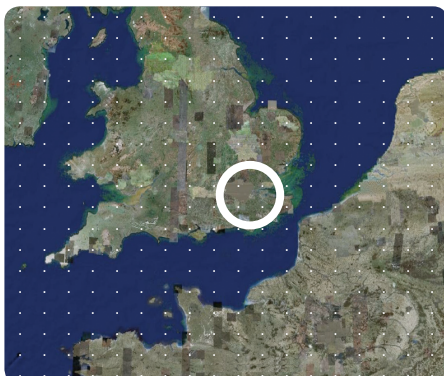


BAA (Heathrow Airport)

Fuel Storage COMAH Works

Project: Heathrow COMAH Works
Service: Consultancy / Project Management / Design
Project stage: Design / Construction / Commissioning
Product: Aviation
Region / Country: Europe / UK
Value: £800,000



Works were required at the Heathrow Airport fuel storage facility to meet the requirements of the COMAH Regulations (Control of Major Accident Hazards) and to enable the operator, Heathrow Airport Fuelling Company (HAFCO), to comply with its statutory obligations as set out by the UK Government Health and Safety Executive (HSE). The tank farms had been in operation for a number of years when the HSE identified a number of remedial works required to improve the capabilities of the bunds.

The Problem:
The Terminal 5 tank farm required additional protection after simulation demonstrated that, in the event of a rupture in the lower levels of the tank, the bund walls would not be adequate protection against the potential "tidal wave" effect which could result in spillage into the nearby aircraft stands.

The Solution:
Wave deflectors, designed in a curved shape and installed above the existing

concrete walls, will force any spillages to be contained within the bund. The application of this solution was unique as modifying the existing installation allowed operations to be maintained whereas the alternative of 'demolish and rebuild' would not.

BPA's works included:

- The design and installation of wave deflectors on the bund walls
- The design and installation of an additional boundary wall
- The infill of all site gates
- Provision of additional foam storage on site to allow greater flexibility
- Modifications to foam pump drainage
- Provision of new access roads.

Furthermore, the cargo depot fuel tank farm bund needed lowering and a concrete base laying. This was a technically complex project due to presence of the existing pipework.

BPA's role included project management, CDM co-ordination, field engineering, site management, safety monitoring, procurement and detail design. These works were completed over a twelve month period and in proximity of fully operational runways.

Below: Wave deflecting bund wall

