

# Old Mangere Bridge (New Zealand)



## Project description

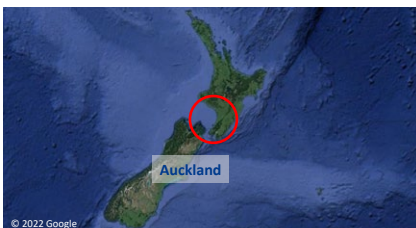
The Old Mangere Bridge on New Zealand's north island connects central Auckland to the city's southern suburb of Mangere.

Due to the replacement project initiated by Waka Kotahi (New Zealand Transport Authority) the bridge has been upgraded and remains an important walking and cycling connection between communities as well as an appealing public space, that makes travelling through the area more accessible and enjoyable.

The bridge's layout was designed to promote safe and accessible use by a variety of users, including people travelling on foot or by bike, recreational users and people fishing.

The bridge will also improve access to Manukau Harbour and Mangere Inlet.

The bridge is located in Auckland, the largest city of New Zealand



## mageba scope

The RESTON®SPHERICAL bearings support the bridge's main span with a typical arrangement: One fixed, one guided-sliding allowing only transverse movements, one guided-sliding allowing only longitudinal movements and one free-sliding.

Due to the bridge's special design, with a horizontal curve and with an arch at one side only, the two bearings at the inside of the curve (where there is no arch) required to be designed to resist uplift forces.

Furthermore, one of the bearings had to be delivered and installed as a free-sliding bearing to suit the structure's temporary requirements during the construction stage, and then retrofitted with guide and tilt bars to act as a guided-sliding bearing in service.

And as a final special feature, two of the bearings were fitted with load monitoring devices. A small number of LASTO®BLOCK elastomeric bearings were also supplied for the approach structures.

Testing of one of the spherical bearings to confirm its proper performance before shipping to site



## Highlights & facts

### mageba products:

Type: RESTON®SPHERICAL bearings  
LASTO®BLOCK elastomeric bearings  
Installed: 2022

### Structure:

City: Auckland  
Country: New Zealand  
Owner: Waka Kotahi (New Zealand Transport Authority)  
Contractor: McConnell Dowel Constructions Ltd.  
Designer: Aurecon

RESTON®SPHERICAL bearings as designed and manufactured to support the bridge's main span

