Gatwick Airport Northern Runway Project

Consultation Report Second Addendum

Book 10

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Table of Contents

Appendices

Appendix A: Briefing Session Meeting Slides
Appendix B: Briefing Session Meeting Minutes
Appendix C: GAL's Letter to the Joint Local Authorities (8 May 2024)
Appendix D: Correspondence between GAL and the JLAs' representative
Appendix E: Template copy of the Consultation Letter
Appendix F: Consultation Leaflet
Appendix G: Copies of Newspaper Notices
Appendix H: Press Releases
Appendix I: Consultation Site Notice
Appendix J: Consultation Webpage
Appendix K: Consultation Responses (redacted)

Executive Summary

A **Consultation Report** [APP-218 to APP-244] was submitted by Gatwick Airport Limited as part of an application for a development consent order under section 37 of the Planning Act 2008 for the proposed Gatwick Airport Northern Runway Project, accepted for Examination on 03 August 2023.

A **Consultation Report Addendum** [AS-142 and AS-143] was subsequently submitted to support a formal request to change the application relating to three Proposed Changes and which have subsequently been accepted into the Examination by the Examining Authority ('ExA') [PD-011].

This **Consultation Report Second Addendum** (Doc Ref. 10.48) supports a further request to change the application, as accepted, relating to the provision of an On-airport Wastewater Treatment Works facility to provide an alternative solution for wastewater, together with related works ("Project Change 4").

The Applicant carried out non-statutory consultation on Project Change 4 between 14 May and 11 June 2024. The purpose of this report is to set out the activities carried out as part of the non-statutory consultation stage, the feedback received and how the feedback has been duly considered prior to making this formal change request.

1 Consultation on the Proposed Change

1.1. Background

1.1.1 Gatwick Airport Limited ('GAL' or the 'Applicant') submitted an application for a development consent order (the 'Application') under section 37 of the Planning Act 2008 for the proposed Gatwick Airport Northern Runway Project (the 'Project' or the 'NRP'). The Application was subsequently accepted for Examination by the Planning Inspectorate (on behalf of the Secretary of State) on 03 August 2023. The ExA was appointed on 15 August 2023 [PD-004] and the Examination commenced on 27 February 2024.

1.1.2 On 8 March 2024, three changes to the application were accepted for Examination by the ExA [PD-011] following the Applicant's submission of a formal Change Request ('Change Request 1') on 13 February 2024 [AS-124 to AS-143]. The three accepted Project changes comprised:

- Project Change 1: Extension to the design parameters for the North Terminal International Departure Lounge proposed southern extension.
- Project Change 2: Reduction in height of the proposed replacement Central Area Recycling Enclosure facility and change in its purpose.
- Project Change 3: Revision to the proposed water treatment works.

1.1.3 In accepting Change Request 1, the ExA agreed with the Applicant that the proposed Project changes were non-material and could be accepted in the Examination via a Procedural Decision made within the **Rule 8 Letter** [PD-011] on 8 March 2024.

1.2. Introduction to the Second Change Application

1.2.1 The Applicant has identified a need to put forward a further request for a Proposed Change to the application ("Project Change 4") and which is the subject of this Second Change Application. The change comprises the provision of an On-airport Wastewater Treatment Works facility (the "On-airport WWTW") as a result of Thames Water Utilities Limited ('TWUL') being unable to confirm, within the timescales of this Examination, the effects of the Project on its receiving network and process infrastructure, or to confirm positively that it will be able to include any upgrades to its infrastructure at the appropriate time within the regulatory funding cycles, as modelling work on the future capacity of the local network is currently ongoing.

1.2.2 Further detail on the content and need of Project Change 4 is contained in the **Second Change Application Report** (Doc Ref. 10.47), submitted as part of the formal Second Change Application alongside this report.

1.2.3 In the process of identifying and addressing changes to the Application, the Applicant has considered the Planning Inspectorate's Advice Note Sixteen: Requests to change applications after they have been accepted for examination ("Advice Note Sixteen") (Version 3 March 2023[1]) and the Planning Act 2008: Examination stage for Nationally Significant Infrastructure Projects[2].

1.2.4 On 7 May 2024, the Applicant wrote to the ExA to notify of its intention to propose a further change to the application (the "Second Change Notification"). The Second Change Notification comprised a **Covering Letter** [AS-145] and the **Second Notification Report** [AS-146]. The **Second Notification Report** set out the Proposed Change, including the reason for the change, a preliminary environmental appraisal, a review of land rights implications and proposed updates to the Application documents that would follow if the change was made and accepted. It also put forward the Applicant's proposed consultation approach and indicative programme for the ExA's consideration.

1.2.5 The ExA set out its advice on the procedural implications of the change and the scale and nature of the proposed consultation approach in its **Procedural Decision** [AS-147] dated 13 May 2024. In its response, the ExA confirmed that *"the scope of consultation activities set out in section 5 of the Second Notification of a Proposed Project Change document provides an appropriate basis for the non-statutory consultation."*

1.2.6 The Applicant subsequently carried out non-statutory consultation on the Project Change 4 between 14 May and 11 June 2024, and following the proposed consultation approach in the **Second Notification Report** [AS-146].

1.3. Purpose of this Report

1.3.1 The purpose of this report is to describe the non-statutory consultation carried out by GAL on the Proposed Change and to demonstrate how the Applicant has had regard to the consultation feedback received.

1.3.2 This report has been prepared in accordance with Advice Note Sixteen, namely Items 6B and 7 of Figure 2b, in that it:

- confirms who has been consulted on the Proposed Change;
- explains why they have been consulted;

[1] https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-sixteen-requests-to-change-applications-after-they-have-been-accepted-for-examination
[2] https://www.gov.uk/guidance/planning-act-2008-examination-stage-for-nationally-significant-infrastructure-projects

- sets out the consultation activities that were undertaken;
- copies of all consultation responses; and
- sets out the Applicant's consideration of the content of the consultation responses received.

1.4. Report Structure

1.4.1 The remainder of this **Consultation Report Second Addendum** is structured as follows:

- **Section 2: Consultation Process** – details the consultation activities that were carried out by the Applicant before and during the non-statutory consultation stage.
- **Section 3: Responses to Consultation** – explains the consultation responses that were received.
- **Section 4: Applicant's Response to Consultation** – sets out the Applicant's response to the consultation feedback and demonstrates how the Applicant has had regard to the feedback received.
- **Section 5: Conclusion** – sets out the conclusions of this report.

2 Consultation Process

2.1. Overview of the Consultation Process

2.1.1 The Applicant carried out non-statutory consultation on the Proposed Change to ensure that all persons who may be affected by the Proposed Change were made aware of the change and had the opportunity to provide comments in advance of this Second Change Application.

2.1.2 Owing to the limited geographical nature of the Proposed Change in the context of the Project as a whole, the consultation was primarily aimed at prescribed consultees, relevant local authorities and landowners/those with an interest in the land related to the Proposed Change under sections 42(a) to (d) of the Planning Act 2008. The Applicant also consulted members of the public.

2.1.3 The consultation was carried out between 14 May and 11 June 2024, totalling a period of 28 calendar days.

2.1.4 Various consultation activities were carried out before and during the consultation period to inform stakeholders and the public on the Proposed Change, and to advertise the consultation itself. Details of the consultation activities are set out below, with copies of the relevant material provided in **Appendices A to J.**

2.2. Briefing Sessions

2.2.1 The Applicant held two briefing sessions on the Proposed Change with Parish / Town Councils on 22 May and 29 May 2024. Collectively, the sessions were attended by Salfords and Sidlow Parish Council, Horley Town Council (GATCOM Member and NATmag Member) and Charlwood Parish Council. A copy of the meeting slides are contained in **Appendix A** and a copy of the meeting minutes are contained in **Appendix B**.

2.2.2 Other Parish / Town Councils were invited to the session but either declined to attend, or did not respond to the invitation. This included Capel Parish Council, Leigh Parish Council and Newdigate Parish Council.

2.2.3 The Applicant wrote to the Joint Local Authorities ('JLAs') on 8 May 2024 to make them aware of the Proposed Change and offering a briefing session to explain the change and answer any questions that may arise. The JLAs declined the offer of a briefing session and instead chose to review details of the Proposed Change through the consultation website (detailed further below). A copy of GAL's letter to the JLAs on 8 May 2024 is contained in **Appendix C** and

a copy of the email correspondence in which the JLAs declined the offer of a briefing session is contained in **Appendix D**.

2.3. Leaflets and Letters

2.3.1 A letter and consultation leaflet was sent to local authorities, landowners/those with an interest in the land related to the Proposed Change and prescribed consultees under section 42(a) to (d) of the Planning Act 2008. **Appendix E** contains a template copy of the letter and **Appendix F** contains the consultation leaflet.

2.3.2 The consultation leaflet (**Appendix F**) was also sent directly to residents and businesses in close proximity to the land subject to the Proposed Change, outside of the Order Limits. A total of 2,615 leaflets were sent to residents and businesses.

2.4. Newspaper Notices

2.4.1 The consultation was advertised through local newspapers. Details of each newspaper notice is contained in **Table 1** and a copy of each newspaper notice is contained in **Appendix G**.

Table 1: Details on Newspaper Notices

Newspaper	Publication Dates
Crawley and Horley Observer	15 May 2024
West Sussex County Times	16 May 2024
Surrey Mirror	16 May 2024
Kent and Sussex Courier	17 May 2024

2.5. Press Releases

2.5.1 GAL also published a series of press releases on its media centre website (https://www.mediacentre.gatwickairport.com/news/) to further advertise the consultation. The press releases were published on 14 May and 4 June 2024.

2.5.2 Copies of the press releases are contained in **Appendix H**.

2.6. Site Notice

2.6.1 Five site notices were erected on 14 May 2024 to further advertise the consultation to residents and businesses in close proximity. The notices were placed on Upfield (Horley), Reigate Road (Hookwook), Horley Road (Horley), The Street (Charlwood) and Russ Hill Road (Charlwood).

2.6.2 The site notices were maintained throughout the consultation period.

2.6.3 A copy of the site notice is contained in **Appendix I**.

2.7. Gatwick Airport website

2.7.1 The consultation material was published on Gatwick Airport's Project website (gatwickairport.com/northern-runway) and provided the link to the online feedback form.

2.7.2 A copy of the consultation webpage is contained in **Appendix J**, showing the link to the feedback form.

3 Responses to Consultation

3.1. Overview of Consultation Feedback

3.1.1 Parties could respond to the consultation by:

- Completing the online consultation questionnaire on Gatwick Airport's Project website (gatwickairport.com/northern-runway);
- Emailing comments or feedback to Gatwick Airport's consultation email address (community@gatwickairport.com);
- Posting a response to Gatwick Airport (Northern Runway Project Team, Destinations Place, South Terminal, Gatwick Airport, West Sussex, RH6 0NP).

3.1.2 Overall, there were 51 responses to the consultation received during the consultation period via the following mechanisms:

- 19 responses via the online consultation questionnaire;
- 32 responses via email; and
- No responses were received via post.

3.1.3 **Appendix K** contains a copy of all consultation responses received.

3.1.4 The categories of respondents are shown in **Table 2**.

Table 2: Consultation Respondents

Type of Respondent	Number of Respondents
Members of the Public / Individuals	32
Local Authorities	3[3]
Prescribed Consultees (excluding LAs)	8
Interest Groups and other Local Organisations	8
Total	**51**

[3] The West Sussex and Surrey Authorities submitted combined consultation responses and have therefore been counted based on the number of separate submissions received. The three separate submissions received by Local Authorities are described in paragraph 3.1.5.

3.1.5 The following local authorities responded to the consultation:

- Waverley Borough Council;
- Joint Surrey Councils (comprising Surrey County Council, Tandridge District Council, Mole Valley District Council and Reigate and Banstead Borough Council);
- Joint West Sussex Authorities (comprising Crawley Borough Council (CBC), Mid Sussex District Council, Horsham District Council (HDC) and West Sussex County Council).

3.1.6 The following statutory consultees (previously consulted under section 56 (a) of the Planning Act 2008) responded to the consultation:

- Historic England;
- National Highways;
- Natural England;
- Network Rail Infrastructure Limited;
- The Coal Authority;
- Southern Gas Networks plc;
- GTC Pipelines Limited;
- Health and Safety Executive.

3.1.7 Other non-statutory consultees and interest groups also responded to the consultation:

- Communities Against Gatwick Noise Emissions (CAGNE);
- Cowden Parish Council;
- Gatwick Area Conservation Campaign (GACC);
- Gatwick Airport Consultative Committee (GATCOM);
- Horley Town Council
- Keep Southwater Green;
- Kirdford Parish Council;
- Salfords and Sidlow Parish Council.

3.2. Deadline 5 Responses

3.2.1 The Applicant is mindful that some parties made comments relating to the Proposed Change as part of their submissions to Deadline 5 (on 6th June 2024) as part of the ongoing DCO Examination, namely CBC, HDC and the Environment Agency in that:

- Both CBC and HDC made comments within their respective updated **Principal Areas of Disagreement Summary Statement** [REP5-085 and REP5-091] to note the Applicant's intention to submit a Proposed Change to enable wastewater treatment on site. No response to this comment is

considered necessary and the Applicant's response to CBC and HDC's consultation response is provided in this report.

- The **Environment Agency's Deadline 5 submission** [REP5-090] contained comments on Project Change 4 however the EA did not submit comments to the consultation process. As the EA is a statutory consultee, the Applicant considers it prudent to consider the EA's submission alongside the consultation responses and has responded to its submission within this report. As such, the EA's comments are considered further in Section 3.

4 The Applicant's Response to Consultation Feedback

4.1. Analysis of Consultation Feedback

4.1.1 The consultation invited any views on the Proposed Change and requested that respondents provided reasons for their views. Excluding one respondent, all respondents answered this question.

4.1.2 The consultation question was deliberately drafted as an 'open-ended' question, as opposed to a closed question which would only allow quantitative analysis. The open-ended question allowed respondents to provide unconstrained, detailed responses on the Proposed Change. This provided the Applicant with a deeper insight into respondent's views than would have been provided through a closed question.

4.1.3 In some instances, respondents made comments on the wider Project and ongoing examination process that are not relevant to the Proposed Change. **Table 3** sets out the number of responses made against each subject matter, namely whether a comment was made on Project Change 4 or on more generally on the Project or the examination. Where a response made a comment on the Proposed Change as well as a general comment, these are counted separately, i.e. in most cases, each respondent made more than one comment.

Table 3: Responses per Subject Matter

Subject Matter of the Response	Number of Comments
General Comments (not relating to the Project Change)	28
Project Change 4	149

4.1.4 The Applicant has reviewed and considered each consultation response received prior to the submission of this Second Change Application, described in further detail below.

4.2. GAL's Response to Consultation Feedback

4.2.1 Each response has been reviewed and fully considered by the Applicant and relevant members of the Project Team. A systematic approach was followed to analyse the responses to the consultation, through which responses were analysed at a sentence-by-sentence level.

- Each response was reviewed and assigned against the relevant subject matter (e.g. if the comment was made against the Proposed Change or more generally on the Project or ongoing examination).
- The responses were then assigned a category based on the topic and corresponding to the EIA topics, where relevant, e.g. traffic and transport, water environment, air quality, etc. and shared with the relevant topic expert and GAL topic lead.
- Topic experts and GAL leads were asked to consider each comment and provide a response and / or highlight where further work or changes to Project Change 4 are required as a result of the comment.

4.2.2 Having considered all of the consultation feedback received, no changes were identified to the Proposed Change or deemed necessary, and therefore the Second Change Application has been prepared on the basis of the change originally proposed as part of the notification process.

4.2.3 In some instances, further information was requested by respondents on the Proposed Change. This additional information was either provided during the consultation process or is contained within this report or the Change Application. For instance, at the briefing session held with Parish / Town Councils on 22 and 29 May 2024 (described in Section 2 of this report), a number of queries were raised during the meeting. The Applicant subsequently provided a summary note of the meeting and which included a response to each query (contained in **Appendix B**). Where further information has been requested, this is set out in the response tables (described below).

4.3. Response Tables

4.3.1 **Tables 4 to 6** set out the consultation feedback received and the Applicant's response to each comment or issue, organised as follows:

- **Table 4** relates to responses received by members of the public or individuals, comprising 32 responses in total.
- **Table 5** relates to responses received by local authorities, prescribed consultees and interest groups, totalling 19 responses.
- **Table 6** relates to the Environment Agency's response submitted at Deadline 5 and not to the consultation process, but which the Applicant has duly considered (as explained in **Section 3.2**).

4.3.2 To avoid repetition, the table sets out the number of times that the particular comment or issue has been raised by a respondent rather than repeating the comment/issue.

Table 4: Responses received by members of the public or individuals

Summary of Comment / Issue	No. of times comment / issue has been raised	The Applicant's response
General comments		
Comment expressing concerns or objections to the Project on matters not related to Project Change 4.	18	The purpose of the consultation was to seek views on the Proposed Change to inform this Second Change Application. Comments not relating to the Proposed Change are therefore outside the remit of this consultation. Notwithstanding this, the Applicant has reviewed and continues to review all representations submitted to the ongoing Examination and has duly responded. None of the matters raised in the consultation feedback (outside the scope of the Proposed Change) have not been responded to previously by the Applicant.

Comment raised no objection to the Project, on matters not related to the Proposed Change.	1	Noted.
Comment supporting the Project, on matters not related to the Proposed Change.	6	Noted.
No comment made on the Project or the Proposed Change.	2	No response required.
Comments related to Project Change 4		
Comment querying what wastewater includes.	1	The flows that will be treated by the On-airport WWTW would constitute predominantly domestic wastewater, being flows from airport visitors/passengers using the facilities in the terminals, flows from airport workers (including in offices and ancillary buildings), emptying of aircraft toilet tanks via the sanitation block, guest and worker flows from hotels, discharges from fast food restaurants and discharges from toilet blocks in the railway station and fuel service stations. The On-airport WWTW would also treat a small quantity of non-domestic type flows (trade effluent flows), such as discharges from aircraft washing, hire car washing, waste

		disposal processes from the Central Area Recycling Enclosure facility (e.g. bin/bottle washing), PFAS-free fire fighting foam from the Fire Training Ground and residual discharges from the terminals' air conditioning systems. The non-domestic type discharges (trade effluent) are estimated to amount to less than 5% of the total wastewater discharged from the airport site on a dry day into the On-airport WWTW.
Comment supporting the WWTW facility.	10	Noted. The Applicant welcomes support for the Proposed Change.
Comment raising no concerns in principle, but objecting to the location which will be counterproductive to future airport development.	1	The location of the proposed On-airport WWTW has been chosen after careful consideration by GAL in consultation with its technical specialists. The Applicant does not consider that this location would preclude future growth plans as outlined in the Gatwick 2019 Masterplan, nor would be it fundamentally alter the scope of the Northern Runway Project. During public consultation on Project Change 4, GAL sought comments and feedback from local authorities, statutory consultees and interested parties on the Proposed Change. GAL has taken these comments into consideration prior to the submission of this Second Change Application, as demonstrated by this report.

Comment querying if the project is dependent on the DCO being granted, or if it would be implemented in the absence of the DCO.	1	If this Second Change Application is accepted, the On-airport WWTW would comprise part of the DCO Application, and therefore construction and operation of the facility is dependent on whether or not the DCO is made by the Secretary of State, and indeed whether or not the Secretary of State is minded to include provision for the Applicant to construct and operate the On-airport WWTW. Therefore, in the absence of the DCO, the Applicant would not have the powers to construct the On-airport WWTW. The potential need for the On-airport WWTW has arisen as a result of the increased passenger throughput and operational capacity that would arise as a result of the Project. The Applicant is awaiting Thames Water Utilities Limited ('TWUL') completing modelling to assess the Project's impact on its own infrastructure, taking account of wider projected growth in the local area on its sewage treatment works and networks. TWUL has requested a DCO Requirement to restrict airport growth under the Project until any necessary (but currently unknown) works have been implemented (in **TWUL's Relevant Representation** [RR-4518] and **Written Representations** [REP1-103]). TWUL has confirmed that it will not have completed its modelling until after the DCO examination has ended. It is in this context of uncertainty, which will not be resolved until after the examination has closed, that the Applicant is putting forward this change

		as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO that precluded airport growth arising from the Project being implemented (and wastewater flows discharged) until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. The bespoke on-airport facility would obviate the need for such a DCO Requirement, as all additional flows generated by the Project (and indeed all airport flows more generally) would instead be serviced by the proposed facility. **Section 2.3** of the **Second Change Application Report** (Doc Ref. 10.47) explains the background to, and the need for, the Proposed Change, in greater detail.
Comment querying if the facility could serve the wider community as well.	1	The On-airport WWTW, if it forms part of the final consented Project, would only serve the flows from the airport (including additional flows generated by the Project). TWUL remains the statutory undertaker for the area and therefore has a statutory obligation to supply water and treat wastewater to the area.

Comment query the quantity of wastewater that would require disposal.	1	GAL has developed a hydraulic model of the airport's existing wastewater drainage system, calibrated against the results of a flow survey. Scaling this up to take account of the increased passenger numbers and other changes attributable to the Project has generated an estimate of the daily discharge volumes in the 2047 design year for a 'busy day' in terms of passenger numbers. These are 3,538m^3/day in dry weather and 10,168m^3/day in wet weather. The sizing of the capacity of the proposed On-airport WWTW has adopted a conservative worst-case scenario including a 20% rainfall uplift to allow for the impacts of climate change. The worst-case assumes that the peak storm response generated by a 3.33% (1 in 30) Annual Exceedance Probability (AEP) event including a 20% rainfall uplift to allow for the impacts of climate change is constant over a 24-hour period and coincides with a 'busy day' in terms of passenger numbers. The 3.33% (1 in 30) AEP event has been used to generate the peak storm response as this is the event that the drainage system conveying flow to the new works would be designed for as an industry standard. Higher flows will exceed the capacity of the WWTW system and will be retained elsewhere on the airport, draining down back to the wastewater network after the storm peak has passed.

Comment querying where wastewater would be discharged to.	1	The treated wastewater would be discharged to the River Mole via a new outfall on the north-western side of the proposed WWTW facility.
Comment query the additional quantity of water into the River Mole, including treated and untreated wastewater, and on an annual basis.	9	To date the concept design for the proposed On-airport WWTW has been based on the anticipated peak 'busy day' discharges from the airport in both dry and wet weather (3,538m^3/day and 10,168m^3/day respectively) in the 2047 design year including an allowance for climate change. All the airport's wastewater received into the WWTW facility would ultimately be discharged into the River Mole following treatment. Annual flows have not been estimated to date but will be derived during the next stages of design, with the wet day discharges refined based on additional flow survey and review of 'typical year' rainfall patterns.
Comment query if the DCO is granted what increase in wastewater is anticipated.	2	Based on hydraulic modelling undertaken by GAL, wastewater flows from the airport have been estimated to increase from 2,509m^3/day (2018 baseline year used to represent the existing situation) to 3,538m^3/day (2047 with-Project) in dry weather on a 'busy day' in terms of passenger numbers. This represents a 41% increase. On a worst-case, wet day flows from the airport site have been estimated to increase from 8,642m^3/day (2018 baseline year used to represent the existing situation)

<table>
<tr><td></td><td></td><td>to 9,063m^3/day (2047 with-Project, but without an allowance for climate change). This represents a 5% increase, lower than for dry weather due to proposed system upgrades that will reduce the amount of surface water conveyed by the wastewater system.

If a 20% uplift to allow for climate change is included, the worst-case wet day flows from the airport site have been estimated to increase to 10,168m^3/day by 2047. This is an 18% increase over the 2018 figure which would not include the impact of climate change.</td></tr>
<tr><td>Comment querying the water quality to be discharged into the River Mole.</td><td>4</td><td>GAL is currently liaising with the Environment Agency to understand their requirements for the quality of the discharged water. The design has been based on the following criteria:

<table><tr><th>Parameter</th><th>Unit</th><th>Value</th><th>Discharge condition</th></tr><tr><td>BOD</td><td>mg/L</td><td>5</td><td>95%ile</td></tr><tr><td>NH3-N</td><td>mg/L</td><td>1</td><td>95%ile</td></tr><tr><td>Orthophosphate</td><td>mg/L</td><td>0.5</td><td>Annual Average</td></tr></table></td></tr>
<tr><td>Comment query which Agency would regulate the quality of wastewater processing and how</td><td>1</td><td>A permit for the operation of the proposed On-airport WWTW would be required under the Environmental Permitting (England and Wales) Regulations 2016. The permit would include the requirements of all other legislation (e.g. Habitats Regulations, Urban Waste Water Treatment Regulations, Water Framework Directive etc). The permit would set</td></tr>
</table>

the regulatory process would operate.		chemical and biological requirements of the discharged effluent to the River Mole to ensure no deterioration in its water quality.
Comment querying if GAL would consider developing its redundant incinerator/generator unit to power the WWTW plant.	1	The existing Central Area Recycling Centre (CARE) facility will be demolished and relocated (as part of the Project), and the ground upon which it sits will be redeveloped to provide new remote aircraft parking stands. The proposed On-airport WWTW has not progressed to detailed design, however, it is likely to be supplied from the main airport power grid.
Comment querying the volume of wastewater predicted from the airport into the WWTW facility (including on a yearly basis).	9	GAL has developed a hydraulic model of the airport's wastewater drainage system, calibrated against the results of a flow survey. Scaling this up to take account of the increased passenger numbers and other changes attributable to the Project has generated an estimate of the daily discharge volumes in the 2047 design year for a 'busy day' in terms of passenger numbers. These are 3,538m^3/day in dry weather and 10,168m^3/day in wet weather, including the predicted impacts of climate change. The sizing of the capacity of the new works has adopted a conservative worst-case scenario including a 20% rainfall uplift to allow for the impacts of climate change. For comparison, the corresponding figures used to represent the existing situation (based on the 2018 baseline year and without climate change) are 2,509m^3/day and

		8,642m^3/day respectively. These discharge volumes are currently split between Horley and Crawley Sewage Treatment Works. The worst-case assumes that the peak storm response generated by a 3.33% (1 in 30) Annual Exceedance Probability (AEP) event including a 20% rainfall uplift to allow for the impacts of climate change is constant over a 24-hour period and coincides with a 'busy day' in terms of passenger numbers. The 3.33% (1 in 30) AEP event has been used to generate the peak storm response as this is the event that the drainage system conveying flow to the new works would be designed for as an industry standard. Higher flows will exceed the capacity of the WWTW system and will be retained elsewhere on the airport, draining down back to the wastewater network after the storm peak has passed. Annual volumes have not been estimated to date, but will be derived during the next stages of design, with the wet day discharges refined based on additional flow survey and review of 'typical year' rainfall patterns.
Comment querying how the Proposed Change will affect the growing amount of water the	7	The wastewater from the airport currently drains to the River Mole via TWUL's network and treatment plants. Gatwick Airport's wastewater

River Thames barrier is having to contend with along with sewage.		would still be discharged to the River Mole but via the proposed On-airport WWTW. The Project will not affect the operation of the Thames Barrier. The Project would result in a very small increase in wastewater flows to the River Mole, however in terms of flood risk this is considered to be negligible.
Comment expressing concern that the wastewater would still be sent to Thames Water's facility.	1	The intention is that the proposed On-airport WWTW would receive, treat and discharge all the wastewater flows from the airport. No wastewater flows would be sent to TWUL's network.
Comment querying how the airport proposes to deal with wastewater.	1	Under Project Change 4 being the subject of this Second Change Application, GAL proposes to treat all of the airport's wastewater at the proposed On-airport WWTW. The capacity of the proposed On-airport WWTW has been sized to cope all the wastewater flows from Gatwick Airport, not solely the additional flows from the Project to at least the 2047 design horizon of the Project.
Comment querying what measures would be put in place	2	A permit for the operation of the On-airport WWTW would be required under the Environmental Permitting (England and Wales) Regulations 2016. The permit would include the requirements of all other legislation

to ensure the water quality of the River Mole does not deteriorate.		(e.g. Habitats Regulations, Unban Waste Water Treatment Regulations, Water Framework Directive etc). The permit would set chemical and biological requirements of the discharged effluent to the River Mole to ensure to deterioration in its water quality.
Comment querying what measures will be put in place to ensure that there is no impact on current levels of flood risk.	2	The construction of the outfall to the River Mole from the proposed On-airport WWTW would be subject to a Flood Risk Activity Permit (FRAP) to the Environment Agency, which would assess the flood risk implications of the additional flow. However the modelled discharge from the WWTW during a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change would be approximately 0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the new WWTW would be 0.3% and is not considered significant. The flow that would be discharged from the new WWTW facility currently drain to TWUL's Horley and Crawley Sewage Treatment Works, i.e. the flows drain to the River Mole under the existing circumstances.
Comment querying how the WWTW facility will cope with	2	The modelled discharge from the works during a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20%

rising levels of rainfall and increasing frequency of extreme rain.		uplift allowance for the impacts of climate change would be approximately 0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the proposed WWTW facility would be 0.3% and is not considered significant. The design of the On-airport WWTW includes an allowance for the predicted impact of climate change of +20%. Additionally, the Project would remove areas of impermeable area that contribute rainfall to the existing wastewater network. This would reduce the amount of rainfall entering the WWTW compared to the existing wastewater network, providing a further buffer against climate change impacts on rainfall.
Comment raising concerns over the limited information provided on the WWTW facility.	1	The design of the proposed On-airport WWTW has been developed to a level of detail commensurate to the rest of the DCO application. The works would be subject to further design development during the detailed design stage post-DCO consent. Construction and operation of the WWTW facility would be subject to environmental permits that would be assessed by the Environment Agency. The concept design has been based on 'busy day' passenger numbers predicted for the 2047 design year generating in a daily wastewater

		discharge in dry weather of 3,538m^3. For wet weather, a worst-case discharge volume of 10,168m^3/day has been used. This represents the volume generated by a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change. The 3.33% Annual Exceedance Probability event is a standard parameter used for the design of wastewater conveyance systems and therefore the flow generated by this event represents the maximum flow expected to be conveyed to the proposed WWTW facility. The volume generated is a conservative worst case as the flow would not be expected to remain at peak values for a full 24-hour period, but this has been assumed for the concept design. The worst-case assumes that the peak storm response generated by a 3.33%% (1 in 30) Annual Exceedance Probability (AEP) event including a 20% rainfall uplift to allow for the impacts of climate change is constant over a 24-hour period and coincides with a 'busy day' in terms of passenger numbers. The 3.33% (1 in 30) AEP event has been used to generate the peak storm response as this is the event that the drainage system conveying flow to the new works would be designed for as an industry standard. Higher flows will exceed the capacity of the system and

		will be retained elsewhere on the airport, draining down back to the wastewater network after the storm peak has passed.
Comment querying what happens in the event of a technical failure at the WWTW and if untreated waste would get discharged.	1	GAL maintains safety and operationally critical equipment as part of its role as Aerodrome Operator and has extensive experience in doing so. An appropriate operational and maintenance regime will be established to ensure that the risk of failure is remote. Procedures will include failsafes to prevent untreated wastewater being discharged to the river. The response procedures in such a scenario would be developed during the detailed design process post-DCO consent and would be recorded in the WWTW's operation and maintenance manual. GAL already has contracts and procedures in operation for emergency response should tankering of fluids offsite for treatment and disposal be required. For note also, the surface water and foul drainage systems at Gatwick Airport are separate and the proposed facility does not include for a combined sewer overflow (CSO) which is the source of many pollution incidents from WWTWs in the UK. Construction and operation of the WWTW would be subject to an environmental permit issued by the Environment Agency under the EPR, and any other legislation or guidance that supersedes it. GAL has

		assumed that design and operations follow UK water industry best practice as per recent permits issued by the EA. Conditions would be set in the consent to ensure that the risk of untreated discharges is low.
Comment querying if the discharge point(s) are capable of dealing with the additional flow.	1	A new outfall would be constructed from the new WTWW facility to the River Mole. This outfall will solely discharge flows from the works. The outfall would be subject to detailed design post-DCO consent and would be sized to convey the flows anticipated from the Project together with existing flows. The modelled discharge from the works during a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the predicted impacts of climate change would be approximately 0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the proposed WWTW facility would be 0.3% and is not considered significant. A new discharge consent would be required from the Environment Agency for the outfall, who GAL has commenced liaison with on this matter. The flood risk implications of the flow would be considered in

		detail when the application is made as part of the detailed design process post-DCO consent.
Comment concerned by odour levels during hot weather.	1	As set out in Section 3.1 of the **Second Change Application Report** (Doc Ref. 10.47), the design of Project Change 4 assumes that all open processes are covered for odour protection, providing suitable mitigation against the potential effects of odour on human receptors. In terms of hot weather, systems within the WWTW facility that require odour and noise control will be included through site-specific Design Principles, which will be submitted to the Examination if the Proposed Change is accepted by the ExA, and which are secured under the **Draft DCO** (Doc Ref. 2.1).

Table 5: Responses received by local authorities, prescribed consultees and interest groups

Summary of Comment / Issue	No. of times comment/ issue has been raised	The Applicant's response
General Comments		

Comment expressing concerns for the Project not related to Project Change 4.	1	The purpose of the consultation was to seek views on the Proposed Change to inform this Second Change Application. Comments not relating to the Proposed Change are therefore outside the remit of this consultation. Notwithstanding this, the Applicant has reviewed and continues to review all representations submitted to the ongoing Examination and has duly responded. None of the matters raised in the consultation feedback (outside the scope of the Proposed Change) have not been responded to previously by the Applicant.
Comments related to Project Change 4		
No comment to make as no issues or concerns.	3	Noted.
No comment to make.	6	No response required.
Comment confirming no in principle objection to the change.	3	Noted.
Comment expressing support for the change in principle.	2	Noted. The Applicant welcomes support for the Proposed Change.

Comment on the lack of a description of works other than the WWTW facility under Project Change 4.	1	The scope of Project Change 4 is centred on the provision of the On-airport WWTW, with other elements of the Proposed Change being required as a result of this proposed facility. **Section 2.2** of the accompanying **Second Change Application Report** (Doc Ref. 10.47) provides a detailed description of all elements forming Project Change 4.
Comment querying the quantity of water into the River Mole.	3	The modelled discharge from the works during a 3.33% (1 in 30) Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change would be approximately 0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the proposed WWTW facility would be 0.3% and is not considered significant. The permitting of the proposed facility would consider the flood risk implications of the additional flow to the River Mole.
Comment querying how the Proposed Change will affect the growing amount of water the	1	The Project, nor the proposed WWTW facility, would not affect the operation of the Thames Barrier. The Project would result in a very small increase in

River Thames barrier is having to contend with along with sewage.		wastewater flow to the River Mole, however in terms of flood risk this is considered to be negligible. The permitting of the proposed facility would consider the flood risk implications of the additional flow to the River Mole.
Comment querying how GAL would manage storm overflows of sewage into the rivers and waterways (when water companies are struggling with this).	1	The proposed WWTW facility is to be designed to 'treat all flows', that is all the wastewater flows emanating from the airport site, including surface water flows conveyed by the wastewater system. Upgrades to the airport's drainage systems are proposed to reduce the amount of rainfall-induced flows in the wastewater system and to separate areas of direct surface water drainage so that this is drained to the surface water system and is not contaminated. However, there will always be some response to rainfall. The worst-case design flows for wet weather will go some way in ensuring that the proposed WWTW will have the capability to treat all the incoming flows even in extreme events. In such events, it is likely that the conveyance system (pipework on the airport site) will be overwhelmed and that exceedance flows will cause flooding within the site and not be conveyed to the WWTW facility until this drains down and enters the system after the event peak. However, the impact of exceedance events will be assessed as part of the detailed design of the

		WWTW facility and appropriate measures such as storage incorporated in the design if considered necessary.
Comment stated it is unclear on the Applicant's preferred choice for wastewater treatment, or if this would be an interim solution until Thames Water has capacity.	1	The On-airport WWTW is being put forward as an 'alternative' option in the DCO and is dependent on whether or not the DCO is made by the Secretary of State, and indeed whether or not the Secretary of State is minded to include provision for the Applicant to construct and operate the proposed WWTW. The Applicant is putting forward this change as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO that precluded airport growth arising from the Project being implemented (and wastewater flows discharged) until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. The bespoke on-airport facility would obviate the need for such a DCO Requirement, as all additional flows generated by the Project (and indeed all airport flows more generally) would instead be serviced by the proposed facility. It would be a permanent (and not an interim) solution to manage wastewater flows at the airport.

		Further detail on the context, and need for, the Proposed Change is explained in detail in **Section 2.3** of the **Second Change Application Report** (Doc Ref. 10.47).
Comment stating that the Applicant should not be able to resile from providing the facility as the ExA has been unable to assess the capacity of TW's infrastructure.	1	Despite the Applicant being in discussions with TWUL regarding the Project since 2019, TWUL has confirmed that it will be unable to complete modelling works to assess the Project's impact on its own infrastructure, taking account of wider projected growth in the local area on its sewage treatment works and networks. TWUL has requested a DCO requirement to restrict airport growth under the Project until any necessary (but currently unknown) works have been implemented to its own local network (in **TWUL's Relevant Representation** [RR-4518] and **Written Representations** [REP1-103]). Further detail regarding the historic and ongoing discussions between TWUL and the Applicant is set out in **Section 2.3** of the **Second Change Application Report** (Doc Ref. 10.47) and row 2.22.5.2 of Table 2.22 of the **Statement of Common Ground between Gatwick Airport Limited and Thames Water** [REP5-064]. TWUL has confirmed that it will not have completed its modelling until after the DCO examination has ended, meaning the ExA will not be able to consider its outcomes. It is in this context of ongoing uncertainty and

		incomplete modelling, and TWUL's request for a DCO Requirement, that the Applicant is making this Second Change Application. The Applicant's position is that it would not be appropriate to include the DCO Requirement which TWUL has requested as it is not considered appropriate or proportionate to make the delivery of the Project conditional on the delivery of third party infrastructure which TWUL has a statutory responsibility to deliver. However, in order to mitigate against this potential consenting risk to the Project, the Applicant is putting forward this Second Change Application as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO that precluded airport growth arising from the Project being implemented (and wastewater flows discharged) until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. The bespoke on-airport facility would obviate the need for such a requirement, as all additional flows generated by the Project (and indeed all airport flows more generally) would now be serviced by this facility. This would mean there would be no adverse impact on the TWUL local network and facilities, and indeed there would be a beneficial impact as current (and future) airport flows would not enter TWUL's network.

		It should also be noted that including this provision within the Draft DCO would not preclude GAL and TWUL reaching an alternative solution for the delivery of any network or processing capacity increases if these are identified to be required in the future.
Comment stating that the DCO cannot be granted without either a strict phasing requirement or an on-site wastewater facility.	1	As stated above, the Applicant's position is that it is not appropriate or proportionate to make the delivery of the Project conditional on the delivery of third party infrastructure which TWUL have a statutory responsibility to deliver. However, in order to mitigate against this potential consenting risk to the Project, the Applicant is putting forward this Second Change Application as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. **Section 2.5** of the **Second Change Application Report** (Doc Ref. 10.47) sets out the detail of the Applicant's proposed drafting changes to the **Draft DCO** (Doc Ref. 2.1) to facilitate this change. In particular, new Requirement 31(3) has also been added which provides that the On-airport WWTW must be constructed and that application(s) for the environmental permit(s) which are necessary to facilitate the operation of the facility must have been made

		prior to the commencement of dual runway operations at the airport, unless otherwise agreed with TWUL.
Comment querying if the facility would treat wastewater from the two terminals or additional buildings within the NRP.	1	The proposed On-airport WWTW would receive, treat and discharge all the wastewater flows from the airport.
Comment requesting further detail to explain how the loss car parking spaces (1,162 spaces) could be accommodated in long stay car parks.	1	The spaces lost from the existing Self Park North car park (shown on **ES Figure 4.2.1b** [REP1-019]) on both a temporary (250 spaces) and permanent (1,162 spaces) basis would be accommodated within the decked area of the North Terminal Long Stay car park (under Work No. 32). The greater number of parking spaces can be accommodated by increasing the approximate dimensions for this decked area from 350m x 225m and a height of 11m above ground level. The larger decked area, of 350m x 325m and up to 11m in height, can be accommodated within the existing area of Work No. 32 as shown on the **Works Plans** (Doc Ref. 4.5) and the maximum heights shown on the **Parameter Plans** (Doc Ref. 4.7) and which informed the EIA. This is due to the existing area of Work No. 32, as submitted, being larger than the

		approximate decked area of 350m x 225m described in **ES Chapter 5: Project Description** (Doc Ref. 5.1). The initial phase of decking would accommodate the 250 spaces temporarily lost to the construction compounds required for the construction of the On-airport WWTW prior to the decking being used for the anticipated airport growth. Further detail on the car parking changes is provided in **Section 2.2** of the **Second Change Application Report** (Doc Ref. 10.47) and reflected in **ES Chapter 5: Project Description** (Doc Ref. 5.1) submitted as part of the Second Change Application.
Comment stating that the material has not considered the proximity to Pond M, the kennels or the biodiversity areas.	1	Pond M, the kennels and the biodiversity areas are located outside of the proposed WWTW construction area and, as such there would be no direct effects on these areas. All areas around the construction sites will be protected from indirect effects (such as dust etc.) through existing mitigation measures proposed as part of **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007].
Comment requesting information on the impact of high ground	1	Groundwater levels would be taken into full account during the detailed design stage of the proposed On-airport WWTW post-DCO consent. To date, groundwater levels have not significantly impacted the design approach for

water levels on the proposed facility.		the proposed WWTW. It is not unusual for a WWTW facility to have to contend with relatively high groundwater levels due to their proximity to watercourses.
Comment stating that TW has not agreed that “cake” can be transported to their treatment plans.	1	Discussions with potential waste receptors for the ‘cake’ produced by the WWTW facility would be undertaken through subsequent design stages, such as TWUL’s Crawley STW or Southern Water’s Goddards Green STW.
Comment requesting detail on how nitrate reduction through discharge into the River Mole would be achieved. The facility should include anoxic and aerobic or anoxic, anerobic and aerobic secondary treatment.	1	The primary effluent flows to the aeration basins. There are two circular aeration basins, each with a secondary clarifier in the middle. Each circular aeration basin is divided in to two basins, effectively for a total of four aeration basin and two final clarifiers. The physical elements of the On-airport WWTW are shown on the indicative layout in Figure 2 of the **Second Change Application Report** (Doc Ref. 10.47). The proposed aeration basin configuration is a three stage Anaerobic-Anoxic-Aerobic (A2O) to provide biological nitrogen and phosphorous removal.
Comment querying the quantity of wastewater that the facility would	1	GAL has developed a hydraulic model of the airport’s existing wastewater drainage system, calibrated against the results of a flow survey. Scaling this up to take account of the increased passenger numbers and other changes

treat and the flows it would discharge.		attributable to the Project has generated an estimate of the daily discharge volumes in the 2047 design year for a 'busy day' in terms of passenger numbers. These are 3,538m^3/day in dry weather and 10,168m^3/day in wet weather. The sizing of the capacity of the new works has adopted a conservative worst-case scenario including a 20% rainfall uplift to allow for the impacts of climate change. For comparison, the corresponding figures used to represent the existing situation (based on the 2018 baseline year) are 2,509m^3/day and 8,642m^3/day respectively. These discharge volumes are currently split between Horley and Crawley STW. The worst-case assumes that the peak storm response generated by a 3.33% (1 in 30) Annual Exceedance Probability (AEP) event including a 20% rainfall uplift to allow for the impacts of climate change is constant over a 24-hour period and coincides with a 'busy day' in terms of passenger numbers. The 3.33% (1 in 30) AEP event has been used to generate the peak storm response as this is the event that the drainage system conveying flow to the proposed WWTW would be designed for as an industry standard. Higher flows will exceed the capacity of the system and will be retained elsewhere on the airport, draining down back to the wastewater network after the storm peak has passed.

Comment stating that the change is likely to have new material environmental effects which should be assessed through an ES Addendum.	1	An environmental assessment of the Proposed Change has been undertaken and is reported in **Section 3** of the **Second Change Application Report** (Doc Ref. 10.47). There would be no new significant effects or materially different significant effects compared to those reported in the ES.
Comment stating that impact on the quality of the River Mole needs to be assessed, which could be significant depending on the flow and dilution capacity of the river. The potential for sewage overflow in the event of heavy rainfall and surges needs to be assessed.	1	The proposed WWTW facility has been sized to treat all flows without any need for sewage overflow. The planned works will also reduce the amount of surface water ingress into the Gatwick Airport wastewater network.
Comment stating that the impact on nearby sensitive receptors, such as biodiversity areas, needs to be considered.	1	An environmental assessment of the Proposed Change has been undertaken and is reported in Section 3 of the **Second Change Application Report** (Doc Ref. 10.47). This contains an assessment of the potential for effects on ecology receptors that could be impacted by the development of Project Change 4. This includes the River Mole, which is part of the North West Zone Biodiversity Area. The conclusion of this assessment is that there would be no

		new or materially different significant effects as a result of Project Change 4 on ecology receptors, including the River Mole.
Comment on the lack of operational information, including lorry movements, light, noise and odour pollution.	1	An environmental assessment of the Proposed Change has been undertaken and is reported in **Section 3** of the **Second Change Application Report** (Doc Ref. 10.47). This contains an assessment of the potential ground noise, associated transport movements and odour levels arising from the operation of the WWTW facility. These assessments provide further detail on the anticipated noise sources, traffic levels and operational odour emissions to inform the assessments, drawn from the detailed design of the WWTW facility in **Section 2** of the report.
Comment stating that appropriate independent monitoring of all discharges in the River Mole and its tributaries is required.	3	GAL proposes its own discharge and river monitoring. Any independent monitoring would be a requirement of the environmental permit issued by the Environment Agency, which will be applied for in due course.
Comment that the River Mole water quality should reach 'Good' status by 2027 as reflected in the UK Water Framework Directive.	1	A permit for the operation of the proposed WWTW facility would be required under the Environmental Permitting Act by the Environment Agency. The permit would include the requirements of all other legislation (e.g. Habitats Regulations, Unban Wastewater treatment Directive, Water Framework Directive Regulations etc). The permit would set chemical and biological

		requirements of the discharged effluent to the River Mole to ensure no deterioration in its water quality and that the WWTW facility would not prevent the River Mole achieving 'Good' status by 2027. The design for the WWTW facility assumes that these would be more stringent than currently applied to the existing TWUL's Crawley STW, that currently receives wastewater from Gatwick Airport.
Comment stating that the increase in volume of GAL's overall discharges must be able to be reasonably accommodated, and adequate storage is required to accommodate surges in water levels.	1	For wet weather cases, the concept design of the proposed WWTW facility has been based on the volume generated by a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change for a 'busy day' in terms of passenger numbers in the 2047 with-Project scenario. This is to cater for the increase in volume of the airport's overall discharges. At the detailed design stage, the impacts of the water levels in the receiving watercourse on the outfall will be considered and the invert level of the outfall set at an appropriate level. At this stage, it is considered that there is an adequate difference in levels between the proposed WWTW site and the discharge point for surges in water levels not to present an issue that cannot be overcome by design.

Comment stating that the facility should become an essential and integral part of the DCO should it be approved; and must be completed and operational before the NRP is operation.	2	As stated above, the Applicant's position is that it is not appropriate or proportionate to make the delivery of the Project conditional on the delivery of third party infrastructure which TWUL have a statutory responsibility to deliver. However, in order to mitigate against this potential consenting risk to the Project, the Applicant is putting forward this Second Change Application as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. **Section 2.5** of the **Second Change Application Report** (Doc Ref. 10.47) sets out the detail of the Applicant's proposed drafting changes to the **Draft DCO** (Doc Ref. 2.1) to facilitate this change. In particular, new Requirement 31(3) has also been added to provide that the On-airport WWTW must be constructed and that application(s) for the environmental permit(s) which are necessary to facilitate the operation of the On-airport WWTW must have been made prior to the commencement of dual runway operations at the airport, unless otherwise agreed with TWUL.
Comment querying the quality of water to be discharged into the	1	A permit for the operation of the proposed WWTW facility would be issued under the Environmental Permitting (England and Wales) Regulations 2016

River Mole and the regularity of discharges.		by the Environment Agency. The permit would include the requirements of all other legislation (e.g. Habitats Regulations, Unban Waste Water Treatment Regulations, Water Framework Directive etc). The permit would set chemical and biological requirements of the discharged effluent to the River Mole to ensure no deterioration in its water quality.
Comment how the regulatory process would operate to ensure only 'clean' water is discharged in waterways.	1	A permit for the operation of the On-airport WWTW would be issued under the Environmental Permitting (England and Wales) Regulations 2016 by the Environment Agency. The permit would include the requirements of all other legislation (e.g. Habitats Regulations, Unban Waste Water Treatment Regulations, Water Framework Directive etc). The permit would set chemical and biological requirements of the discharged effluent to the River Mole to ensure no deterioration in its water quality.
Comment querying what storage capacity will be provided to hold water during heavy rainfall.	1	The proposed WWTW facility is to be designed to 'treat all flows', that is, all the flows conveyed by the airport's wastewater drainage system even during heavy rainfall. Hydraulic modelling has generated an estimate of the daily discharge generated by a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change of 10,168m^3/day. This is considered to be the theoretical maximum daily volume that could reach the facility as the upstream pipework would not

		have capacity to convey additional flows. This will however be assessed further at the detailed design stage post-DCO consent. The current concept design does not include for storage on the WWTW facility as the design is based on the throughput generated by the above daily volume. This is reasonable for a wastewater system that predominantly conveys foul flows. Rainfall-induced flows are mainly associated with infiltration from the ground into the system and therefore do not cause a peaky response to the same degree as does directly connected surface water run-off. There are some areas where surface water drainage is directly connected to the wastewater system, but upgrades to the drainage systems are proposed as part of the wider Project to reduce at least some of these. The need for storm storage on the site of the proposed treatment works will be reviewed at the detailed design stage.
Comment querying the capacity of watercourses to accept additional flows.	1	The construction of the outfall to the River Mole from the On-airport WWTW would be subject to a Flood Risk Activity Permit (FRAP) from the Environment Agency, which would assess the flood risk implications of the additional flow. However the modelled discharge from the WWTW during a 3.33% Annual Exceedance Probability (1 in 30-year return period) event with a 20% uplift allowance for the impacts of climate change would be approximately

		0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the new STW would constitute 0.3%, which is not considered significant.
Comment stating that an odour appraisal that considers the full source, pathway and receptor chain would have been expected.	1	As set out in **Section 2** of the **Second Change Application Report** (Doc Ref. 10.47), the design of Project Change 4 assumes that all open processes are covered for odour protection, providing suitable mitigation against the potential effects of odour on human receptors. To provide additional assurance with respect to odour, Project Change 4 will be a permitted activity, whereby the Environment Agency will require a review of odour and design to confirm there would be no significant effects prior to the commencement of works.
Comment that there should be commitment to model odour dispersion from the bio tower.	1	As set out in **Section 2** of the **Second Change Application Report** (Doc Ref. 10.47), the design of Project Change 4 assumes that all open processes are covered for odour protection, providing suitable mitigation against the potential effects of odour on human receptors. To provide additional assurance with respect to odour, Project Change 4 will be a permitted activity, whereby the Environment Agency will require a review of odour and design to

		confirm there would be no significant effects prior to the commencement of works.
Comment that suitable noise assessments need to be carried out to determine appropriate operational plant noise design targets, in accordance with BS4142.	1	Noise modelling and assessment is reported in **Appendix C** of the **Second Change Application Report** (Doc Ref. 10.47) giving the predicted noise levels from the plant assessed in accordance with BS4242.
Comment that a noise assessment of both construction and operation of the WWTW is required.	1	The noise assessment is reported in **Appendix C** of the **Second Change Application Report** (Doc Ref. 10.47), and which predicts and assesses noise during the construction phase as well as during the operational phase.
Comment seeking confirmation that the River Mole outfall will have no adverse impacts on the existing noise bund and its acoustic benefits.	1	The noise modelling accommodates the expected final form of the noise bund. The new outfall to the River Mole from the WWTW facility would pass under the existing noise bund and would therefore not affect its current noise mitigation properties. Directional drilling techniques will be used to avoid impacts to the acoustic effectiveness of the noise bund during construction.

Comment that the air quality assessment did not identified the presence of an AQMA (No. 3) along the boundary of the construction route and therefore a lower screening threshold of 25 heavy-duty vehicles should have been applied and should take account of construction workers. Query on how conservative the estimated number of heavy-duty vehicle is.	2	**Section 2** of the **Second Change Application Report** (Doc Ref. 10.47), sets out the construction access route which is anticipated to be from Junction 9 M23 along Airport Way and Perimeter Road North. The construction route therefore does not include traffic through AQMA (No. 3). This route is consistent with the primary construction route set out in Appendix A of the **Outline Construction Traffic Management Plan** that forms Annex 3 of **ES Appendix 5.3.2 Code of Construction Practice** [REP5-020], to be confirmed and approved through the detailed CTMP(s). The Heavy Goods Vehicle trips presented relate to the peak month of construction and are therefore represent the worst-case.
Comment that a further air quality assessment is required taking account of the wide range of construction activities between 2026 to 2029.	2	The assessment reported in **ES Chapter 13: Air Quality** [REP3-018] adopted a conservative approach for construction traffic effects, assessing the worst-case year for construction. As demonstrated in the Traffic and Transport Section of **Table 2** of the **Second Change Application Report** (Doc Ref. 10.47), Project Change 4 would not result in a material change in the number of trips during the construction or operational phase of the Project. The primary route to be used for the construction compounds proposed as part of

		Project Change 4 was included in the modelled construction traffic network assessed and reported in **ES Chapter 13: Air Quality** [REP3-018].
Comment that further information is required to understand the NRMM pollutant contributions.	2	As set out in the Air Quality Section of **Table 2** of the **Second Change Application Report** (Doc Ref. 10.47), although Project Change 4 would result in potential changes to NRMM activity, this would not change the results of the assessment reported in **ES Chapter 13: Air Quality** [REP3-018]. In addition, existing mitigation measures proposed as part of **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007], would ensure air quality impacts associated with construction of Project Change 4 are minimised as far as practicable.
Comment that recent air quality submissions from the Applicant indicate that the modelling is not conservative in that only cleaner Stage V NRMM are in place and query how much higher will these	2	The NRMM commitment in **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007], secured under DCO Requirement 7, aligns with the Greater London Authority (GLA) NRMM requirements. During the initial construction period (pre 2030), NRMM will be required to meet emission standard Stage IV as a minimum and will be required to meet Stage V from 2030. The planned NRMM fall in the net power range of 56-560kW. A comparison of the Euro Stage IV (Directive 2010/26/EU) and Euro Stage V (Regulation (EU) 2016/1628) show that Nitrogen Oxide (NO_x) emission limits

contributions be using Stage IV NRMM.		are the same. For Particulate Matter (PM), the rate reduces from 0.025g/kWh to 0.015g/kWh however the contribution to total concentrations is negligible (<0.01%). Considering the emission changes between Stage IV and V and the conservatism built into the ES NRMM assessment as detailed in Section 3.12 of **ES Appendix 13.4.1: Air Quality Assessment Methodology** [APP-158], NRMM emissions associated with construction of Project Change 4 are implicitly represented and would not change the results of the assessment reported in **ES Chapter 13: Air Quality** [REP3-018]. The commitment aligns with best practice GLA guidance and acknowledges availability and technological requirements of local contractors. In addition, existing mitigation measures proposed as part of **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007], would ensure air quality impacts associated with construction of Project Change 4 are minimised as far as practicable.
Comment that no information is provided on the implications of the car parking changes on	2	As set out in **Section 2** of the **Second Change Application Report** (Doc Ref. 10.47), the parking spaces lost from part of the Self Park North Terminal Long Stay car park would be accommodated within the decked area of this car park.

emissions and air quality predictions.		Therefore the car park numbers would be unchanged from those assessed in the ES and remain allocated within the Self Park North (North Terminal Long Stay car park) model area. The extent of this car park is set out in **ES Figure 5.2.1b** (Doc Ref. 5.2).
Comment requesting further detail on engagement with the EA on the permitting process and opportunities for the LAs to be consulted.	1	GAL is engaging directly with the EA's National Permitting Team with respect to the operation of the proposed WWTW facility. GAL will keep the Local Authorities appraised of progress with this consultation.
Comment querying how many other vehicles trips are expected during the construction and operational phases of the WWTW facility.	1	There would be approximately 450 heavy goods vehicle movements (225 arrivals and 225 departures) in the peak month of construction, equating to around 20 movements per day. Either side of the peak month, it is anticipated there would be between 220 and 300 movements a month (10 to 13 movements a day) for a total of seven months. During other months there would be fewer than 80 movements a month (4 movements per day). As stated in Section 2 of the **Second Change Application Report** (Doc ref. 10.47) it is expected that during the operational phase there would be two 'cake' lorry movements a week (one arrival and one departure). The On-airport WWTW would be staffed in two shifts a day, requiring up to five full-

		time employees; consequently it can be anticipated that there would be two people per shift and in the event that all journeys by these workers were made by car, there would be up to eight car movements per day.
Comment querying when the 1,632 car parking spaces to be lost will be relocated to the North Terminal long stay car park and made accessible.	1	The car parking spaces lost as a result of the WWTW facility would be reprovided at the same time as the remaining decked capacity proposed as part of the Project, to accommodate displaced capacity and growth from 2029. It would not be necessary to reprovide the car parking spaces immediately as construction of the WWTW facility would begin as the parking demand:capacity ratio indicates that the airport would still remain below its target occupancy.
Comment requesting further detail on the Pumping Station and if it would result in any tree loss, impact adjoining occupiers or the nearby footpath.	1	The footprint of the proposed Pumping Station next to the existing Gatwick Airport Police Station is outside the Root Protection Area (RPA) of any trees and will require no felling works. The temporary works area required for the pumping stations installation will not require the felling of any trees, but the area may overlap with the RPA of some trees. This will be assessed during detail design and if required protective measures, such as suitable ground protection, will be used to protect trees during construction. The closest occupied building to the Pumping Station is the Gatwick Airport Police Station more than 70m to the west. Sufficient mature trees within the

		belt of woodland planting between the proposed Pumping Station and police station would be retained to provide screening of development from occupiers of these buildings. There would be no impact on views from residential properties in Horley. The new Pumping Station, would require the closure of the footway during the construction phase. This footway incorporates a section of the Sussex Border Path (Footpath 346_2Sy). In order to maintain access for footway users, including users of the Sussex Border Path during the construction of Project Change 4, a temporary diversion of the footway would be required of approximately 75m in distance. If the Second Change Application is accepted by the ExA, **ES Appendix 19.8.1: Public Rights of Way Management Strategy** [REP2-009] would be updated to include the temporary diversion of this footway during the construction of the Pumping Station. The temporary diversion for the Sussex Border Path section (346_2Sy) is proposed to be located within the grassed area adjacent to the construction area to the north of the footway.
Comment requesting further detail on the location of	1	**Figure 3** in the **Second Change Application Report** (Doc Ref. 10.47) shows the planned locations of the temporary construction compounds associated to

construction compounds, their layouts, and potential impact on existing features, trees or watercourses.		the On-airport WWTW. The temporary compounds will be located on the existing hardstanding areas (currently a car park) and therefore have minimal impact on existing features, trees or watercourses.
Comment that further detail would be required into the DAS and Design Principles on the WWTW design details.	1	If the Second Change Application is accepted by the ExA, updates would be made to the **Design Principles** [REP5-031] including the addition of site-specific design principle(s) relating to the On-airport WWTW facility. Further detail on the changes that would be made to the Design Principles is contained in **Table 3** of the **Second Change Application Report** (Doc Ref. 1.0.47)
Comment requesting further detail on how the additional car parking spaces alters the design of the North Terminal Long Stay car park.	1	The car parking capacity displaced by the proposed On-airport WWTW would be reprovided within North Terminal Long Stay decked parking, proposed as part of the Project and within the area shown for Work No. 32 on the **Works Plans** (Doc Ref. 4.5). As a result of the Project, a larger area of decking is proposed but this all falls within the assessed area.
Comment querying if Southern Water has confirmed that there is	1	To date, Southern Water had not been contacted to determine if they could accept the 'cake' from the proposed On-airport WWTW. This engagement would be undertaken during the detailed design stage post-DCO consent.

capacity available at Goddards Green WWTW.		
Comment querying when, where and how the 250 parking spaces would be reprovided. There is a mismatch in delivery in the DAS Volume 5 which suggests that works to the North Terminal long stay car park will be after 2029.	1	The car parking capacity displaced by the proposed WWTW facility would be reprovided within North Terminal Long Stay, within the area shown for Work No. 32 on the **Works Plans** (Doc Ref. 4.5). This does not result in a change to the area considered under the Environmental Impact Assessment for the Project and remains consistent with the Works Plans and Project Description. The spaces lost as a result of the WWTW facility would be reprovided at the same time as the remaining decked capacity proposed as part of the Project, to accommodate displaced capacity and growth from 2029. It would not be necessary to reprovide the spaces immediately as construction on the WWTW begins as the parking demand:capacity ratio indicates that the airport would still remain below its target occupancy.
Comment requesting clarity on how the Proposed Change would impact the timing and construction sequencing of other	1	**Section 2** of the **Second Change Application Report** (Doc Ref. 10.47) describes the indicative construction timescales associated to Project Change 4. The proposed On-airport WWTW would alter the wastewater drainage strategy as it would be designed to carer for all wastewater flows from

DCO works, including the wider drainage strategy.		Gatwick Airport. An explanation of these changes is contained in Section 2.2 of the **Second Change Application Report** (Doc Ref. 10.47).
Comment requesting further detail on the lighting details for the North Terminal Long Stay car park, given the location of Grade II* Charlwood Park Farmhouse.	1	The larger decked area of the North Terminal Long Stay car park, of 350m x 325m and up to 11m in height, can be accommodated within the existing area of Work No. 32 as shown on the **Works Plans** (Doc Ref. 4.5) and the maximum heights shown on the **Parameter Plans** (Doc Ref. 4.7) and which informed the EIA as part of the original DCO Application. This is due to the existing area of Work No. 32, as submitted, being larger than the approximate decked area of 350m x 225m described in **ES Chapter 5: Project Description** (Doc Ref. 5.1). **ES Appendix 5.2.2: Operational Lighting Framework** [APP-077] provides a technical framework for external lighting. Section 14 of the Framework explains the lighting arrangements for decked car parks, therefore applicable to the North Terminal Long Stay decked car park. The **Design Principles** [REP5-031] provide specific lighting-related design principles for decked and surface car parking arrangements, drawing from the Operational Lighting Framework. Each principle requires the external lighting

		design to consider lighting measures to restrict potential obstructive lighting of ecological sensitive areas, heritage assets and surrounding landscapes. It should also be recognised that Historic England has confirmed through the **Statement of Common Ground between Gatwick Airport Limited and Historic England** [REP1-035] and also through its consultation response to Project Change 4 (contained in **Appendix F**) that it does not have concerns regarding the Project's impact on the Grade II* listed Charlwood Park Farmhouse.
Comment requesting further detail on the proximity of the North Terminal long stay car park to the tree screen.	1	The larger decked area of the North Terminal Long Stay car park, proposed as part of Project Change 4, sits within the footprint of the existing car park assessed under the ES as part of the DCO Application, as submitted. No trees outside of the existing car park will require removal, and no root involvement is expected within the car park's footprint. A number of small trees, currently situated within the North Terminal Long Stay car park will however require removal.
Comment seeking clarity on whether the outfall to the River Mole will require tree removal.	1	No tree surveys have been undertaken to date in the vicinity of the River Mole outfall. Based on an analysis of aerial photography, it is considered that there are no existing trees located on the south bank of the River Mole in the vicinity of the proposed outfall, therefore no removal of trees is anticipated

		during construction. Further tree survey work will be undertaken to inform the detail design stage. Suitable tree/vegetation protection measures will be provided during detail design in accordance with **ES Appendix 5.3.2: Code of Construction Practice: Annex 6 – Outline Arboricultural and Vegetation Method Statement** (Doc Ref. 5.3).
Comment querying the visual impact from the additional parking spaces at North Terminal long stay car park.	1	The larger decked area of the North Terminal Long Stay car park, proposed as part of Project Change 4, sits within the footprint of the existing car park assessed under the ES as part of the DCO Application, as submitted. The height of the maximum parameter box for the North Terminal Long Stay decked car park as illustrated in photomontages at **ES Figures 8.9.1 to 8.9.128** [REP2-007, REP2-008] would not increase and would not extend above intervening vegetation in views from the west (See Viewpoint 5: River Mole public right of way 346, Sussex Border Path, Viewpoint 14: Public right of way 344, Sussex Border Path east of Charlwood and Viewpoint 28: Hookwood public right of way 342).
Comment requesting a detailed ecological survey and river banks/beds survey to understand the impact of the River Mole outfall structure and measures to	1	The banks along the River Mole in the area where the outfall is due to be constructed have previously been surveyed for a variety of receptors with the results reported in **ES Appendix 9.6.2: Ecology Survey Report** [APP-125 to APP-130]. The results found the grassland in this area to comprise a combination of MG9b *Holcus Lantus - Deschampsia cespitosa* grassland

avoid, mitigate and compensate ecological impacts.		(*Arrhenatherum elatior* sub-community) grassland and S4 *Phragmites australis* swamp and reed-beds (Figure 3.2.1 of ES Appendix 9.6.2). As described in section 5.4.2 of **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007], pre-construction surveys will be undertaken to identify any protected species that may be present in this area. As such, further surveys of the outfall area are not considered necessary at this time. Potential impacts on geomorphology and water quality would be avoided via the implementation of embedded mitigation measures in the design of the River Mole outfall, including a cascade feature (concrete structure) at the outfall (to prevent bank and bed erosion), through the conditions of the environmental permit required for the operation of the facility, and existing environmental controls set out in **ES Appendix 5.3.2: Code of Construction Practice** [REP4-007]. As such, it is considered that there is no potential for new or materially different likely significant effects on habitats species as a result of changes to water quality in the River Mole during construction and operation of Project Change 4.
Comment querying the risk of facilitating the spread of INNS in	1	The Applicant's approach to the management of Invasive Non-Native Species (INNS) during construction is set out in **ES Appendix 5.3.2: Code of Construction Practice: Annex 8 - Outline Invasive and Non-Native**

the river catchment through discharging to the River Mole.		**Species Management Strategy** [REP4-011]. Implementation of this this strategy will ensure that INNS are controlled during the construction phase of Project Change 4. The approach to operational control of INNS is set out in section 7.3.20 of **ES Appendix 8.8.1 Outline Landscape and Ecology Management Plan** (oLEMP) (Doc Ref. 5.3). This requires that the Landscape and Ecology Management Plan for each individual area include a biosecurity risk assessment. This would include with respect to the potential for spread via the operation of the proposed WWTW. The principles for the control of invasive species are set out in section 11.12 of the oLEMP.
Comment seeking biodiversity enhancement given the site's proximity to the North West Zone Biodiversity Area and near the River Mole wildlife corridor (a bat commuting route).	1	If Project Change 4 is accepted into the Examination by the ExA, **ES Appendix 9.9.2: Biodiversity Net Gain Statement** (Doc Ref. 5.3) would be updated to account for the Proposed Change. This would demonstrate the overall enhancement for ecology associated with the Project.
Comment seeking further detail on the required tree loss, impact	1	Detailed landscape proposals have not been designed at this stage, however a general principle of perimeter planting in the form of linear belts of native trees, shrubs and hedgerows to screen and soften development has been

on the oAVMS, oLEMP and relationship to CBC's Policy CH6.		included in **ES Appendix 8.8.1 Outline Landscape and Ecology Management Plan** (Doc Ref. 5.3) specifically Section 3: Landscape and Ecology Zone Objectives (Zone 4). The **Design Principles** [REP5-031] include Project-wide Design Principles for landscaping which sets out design principles for native tree, shrub and hedgerow planting that would be appropriate within the Project. In particular, Design Principle L4 directs that any vegetation will be retained and incorporated into the design where feasible to minimise impacts on character and visual resources. The detailed design must be prepared in accordance with the **Design Principles**, as secured under Requirement 2 of the **Draft DCO** (Doc Ref. 2.1). Any tree removal required has not been included within the AIA or oAVMS to date, however an initial assessment would suggest that approximately 161 trees are situated within or in close proximity to these works. Applying Crawley Borough Council's (CBC) Policy CH6 to these trees, this would require an additional 300 trees to be added to the current replanting calculations. Based on the worst case assessment of the submitted DCO application, proposed site-wide planting is 5,745 trees over the calculated CBC replanting requirement and as such would cover the additional tree replanting needed, even if no trees can be retained. Trees will however be

		retained where possible and any need for removal/ protection will be assessed during detail design.
Comment that the site is contaminated land and measures to deal with any discovered contamination should be mitigated.	1	With regard to potential contamination risk, this would be avoided or minimised via the implementation of measures secured under Requirement 9 of the **Draft DCO** (Doc Ref. 2.1). This includes a discovery strategy to assess and minimise any potential risk associated with any previously unencountered contamination
Comment requesting clarify on how the increase in flow to the River Mole will affect its hydraulics and on the geomorphology of the watercourse.	1	The increased flow to the River Mole will be negated by the increased length in the channel's planform as a result of the proposed realignment as part of the Project (irrespective of Project Change 4). The realignment is to be designed to increase sinuosity, which in effect increases channel length and reduces the impacts of any likely flow by slowing down the conveyance time from up to downstream within this realigned section. In conjunction with this, the channel will be designed to be trapezoidal, thereby further increasing the channel's capacity when flow rates increase for example. This increased realignment length absorbs any deleterious effects to downstream by slowing flow down. The geomorphology will likely change as a result of the realignment because flow, water speed and sediment will become increasingly heterogenous due to the improvement in channel sinuosity, as

		well as the incorporation of additional features to improve the overall planform, cross section, and morphological continuity.
Comment requesting how the increased impermeable area from the larger car park has been considered and mitigation under the pluvial mitigation plan.	1	As stated in **Section 2.2** of the **Second Change Application Report** (Doc Ref. 10.47), the lost car parking spaces from the existing Self Park North car park would be accommodated in the larger decked area of the North Terminal Long Stay car park, proposed as part of Project Change 4. As such, it would not result in an increase in effective impermeable area as this increased footprint would be over an existing impermeable area, and therefore would not result in an increase in runoff to the surface water drainage network.
Comment requesting clarity on how the works will impact on the foul drainage strategy.	1	Project Change 4 would alter the foul drainage strategy for the Project by redirecting all wastewater flows from the airport to the proposed On-airport WWTW. No flows would be discharged to TWUL's network at its Horley and Crawley STWs.
Comment seeking clarify on any other vehicle movements associated with the WWTW's operation.	1	As stated in Section 2 of the Second Change Application Report (Doc ref. 10.47) it is expected that during the operational phase there would be two 'cake' lorry movements a week (one arrival and one departure). The On-airport WWTW would be staffed in two shifts a day, requiring up to five full-time employees; consequently it can be anticipated that there would be two

		people per shift and in the event that all journeys by these workers were made by car, there would be up to eight car movements per day.
Comment seeking further clarify on construction movements for the full construction period.	1	There would be approximately 450 heavy goods vehicle movements (225 arrivals and 225 departures) in the peak month of construction, equating to around 20 movements per day. Either side of the peak month, it is anticipated there would be between 220 and 300 movements a month (10 to 13 movements a day) for a total of seven months. During other months there would be fewer than 80 movements a month (4 movements per day).
Comment seeking clarify on how GAL is proposing to accommodate the contingency option within a DCO control mechanism.	1	As stated in **Section 2.5** of the **Second Change Application Report** (Doc Ref. 10.47), the On-airport WWTW has been provided for in the **Draft DCO** (Doc Ref. 2.1) by new Work No. 44 (on-airport wastewater treatment works facility). New Requirement 31(3) has also been added to the **Draft DCO** (Doc Ref. 2.1), which provides that the On-airport WWTW must be constructed and any necessary environmental permits applied for to facilitate the operation of the On-airport WWTW prior to the commencement of dual runway operations at the airport, unless otherwise agreed with TWUL. GAL would endeavour to secure any necessary operational environmental permits whilst the On-airport WWTW is being constructed and in advance of the commencement of dual

		runway operations, so that the On-airport WWTW is operational at the point at which dual runway operations commence. Both this drafting and the new work number have been added in square brackets to reflect that they are an 'alternative' option as described above. If the Secretary of State is not minded to include a restriction of the nature sought by TWUL, the square bracketed drafting can be removed from the Draft DCO. If the Secretary of State retains the square bracketed text in the made DCO but an alternative solution is later agreed between the Applicant and TWUL, the drafting of Requirement 31(3) allows for TWUL to agree that the On-airport WWTW need not be delivered.
Comment on missing documentation to be provided to reflect the Proposed Change.	1	Further detail on the change and its need is provided in **Section 2** of the **Second Change Application Report** (Doc Ref. 10.47). **Table 3** of the report explains those documents that are submitted as part of the Second Change Application and which documents would be submitted if the Proposed Change is accepted by the ExA.
Comment that the estimated number of vehicle movements resulting from the change is optimistic.	1	The number of construction vehicle movements expected during the construction period has been estimated based on the assumed construction methodology and outline materials quantities.

		During operation, the On-airport WWTW will require only five full-time employees working across two shifts, together with a very small number of lorry journeys per week to remove the 'cake' produced by the On-airport WWTW. The number of operational vehicle movements will be very low.
Comment that the WWTW facility should be commissioned irrespective of an DCO condition or improvements to existing treatment works.	1	The On-airport WWTW is being put forward as an 'alternative' option in the DCO and is dependent on whether or not the DCO is made by the Secretary of State, and indeed whether or not the Secretary of State is minded to include provision for the Applicant to construct and operate the proposed WWTW. The Applicant is putting forward this change as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO that precluded airport growth arising from the Project being implemented (and wastewater flows discharged) until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. The bespoke on-airport facility would obviate the need for such a DCO Requirement, as all additional flows generated by the Project (and indeed all airport flows more generally) would instead be serviced by the proposed facility. This would mean there would be no adverse impact on the TWUL local network and facilities, and indeed there

		would be a beneficial impact as current (and future) airport flows would not enter TWUL's network. It should also be noted that including this provision within the Draft DCO would not preclude GAL and TWUL reaching an alternative solution for the delivery of any network or processing capacity increases if these are identified to be required in the future. Further detail on the context, and need for, the Proposed Change is explained in detail in **Section 2.3** of the **Second Change Application Report** (Doc Ref. 10.47).

Table 6: Environment Agency's Deadline 5 Response [REP5-090]

Environment Agency's Response [REP5-090]	The Applicant's response
Comments related to Project Change 4	
The new treatment facility would require a bespoke environmental permit with a full assessment and review by our Permitting team and would likely be a matter of significant public interest. It would introduce another	The Applicant is aware that a permit for the operation of the On-airport WWTW would be required under the Environmental Permitting (England and Wales) Regulations 2016 and the necessary explanation

discharge into the Mole of material previously discharged via Crawley Sewage Treatment Works (STW) to the Gatwick Stream. We are unsure whether this could be granted in an area which is served by an established sewerage network.	as to why the Applicant cannot discharge to the public sewer will be given in this permitting application. **Section 2.3** of the **Second Change Application Report** (Doc Ref. 10.47) sets out why the Applicant is making this Second Change Application.
Planning new developments If you're planning a new development, plan your foul sewerage at an early stage and consult with the local council and sewerage undertaker. If you got planning permission on the basis that the development will be connected to the public foul sewer, this indicates it's likely to be reasonable to do so.	The Applicant and TWUL have been in discussions on the Project since 2019, first informed by the Applicant's hydraulic model of the airport's wastewater system to assess the current performance of the airport's infrastructure and to plan for the provision of wastewater infrastructure for the Project. In discussing the modelling work with TWUL, the Applicant was advised to limit increased flows to Horley STW and instead direct flows to Crawley STW. This approach has been maintained throughout discussions between the Applicant and TWUL and informed the Project's proposed wastewater strategy under the DCO Application, as submitted. Whilst this engagement commenced in 2019, there are a series of outstanding assessments being carried out by TWUL to establish whether upgrades are required to TWUL's existing network and processing facilities to accommodate future forecasted foul water flows

	from the airport as a result of the Project. These assessments are not expected to be fully completed until after the close of Examination (27 August 2024) (confirmed in **TWUL's response to ExQ1 WE.1.8** [REP3-149]) and TWUL was unable to give the necessary assurances on the assessments at the **Issue Specific Hearing 7 (Other Environmental Matters)** on 1 May 2024 [EV13-001 to EV13-004]. As such and as explained in the **Applicant's response to ExQ1 WE.1.8** [REP3-105] and orally at Issue Specific Hearing 7 (**ISH7 Transcript, Part 2** [EV13-006], the Applicant considers it necessary to put forward an alternative option to service wastewater flows from the Project (and the airport more generally) in lieu of any other restriction or control that could be placed on the operation of the Project against wastewater upgrades. This is explained further in **Section 2** of the Second Change Application Report (Doc Ref. 10.47).
We will not normally give you a permit for use of a private sewage treatment system based on the nearest public foul sewer not having enough capacity. If necessary, you should agree improvements to the sewerage network with the sewerage undertaker so you can connect to it. These improvements must be put in place before the development	The Applicant's position is that it would not be appropriate to include a DCO Requirement which TWUL has requested as it is not considered appropriate or proportionate to make the delivery of the Project conditional on the delivery of third party infrastructure which TWUL has a statutory responsibility to deliver.

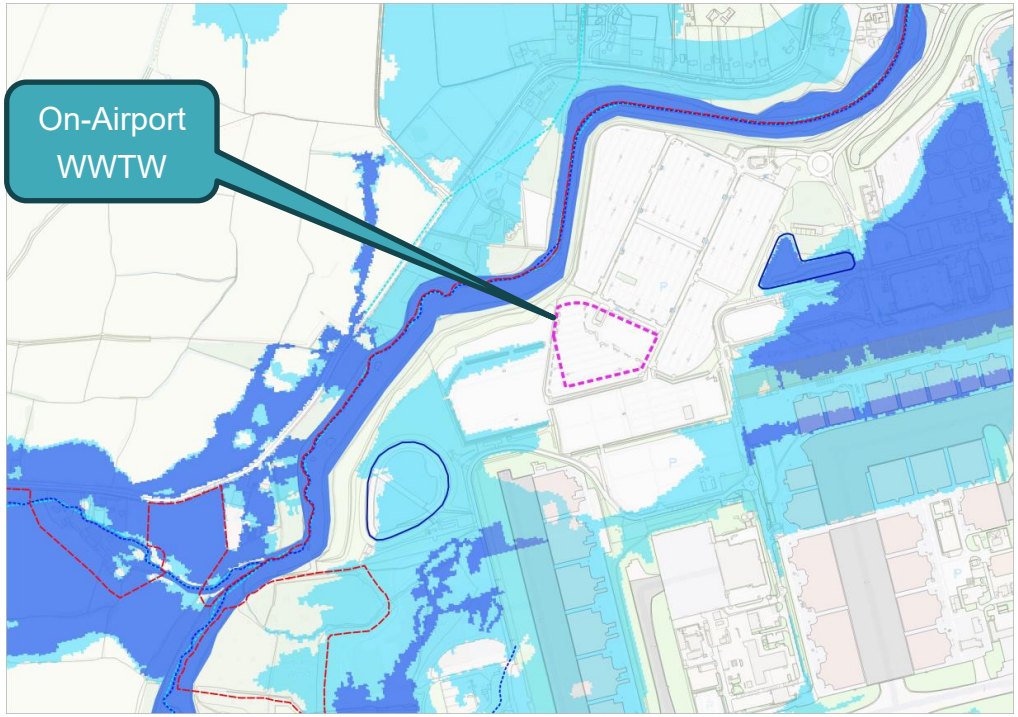
is occupied. This reflects planning practice guidance and building regulations. It was apparent at the Hearing (ISH7) on 1 May 2024 there was some work to be done on overall modelling before Thames Water were comfortable with the proposal. There is potential for a permit application to be considered if there is no capacity in the network or sufficient treatment capacity and Thames Water have no plans to make treatment capacity available to cover the development.	However, in order to mitigate against this potential consenting risk to the Project, the Applicant is putting forward this Second Change Application as an 'alternative' option in the DCO, were the Secretary of State to be minded to include a pre-commencement restriction in the DCO that precluded airport growth arising from the Project being implemented (and wastewater flows discharged) until any necessary upgrade works to TWUL's local network and processing facilities have been implemented. The bespoke on-airport facility would obviate the need for such a requirement, as all additional flows generated by the Project (and indeed all airport flows more generally) would now be serviced by this facility. This would mean there would be no adverse impact on the TWUL local network and facilities, and indeed there would be a beneficial impact as current (and future) airport flows would not enter TWUL's network. It should also be noted that including this provision within the Draft DCO would not preclude GAL and TWUL reaching an alternative solution for the delivery of any network or processing capacity increases if these are identified to be required in the future.
The non-attendance of Sutton and East Surrey Water at the hearing created some concern regarding clean water	**Appendix A** of **The Applicant's Response to Actions from Issue Specific Hearing 7** [REP4-037] enclosed correspondence from Sutton

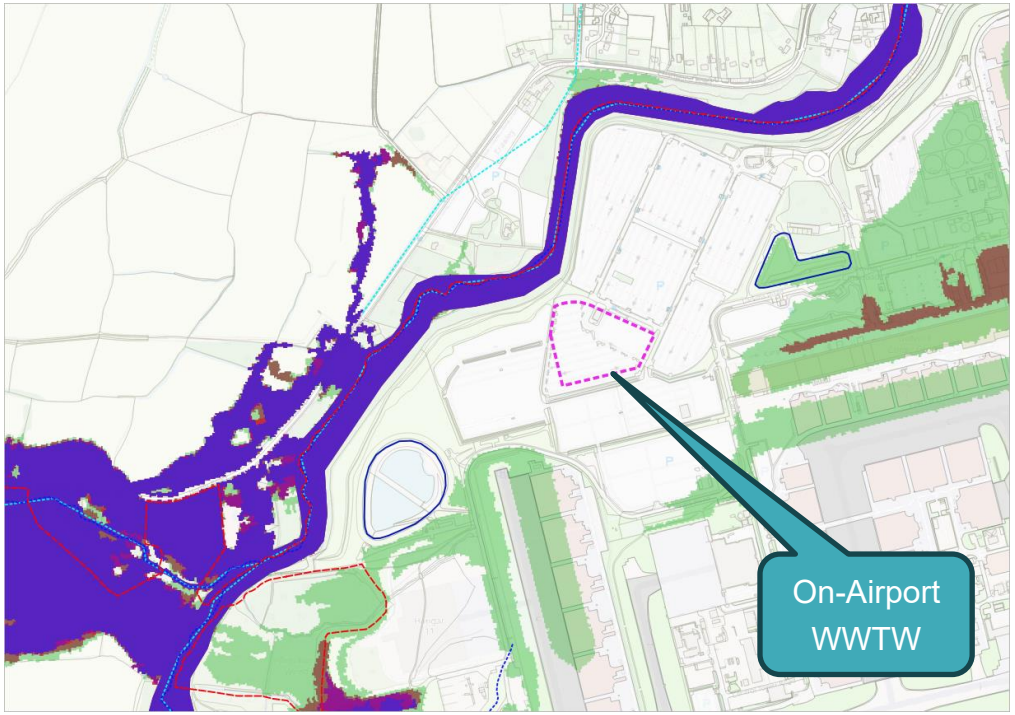
provision to the development – We have asked the applicant to update the current situation regarding this element since there is a potential environmental impact should the increased requirement cause supply issues.	and East Surrey Water (SES) confirming that their water sources and infrastructure would be able to meet the predicted demands from the Project. SES also confirmed to the Applicant that this correspondence could be submitted to the Examination.
The information supplied regarding the potential new facility lacks detail. For example, flows, population equivalent. We have asked the applicant to confirm how has the planned layout been sized.	The On-airport WWTW would receive all wastewater flows from the airport, no flows would discharge to the TWUL public sewer network as they would at present. The On-airport WWTW has been sized to treat flows for the 2047 Project assessment year as a worst-case of peak passenger numbers (historically in August). For dry days this is 3,537 cubic meters per day and on a wet day 10,168 cubic meters per day. The worst-case assumes that the peak storm response generated by a 3.33% (1 in 30) Annual Exceedance Probability (AEP) event including a 20% rainfall uplift to allow for the impacts of climate change is constant over a 24-hour period and coincides with a ‘busy day’ in terms of passenger numbers. The 3.33% (1 in 30) AEP event has been used to generate the peak storm response as this is the event that the drainage system conveying flow to the new works would be designed for as an industry standard. Higher flows will exceed the capacity of the

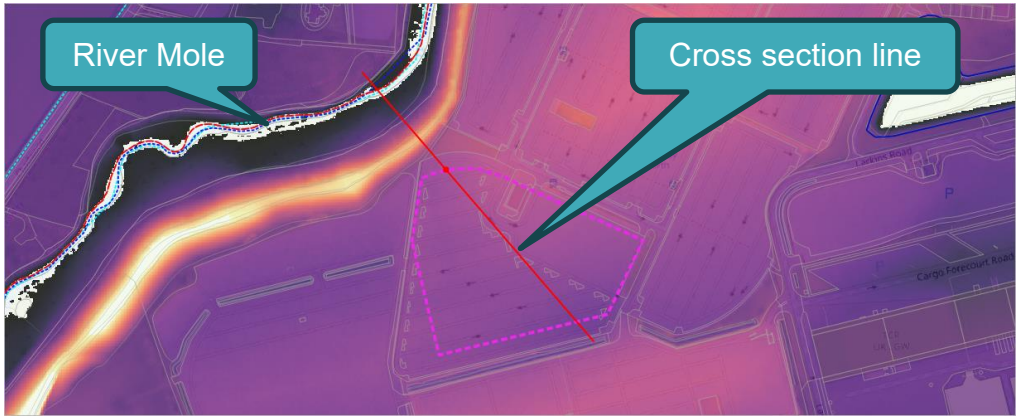
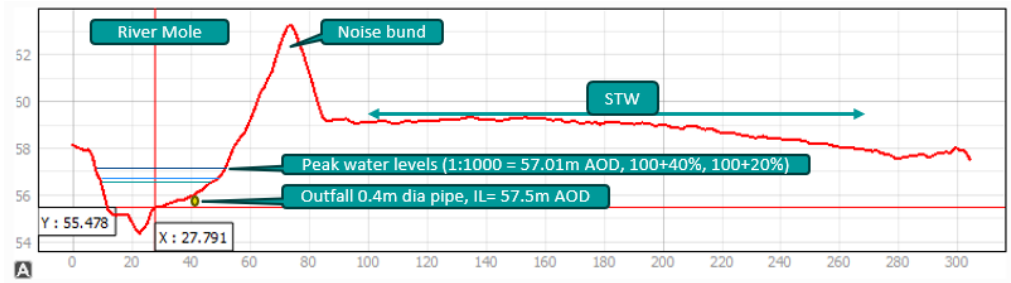
	WWTW system and will be retained elsewhere on the airport, draining down back to the wastewater network after the storm peak has passed. The Applicant considers that this is likely to be an over-estimate of actual flows. There is diurnal variation in the wastewater flows observed during flow surveys at the airport unlike a typical domestic variation which has bene factored into this assessment. Flow to the On-airport WWTW is limited by the proposed capacity of the new pumping station upgrades in the airport's wastewater network. Flows to the On-airport WWTW would be predominantly domestic, the principal Trade Effluent (TE) source is de-icer in runoff that would be treated via a separate system (the engineered wetland). The Residual TE flows would be from: aircraft washing, hire car washing, cooling tower/air conditioning plant residual flows, recycling centres (waste disposal) and fire training ground, but these amount to less than five per cent of the daily dry weather flow volume. The Applicant has not undertaken a flow and load survey to determine the Population Equivalent of the modelled flows. This would be

	considered as part of the development of the On-airport WWTW detailed design after the DCO process. Dosing requirements at the On-airport WWTW are metal salts for phosphorus removal, alkalinity for pH adjustment if needed and polymer for biosolids processing.
The flow profile for an international airport with near 24-hour operation would differ from a normal domestic STW.	Please see the Applicant's response above.
We have also requested confirmation of the following: • If this would be foul sewage only or whether there would be other contributary sources (trade effluent). • What is the specific treatment process? • Would chemical dosing be required as part of the process?	**Flows to the On-airport WWTW** The flows that will be treated by the On-airport WWTW would constitute predominantly domestic wastewater, being flows from airport visitors/passengers using the facilities in the terminals, flows from airport workers (including in offices and ancillary buildings), emptying of aircraft toilet tanks via the sanitation block, guest and worker flows from hotels, discharges from fast food restaurants and discharges from toilet blocks in the railway station and fuel service stations. The On-airport WWTW would also treat a small quantity of non-domestic type flows (trade effluent flows), such as discharges from aircraft washing, hire car washing, waste disposal processes from the Central Area

	Recycling Enclosure facility (e.g. bin/bottle washing), PFAS-free fire fighting foam from the Fire Training Ground and residual discharges from the terminals' air conditioning systems. The non-domestic type discharges (trade effluent) are estimated to amount to less than 5% of the total wastewater discharged from the airport site on a dry day into the On-airport WWTW. **Treatment Process** The On-airport WWTW would treat flows via a conventional activated sludge process with anoxic and / or anaerobic zones for nutrient removal. **Chemical Dosing** Chemical dosing would be required: metal salts for phosphorus removal, alkalinity for pH adjustment if needed and polymer for biosolids processing.
If a permit application was successful, options include the inclusion of an improvement condition stating that connection to the sewerage network would be required at	Any such discussions would be undertaken with the EA during the permitting application process.

the point at which capacity became available or if Thames Water adopt the facility in the future.	
Flood Implications We will ask the applicant to confirm whether: • The proposed WWTW facility is located outside of areas considered to be at risk to flooding • The proposed WWTW facility would not lead to a loss of floodplain storage capacity or impact on flood flow routes • The proposed WWTW would be designed to carry on functioning during a flood event? What Flood Risk Vulnerability Classification has been given to the proposed WWTW in line with Annex 3 of the National Planning Policy Framework, considering Table 2 of the Flood Risk & Coastal Change Planning Practice Guidance • The temporary construction compounds will be located outside of areas considered to be at risk to flooding	**Flood Risk** The On-airport WWTW is located outside the Environment Agency's published Flood Zones 2 (light blue in the figure below) and 3 dark blue). 

• The movement of flows from the catchment of Horley WWTW to Crawley WWTW will have any impact on onwards flows to the river catchment(s) and if the volume of flows be likely to have any impact on flood peaks in different rivers.	The On-airport WWTW is outside the modelled 1% (1 in 100) AEP plus 40% Credible Maximum Scenario flood extent (dark red in the figure below). The On-airport WWTW would therefore not remove floodplain and not increase flood risk to other parties.  The relative levels of peak water levels and the discharge point from the On-airport WWTW to the River Mole have been compared and the

	Applicant has determined that there would be sufficient hydraulic head for the works to continue to discharge to the watercourse   The flow from the On-airport WWTW would be equivalent to that which would have been discharged to the Horley and Crawley STWs catchments under the DCO Application, as submitted, and without this Proposed Change. The construction of the outfall to the River Mole

	from the proposed On-airport WWTW would be subject to a Flood Risk Activity Permit (FRAP) to the Environment Agency, which would assess the flood risk implications of the additional flow. However the modelled discharge from the On-airport WWTW during a 3.33% (1 in 30) AEP event with a 20 per cent uplift allowance for the impacts of climate change would be approximately 0.12m^3/s. Based on modelling undertaken for the Project, the peak flow in the River Mole under such circumstances would be 39.4m^3/s, so the proportion of the flow from the new WWTW would be 0.3% and is not considered significant. **Vulnerability Classification** The vulnerability classification of the On-airport WWTW has been assessed as Essential Infrastructure **Temporary Construction Compounds** The two proposed temporary construction compounds are located outside the modelled 1% (1 in 100) AEP plus 40% Credible Maximum Scenario fluvial flood extent.

The document states that they propose to use a directional drilling technique to install a new outfall into the River Mole to have a lesser impact on the flood defence. It should be noted that any works in, over, under or within 8 metres of the top of the bank of a main river, or within 8 metres of the landward toe of a flood defence would require assessment under the Environmental Permitting Regulations 2016 to understand whether a Flood Risk Activity Permit(s) would be required for the proposed WWTW.	The Applicant is aware that the construction of the outfall to the River Mole from the On-airport WWTW would require a Flood Risk Activity Permit (FRAP) from the Environment Agency.
Within the 'Second Notification of a Proposed Project Change' document (Book 10), it appears that the WWTW will be located outside of the fluvial flood risk areas according to modelling provided by Gatwick Airport Limited, but it would be helpful to see confirmation of this since it does appear the site is located within our Flood Map for Planning.	Please see the Applicant's response above.

5 Conclusion

5.1.1 The Applicant has carried out non-statutory consultation in line with the approach set out in the **Second Notification Report** [AS-146] and which the ExA's **Procedural Decision** [AS-147] dated 13 May 2024 confirmed was an appropriate basis for non-statutory consultation.

5.1.2 The consultation process has been effective and productive, and we are grateful to those that have given time and effort to be involved in the process and submit a response.

5.1.3 Mixed feedback has been received to consultation, including support for the Proposed Change and request for further information. Limited objection or concern has been raised over the principle of the proposed On-airport WWTW.

5.1.4 The Applicant has fully considered all responses received and followed the systematic process described in this report. No fundamental issues have been raised that would lead GAL to not move forward with the formal change request. Additionally, no changes have been identified to Project Change 4 as a result of the consultation feedback and therefore the Second Change Application has been prepared on the basis of the change originally proposed as part of the notification process.

5.1.5 In some instances, further information was requested by respondents. This additional information has either been provided during the consultation process or is contained within this report and the **Second Change Application Report** (Doc Ref. 10.47).

5.1.6 This report demonstrates that the Applicant has thoroughly considered the consultation feedback received and sets out the Applicant's response to each comment/issue raised in consultation.

6 References

Planning Inspectorate (March 2023). Advice Note Sixteen: Requests to change applications after they have been accepted for examination (Version 3).

7 Glossary

Term	Description
CoCP	Code of Construction Practice
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
GAL	Gatwick Airport Limited
GHG	Greenhouse Gas
HGV	Heavy Goods Vehicle
NRP	Northern Runway Project
NRMM	Non-Road Mobile Machinery
NSR	Noise Sensitive Receptor
oLEMP	Outline Landscape and Ecology Management Plan
WSI	Written Scheme of Investigation
ZTV	Zone of Theoretical Visibility