

TMS Maritime is a leading UK specialist in marine civil engineering, ancillary floating plant and diving services

Client: Dyer & Butler (for Network Rail) Value: £180,000
Project: Newbridge, Newton St Cyres Duration: 12 Weeks

In late August 2018, TMS commenced work to stabilise the river bank adjacent to the North Devon railway line near Newton St Cyres. The riverbank and railway embankment were being scoured out by turbulent river flow, and the abutment of an adjacent multi-span masonry arch road bridge that crossed both the railway line and the river was also indicating signs of erosion.

Access for this project was particularly difficult. It was decided that using road rail vehicles (RRVs) for the works would be prohibitive since it would involve significant night working and would tax the RRVs available to the limits of their capacity. Instead, TMS proposed a solution that involved mobilising all activities and plant from the opposite side of the river and using a multi-float pontoon to deliver all plant, equipment and materials to the working area. The pontoon was also used as a working platform for an 8t excavator that performed most of the excavation and lifting duties.

The scour pocket was repaired by excavating within the river to solid bedrock. Hand-faced gabion baskets were then placed on this formation and built up to the required profile and level. Armourstone was then laid in the river in front of the gabion baskets to provide a further element of protection. Terram-lined backfill was placed behind the gabion baskets, topped off with topsoil and erosion matting. Finally, the gabion baskets were faced with brushwood faggots, which both improved the aesthetics of the repair and helped to trap sediment locally to the repair. The bridge abutment was protected by laying rock roll bags along the river edge and dressed up the river bank towards the railway boundary fence.

