


CASE STUDY



Ploughing, Cable Laying & Jointing - Oransay, Isle of Skye

Overview

In October 2023, responding to a SHEPD network fault on the Isle of Oransay seabed, the McGowan Infrastructure team completed an installation of the replacement electricity cable connecting the island to the network supply on the nearby Isle of Skye. Due to the complexity of these cable laying and jointing works, and to reduce the impact to the local community and environment, McGowan Infrastructure successfully delivered the solution for client SSEN utilising a SpiderPlow. The new cable - seamlessly installed across a tidal mud flat - reconnected a number of customers on the island as well as the Oransay Lighthouse.

Project profile

Location:

Oransay, Isle of Skye

Solution:

Ploughing, Cable Laying & Jointing

Delivered by:

McGowan Infrastructure

Solution

To deliver these vital SHEPD Network Fault works on the Isle of Oransay, Skye, McGowan Infrastructure deployed a state-of-the-art SpiderPlow. This innovative, efficient and environmentally friendly method for installing pipes and cables below ground utilises a mobile winch to move the plough through the soil, installing cables or pipes to depths of up to 2.5 metres. This methodology was particularly important to ensure faults in this line didn't reoccur, with this technique virtually eliminating the possibility of damage because downward pressure arising through compaction is deflected sideways due to lateral slicing.



Project benefits

- SpiderPlow created smooth laying bed, mitigating need for sand bedding
- Cables & pipes installed without tensile stress
- Faults virtually eliminated
- Cabling technique reduced environmental impact
- Vital electricity cable replaced

Result

With the SpiderPlow's adjustable wheels adapting to the terrain, a smooth laying bed was created, mitigating the need for additional sand bedding. Cables and pipes were inserted across a tidal mud flat without tensile stress, resulting in a superior quality job compared to traditional open trenching methods. This vital subsea electricity cable was replaced in a timely, cost effective, environmentally friendly manner to the satisfaction of the client.