



Thames Water Property Services



By email: airports.consultation@systra.com

2nd February 2015

Increasing the UK's long-term aviation capacity

Dear Sir/Madam,

Thank you for giving Thames Water the opportunity to comment on the detailed consideration of the three London Airport expansion schemes that have been short-listed.

Within the Airports Commission Consultation Document Question 3 on page 34 asks:

“ In your view , are there any relevant factors that have not been fully addressed by the Commission to date?”

In the following sections we look at the possible impacts the proposals will have on Thames Water's operations and assets. Some of which could result in costly and timely works which should be factored into any viability assessment of the possible options.

Gatwick Airport Second Runway

Thames Water is the statutory undertaker for wastewater treatment in the Gatwick Area. Sutton and East Surrey Water are the water service providers.

Sewage Treatment Works

The foul water flows from Gatwick Airport currently split. Some go to Crawley Sewage Treatment Works (STW) and some to Horley STW. To cater for the increased flows due to the potential additional usage of Gatwick Airport, upgrades to both STWs would be required. Details of the extent of these upgrades and the timescales would be dependent on the final proposals, the

Thames Water
Clearwater Court, 4th Floor
West, Vastern Rd, Reading,
Berks
RG1 8DB
T 0118 – 373 8093
F 0118 – 373 8009
I www.thameswater.co.uk

Registered in England and Wales
No. 2366623, Registered office
Clearwater Court, Vastern Road,
Reading, Berks, RG1 8DB

expected increase in passenger numbers and the proportion of flow that will drain to each sewage works.

Crawley STW falls within the boundary of the proposed expansion area. In order to enable the required upgrades at Crawley STW the site boundary will need to be extended. As such this needs to be factored into any expansion plans.

By working in close partnership with the developers we do not see any current reason why the necessary sewage treatment upgrades could not be provided during our Asset Management Period 7 (AMP7) which runs from 2020-2025.

Wastewater Network Infrastructure

Due to the current uncertainty of this proposal, detailed modelling of Thames Water's network capacity has not been undertaken. Once the detailed design work has been carried out, and as such more certainty can be provided we will be in a better position to undertake the necessary capacity impact studies.

With regards to the location of Thames Water's network assets, there are a number of public sewers crossing or running close to the proposed extension site. In order to protect these public sewers and to ensure that Thames Water can gain access to the sewers for future repair and maintenance details of the proposals will need to be approved. Where sewers or rising mains are to become redundant or have to be diverted the full cost of administering and undertaking the works should be funded by the Gatwick Developers.

Heathrow Airport Extension Options

Thames Water is the statutory undertaker for wastewater treatment for the Heathrow Area. Water services in the Heathrow Area are provided by Affinity Water. Thames Water do however have water resources and strategic mains within the area.

Sewage Treatment Works

The flows from Heathrow Airport currently go directly to Mogden Sewage Treatment Works (STW). The increase in foul flow produced by any significant extension to Heathrow Airport has the potential to necessitate improvements to Mogden STW. Details of the extent of these upgrades and the timescales would be dependent on the final proposals and the expected increase in passenger numbers. It should be noted that there is limited spare land at Mogden STW and therefore alternative sewage treatment may be necessary.

We would expect all surface water, from all elements of the proposed airport expansion (including peripheral rail hubs and other ancillary infrastructure) to be discharged to the environment and not the public sewer.

Wastewater Network Infrastructure

Due to the current uncertainty of this proposal, detailed modelling of our network capacity has not been undertaken. Once the detailed design work has been carried out, and as such more certainty can be provided we will be in a better position to undertake the necessary capacity impact studies.

Water resource

It is unclear at present the exact impact the proposed extension at Heathrow Airport will have on the 5 reservoirs (Queen Mother, Wraysbury, King George VI, Staines North and Staines South Reservoirs) which are in close proximity to the existing airport. Should Thames Water be required to drawdown the reservoirs for whatever reason during the construction period, or similarly if alterations are required to the reservoir infrastructure which prohibits use for significant periods, then we are likely to need to develop additional water resources to cover this temporary loss.

The proposed development area is also within the flood inundation zones of the Queen Mother, Wraysbury, King George VI, Staines North and Staines South Reservoirs. To what extent these zones will be affected will need to be modelled and the impact assessed on both the new development and any other existing infrastructure.

Specific Comments on the Heathrow Airport Extended Northern Runway

Sewage Treatment Works

Iver South Sludge Treatment Centre is located in very close proximity to the boundary of the proposed extension site and a large section of the Mogden STW to Iver sludge main runs underneath the proposed runway extension. It is unclear from the information provided what the impact will be on these assets, as such in order to fully understand the implications further detailed design information would be required.

Impact on Water Resources and Strategic Mains

From the information available to date, including the masterplan drawings available, we are concerned that the runway would be in close proximity to our trunk mains, Wraysbury and Queen Mother Reservoirs and associated water infrastructure.

In order to fully understand the impact the proposed expansion will have on the above assets, more detailed plans and modelling will be required. It may be that

water mains will need diverting and / or reservoir monitoring programmes will need to be set up during any construction period.

Specific Comments on the Heathrow Airport North West Runway

Impact on Water Resources and Strategic Mains

From the information available to date, including the masterplan drawings available, we are concerned that the runway would be in close proximity Wrybury reservoir, water mains, and associated water infrastructure.

In order to full understand the impact the proposed expansion will have on the above assets, more detailed plans and modelling will be required. It may be that the above mentioned water mains will need diverting and / or reservoir monitoring programmes will need to be set up during any construction period.

Summary

Thames Water have a number of strategic and local assets within the proposed airport runway expansion boundaries and in close proximity to such boundaries. Furthermore, our water resource and sewage treatment works may also be significantly impacted by the proposed developments.

The main potential impacts have been raised above, but significant additional modelling and assessment work will be required in liaison with the developer promoters. This includes assessing the impact upon our smaller assets whose impacts were not considered in this consultation response.

As the airport expansion options are narrowed down, refined and developed, we will work with the Commissioner and the airport developers to ensure our water and wastewater infrastructure is protected and has sufficient future capacity to cater for these significant airport infrastructure developments.

I trust the above comments are helpful.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Thames Water Property Services.