

Learning Event - Service Strike, Brook Street, Porth



P1 Damage to the Spade

P2 Cross Section of Cable

P3 Spade Damage x2

A 415v electric cable was struck by a sub contract operative whilst he was hand digging around two 11kv cables using a spade.

No injury occurred and the circuit tripped immediately rendering the cable safe, however the initial contact with the electricity damaged the spade providing a stark reminder of the danger of hitting electric power cables (see P1).

The damage occurred to the 415v cable after the 11kv cables had been located and the operative was in the process of completely uncovering them. The spade penetrated the outer sheath very easily, making contact with the outer earth and internal wiring. It was later established that the sheath protecting the cable was extremely fragile, this was demonstrated when the WPD engineer accidentally caused the same damage whilst he excavated around the cable (see P3).

All procedures were followed during the excavation although it did become apparent when Western Power Distribution (WPD) attended site that the service drawing being used by Morgan Sindall was out of date and the damaged cable was charted. The damaged cable (a capped former welfare supply) had been included on revised WPD drawings and was clearly visible.

Learning

- Even when hand digging , vigilance is required to identify visible indications of services that are present i.e. Warning tape, dust etc.
- Remember that cables can be easily damaged by digging equipment such as spades, extra care should be taken when removing spoil from around services.
- The most recent utility service drawings should be used to identify the presence and location of services within the area.
- HV cables can mask the presence of lower voltage cables during CAT scanning.
- Locations of temporary underground supply cables should be marked on site service drawings to ensure the information is captured for future works being carried out later on the site.

Action to be taken by site management

- **Bulletin to be briefed out to all personnel on site and recorded**
- **Review site service drawings and ensure all additional information in regard to service locations are recorded.**
- **Carry out TBT with all site personnel on safe digging practices found in HSG47.**

Communication:	Toolbox Talks / briefings <input checked="" type="checkbox"/>	Notice boards <input checked="" type="checkbox"/>	Safe and Sustainable update <input type="checkbox"/>
Circulation List:	To all of Morgan Sindall <input type="checkbox"/>	Supply Chain <input checked="" type="checkbox"/>	Morgan Sindall Plant Hire Desk <input type="checkbox"/>
		Morgan Sindall Group <input type="checkbox"/>	
SHEQ Alert No:	1W004	Display until:	31.02.12