

KL Blue Line Stations

Complete	Area	Client	Architect
2016	East Asia	Mott McDonald MCC - Gamuda	Mott McDonald Neuformation

The Sungai Buloh-Kajang (SBK) railway line connects the north west and south east of Kuala Lumpur. It is 51 kilometres long and was designed to serve 1.2 million people. The blue line, which was the first to be developed, passes through the city centre and serves a number of densely populated urban areas.

The seven stations that make up the blue line include three underground stations – Pasar Rakyat, Cochrane and Maluri – and four elevated stations at Taman Bukit Ria, Taman Bukit Mewah, Leisure Mall and Plaza Phoenix.



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Services provided

Sandy Brown was engaged to provide consultation on:

- achievement of suitable internal acoustic conditions for ticket halls and concourses
- control of noise egress from mechanical and ventilation plant
- design for public address and voice alarm system.

Special acoustic features

Our design objective was to provide a desirable acoustic environment throughout all areas of the stations that is safe and comfortable for all users. To achieve this, the stations needed to be free from harsh reverberation and excessive amounts of transport generated noise. It was also essential for us to ensure announcements can be heard clearly.

Where stations are open sided there is less need to use acoustic finishes because sound from within the station escapes rather than reflecting back into the station. This reduces reverberation. However, all of the over-ground stations were at sites where existing noise levels were high so enclosure and screening of the sides was recommended to control noise ingress into them. This meant sound absorbent finishes were recommended to help provide good acoustic conditions for clear public address announcements.

The underground stations and tunnels require large amounts of ventilation and cooling. Residential buildings are located close to the stations so control of noise transmission to the local environment was a key consideration. Sandy Brown provided advice to the mechanical engineers on the selection of bespoke attenuation and isolation measures to large fans and cooling equipment.



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