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Environment Agency

The Planning Inspectorate
Major Applications and Plans
Temple Quay House
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Bristol
BS1 6PN

Our ref: KT/2023/130482/01-L01
Your ref: TR020005

Date: 26 June 2024

Dear Planning Inspectorate Team

Gatwick Airport Northern Runway Development Consent Order Application – Deadline 6 - Environment Agency comments on further submissions by Deadline 5

We have reviewed the submissions and have the following comments to make.

GAL Deadline 5 Response
Design and Access Statement Appendix 1 – Design Principles – Version 1
Page 4 – Water Management Plan: Refers to the Code of Construction Practice Annex 1 – Water Management Plan. This document sets out measures proposed to ensure the risk to flooding can be managed throughout the duration of the proposed works. Within the document, there is recognition the construction phases of the proposed works could impact on the risk to fluvial flooding. The requirement for Flood Risk Activity Permits (FRAPs) in relation to works on or near main rivers, and on the floodplain are also recognised.

Section 9.2 of the Code of Construction Practice (CoCP) states monitoring will be required in areas such as the River Mole diversion, Car Park X and the Museum Field Spillway to determine over time whether erosion protection would be required. We would highlight that discussion with us on the need for the installation of erosion protection as part of the design of these areas should be ongoing, rather than considering whether erosion protection would be necessary later. By that stage, significant damage to the watercourse(s) could have occurred and it may be problematic to secure erosion mitigation works post development.

Section 10.7 discusses measures to manage fluvial flood risks during construction. 10.7.1 states an incident response plan would be prepared, this should be considered a requirement of the construction works and should be treated as a living document. Therefore, it should be kept under review and updated as necessary as works progress. Ways to mitigate against the risk to fluvial flooding are highlighted within Section 10.7, it is appreciated these comments will be high level and more generic at this stage though more detail will be required on how these risks will be managed should the works be realised.

It is welcomed that the CoCP is referenced within the Design and Access Statement Appendix 1 – Design Principles. These documents should be kept updated throughout the project to ensure they are reflective of the latest information.

DBF25 – This Principle should state the proposed culvert extension will also be no smaller in diameter than the existing culvert.

Removal of previously numbered DBF26 – this point covered the provision of syphons beneath the active travel path to connect Longbridge Roundabout to Car Park Y to ensure floodplain connectivity is maintained. It is noted this has been removed from this version of the document. The applicant should set out details as to why the removal of these syphons has been proposed and be able to clearly demonstrate flood risk will not be increased as a result.

DDP2 – Suggested rewording of this principle 'Any loss of fluvial (river) floodplain and interruption to flood flow routes would be mitigated using flood compensation areas and syphons to ensure no increase in flood risk to other parties at any time during the construction phases and post project completion. The flood compensation areas and syphons will be designed for the 1 in 100 (1%) Annual Exceedance Probability (AEP) event plus a minimum of a 20% allowance for climate change as required by our guidance using the appropriate hydrology at the time of detailed design. Any updates to climate change allowances at the time of detailed design will be considered when designing fluvial mitigation and compensation'.

DDP4 – Addition of the wording 'Exceedance routes will be clearly shown on plans and an understanding of the receptors potentially impacted will be set out, as well as any mitigation measures necessary'.

DDP13 – Reference is made to syphons beneath 'the noise bund' to maintain floodplain connectivity. It would be helpful for the applicant to clarify the location of this noise bund to ensure it is clear, does this related to the western noise bund for example? As highlighted in our comment above around the now deleted DBF260 related to the active travel path syphons, further details should be given to why these have been removed and if they are to be retained, or may be retained, they should be reference under this Design Principle.

DLP16 – previously DLP14. It is noted the wording of this Principle has changed from 'should' to 'could' with the addition of 'if necessary' in relation to the provision of culverts beneath the active travel path to maintain floodplain connectivity. Although the wording suggests culverts would still be included if required, it is not clear how this need would be determined. It is essential to maintain floodplain connectivity in this area to ensure there is no increase in flood risk. We suggest the applicant adds to this Principle to highlight how the decision of whether culverts will be required.

The Applicant's Response to Deadline 4 Submissions

Water Environment Section 2.16 WE 1.6 – Although this question and the applicant's response is related to the design of surface water drainage which is led by the Lead Local Flood Authority (LLFA), we take an interest in how the surface water drainage strategy is evolving and any concerns raised by the LLFA. As the surface water from the site will ultimately drain to the fluvial river system, we would support the LLFA is ensuring they have enough information to be satisfied with the proposed management of surface water.

Paragraphs 3.5.20 and 3.5.22 Flood Risk – Our review of the with-scheme modelling for the proposed project remains ongoing at the present time.

Paragraph 3.5.95 Table 31 Comments on ISH7 – Comments relating to flooding
Our review of the with-scheme modelling for the proposed project remains ongoing at the present time. We note the applicant's response to the question raised around the lifetime of the proposed development.

Statement of Common Ground dated June 2024
Table 2.22: Water Environment Matters
2.22.2.1 – The applicant's comments around the overall proposed development being assessed against a 100 year lifetime is noted. We will review the updated Flood Risk Assessment (FRA) and Flood Compensation Delivery Plan (FCDP) once these are available. The details of how the Flood Compensation Areas (FCAs) will function, as contained in EA Appendix 11.9.6 Annex 5, will be taken into consideration as part of the review of the with-scheme modelling.

2.22.3.1 – 2.22.3.6 – Our review of the with-scheme modelling is ongoing and we will also take into account the planned updates to the FRA in our response to this Matters.

2.22.4.1 – We will review the FCDP and the updated FRA once available and take these into account in our response to this Matter.

Draft Development Consent Order (DCO) Version 7 June 2024
Schedule 1
Work No. 42 – Note the inclusion of the construction of a weir and fish pass as a separate point, (b), rather than being included in the overall description.

Reference is made to provision of flood compensation works under Works 31, 38 and 39. The use of syphons/culverts under proposed taxiways, the western noise bund and the active travel path at the Longbridge roundabout have been highlighted in documents such as the FRA as they are necessary to maintain flood flow routes. However, these features do not appear to have been set out in the description of the

Works within Schedule 18. For example, should reference be made to flood conveyance syphons as part of Work 18?

Schedule 2

Requirement 23 – When the FDCP becomes available we will review the content of this document and then may be able to amend or refine our current comments.

The applicant has identified several Work items that should not commence (as set out in draft Requirement 23) until Works 31(b), 38(a) and 39(a), which are all related to the provision of fluvial flood mitigation, are in place. It is essential that the flood mitigation strategy is in place and operational prior to any works which could impact on the risk to fluvial flooding are commenced. We are supportive of the inclusion of this requirement in the DCO to secure the provision of the fluvial mitigation aspects.

We would wish to review the FDCP and make full comments once this document is available.

In terms of the fluvial mitigation to be delivered prior to other works commencing, the flood conveyance syphons required for the taxiways, western noise bund and the active travel path are essential aspects. As already highlighted, these syphons are not listed under a Work Number in Schedule 1 and we would question whether the flood conveyance syphons should also be listed under Requirement 23 in order to secure their delivery alongside the other fluvial mitigation elements.

Requirement 31 – Construction sequencing. We welcome the addition of this Requirement which would ensure Work No. 42(b) (weir and fish pass) would be completed prior to Work No. 39(b) (extension to the existing River Mole culverts and syphon) commencing. We would suggest that Work No. 39(a) (divert and extend river course) should also be completed prior to 39(b) commencing. We note that Work No. 39(a) is included within Requirement 23 so the applicant should be able to confirm the overall construction sequence and whether Work No. 39(a) would already be delivered prior to Work No. 39(b).

ES Appendix 11.9.6 Flood Risk Assessment – Annexes 3-6 – Version 2

There have been updates and additions to this report to add additional details and explanation around the fluvial flood risk modelling, and the findings of this modelling. The additional detail is welcomed, it is also noted the findings and conclusions of this report have not changed from the previous version. We will use this updated version of the report to assist with the ongoing review of the with-scheme fluvial modelling.

It is noted that dimensions/design of several aspects, such as the soffit levels of extensions to watercourse bridges, the alignment of the active travel path/flood relief culverts at the Longbridge Roundabout and elements of the flood compensation areas will be finalised at the detailed design stage. We would highlight that further investigations by the applicant into the flood risk aspects may be required when

detailed designs are available to ensure supporting evidence is reflective of the actual design.

In Table 6.3 which sets out information around the Car Park X FCA, the line containing information on the peak flows in the River Mole appears to be blank. Could this table be updated please?

Design and Access Statement Appendix 1 - Design Principles - Version 4 - Tracked

DBF25: Advisory: We still recommend a clear span bridge for this section but recognise it is outside of our remit. Given this situation, we advise a V-shaped notch in the bed of the proposed depressed/recessed invert so that if incision of the bed upstream and downstream does happen then there will still be a 2 stage section to focus water flow within the culvert during low flows.

DBF260: Request for further information: This statement is crossed through. Is this raised embankment no longer going to be present? Raised embankments close to watercourses can make geomorphologically changes to the watercourse through increasing the stream power and causing erosion/washing away flora and fauna.

DDO16: Advisory: Soft/bio protection should avoid plastics where possible, unless they are beyond the bank top. This to avoid microplastics being released into the watercourse. Many coir sheeting products include strands of plastic which should be checked for.

DDP17: Advisory: The following statement may be better as a separate statement/entry: ‘The re-naturalised section of the River Mole will not be netted (to avoid impinging on tree growth and nature movement of the channel). ‘

ES Appendix 11.9.1 Geomorphology Assessment - Version 2 - Tracked
Page 13: Advisory: We are surprised to see erosion happening along the Crawters Brooks through the airport. We believe this channel to have too shallow a gradient for this process to occur. We think the damaged gabions are more likely to be the result of blockage clearance, dredging or the installation of the netting.

Page 26: climate change impacts before 2029:

Advisory: Suggested missing considerations:

- It is possible that the steep banks of the Gatwick Stream between the eastern end of the runway, the A23 and railway could suffer from bank collapses within this time period.
- It is likely that the Man Brooks, which has a significant nick point, could be exacerbated in its erosion rate by climate change impacts before 2029.

However, neither of these impact on the design of the second runway options.

Page 31. Section 6.4.1
Advisory: Continued maintenance of the berms with the new open-lidded culvert extension should be mentioned here. This is a geomorphological affect.

Wastewater Impact Assessment Page 273 – these scenarios and projections do not appear to consider the proposed new wastewater treatment facility onsite at Gatwick. – how does this most recent Change affect these figures?

Page 296 Comments on ISH7 – Wastewater
NB – we have not received formal consultation regarding the onsite wastewater treatment (foul sewage) facility. This is a very important element for us as the likelihood of being a high public interest permit application..

We met with the applicant on 20 June 2024 regarding the potential permitting of the proposed onsite sewage treatment works (note not the separate reed bed application).

Usually if the proposed discharge is in a sewered area (which this would be) then it would be expected that the applicant connects to that local network. Thames Water saying there is no capacity is not a reason for us not to say the applicant must connect. It is Thames Water's responsibility to provide capacity. This project is expected growth and as such Thames Water should plan for this.

We have in the past issued permits for self-contained Sewage Treatment Works, but these have been with conditions that connection to foul sewer is made as soon as it is available. Time-limiting EPR permits is difficult but can be achieved through improvement conditions.

It is also possible if the private system is constructed to Water Company standards so that it can be adopted by the Water Company once constructed. This could also be problematic as construction needs to be followed and signed off by the Water Company to agree that it meets specifications.

As a minimum the applicant would need confirmation from Thames Water that their infrastructure could accommodate the additional flows from the NRP.

Explanatory Memorandum to the Draft DCO – Version 5
Page 16 Section 6 Article 22 (Discharge of water)

Permit applications may be required for discharges to watercourse. The ownership of the watercourse is not the relevant criteria but protecting the environment is the overarching consideration.

We recommend that the applicant amends this section to include the above consideration.

Design and Access Appendix 1 P32-35,DDP1-18 We would like the applicant to confirm if the potential for deicer/surface water run-off to contain PFAS been taken into account.

If you require any further information, please do not hesitate to contact me.

Yours sincerely

Mrs Michelle Waterman-Gay
Planning Advisor

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