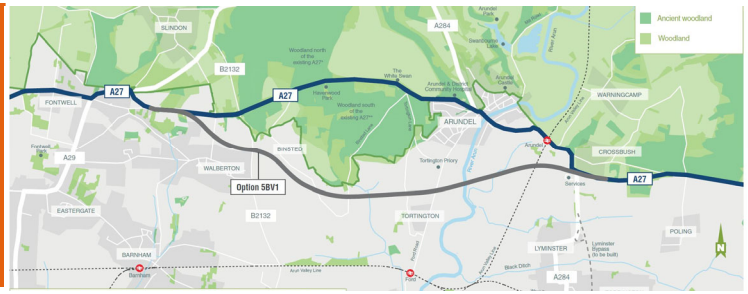
A27 ARUNDEL BYPASS

Reducing congestion and travel time



CLIENT
National Highways
Linkconnext

OVERALL VALUE
£TBC

PRODUCTS & SERVICES

- Geotechnical Drilling to establish ground condition and assist design type of road structure.
- Contamination testing on the edge of a service station in proximity to a forecourt.
- Cone Penetration Testing to establish ground condition and assess thickness of gravels on the floodplain.
- Working with multiple stakeholders who still require land access during our works.
- Full-time support by contract site team running two rotary rigs and three rotary loggers.
- Post fieldwork gas monitoring and low flow sampling.

PROJECT DATES

MARCH 2021 – AUGUST 2022.

The A27 is currently the only east-west trunk road south of the M25. The Arcadis Ground Investigation, established ground conditions from Crossbush, west to Ford Road Arundel for the design of the road, which would be passing across a floodplain, railway and River Arun.

Our Role

Acting as Principal Contractor for the GI works consisting of providing Geotechnical Borehole Drilling, Geo-Environmental Contamination Sampling, Gas Monitoring, and Low Flow Sampling.

Key Challenges

The Scale of the Arundel Bypass Scheme encountered a number of challenges:

- Accessing multiple are areas of farmland owned my multiple stakeholders who need maintain operation of their land.
- Providing GPR/PAS128 surveying and co-ordinates through permits to dig for the safe intrusive investigation and ensuring the works were situated away from major services.
- Supervision of two rotary rigs. With constant supply of drilling water and removal of drilling fluids from drill sites.

Innovation/ Best Practice

Supervision, management and data collection of rotary drilling, windowless sampling, CPT and hand excavated inspection pits to provide data points across the site area.

Permit to Dig System designed collaboratively with Arcadis and National Highways

Daily data management and updates through Linkconext and National Highways to discuss strata encountered and the need for deeper drilling (if required).

Trial of Dando Duke cable percussion drilling rig followed rotary drilling. Boasting features for safety, efficiency and productivity.

Decommissioning of site compound by removing sub-base and placing subsoil and topsoil back onto the site compound.

Use of stop work authority. Stopping, changing working methods due to change in risk. For example weather and ground conditions.

What we are proud of

The scheme will reduce congestion for the town of Arundel and will utilise a dual carriageway bypass outside the South Downs National Park. The project involved daily consultation with the clients engineers to ensure the investigation encountered ground conditions suitable for the development.