

Case Study:

## Installation of Emergency Telephone External Armoured Cable

Customer:

Royal Military Academy Sandhurst

### Overview

The Royal Military Academy Sandhurst (RMAS) is the British Army's initial officer training centre. All British Army officers, as well as men and women from overseas, are trained in leadership at RMAS. The site comprises in excess of 50 buildings, including many listed, and is home to 2,000+ personnel.

#### Our challenge

Emergency phones are situated on an inner-perimeter fence which cordons off the military artillery ranges where 'live firing' takes place. Due to recurring faults and the critical nature of this system Quadratek was asked to assess the current infrastructure prior to recommending improvements that would offer a robust system.

#### What we did

Quadratek replaced the existing cabling with 5 pair CW1198 steel wired armoured (SWA) external telephone cable. The cable is suitable for outdoor installations where direct burial is required. It offers a lightweight, compact, tough solution for cables that need to endure a variety of weather conditions.

Quadratek installed outside emergency phone cable to the artillery range perimeter fence. The length of the run was 1985mtrs, feeding 2 x emergency phones. 6 x excavations were needed to traverse 4 x range access gateways and 2 x excavations to the Emergency Phones themselves.

During the installation it was imperative Quadratek engineers worked closely with the Range Officers and Military Provost Guard Service (MPGS)



### **What we did cont'd**

Quadratek installed the cable using Stainless-Steel Cable Ties and a Tensioning Tool to ensure it was securely fastened and weather-proof. The ties were installed at 0.5mtr intervals to negate sagging. IP54 rated external weather-proof connection boxes were used to join the 200mtr sections of cable together and to spur off to the emergency phones. These connection boxes were mechanically bolted through the fence onto a stainless-steel backing plate.

During the installation it was imperative Quadratek worked closely with the Range Officers and Military Provost Guard Service (MPGS) to ensure all entities knew when and where we were at all times. Once the proprietary works were complete down time was scheduled to the facility while the emergency phone system was switched over to the new infrastructure and tested.