

**PROJECT: PROJECT SAPPHIRE, FILTON, BRISTOL**  
**SERVICE: CIVIL ENGINEERING**



### Project Summary

Client : BAE Systems  
Value : £1,690,000  
Role: Civil Engineering Main Contractor

To extend the capacity of the airfield the contract required the construction of over 12,000m<sup>2</sup> of new concrete aircraft aprons and the refurbishment and overlay of 7,200m<sup>2</sup> of taxiway with aviation fuel resistant tarmac surfacing.

The scheme overall also included extensive new fire and potable water mains as well as high and low voltage power cabling and data cabling, some laid under existing taxiways by trenchless directional drilling.

Further works included a number of mass insitu concrete communications mast bases and a new radar system foundation. Most of these works were completed as an airside contract with Tercon providing full airside compliance.

### Key Elements of work

- Breaking up and removal of existing hard surfaces, excavations and sub base filling.
- In excess of 4,000m<sup>3</sup> of concrete used in mass sub base and pavement concrete to the airfield aprons.
- Planing and preparation of existing taxiways and overlay with new aviation standard surfacing, including re-setting of existing and new taxiway lights.
- Extensive system of multiple data ducting with all chambers, trenchless directional drilling beneath existing taxiways.
- Around 3,000m of trenching and installation of water mains and HV/LV power cables.
- VHF and UHF communications mast bases with installed mast base grillages and all associated works.

