VOCON ENERGY LIMITED

Successful Directional Drilling Project

Project Requirements

The client required the installation of new underground utilities in a congested corridor where open-cut trenching would have caused disruption to businesses, road users and the surrounding community. VOCON Energy was engaged to provide a trenchless directional drilling solution that ensured minimal surface disturbance while achieving precise installation.

Our Approach

Our specialist drilling team engineered and delivered a 145-metre directional drilling operation, navigating beneath existing services and transport infrastructure with millimetre accuracy. Key elements included:

- Advanced subsurface planning and ground condition assessment.
- Real-time guidance systems to maintain bore accuracy
- Optimised drilling parameters to reduce ground impact
- Continuous coordination with the client, utilities and local stakeholders.

Collaboration & Partnerships

Successful delivery was made possible through strong collaboration. We extend our thanks to our partners, McAndrews Utilities, whose operational support and on-site expertise were invaluable throughout the works.

We also recognise our wider supply chain partners whose reliability, responsiveness and technical support ensured smooth progress and high-quality execution at every stage.

PROJECT LOCATION:

Midlands

PROJECT OVERVIEW:

VOCON Energy has successfully delivered a major directional drilling project in the Midlands region on behalf of a blue-chip client, completing the works safely, within budget and ahead of programme. This achievement highlights our technical expertise, collaborative working model and commitment to sustainable, low-impact infrastructure delivery.

KEY STATS:

- 145-meter directional drilling operation.
- Estimated CO2 saving of 6-9 tonnes.
- Safely delivered with no incidents.

Environmental Benefits

In addition to the programme and safety achievements, the project delivery significant environmental advantages compared to traditional open-cut excavation.

Reduced Surface Excavation

Only three small excavations were required, approx. 2m x 1m each. Without directional drilling, a traditional trench for 145 meters could have required the following:

- Multiple spoil movements
- Increased plant usage
- Road closures inconveniencing road users

Estimated CO2 Saving

Directional drilling dramatically reduces heavy-plant operation, haulage and reinstatement emissions.

A typical open-cut trench of this length might generate 8-12 tonnes of CO2e, from excavation plant, lorry movements, backfill and reinstatement materials. By contrast, a trenchless installation with only three small pits generally emits 2-3 tonnes of CO2e.

Indicative CO2 reduction for this project is approximately 6-9 tonnes of CO2e saved. This is equivalent to the annual electricity use of 1-2 UK homes or removing 2 cars from the road for a year.

This reduction strongly aligns with VOCON Energy's commitment to providing low-carbon construction solutions and supporting clients in achieving their sustainability goals.

Outcome & Conclusion

The following outcomes reaffirm VOCON Energy's reputation for delivering complex, high-precision drilling operations with a strong focus on safety, sustainability and engineering quality. The project was delivered:

- Safely and incident-free
- Within budget
- With demonstratable environmental benefits
- Ahead of the agreed programme