

## BP PANGBOURNE MODERNISATION

**Client: BP Pangbourne**

**Commencement: August 2020**

**Completion: Ongoing**



### The Project History:

Pangbourne research site opened in 1907 and was acquired by Castrol in 1976. It comprises a stately home (Bozedown House) and a large number of out-buildings which have been added to the site over the years that now make up the research facility. The site is the global headquarters of BP's lubricants business and its products are sold to countries all over the world.

As the site has grown, so too has the utility infrastructure around the site. However, previous utility additions have been individually tailored to suit specific developments rather than taking a holistic view to meet the future demands of the site. The new utility infrastructure upgrade required the demolition of several ageing research buildings which are to be replaced by new modern research facilities. These new facilities require an increase in capacity for electricity, gas, water and telecoms.

### The Project Description:

Based on information available for both the existing site and the emerging masterplan for the new development, Gattica were asked to review and comment on the constraints posed by the existing utility networks and their possible likely effects on BP's ability to develop the site through to the future masterplan.

Gattica were also asked to develop a high-level strategy and masterplan for the new network arrangements required to deliver this plan. This included a sitewide redesign and upgrade of the utility infrastructures for electricity, gas, water and telecoms, as well as the introduction of a solar PV farm and electric vehicle charging across the site.

Based on these requirements, Gattica was further retained to provide Topo and GPR surveys as well as providing monthly reporting on the programme, specification, workmanship, and the management of the individual works packages including the monitoring of costs associated with these upgrades. Reporting also included advanced highlighting of any constraints, risks, and value engineering opportunities during construction.

### Gattica Associates Responsibilities:

Gattica's initial scope was to understand the limitations and constraints of the existing utilities infrastructure and then to design a new masterplan for the emerging development. Gattica reviewed the constraints posed by the existing utility networks to ensure their resilience and ability for BP to develop the site to meet the requirements of the future masterplan.

Gattica developed a high-level strategy for the future masterplan and then progressed to design the site-wide utilities infrastructure to RIBA 3b for the new network arrangements. This included the calculation of sitewide loads for each of the new facilities and the development of a construction programme in line with BP's desired build-out pathway for the site.

Gattica were also involved in the bid process to appoint the chosen M&E contractor and were then engaged into the BP contract management team (CMT) to monitor the works and costs to ensure adherence to the specifications of the design.

Gattica developed a programme for the durations for the works including sequencing of works with indicative cost/estimates for any diversion and abandonments of existing apparatus within the site.