**Key Issues**

Due to the sensitive location of the site in terms of odour, noise, the ecology of the adjacent Ramsar site, and visual impact, it was anticipated that an EIA would be required. However, following the submission of an EIA Screening Report to Southampton City Council, it was determined that an EIA was not required, although numerous, specialist environmental information was requested in support of the application, including:

- Landscape & Visual Impact Assessment;
- Daylight & Overshadowing Study;
- Microclimate Assessment;
- TV Reception Study;
- Traffic Statement;
- Noise Assessment;
- Land Quality Assessment;
- Arboricultural Survey;
- Landscaping Proposal;
- Flood Risk Assessment;
- Construction Environmental Management Plan; and
- Sustainability Checklist

**Purpose of the project**

Southern Water Services Limited proposes to undertake improvements to the existing Woolston Wastewater Treatment Works. Since 1966 the works have undergone only minor upgrades to the processes but now major improvements are required to meet the requirements of the Wastewater Directive and increase its capacity. An Options Study was undertaken to consider both the on-site option and transfer options to other WTWs in the area.

**Description of the project**

The WTW is located in Woolston, Southampton, immediately adjacent to the European designated Solent, at the mouth of the River Itchen and surrounded by residential properties. It is a conventional activated sludge plant built in 1966 and treats flows from part of the Southampton conurbation, serving a population of approximately 66,000.

The refurbishment works are required to take place within the existing 1.26ha site whilst remaining fully functional as a WTW.
Lessons learnt
As part of the support to planning, the engineering solution for the preferred on-site option was taken to a level of detail similar to that at the outline design stage. Without this level of detail, it was considered that there was an increased risk that either the planning application would be rejected or, if it was accepted, that design changes would be required post planning approval, resulting in amendments to the planning application, delay to the implementation of the project and an increase in the scheme cost.

The Options Study was also undertaken to a sufficient level of detail to support either the planning application for the development of Woolston or a submission to OFWAT to demonstrate a transfer option was the best option.

Given the restricted (1.26ha) size of the site, on-site constraints required a phased approach to development to allow the existing process to remain operational while the equivalent parts of the new process were being constructed. The impacts of each phase had to be assessed within the supporting information.

Lessons learnt cont. -
Given the restricted timescale to undertake the concept engineering, the environmental studies, compliance planning, option development and production of planning information, MWH were required to work closely with Southern Water and the planning advisor, with Southern Water undertaking the liaison with adjacent landowners and planning advisor leading the liaison with third party stakeholders.

The WTW is located immediately to the south of a proposed and consented prestigious new waterfront development, and surrounded by residential properties. As a result the architectural scheme designs for the new WTW had to be innovative and sensitive to the neighbouring proposed development, and the supporting environmental studies, including the Construction Environmental Management Plan, had to take this into account.

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