

SH20-1 Manukau Extension Project



Location	South Auckland, New Zealand
Client	New Zealand Transport Agency
Contract	Design & Construct
Total Cost	A\$210 million
Duration	June 2006 to December 2010



Stretching across the heart of South Auckland in Manukau, the SH20-1 Manukau Extension project will form a vital link connecting State Highway 1 (SH1) with State Highway 20 and Auckland International Airport, via a new three-level motorway interchange at Manukau City.

The 4.5 kilometre motorway is also the southernmost part of the Western Ring Route and part of a long-term objective to construct an alternative route through Auckland for traffic wishing to avoid the central city area.

The project is being completed for the New Zealand Transport Agency by Leighton Works, a joint venture between Leighton Contractors and Downer EDI Works. The design of the motorway is by Sinclair Knight Merz.

Included in the project are the design and construction of three major interchanges and 12 bridges, including a 240 metre long flyover over SH1 and a 120 metre long bridge carrying the new motorway across a major rail line.

As well as the motorway itself, the project is also improving some of the adjacent local road network and constructing earthworks, foundations and a 270 metre concrete trench for a 1.8 kilometre rail connection next to the motorway.

The trench will house the future station for Manukau City and is being built for KiwiRail and the Auckland Regional Transport Agency as a variation to the original contract.

The project's numerous challenges include significant service relocations across the length of the project, extensive environmental controls to protect the adjacent Puhinui Stream, and traffic management for an estimated 200,000 vehicles per day around the alignment.