

Project Case Study



Project Riverside

In April 2014 Griffiths, along with Design Partners Tony Gee, were appointed as Main Contractors for Project Riverside. This ambitious residential-led regeneration scheme on the site of the former Merthyr Vale Colliery has revitalised Merthyr Vale and Aberfan providing improved access and flood defences for Crescent Street, Nixonville and Bells Hill.

In general the works comprised:

Flood Defence Embankment & Spine Road

A 1.5km spine road has been constructed upon a full length flood embankment, protecting the new Riverside Residential Development from a 1:1000 year flood. The embankment was constructed using 40,000 tons of material, 15,000t of which was sustainably sourced from United Recycled Aggregates (Griffiths' in-house recycling company). In addition 5,000t of impermeable 2C clay formed the embankment core and was sourced from another local Griffiths project under the CL:AIRE Protocol. The new 7.3m wide spine road also included a segregated 3m wide cycleway, a 2m wide footway, a 2m wide service corridor, 5 new junctions and a roundabout connecting the new road with Crescent Street, Nixonville and Bells Hill.

New Road Bridge

Due to unforeseen ground conditions and the discovery of contaminated land during site investigation works significant design amendments were required to the Client's preliminary design. Griffiths' extensive experience of early contractor involvement resulted in the original mass concrete abutments being replaced with 38 no. 1,050mm diameter case bored piles to a depth of 20m. The semi-composite steel beam bridge was increased in span from 31m to 46m and allowed works to commence and continue throughout the fish spawning embargo period and ensured works would be completed on the originally planned date.

Project Details:

Client

Merthyr Tydfil County
Borough Council

Location

Merthyr Vale & Aberfan

Completion Date

November 2015

Value

£8,000,000

Contract

JCT Standard Form 2011
Design & Build

Key Project Aspects

- Highway Construction
- Flood Defence Embankment
- Road and Footbridge Construction
- Civic Amenity Site
- Early Contractor Involvement
- Community Engagement

New Footbridge

A new footbridge was constructed to maintain a key access route for equestrians, cyclists and pedestrians between Merthyr Vale/Nixonville and Aberfan. Griffiths proposed and instructed design changes to the footbridge, increasing the span by 5m and changing the mass concrete abutments to 8 no. 750mm diameter, 18m deep cased bored piles. Griffiths liaised with Statutory Undertakers to divert underground services on to the new footbridge prior to demolishing the old road bridge. The riverbank was restored with the use of coir matting.

Civic Amenity Site

A new Civil Amenity Site was constructed to serve Aberfan. Works included new RC walls and slabs, access ramps, drainage works with oil interceptor, lighting, surfacing works and utilities provision.

Car Park, Drainage & Landscaping

Works also included the construction of a public car park, new underground services and utilities (including gas and bt infrastructure) and surface water drainage with extensive landscape works undertaken throughout the site including restoration of the riverbank.

Environment

Due to the sensitive location of the site within the riparian river corridor of the River Taff a comprehensive Construction Environmental Management Plan including a Habitat Management Plan was required. Bat and reptile (common newt and slow worms) protection measures were implemented and a European otter licence obtained to work in the river. A two-way reptile fence was erected around the site during the construction phase and areas of riverbank hibernaculum, an artificial otter holt, nine bat and six bird boxes have been incorporated within the permanent works.

Community Engagement

A full-time Public Liaison Officer was appointed and based onsite throughout the project and responsible for the development of a Community Engagement Plan and the delivery of Community Benefits. The project was registered with the Considerate Constructors Scheme and achieved a final overall score of 42/50.

Local residents were consulted on the name of the new road with a public vote through the project Twitter feed used to select the final name of Golwg Yr Afon (River View).

The ICE Bridges to School initiative was delivered at Ynysowen Primary School with the pupils also attending a site visit to observe the bridge lift. Our Site Team also undertook environmental improvement works to the school's playground, clearing and restoring a pond and providing a safe access track to this valuable learning resource.