

# Project Case Study



## A483/A489 Newtown Bypass

Griffiths in partnership with Welsh Government were responsible for the design and build of the £71m A483/A489 Newtown Bypass. The bypass is intended to ease congestion along the A483 and A489 trunk roads that converge in the centre of Newtown currently. There was also an issue with 2 low railway bridges within Newtown which cause regular traffic problems.

The bypass consists:

- 6.5km of a new wide single 2+1 carriageway, with 1km of new side roads
- 5 new roundabouts
- 11 retaining walls, 4 underpasses, 4 underbridges and 3 overbridges
- 2.5m<sup>3</sup> tonnes of earthworks and extensive ground improvement works
- 7 attenuation ponds
- Extensive environmental landscaping works

Griffiths were awarded this Early Contractor Involvement contract to develop the scheme from preferred route, through outline design, public consultation, statutory processes, detailed design, construction and aftercare. During the outline design process, the preferred route was realigned to minimise significant stats diversions.

The A483/A489 Newtown Bypass has received multiple awards including:

- Constructing Excellence Wales & National Awards in 2018 for People Development
- CIHT National Major Projects Award 2019 - Highly Commended
- ICE Wales George Gibby (Major Project) Award 2019 - WINNER
- Constructing Excellence Wales Integration and Collaboration Award 2019 – Shortlisted
- ICE National People's Choice Award
- Bronze Considerate Constructors National Award

## Project Details:

### Client

Welsh Government

### Location

Newtown, Powys

### Completion Date

February 2019

### Value

£71m

### Contract

NEC 3 Option C  
Design and Build Contract

## Key Project Aspects

- Early Contractor Involvement
- New Road Construction
- Earthworks
- Landscaping
- Bridge Construction

## Challenges Faced

Griffiths were commissioned for the Early Contractor Involvement contract along with our fully integrated project partners Atkins (Design Development) and TACP (Environmental Support). This involved taking the projects from preferred route through outline design, public consultation, statutory processes, detailed design, construction and aftercare.

During the outline design process, the preferred route was realigned to minimise significant diversions to statutory undertakers' apparatus and to pass over the railway line rather than under.

These changes reduced the cost of the diversions by £9M and made the scheme more buildable. The resultant savings were reinvested in to the scheme to provide more 2+1 safe overtaking along the route.

## Community Engagement

Extensive public consultation during project development resulted in a reduced duration for the Public Inquiry. The inquiry was concluded after just 4 weeks.

## Newtown Skills Academy

The establishment of a National Skills Academy for Construction accredited by CITB has enabled us to maximise local employment, increase new entrant apprentice starts and develop and mentor a local supply chain. We have provided Training Plans for our employees and subcontractors, delivering NVQ training, supervisor training, advanced Health and Safety training and Leadership and Management training.

The skills academy has met all of its KPIs to date with some 17 Apprentices and 5 Graduates being employed during the construction period.

## BIM

The project team utilised BIM for clash detection and LEAN construction techniques to improve efficiency. A BIM workstation was installed on site and staff were trained in Navisworks (BIM Software) which enabled interrogation of the model by the site team. Stats information was added to the BIM model which allowed us to carry out clash detection reviews to programme site works much more efficiently.

