

Browfield & Waste

## Aviation Fuel Pipeline Contract, Major UK Airport

<b>CLIENT</b>	Confidential
<b>LOCATION</b>	South East England, UK
<b>DATE</b>	2003 to 2004
<b>PROJECT</b>	Aviation Fuel Pipeline Contract



### DESCRIPTION

This Project involved the construction of new fuel storage and transmission facilities on a major UK Airport.

The project comprised the construction of a new tank farm installation, intended to supply aviation fuel (Kerosene, Jet A-1) through two new airport transfer pipelines from two newly constructed fuel receipt facilities.

Abricon were commissioned to undertake the foundation designs for the three main works areas, the two fuel receipt facilities, the tank farm as well as the 2km long pipeline route.

Information collected from the initial geophysical and environmental site investigation indicated that three of the six 26 metre diameter tanks proposed at the tank farm were constructed over an old gravel borrow pit. The variable thickness of the Made Ground and the dense nature of the Terrace Gravels found on site had a direct impact on the chosen piling/foundation methodology. Abricon designed the piling/foundation layout to accommodate differential settlement.

The role of Abricon was to record on site and report on the following:

- anticipated differential settlement under the edge and centre of the tanks
- construction advice to minimise differential settlement
- recommendations regarding piling across the transition boundary of the gravel pit "high wall"
- assessing the minimum factors of safety incorporating any potential creep due to cyclic loading of the fuel tanks
- Preparation of working method statements for the earthworks contractor.
- Special working methods statements to prevent site staff exposure to any contamination encountered in the made ground.

The whole project was managed within the exacting requirements of the overall contract within budget and completed on time.