



# PEACOCKE STRATEGIC TRANSPORT

## ALLAN BLOCK® RETAINING WALL SYSTEM

### PROJECT

The Peacocke Strategic Transport project largely centres around the new bridge over Waikato River. It is a pedestrian/cycle bridge over Wairere Drive on the north bank of the river and the Ring Road / Peacockes Road roundabout.

The Allan Block retaining walls were designed and built as part of the underpasses beneath the Ring Road / Peacockes Road roundabout. The objective was to divert pedestrians and cyclists, ensure safety, traffic flow and convenience for non-motorised transport modes.

### DESIGN

The design and selection of the retaining walls and their materials were based on the context and project location. High quality Allan Block retaining wall units with an AB Capstone unit of top were preferred and used to provide a quality finish on the underpasses and areas along cycleway/pedestrian paths.

The Allan Block RWs were designed as Mechanically Stabilized Earth (MSE) structures, using polyester geogrid and pit sand (less than 10% fines) as backfill, with a preference of a sloping top to wall. The walls required to form a smooth outside curve connecting and linking the different underpasses to each other.

Fall protection fencing will be integrated into the design in accordance with requirements of F4 of the Building Act.

### INSTALLATION

Keir Landscaping was appointed by HEB Construction to build the curved Allan Block retaining walls. They were selected because of their ability to do a wide range of projects, even logistically challenging ones. To ensure they had a complete knowledge and understanding of the system, part of the Keir Landscaping crew attended the Allan Block Contractor Certification Training carried out by Bowers Brothers in Hamilton before the project commenced.

The 4 underpasses (450 m2) were built in approximately two months. The walls required the combination of two colours, Rock Salt and Autumn Leaves, to match the cultural theme wall patterns developed by the project engineers and Tangata Whenua Working Group (TWWG).

Installation was carried out following the Allan Block Best Practices. For instance, the AB Vertical units back wings were removed to allow for smooth curves.

### The Allan Block RW System provided the following benefits to the project:

- A ground retention solution that provides 100 years of design life
- A quality finish for the underpasses and areas along cycleway/ pedestrian paths
- A system that allows for beautiful and smooth curved walls
- Proper construction methods and Best Practice recommendations for the retaining walls



**CONTRACTOR**  
HEB Construction

**SUB-CONTRACTOR**  
Keir Landscaping

**ENGINEER**  
Bloxam Burnett & Olliver

**CLIENT**  
Hamilton City Council

**LOCATION**  
Peacocke Road, Hamilton

**PRODUCT USED**  
AB® Vertical Rock Salt & Autumn Leaves



**0800 207 374**  
**BOWERSBROTHERS.CO.NZ**

