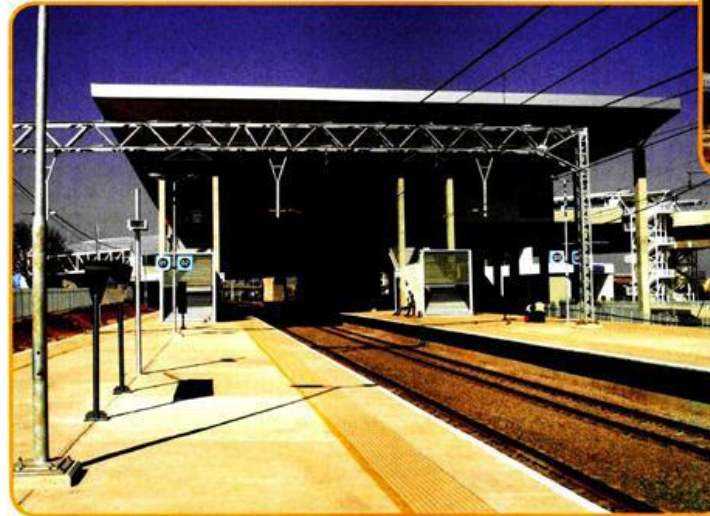
South Africa is set to continue upgrading its transport infrastructure well into the next few decades and the Rhodesfield Railway Station is a project that is revolutionary for the country's transport industry, says Wimpie Oosthuizen, Technical Director GIBB.

The leading consulting engineering company's innovative design of the Ekurhuleni Municipality station, will no doubt serve as a blueprint for similar projects in the future, says Oosthuizen.

Rhodesfield Station is one of the four main transportation hubs, joining the Metrorail system with the Gautrain Rapid Rail and the Gautrain Feeder Bus system, as well as with buses and taxi services.

"In 2008, GIBB was contracted by Passenger Rail Agency of South Africa to provide consulting engineering services for the structural, civil, electrical, mechanical and railway engineering of the Rhodesfield Railway Station. The Municipality aimed to facilitate the transport of commuters between Metrorail and the Gautrain, as well as anticipate future transport growth.

The R125 million project entailed relocating the existing four railway tracks to accommodate two new commuter



platforms. Oosthuizen says there were many complications and challenges in the duration of this project.

"The first was the specific timeframe for completion as the project needed to be handed over ahead of the 2010 FIFA World Cup, last year. Apart from the timelines, we deployed many revolutionary and innovative approaches to issues of roof design, station concourse design, aesthetics and the specific construction methods adopted to ensure minimum disruption to the existing operating trains.

"The architectural design was unique in that it needed to provide a modern and new look design compared to the existing station designs, to achieve a facility that would complement the Gautrain stations and precinct without compromising on providing a modern and functional design," says Oosthuizen.

The design of the station concourse and access to the station offers opportunities to create an integrated link that could be sustained with additional commercial opportunities. The adopted



design retains the flexibility required to suit the immediate and long-term requirements of the station.

The project required remodelling of the existing rail infrastructure to accommodate two new commuter platforms. Construction methods had to be specific to ensure minimal disruption to the existing operating trains.

The remodelling encompassed realignment of the four railway lines and associated signalling, overhead electrification works to create space for the construction of two island platforms, each 275m long and 9m wide.

GIBB scooped the Innovation Award at the recent Transport Africa Awards 2011, held in June.

"The Transport Africa Awards are one of the important events in Africa, which recognises and rewards excellence in the rail, road and ports sector. Our role in successfully project managing such a complex initiative was challenging but every individual and team pulled together to bring a successful project to fruition within the allocated timeframe." ■

