

Lucy's Railway Bridge – Network Rail Structure No. VTB3 - 155

Client: Network Rail
Consultant: Crouch Waterfall & Partners
Contractor: Suttle Projects
Supply: 68No. MR1 Stainless steel (SS) Duckbill® ground anchors c/w recessed SS pattress plates
Date: Installed Dec 2013/Jan 2014



Requirements

As part of Network Rail's asset repair and refurbishment programme Lucy's Bridge was selected for repairs to be begun at the end of December 2013. Lucy's bridge is the only pedestrian and single vehicle access to a local housing estate and Caravan Park in Burgess Hill, West Sussex. Suttle Projects were awarded the contract to provide the repairs to the structure based on the survey and subsequent recommendations of Engineer Crouch Waterfall & Partners. The wing walls were identified as having a number of repairs to the brickwork, brickwork mortar and coping units. Anchor Systems (Europe) Ltd (ASEL) Duckbill® ground anchor solution was identified by the Engineer as a system of choice to stabilise all four wing walls and both spandrel walls. A complete stainless steel Duckbill® solution has been designed and developed to ensure the longest durability based on the aggressive nature of the soils adjacent to the railway structure. Suttle Projects had a number of challenges on the project and the most important was keeping the access open to cars and pedestrians while working in a limited access area.



The Solution

ASEL supported Suttle Projects in the confirmation and verification of the stainless steel Duckbill® system proposed by the Engineer. The Engineer had proposed the Duckbill® system as it is an anchoring system that is portable and is commonly used on projects with difficult access as well as major projects. The Duckbill® system was also employed with ASEL's specialist recessed pattress plates commonly used in pedestrian zones. After the verification process ASEL were engaged to supply 4No. Stainless steel Duckbill® test anchors and the attendance of our Site Supervisor to support and assist in the installation and loading of the test anchors. The test anchors were installed within a day shift and the loading requirement designated by the Engineer was achieved and surpassed beyond expectation. The use of test anchors is whole heartedly recommended by ASEL to practically confirm the designer's requirements prior to major purchases of product. As a result of the successful test the remaining anchors were ordered for the project and installed within the project programme and budget. The project was a collaborative effort from design to installation between all parties concerned.



Registered Office: North House 198 High Street, Tonbridge, Kent, TN9 1BE
Company Registration No. 04023935, VAT Registered No. 656490607