

Roundtree and Greenford Road

Client:	Network Rail
Location:	London Borough of Brent
Value:	£1m
Duration:	5 Months



30m Span - Roundtree



Bottom Drive Piles - Reduced Arisings

In Brief...

Barhale were contracted by Network Rail to undertake a construct only package of two schemes in North London. The first scheme on Roundtree Road involved the demolition of an existing footbridge and the fabrication and installation of a replacement steel structure along with the construction of associated foundations, footpath and fencing.

The second scheme on Greenford Road consisted of the refurbishment, grit blast and painting works to an existing footbridge as well as de-vegetation and brickwork repairs.

Customer Benefits...

- Barhale proposed an alternative form of bottom driven piling, and retaining arisings within the wide cess. This minimised the need for removing materials to landfill and reduced our carbon footprint and cost
- Minimised disruption to local residents by working at midday on a Sunday, when site staff were least likely to disrupt local residents.
- The large span was transported to site via a restricted residential access road using steerable trailers, this required careful route planning and liaison with the local highways authority and affected residents.
- The steel bridge that was replaced on Roundtree Road was recycled and spoil was deposited on the embankments.

Technical Features...

The works at Roundtree Road comprised of the removal of the existing footbridge and replacing it with a new all steel 30m span footbridge.

Demolition and removal of the existing footbridge and foundations were undertaken during a 24 hour track possession allowing the new bored piled foundations and pile caps to be installed. The designed depth of concrete pile caps necessitated the use of temporary sheet piles in the embankments during excavation works to maintain the integrity of the rail tracks. A 400 tonne mobile crane situated within the adjacent cul-de-sac was used to undertake the installation of the bridge sections in weekend track possession.

The refurbishment and painting works at Greenford Road were undertaken within an encapsulated access scaffold, providing containment to the underside of the bridge deck and side spans, allowing steel work repairs and painting to be completed without disrupting the live railway. As the work progressed it became apparent that the steelwork was in a worse condition than initially thought. Barhale were able to respond quickly to replace the corroded sections using our in house steelwork shop.