Balvac

Post Tensioning - River Shannon Bridge, Limerick

Award winning segmental bridge linking Limerick University South Campus with the North Campus in County Clare over the River Shannon.

Client	**Plassey Campus Developments**
Architect	**Murray O'Laoire**
Principal Engineer	**Arup**
Main Contractor	**Irishenco**
Post Tensioning specialist	**Balvac**
Subcontract value	**£125,000**
Site programme	**2003 - 2004**

The bridge is a 150m five span pre-cast concrete segmental balanced cantilever deck comprising a single carriageway vehicle deck and separate foot/cycle way deck supported on cantilevers from the vehicle deck.

The viaduct deck comprised of pre-cast segments and was erected and post tensioned using the balanced cantilever method. The segments were erected and temporarily held in position by 32mm diameter bar tendons. Reinforcement was then placed and permanent corrugated plastic post tensioning ducts were fixed between the cast-in deflector and anchorage points in the pre-cast shell. A second stage pour was then concreted and, on reaching adequate cube strength, permanent stressing of 27/15 tendons carried out.

The project specification was based on the requirements of Concrete Society Technical Report 47, including a full scale grout trial.

This bridge won the Irish Concrete Society Award for the Infrastructure Category in 2005.

Balvac are the UK and Ireland licensee of the MK4 Post Tensioning System, and are CARES QA certified for internal and external, bonded and unbonded, post tensioning systems for a wide range of structures such as bridges, building slabs, tanks and silos.

CARES Certificate Number

UKAS PRODUCT CERTIFICATION

Balvac
Sherwood House, Gadbrook Business Centre, Rudheath,
Northwich, CW9 7TN
Tel: 01606 333036 Fax: 01606 812497
e-mail : enquiries.balvac@balvac.co.uk
www.balvac.co.uk