



ROCKY LANE UNDERBRIDGE, WENDOVER WENDOVER, AYLESBURY, BUCKINGHAMSHIRE

Railway

CLIENT
EKFB JV

PROCESS
ABI TM 14-16 TELESCOPIC LEADER RIG / KOWAN
STILL WORKER / CRAWLER CRANE / VIBRATORY
HAMMER

CONTRACT NO.
C21590

SPI Piling Ltd, were employed for the supply and installation of 115nr GU27N sheet piles, 11m long forming a temporary retaining wall, which would enable the adjacent public road to remain open during the construction of the new bridge abutment.

As well as the road to protect there were also services in the road and verges which could not be disturbed and with a temporary retained height during construction of 4-5m, any deflections in the piles had to be minimised to prevent any damage.

The pile line was preaugered to break up any dense strata lower down. This would help reduce any excessive vibrations in the ground during installation and so reduce the risk of damage to the road, services and an adjoining property.

The piles were then driven to level with our 16m leader rig and resonance free vibrating hammer.

To further reduce pile deflection during the construction phase SPI Piling Ltd, also installed two rows of duckbill type anchors through the sheet piles.

The first row of 58nr anchors was installed approximately 1m below ground level and each anchor was 17m long.

The second row of 58nr anchors was installed at approximately 3m below ground level and each anchor was approximately 24m long.

After the construction of the new abutment SPI are contracted to return to site to extract the sheet piles.

As the new structure will be in place there will be no access for our equipment immediately alongside the sheet piles so SPI Piling Ltd, will position a 100T crawler crane approximately 20m away from the sheet piles and lift a silent piler onto them.

This machine will then extract the piles from the ground and they will be lifted away by the crane.

The use of the silent and vibrationless piler will also ensure no disturbance to the services in the ground and the adjoining property.



