**Background**
The increase in the number, speed and frequency of trains using West Coast Main Line the line as a result of its modernisation would lead to increased delays at level crossings on the line. To mitigate against these delays improvements have been made at a number of crossings. The level crossing at Bugrooke was replaced with a new section of road including new rail and canal crossings.

**Challenge**
The client required a modern high performance structure that would be in keeping with the canal environment over which it crossed. Discussions were undertaken with British Waterways to provide a structure that would appeal to all parties.

**Solution**
Reinforced Earth Company’s TechSpan arch provided an attractive cost effective solution that would meet British Waterways’ requirements for a traditional structure. The use of Reinforced Earth headwalls and wingwalls allowed Reinforced Earth Company to provide a full design solution for the structure. The arch units were erected during two night-time possessions allowing the canal to remain open during the construction period. The Reinforced Earth spandrel walls were constructed using selected granular fill with galvanised steel soil reinforcement and TerraTrel facing elements. The wingwall were constructed in Reinforced Earth with precast concrete TerraQuad facing panels.