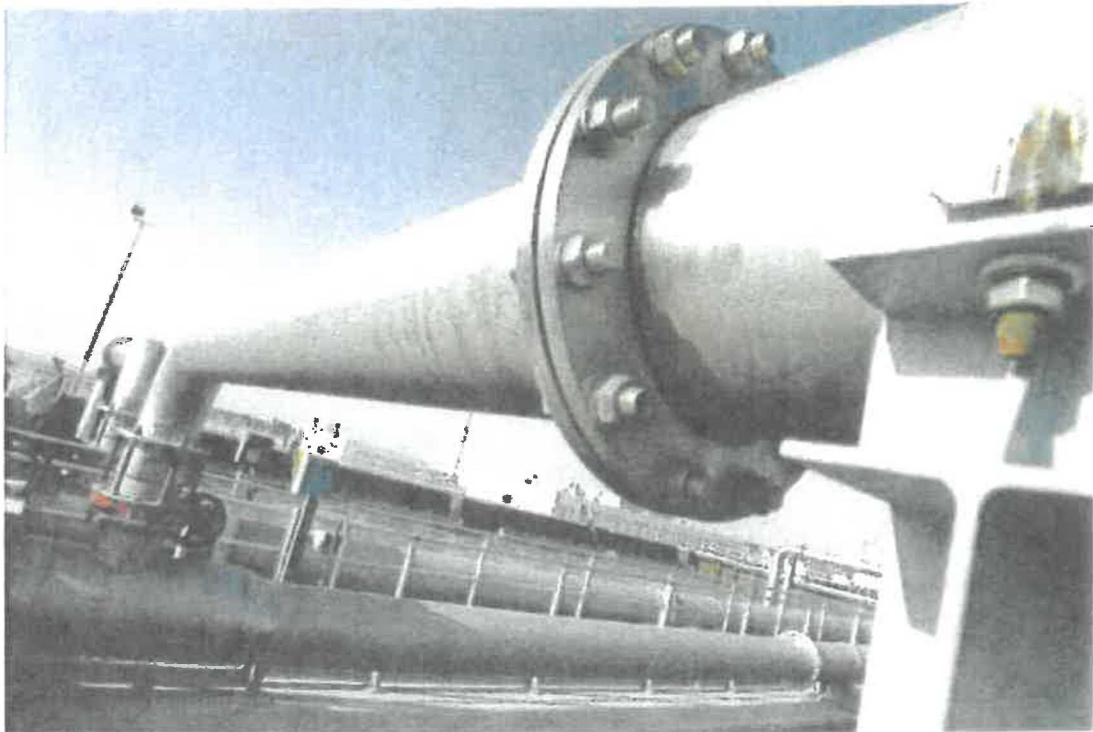


**Countryside Properties**  
**Bourn Airfield**  
**High Level Outline Water Cycle Study**

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Revised Cambourne West Trajectory - Final Report - Summary



# 1 SUMMARY

The purpose of this high level site specific Water Cycle Study is to assess any constraints to development at the Bourn Airfield site arising from either the water environment, or water supply and wastewater infrastructure capacity.

It is intended that the study identifies, and where possible quantifies, the water infrastructure/ environment risks and opportunities, tests compliance with emerging policy, identifies an indicative water/wastewater infrastructure strategy, and clarifies further work requirements and stakeholder responsibilities.

The findings of this study suggest that whilst there are restrictions on the amount of water that would be available for abstraction locally, Cambridge Water have a robust plan in place to serve their supply area until at least 2040, and this plan accounts for significant growth and uncertainties.

The water supply infrastructure required to serve the site can be readily provided, and is unlikely to be severely constrained or cost prohibitive.

Compliance with emerging water efficiency planning policy can be achieved and potentially beaten through the introduction of a suitable design standard for the site, to specify the necessary water efficient fixtures and fittings.

Wastewater treatment and the subsequent water quality impacts on the receiving waterbodies have been investigated in some detail previously by the stakeholders. An indicative strategy has been developed which would allow the first phase of the Bourn Airfield site (1,040 dwellings) to be treated at the existing Bourn Water Recycling Centre (subject to upgrades by Anglian Water, and successful permitting negotiations with the Environment Agency).

The second phase (2,338 dwellings) may be served at Papworth Everard Water Recycling Centre, along with flows from the nearby Cambourne West development (again subject to upgrades by Anglian Water, and successful permitting negotiations with the Environment Agency).

The increase in flood risk due to the increases in discharged wastewater to the Bourn Brook is unlikely to be significant – however further investigation is required by the stakeholders to confirm the extent of the impact at Papworth Everard.

The proposed Bourn Airfield development presents an ideal opportunity to reduce existing flood risk issues downstream of its catchment area by taking an innovative and sustainable approach to surface water management, which has the potential to deliver wider environmental and water quality benefits. The site has sufficient capacity to reduce existing runoff rates and flows by 60% through effective master planning and integration of Sustainable Drainage Systems.