

# HVAC Buried Cable

The HVAC Buried Cables, will connect the Interconnector Converter Station to the new Peterhead Substation. There will be six 400kV cables. These will be installed in two separate trenches, each with 3 cables. Each batch of three cables will be buried in a trench measuring 1.5m deep by 1.5m wide. The trenches will be separated by a temporary haul track that will be used to move the excavators digging the trenches, as well as the cable laying vehicles.

The cable route follows field boundaries wherever practicable. There will be a need for two streams to be crossed. The streams will be culverted during installation works and all precautions taken to minimise impacting on the water quality and the ecology of the surface watercourses.

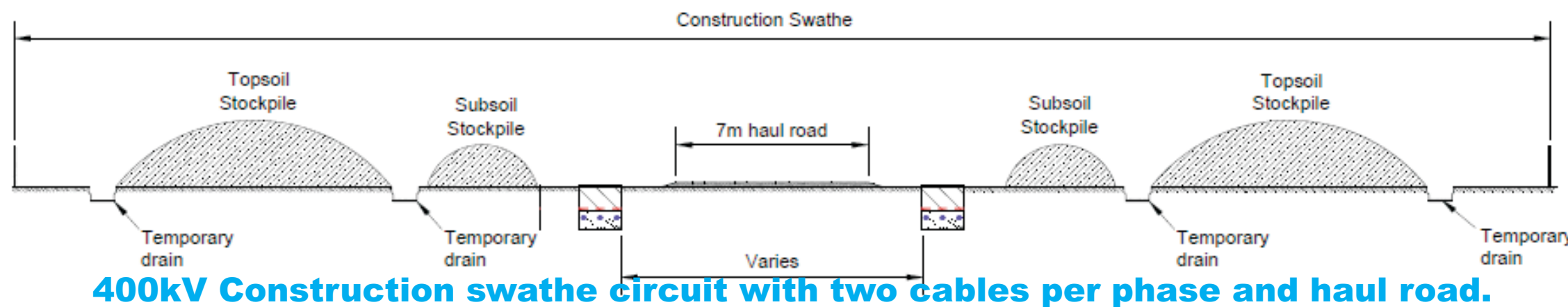


Cross Section of HV Cable



Typical Excavation of 400kV Ducts

A minor road will need to be crossed and works will be condensed into as short a time frame as possible. All local residents will be made aware of the timing of the works and appropriate diversion signage will be provided. To cross the road a trench will be made and ducts installed which are set in concrete. The trench is then backfilled and the road reinstated.



400kV Construction swathe circuit with two cables per phase and haul road.

As part of the works, the topsoil for the cable route and temporary track is removed and put into stockpiles along the route. This is to allow the indigenous topsoil to be reinstated at the end of the works. Once the topsoil is removed, the temporary track is established to allow access for digging and cable laying vehicles and machinery.



Boarded Cable Trench, Temporary Access Road and Drainage Ditches

The cable is only manufactured in lengths of up to 1000m. The total length of the route to the AC substation is approximately 1500m. Due to this, the AC cable will need to be split into two sections and joined in the middle. As part of the joining process, an underground jointing bay is necessary. After the cables are installed, this jointing bay is buried underground and the surface reinstated. At the jointing bay location there will be two above ground link box pillars, approximately 0.6m x 1.0m x 1.5m.

