

## Lowry Centre Footbridge Control System

### Contract Details

- Project Cost - £4m
- New 95m long lifting footbridge over Manchester Ship Canal
- 18 metre total lift
- Less than 3 minutes to lift or lower
- Integrated sequential operation:- Full control of bridge movement provided by just 3 push buttons
- Advanced 'maintenance mode' control for one or both sides of the bridge

### Brief description of control system

- Movement of bridge, barriers and span locks
- Control of pedestrian warning systems
- Proportional speed control of bridge movement
- Advanced 'Feed Forward' level correction system
- Independent speed and position monitors
- Automatic operation on electric or diesel power
- Wind speed and rope load interlocks
- Digital system description readouts
- Digital prompting for operators
- Control of motors and power pack on both sides of the canal
- Control of navigation traffic lights and all proving circuits
- Advanced zoned fault annunciation system

### Responsibilities

- Design of all mechanical equipment (winch, drums compensators, counterweights etc.)
- Design of all site hydraulics
- Design and authoring of all PLC software
- PLC network design
- Commissioning of all moving equipment
- Provision of all maintenance information and training

### Hardware

- 2 No Cegelec Alspa C-35 PLCs
- Alspa enhanced N80 network
- 3 No Celgelc communicator operator terminals

