

M25 junction 10/A3 Wisley interchange TR010030 8.3 Statement of Common Ground with Environment Agency

Regulation 5(2)(q)
Planning Act 2008





Infrastructure Planning

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The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

M25 junction 10/A3 Wisley interchange

The M25 junction 10/A3 Wisley interchange Development Consent Order 202[x]

8.3 STATEMENT OF COMMON GROUND WITH ENVIRONMENT AGENCY

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STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) Highways England Company Limited and (2) the Historic Buildings and Monuments Commission for England (Historic England).



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Date: 17 June 2019



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Date: 17 June 2019



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1. Introduction

1.1. Purpose of this document

- 1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed M25 junction 10/A3 Wisley interchange improvement scheme ("the Application") made by Highways England Company Limited ("Highways England") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").
- 1.1.2 This SoCG does not seek to replicate information which is available elsewhere within the Application documents. All documents are available in the deposit locations and/or the Planning Inspectorate website.
- 1.1.3 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it, and where agreement has not (yet) been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.

1.2. Parties to this Statement of Common Ground

- 1.2.1 This SoCG has been prepared by (1) Highways England as the Applicant and (2) Environment Agency.
- 1.2.2 Highways England became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing Highways England made provision for all legal rights and obligations of the Highways Agency, including in respect of the Application, to be conferred upon or assumed by Highways England.
- 1.2.3 The Environment Agency is an executive non-departmental public body, sponsored by the Department for Environment, Food and Rural Affairs with the stated purpose 'to protect or enhance the environment, taken as a whole'. Within England it is responsible for:
 - regulating major industry and waste;
 - treatment of contaminated land;
 - water quality and resources;
 - fisheries:
 - some inland river, estuary and harbour navigations;
 - conservation and ecology; and
 - managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.



1.3. Terminology

- 1.3.1 In the tables in the Issues chapter of this SoCG, "Not Agreed" indicates a final position, and "Under discussion" where these points will be the subject of ongoing discussion wherever possible to resolve, or refine, the extent of disagreement between the parties. "Agreed" indicates where the issue has been resolved.
- 1.3.2 It can be taken that any matters not specifically referred to in the Issues chapter of this SoCG are not of material interest or relevance to Environment Agency, and therefore have not been the subject of any discussions between the parties. As such, those matters can be read as agreed, only to the extent that they are either not of material interest or relevance to Environment Agency.



2. Record of Engagement

2.1.1 A summary of the meetings and correspondence that has been taken place between Highways England and Environment Agency in relation to the Application is outlined in table 2.1.

Table 2.1: Record of Engagement

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
28.06.17	Meeting	Scheme update and discussion on the route options and environmental issues, including drainage, contamination and historical landfills, water and ecology
19.12.17	Meeting	Stage three meeting to provide an update to the scheme.
09.03.18	Meeting	Discussion regarding Water Framework Directive and impacts and mitigation on Bolder Mere and Stratford Brook.
13.04.18	Meeting	Impacts on Bolder Mere and Stratford Brook.
24.05.18	Letter	EA response to meeting minutes of 13.04.18.
02.08.18	Meeting	Discussion regarding scheme updates, soils and geology including ground investigation phasing, and temporary de-watering requirements.
15.08.18	Meeting	Discussions on water quality, with a particular focus on Phosphorus in Bolder Mere, WFD and Ecology mitigation in relation to watercourse crossings.
28.11.18	Meeting	Discussion on scheme updates, EA interests Protective Provisions, licencing and ground investigations for the DCO application.
12.12.18	Meeting	Discussion on the Statement of Common Ground, method of input and governance.
13.12.18	Targeted Consultation response	Environment Agency provided feedback on the changes made to the Scheme since the Statutory Consultation earlier in the year. This includes their confirmation that the changes to the Scheme will result in a reduced environmental impact including a more limited impact on Bolder Mere lake.
14.12.18	Letter	Receipt of EAs updated 'standard' Protective Provisions. Request for further details on scheme proposals in relation to the requirement for licences and consents.
22.01.19	Site visit.	A site visit to the Site of Special Scientific Interest and Special Protection Area to discuss proposed and possible mitigation measures. Other



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
		stakeholders included RSPB and Surrey Wildlife Trust.
07.02.19	Email	Email from stakeholder engagement team seeking confirmation on status of agreement to disapply certain consents.
14.02.19	Email	Email from EA requesting information originally requested in letter of 14.12.18.
19.02.19	Email	Email from EA responding to other points in Atkins email of 7th February 2019, that did not require further information and reiterating the requirements for further information on certain permits.
22.02.19	Meeting	Discussion on the Water Framework Directive and proposals for mitigation measures.
27.03.19	Letter	EA feedback on meeting notes from 22.01.19 and on mitigation proposals for Stratford Brook and Bolder Mere.
29.03.19	Site visit	To review mitigation proposals for scheme impacts at Stratford Brook.
09.04.19	Letter	Response to WFD and Water Quality Assessment from EA IEP
10.04.19	Meeting	To update on project and programme and to discuss risk assessment methodology for land contamination in respect of DCO application.
18.04.19	Letter	EA response to WFD Assessment Report. EA are concerned with the lack of groundwater information and how the scheme may impact on groundwater resources and sensitive Site of Special Scientific Interest. They request further information (ES chapter 10) to alleviate their concerns and potential objection to the DCO.
26.04.19	Letter	Response to additional targeted consultation.
07.05.19	Meeting	To discuss feedback in letter of 18.04.19 from the EA on the WFD and Water Quality Assessment, specifically in relation to the approach to the risk assessment of potential impacts to ground water quantity in light of available data.
16.05.19	Email	Mitigation strategy and proposed amount for commuted sum to act as fall back if preferred mitigation options for Stratford Brook are not possible. Sent to EA for their consultation.
22.05.19	Letter	EA response to mitigation strategy for Stratford Brook. They agree commuted sum value for the purpose of application submission, but state a) the 'reasonable cost' of works will need to be justified and b) the commuted sum should not be taken as a



Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
		cap on expenditure. They also provide some clarifications/corrections for the mitigation strategy.
23.05.19	Letter	EA response ('fall-back position') in relation to A3 drainage discharge to Bolder Mere. They state that if re-routing is not feasible they expect some form of attenuation/pipe treatment/settlement that delivers better treatment that that currently in place.
05.06.19	Email	Updated ES chapters for Water Environment and Drainage (8) and Geology and Soils (10) sent to EA for their review and comment, in respect of approach to assessment of risk to ground water resources and that of contaminated land in absence of GI data.
06.06.19	Email	Summary of s150 consents, licences and permits required or not required for the project sent to EA for their consultation.
06.06.19	Email	Updated WFD report sent to EA for their review.
07.06.19	Email	Response sent to EA comments on the WFD/WQ assessment report.
10.06.19	Letter	EA confirm that they are content with the meeting note of the 07.05.19 and have no comments.
14.06.19	Letter	EA confirm that they are content with the meeting note of the 10.04.19 and have no comments. They provide feedback on the draft DCO requirements Bolder Mere, Stratford Brook and Contaminated Land & groundwater; the permits/licences/consents to be required or to be disapplied and confirm, subject to some amends that they are satisfied with the SoCG.

2.1.2 It is agreed that this is an accurate account of the key meetings and consultation undertaken between (1) Highways England and (2) Environment Agency in relation to the issues addressed in this SoCG.



3. Issues

3.1. Water Framework Directive (WFD)

Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
WFD	Scheme impacts (Groundwater resources & SSSI)	The EA are concerned with the lack of groundwater information and how the scheme may impact on groundwater resources and sensitive Site of Special Scientific Interest (SSSI) sites in the locality of the scheme. Until we have reviewed how you have addressed this issue in the Environmental Statement (ES) Chapter 10 (Geology & Soils), at this point we are concerned that we may have an objection to the Development Consent Order (DCO) application based on this lack of information	Discussions with the EA as regards this matter are in progress. The likely significant effects of the Scheme have been identified and reported in the Environmental Statement (document reference TR010030/APP/6.3). Highways England has shared advance draft copies of Environmental Statement chapters 8 (road drainage and water environment) and 10 (geology and soils) with the Environment Agency which explain how the likely significant groundwater impacts of the Scheme have been identified and assessed.	Under discussion
WFD	Assessment and proposed mitigation	Overall, the EA are now satisfied that the WFD Assessment and proposed mitigation packages are acceptable for submission for the Development Consent Order (DCO) application, whilst noting that further details are to be submitted at later stages as noted throughout the submitted documents. In particular, we will be keen to review the Ground Investigation (GI) and Hydrogeological Risk Assessment (HRA), Construction and Environmental Management Plan, SPA Management and Monitoring Plan and Register of Environmental Commitments and Actions for the Scheme, which should	Noted	Agreed



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		provide the outstanding details for the issues within our remit		
WFD	WFD status (Stratford Brook and Bolder Mere)	Provided that the embedded mitigation, additional specific mitigation and generic guidance on the principles of WFD compliant design are implemented, we are satisfied that the scheme will not result in a deterioration in WFD status or prevent the achievement of good status. We are satisfied that the details of the package of measures to mitigate for the impacts on the Stratford Brook and Bolder Mere Lake can be secured through Requirements of the DCO, providing they can be agreed with us at detailed design	Noted	Agreed
WFD	Assessment scope	Overall we are pleased with the scope and breadth of the submitted reports, taking into account that further site investigation works need to take place before the mitigation measures can be finalised. The reports are clear and well laid out. We agree that you have provided a proportional evidence base for the associated risk, except for groundwater.	Noted	Agreed.
WFD Assessment/Water quality assessment	Screening & scope	The EA agree with what has been scoped in and out. We agree that this scheme poses little to no risk to Drinking Water Protected Area (DrWPA) status is also not likely to	Noted	Agreed



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		impact on Nitrate Vulnerable Zones (NVZs).		
WFD	Biodiversity net gain	We are concerned that the scheme's objectives no longer include a commitment to achieving biodiversity net gain, which we understood through our pre-application engagement would be committed to. We would like confirmation of whether the scheme will provide an overall net biodiversity gain.	The package of mitigation proposed to address the effect of the Scheme on the water environment, is considered to have potential to deliver biodiversity benefits to specific water features. This is detailed in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report). Due to the scheme's location, it has not been possible to completely avoid loss of land from national and international statutory designated sites and irreplaceable habitat outside designated sites (ancient woodland and veteran trees). Therefore, in keeping with published guidance (Baker et al (2019) Biodiversity net gain. Good practice principles for development. CIRIA, CIEEM & IEMA.) overall the scheme cannot achieve 'biodiversity net gain' and, in line with good practice, metrics to quantify the scheme's biodiversity outcomes have not been used. Rather, the ecological design has been based on the mitigation hierarchy to avoid and minimise losses as far as practicable, and a landscape-level approach for the compensation to deliver long-term benefits for nature conservation. This approach has been agreed with	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			Natural England.	
Affected waterbodies (and Bolder Mere)	Scheme impacts (findings & proposed mitigation)	The WFD assessment concludes that the scheme won't cause a deterioration in any of the affected waterbodies at a waterbody scale but it does suggest there will be several minor localised effects, including increased shading/modification as a result of river crossings and encroachment of Bolder Mere Lake and the loss of associated marginal habitat. Although localised, these impacts must still be mitigated (or as a last resort compensated for). Where these mitigations (or compensations) are not reflected in the WFD assessment, we would expect them to be detailed in the Ecology (or similar) chapter of the Environmental Statement.	Mitigation for the impacts on Bolder Mere has been discussed with the Environment Agency (and agreed with Natural England) as detailed in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. This comprises of a scheme configuration that minimises impacts. Additional (specific) mitigation measures have also been developed as far as concept sketches and brief descriptions as detailed in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report, Appendix F: Brief descriptions and concept sketches for additional mitigation (specific). This is also outlined in the Environmental Statement. Natural England agree in principle that the package of embedded and additional specific measures to mitigate the effect of the scheme on Bolder Mere SSSI are a) proportionate to the risk of adverse effect of the Scheme on the water body unit and b) have the potential to deliver additional biodiversity benefit.	Under discussion
Stratford Brook	Proposed mitigation measures	Although the EA welcomes the proposed measures (as contained in M25 junction 10/A3 Wisley interchange	Highways England and EA have discussed a strategy for developing an effective mitigation package for	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		(5.4) Water framework directive compliance assessment report – Appendix F), we do not feel they fully mitigate or compensate for the impact of the new structure. The main limiting factor to a healthy fish population in this instance is the presence of the impounding structure. The creation of backwaters is a temporary measure that isn't necessarily appropriate for high gradient streams. In addition, there is limited opportunity to improve the in-channel habitat of the Stratford Brook within the red line boundary. The preferred order of mitigations would be: 1) Full mammal & fish passage improvement works to existing A3 culverts; 2) Partial removal / notching of concrete sill in A3 South culvert. 3) Improved connectivity (e.g. through use of baffles) through A3 South culvert. 4) Enhancement/restoration of length of watercourse equivalent to new bridge width downstream of A3 culverts. 5) Commuted sum	the effects of the Scheme on Stratford Brook that comprises a) works HE have committed to as part of the Scheme; b) studies to determine the technical feasibility and cost of potential additional mitigation measures (and a commitment to undertake these works if they are feasible and of reasonable cost and c) fall-back to payment of an agreed commuted sum to the EA if the cost of additional mitigation is not reasonable. This is detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report, Appendix F: Brief descriptions and concept sketches for additional mitigation (specific). What constitutes a reasonable cost for the additional mitigation works will need to be justified and the commuted sum is not be taken as a cap on the cost of the additional mitigation works. The draft DCO includes a requirement (Requirement 12) which requires Highways England to agree the details of the mitigation measures for works adjoining Stratford Brook with the Environment Agency.	



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
Stratford Brook	Scheme impacts; mitigation measures	The EA agree that 'minor localised' is an appropriate categorisation of risk for the Stratford Brook. It will be critical going forward that you can 'firm up' these mitigation measures at the earliest opportunity to offset the morphological impact associated with the bridge, as we have discussed with you separately at our site visit meetings, most recently on 29 March. Our position remains that the proposed 'embedded mitigation' will not be sufficient to mitigate the impacts on their own.	Noted. As above.	Under discussion.
Stratford Brook	Mitigation measures	We agree that the new Stratford Brook crossing and strengthening works to the A3 slip road culvert will not prevent the achievement of WFD Good Ecological Status (GES). However, it must be acknowledged that the scheme presents a significant opportunity to reverse the detrimental impacts of an existing Highways England asset and achieve WFD objectives by restoring 100-200m of natural channel morphology and opening up a significant reach of watercourse to fish, an opportunity which is unlikely to be available again for some decades given the scope of works proposed to the junction	The opportunity to address the adverse effect of the Stratford Brook culvert (North) is to be considered as part of the mitigation strategy (see above) and is detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report, Appendix F: Brief descriptions and concept sketches for additional mitigation (specific). The draft DCO includes a requirement (Requirement 12) which requires Highways England to agree the details of the mitigation measures for works adjoining Stratford Brook with the Environment Agency.	Under discussion
Stratford Brook	Feasibility studies (additional mitigation measures)	We maintain concerns that the feasibility studies for works on the Stratford Brook are to be completed	Following a site visit by specialists in fish easement the EA have concluded that it should be possible	Under discussion.



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		after Development Consent Order (DCO) approval. It is not clear to us how, if essential mitigation measures are found to be non-viable, any works would be acceptable. We would not wish to find ourselves in a position where the scheme is approved, but appropriate mitigation measures cannot be implemented, leading to a detrimental impact on the Stratford Brook. It is not clear to us why such feasibility studies cannot be undertaken in advance of the application. We need to have a level of surety at the application stage. Unfortunately, based on the current information available to us, we are likely to raise an objection at the application stage, given that we cannot be certain that appropriate mitigation will be delivered as part of the scheme	to implement some form of additional mitigation that can be agreed to as a result of the feasibility study. They understand that the study will not be completed prior to DCO submission (agreed at site visit 29.03.19). A mitigation strategy has been reviewed by the EA and is detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Appendix F: Brief descriptions and concept sketches for additional mitigation (specific) The draft DCO includes a requirement (Requirement 12) which requires Highways England to agree the details of the mitigation measures for works adjoining Stratford Brook with the Environment Agency.	
Stratford Brook	Feasibility studies (mammal passage solutions)	We are concerned that mammal passage solutions through the Stratford Brook South Culvert and the culvert passing between the A3 and northern slip road are only included as 'potential' mitigations, subject to further feasibility studies. These works should be carried out as essential mitigation because these existing structures do not comply with Highways England best practice for culvert design	A mitigation strategy has been discussed with and reviewed by the EA and is detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Appendix F: Brief descriptions and concept sketches for additional mitigation (specific).	Under discussion
Stratford Brook	Mitigation (effects of existing roads – Otter populations)	Volume 10, section 1, part 9 of HE's Design Manual for Roads and Bridges requires mitigation for the effects of existing roads to always be considered	Appendix F of the WFD assessment commits the Scheme to provision of mammal shelf on Stratford Brook Underbridge (additional specific	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		when improvements or major maintenance works are planned adjacent to the watercourses. This includes in areas where otter populations can be expected to spread during the lifetime of the improvements. Although otters are relatively sparse in the Wey catchment, we have evidence that their range is expanding in adjoining catchments and we recently had a report of a dead otter (suspected roadkill) at the top of the Wey Catchment.	mitigation measure SB_b). The Scheme will also consider provision of mammal passage through the existing Stratford Brook culverts (north and south) as part of a feasibility assessment (additional specific mitigation measure SB_d in Appendix F of the WFD assessment). These will be implemented if technically feasible, and, as part of a total mitigation package, of reasonable cost.	
Bolder Mere	Scheme impacts (loss of bank and open water habitat – justification for scheme)	The widening of the A3 is likely to impact directly on Bolder Mere, including loss of bank and open water habitat. Justification is needed as to why encroachment on Bolder Mere Lake is required and why other options with a lesser effect on the lake have been ruled out.	During development of the Scheme a very wide range of alternative solutions for resolving the traffic problems at junction 10 have been identified, developed and assessed. This process is set out in Chapter 3 (Assessment of Alternatives) of the Environmental Statement (Application document TR010030/APP/6.3), and with specific reference to minimising effect on the Thames Basin Heaths SPA in Habitat Regulations Assessment Stage 3 record (in Application document TR010030/APP/5.3).	Under discussion
Bolder Mere	Scheme impacts (SSSI designation; compensation habitat)	Bolder Mere has been assigned as a WFD waterbody due to the areas SSSI designation. We are therefore open to compensation for the loss of habitat being provided elsewhere on the scheme.	Mitigation measures to counteract the impacts on Bolder Mere have been agreed with Natural England as detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Appendix F:	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		We understand that Natural England have advised that further ponds could provide better habitat for the SSI designation. We would expect to be involved – along with Natural England – in any discussions for proposals on this matter.	Brief descriptions and concept sketches for additional mitigation (specific). In line with the best practice of mitigating the effect of a scheme as close to source as practicable, we have been able to agree a package of measures for mitigating the effects on Bolder Mere that are immediately adjacent to the lake. Mitigation for the effects of the scheme on ephemeral headwater ditches does include pond improvements. Natural England agree in principle that the package of embedded and additional specific measures are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity benefit.	
Bolder Mere	Scheme impacts (SSSI designation; loss of marginal habitat)	The WFD assessment acknowledges that encroachment into Bolder Mere Lake will also result in the loss of marginal habitat which is known to support a number of species for which the SSSI is designated. We support Natural England's recommendation for further macrophyte and aquatic invertebrate surveys to be carried out around the lake to better understand the distribution and abundance of key species and habitats which will help to inform an appropriate mitigation strategy.	Specialist aquatic ecological surveys have been undertaken to provide aquatic macrophyte and aquatic macro-invertebrate data from Bolder Mere. This data has been used to inform the scope for mitigating and offsetting the effects of encroachment of the A3 into the NE shore of Bolder Mere. This report Bolder Mere: Ecological Survey and Condition Assessment Summary Report (Nov 2018) has been shared with the Environment Agency.	Agreed



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
Bolder Mere	Scheme impacts (loss of marginal habitat; water quality; disturbance of lake habitat)	Compliance with the WFD status of Bolder Mere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. It is therefore critical that the proposed measures are 'firmed up' - working with us and Natural England - to ensure that deterioration can be avoided.	Mitigation as detailed in Appendix F of the WFD Assessment has been agreed with Natural England. Natural England agree in principle that the package of embedded and additional specific measures as detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Appendix F: Brief descriptions and concept sketches for additional mitigation (specific) are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity benefit. The preliminary design incorporates drainage improvements that redirect road runoff away from Bolder Mere. Instead (treated) runoff will be discharged to a watercourse downstream of the lake. This will reduce the volume of pollutants generated by the A3 entering the lake. However, the key water quality concern for Bolder Mere from the perspective of the WFD is Phosphorus. Appendix F of the WFD assessment demonstrates that a) Phosphorus is very unlikely to be sourced from the road and b) the	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			change in volume of the lake associated with the scheme is also very unlikely to affect the WFD Phosphorus status of the lake. Although neither the existing road or scheme are considered contributors to the current Phosphorus concentrations in Bolder Mere the mitigation package does still include some measures targeted at managing Phosphorus, to support achievement of WFD targets for the water body. These measures have been developed in consultation with NE and SWT.	
Bolder Mere	Environmental management plan	We recommend that an ongoing maintenance plan and/or adaptive environment management plan is produced for Bolder Mere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required.	Paragraph 4.7.35 of the WFD assessment starting "HE are committed to implementation of additional mitigations" states that the habitat improvements to the shores of Bolder Mere (BL_b), as described in Appendix F Table 2, will be maintained and monitored for a period of 15 years in accordance with the specification set out in the Thames Basin Heath SPA Management and Monitoring Plan (application document TR010030/APP/6.5).	Under discussion.
Bolder Mere	Enhancements (Biodiversity net gain & waterbody recovery)	Opportunities for enhancements should be taken in line with the 25-year Environment Plan and emerging national planning policy. Waterbody enhancements should aim to address waterbody failures. Bolder Mere Lake is currently failing to achieve Good Ecological Potential due to its hydro	Mitigation has been discussed with the Environment Agency (and agreed with Natural England) as detailed in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Natural England agree in principle	Under discussion



should be explored.	that the package of embedded and additional specific measures are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity benefit. These measures are being implemented with the objective of maintaining and potentially improving the conservation value of Bolder Mere, with a focus on providing for the needs of species identified within the citation for the wetland elements of Ockham and Wisley Commons SSSI, and in particular the Odonata order (dragonflies and damselflies). The measures are based on adult life stages. The measures are based on recommendations from Goldsmith Ecology (2018) and follow extensive consultation with the Environment Agency, Natural England and Surrey Wildlife Trust. These are also recorded in the M25 junction 10/A3 Wisley interchange, Outline Construction and Environmental Management Plan. Highways England is committed to the implementation of these measures, or measures generating	



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			The draft DCO includes a requirement (Requirement 10) which requires Highways England to agree the details of the mitigation measures for works adjoining Stratford Brook with the Environment Agency.	
Bolder Mere	Scheme impacts (Groundwater flow)	Concern that the new retaining wall as part of the scheme design will impact on groundwater flows and could therefore disrupt one of the main water sources to the lake.	The Environment Agency have reviewed the approach to the assessment of impacts on groundwater resources and SSSI as detailed in Chapter 8 (Water and Road Draining) and Chapter 10 (Geology and Soils) of the Environmental Statement. Information on the approach was also presented at a meeting on 7 May 2019. The Environment Agency agreed to provide a formal response following consideration of the environmental statement chapters which were subsequently provided by Highways England. An assessment of groundwater flow direction and groundwater contribution into Bolder Mere will be completed following the ground investigations to be undertaken as part of the Scheme. Design of the sheet pile element will take into account the likely requirements of Bolder Mere for groundwater inflows.	Under discussion
Bolder Mere	Surface water/road drainage (Bolder Mere)	Opportunities should be taken to improve the road drainage from the	Mitigation has been discussed with the Environment Agency as detailed	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		M25 and A3 as part of the redevelopment. In particular, we are keen to see the current drainage outfalls into Bolder Mere Lake altered so that they are not having such a detrimental impact on the water quality of Bolder Mere and surrounding watercourses/ditches. If re-routing the A3 drainage to a watercourse downstream of Bolder Mere is not technically feasible the minimum the EA would expect is some form of attenuation/pipe treatment/settlement that is above what is currently in place to at least offset the impact from the increased traffic movement/larger volume of surface water run-off to the lake.	in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. This includes a significant upgrade to road drainage that replaces a direct untreated discharge to Bolder Mere with a treated discharge to a watercourse downstream of the lake. The design of the of the drainage solution is dependent on the outcomes of a drainage survey yet to be undertaken. The draft DCO includes a requirement (Requirement 10) which requires Highways England to agree the details of the mitigation measures for works within the Bolder Mere mitigation and enhancement area with the Environment Agency. The DCO also includes protective provisions for the benefit of the Environment Agency which requires the Environment Agency to consent to any works carried out under the DCO which may affect drainage works.	
Bolder Mere	Road drainage	In section 4.7.26 of the WFD Assessment, we are encouraged by the plans to re-direct road runoff to downstream of the lake as this will help to ensure the salinity WFD element remains at 'High' post-construction and reduce the risk of WFD chemical failures. It is not clear that the impact on water quality at this new discharge location has been included in any of	The potential impact of the new outfall (outfall reference: PO-J10-006) has been included in the water quality assessment. Further details of the assessment can be found in Section 8.10 (Assessment of effects) of the Environmental Statement.	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		your drainage or water quality assessments; this will need to be assessed		
Bolder Mere	Construction impacts	Although only a short-term activity, there is the potential for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and Phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. A detailed method statement should be produced for this specific element of the scheme to demonstrate how this risk will be reduced and the WFD status protected.	This isn't covered in the WFD assessment, but it is addressed within the wider environmental document set, specifically the Construction and Environment Plan (see Section 4.8). To make sure that this specific issue is picked up and detailed methods of work are developed for construction of the retaining wall at Bolder Mere we have also included this as a specific item in the Register of Environmental Commitments and Actions (REAC) for the Scheme.	Under discussion
Mole Water Body	Proposed mitigation	In relation to the mitigation measures for Chatley Wood Pond in the Mole catchment area (Appendix F) opportunities for creating or enhancing wetland habitat should be explore at Chatley Wood Replacement Land where in close proximity to the River Mole	The boundaries of Chatley Wood Replacement Land have been revised, and no longer extend to the Mole floodplain. Chatley Wood Pond remains the best opportunity for habitat enhancement.	Agreed
River Wey	Proposed mitigation	Opportunities for creating and/or enhancing wetland habitat should be explored at Park Barn Farm Replacement Land where in close proximity to River Wey. This area does not seem to have been included within the proposed mitigation measures	The strategy of incorporating wet mitigation features into enhancement and replacement land has always been opportunist in nature and will always be secondary to the primary functions of these areas (SPA compensation in the	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			case of the enhancement areas and public access in the case of the replacement land). We have investigated opportunities within the HE / Atkins Environment team in Park Barn Farm Replacement Land. Although there may be some opportunity to create limited wet areas here this will always be limited by the need to not make areas intended for public access too wet. Opportunities are further limited by the location of ditches within the area. These are at the boundary with third party land, restricting opportunities to incorporate water features that don't also affect land outside the ownership of the Scheme. For these reasons there are no obvious opportunities to proposed wet mitigation in this area.	
WFD Assessment	Ephemeral & headwater ditches	The EA's interest in these is limited as they are not main rivers, however the EA encourages improvements where they can be made.	Noted. Details on the proposed mitigation and enhancement proposals have been reviewed and discussed with The EA and are detailed in Appendix F: Brief descriptions and concept sketches for additional mitigation (specific) of the WFD Assessment.	Under discussion
WFD	Assessment scope (Guilleshill Brook)	Although not directly impacted, the Guilleshill Brook should be considered in the Water Framework Directive (WFD) assessment due to its proximity to one of the proposed construction compounds and therefore has the potential to be polluted	This watercourse is considered in the M25 Junction 10/A3 Wisley Environmental Statement 6.3, as it is within 1 km of the Scheme. No impacts on the watercourse are predicted during construction and the Scheme is not proposing to	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			discharge road runoff into the watercourse during operation so again no impacts are predicted.	

3.2. Environmental Statement

Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
Road drainage & water environment	Groundwater (Water Quality Assessment)	The Water Quality Assessment Report concludes that the scheme provides a medium level of risk. We accept this in part because of the nature of the receiving aquifer - mainly the Bagshot Formation. The report does however indicate that mitigation measures and further risk assessment will be required and we would concur with this approach.	Noted	Under discussion.
Geology and soils	Ground investigation and quantitative risk assessment	We understand from recent discussions that the dewatering works that were proposed for the gas main realignment works are no longer taking place and that techniques that do not involve dewatering will be used, predominantly to avoid impacts on groundwater sensitive habitats in the area. We also understand that no borrow pits are proposed in the local area for the scheme. Given the above, our only outstanding issue is that ground investigation works have not yet commenced. If the data collected from the GI is not ready in time for DCO submission, then the ES will need to state that the	The EA has reviewed Chapter 10 of the ES (Geology & Soils) and the approach to GI and quantitative risk assessment. This information was also discussed at meetings on the 10 April 2019 and the 7 May 2019. The draft DCO includes a requirement (Requirement 13) which prevents the commencement of intrusive ground works until Highways England has submitted a site investigation and risk assessment to the Secretary of State and it has been approved. Information from the scheduled ground investigation, along with quantitative risk assessments	Under discussion



Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
		data and relevant documents would be submitted to the Environment Agency for review prior to groundworks.	undertaken in line with CRL11, will be submitted to the EA for approval at a later stage as part of the detailed design and ahead of any work commencing and will be controlled through the protective provisions for the EA's benefit within the DCO.	
Geology and soils	Piling Risk Assessment	Piling Risk Assessment (PRA): No expected pathways to be created from piling so if a PRA is not deemed necessary then at the least a controlled waters qualitative risk assessment would be submitted.	A PRA will be undertaken at a later stage, once piling design is sufficiently detailed to determine a construction method for the protection of groundwater and that this is secured in the CEMP.	Under discussion
Geology and soils	Mineral extraction	If mineral extraction is to be carried out then hydrogeological risk assessment may be required.	No mineral extraction will be carried out as part of the Scheme.	Agreed
Flood risk	Flood Risk Assessment (Stratford Brook compensation area)	We agree that the Stratford Brook model that we have reviewed demonstrates that the bridge will not have a significant impact on flood risk, and we also agree with the conclusions of the model report, which includes that compensation is not required. However, it will still be important to demonstrate within the FRA submitted with the application that the bridge will not cause an increase in flood risk, using the model results as evidence. As we have previously stated, it is important that the FRA – although a technical document – can be easily read by a 'lay person' to understand these conclusions.	Noted. This evidence will be provided in the Flood Risk Assessment (document ref: TR010030/APP/5.5)	Under discussion.



Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
Flood risk	Scheme impacts (River Mole & Wey; floodplain; compensatory habitat areas)	At the detailed design stage, we would expect to see confirmation that there will be no impacts on floodplain storage or flow routes for the proposed compensatory habitat areas adjacent to the River Mole and River Wey. Any works within 8 metres of a main river will require a Flood Risk Activity Permit.	Noted. This will be confirmed at detailed design phase and Flood Risk Activity Permits will be obtained for any works within 8m of a main river.	Agreed
Ecology	Surveys on watercourses (Otter and water voles)	All affected watercourses - including ordinary watercourses - should be assessed for their potential to support otter and water voles and surveyed where appropriate.	Otter and water vole surveys were undertaken in the summer of 2018. No water vole evidence was recorded. The only Otter evidence recorded was a spraint on the River Wey approximately 180 m east of the DCO boundary. The results are recorded in the M25 Junction 10/A3 Wisley interchange Environmental Statement 6.3, and will be shared with EA.	Under discussion.
Ecology	Aquatic invertebrates	The PEIR makes no mention of aquatic invertebrates, in particular white-clawed crayfish, which could be impacted by any physical works to the watercourses, for example river crossings. We do not hold any records of either the invasive American Signal crayfish or the native white-clawed crayfish for the Stratford Brook or other minor watercourses affected by the scheme. However, we do hold records of Signal crayfish in the main river Wey. An assessment should be made as to whether Signal crayfish could migrate between the river Wey and the affected watercourses. If it is concluded that Signal crayfish would	White-clawed crayfish surveys were undertaken in the summer of 2018. No evidence of white-clawed crayfish or invasive non-native crayfish were recorded in Stratford Brook. In addition, Stratford Brook assessed as being unsuitable for white-clawed crayfish due to a lack of suitable refuges and levels of pollution. The results are recorded in the M25 Junction 10/A3 Wisley interchange Environmental Statement 6.3 and will be shared with EA	Under discussion.



Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
		not be able to easily migrate upstream - most likely due to the presence of a weir - then the watercourses should be assessed for their potential to support native white-clawed crayfish.		
Pollution & waste	Pollution control (during construction)	Pollution control measures need to be implemented during construction for all works in or adjacent to watercourses.	During construction Pollution Prevention Guidelines (PPGs)/Guidance on Pollution Prevention (GPPs) and the Construction Industry Research and Information Association (CIRIA) guidance on the control of water pollution from construction sites will be implemented to prevent any impacts on watercourses or notable aquatic habitats.	Under discussion
Pollution & waste	Pollution control (during construction)	All waste produced on-site should be taken to an appropriate authorised treatment or disposal facility.	The waste producer or holder will be required to make checks on waste carriers and to ensure receiving facilities are authorised to manage the waste.	Under discussion.
Pollution & waste	Pollution control (during construction)	All soils and construction, demolition and excavation (CDE) waste should be assessed for hazardous properties.	Wastes generated by the Scheme will be characterised and classified as required.	Under discussion.
Pollution & waste	DoWCoP	The EA wants to see any CLAIRE Definition of Waste: Code of Practice (DoWCoP) application in advance	Where one is required, details of a Materials Management Plan under the Definition of Waste: Development Industry Code of Practice will be provided to the EA in advance of an application.	Under discussion.
Pollution & waste		The re-use and recovery of wastes where appropriate is encouraged.	Reuse and recovery of waste will be implemented in the Scheme where possible.	Under discussion.



Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
Pollution & waste	Pollution control (during construction)	All waste leaving sites should be accompanied by a relevant accurate duty of care or hazardous paperwork.	The waste producer or holder will be required to transport waste in accordance with Duty of Care requirements. This includes providing documentation for the transport of waste.	Under discussion.

3.3. Permits, Licensing and Protective Provisions

Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
Protective Provisions		The Environment Agency will need to agree that the Protective Provisions included in the DCO will be sufficient to provide assurance to the Environment Agency that they can agree to disapply the requirement for obtaining separate permits and licences that might otherwise be necessary for the construction works and once the scheme is built.	Highways England is currently discussing the form of protective provisions to be included in the DCO for the Scheme with the Agency. The draft DCO contains protective provisions in favour of the Environment Agency.	Under discussion. (subject to further discussion and agreement on the draft PPs)
Flood Risk	Flood Risk Activity Permits	Any works within 8 metres of a main river will require a Flood Risk Activity Permit.	As explained in more detail in the consents and agreements position statement, HE seeks to disapply the requirement to obtain a flood risk activity permit, which is a prescribed consent for the purpose of section 150 Planning Act 2008. The Environment Agency's consent to the disapplication of this consent in the DCO is therefore required before the DCO can be made in that	Under discussion.



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			form. The draft DCO includes protective provisions for the benefit of the Environment Agency, which contain restrictions on HE's ability to carry out some aspects of the authorised development without the consent of the Environment Agency. The protective provisions included in the draft DCO are based on the protective provisions provided by the Environment Agency to HE, with some limited and reasonable adjustments.	
Pollution	Water Discharge Activity Environmental Permit	On the basis of the drainage improvements to be included in the scheme, the EA's initial view was that we did not consider that a Water Discharge Environmental Permit would be required. (28.11.18 meeting) However we have requested further information (letter dated 14.12.18) in order to make a formal decision on whether or not we can agree to disapply the need for this permit.	Given the pollution control measures provided for within the scheme and in keeping with the Memorandum of Understanding between the Highways Agency and Environment Agency – Annex I – Water Environment, dated March 2011, it is anticipated that a water discharge activity permit will not be needed for highways run-off. Further we do not anticipate any dewatering activities (of surface water to surface water) will be required for construction.	Under discussion
Materials & waste	Waste Activity Permit	The EA have confirmed (<i>email dated 19.02.19</i>) that any waste permit which may be required during construction for treating / reuse of any	It has been agreed with the EA that a Waste Activity Permit will not be needed for the DCO	Agreed



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
		manmade materials, can be applied for at a later date.	and can be dealt with by the appointed contractor at a later stage if required. (28.11.18 meeting)	
Water environment	Water Abstraction Permit	The EA have confirmed (<i>email dated 19.02.19</i>) that any abstraction licence which may be required during construction for groundwater dewatering activities, can be applied for at a later date.	It has been agreed with the EA that a Water Abstraction Permit will not be need for the DCO and can be dealt with by the appointed contractor at a later stage. (28.11.18 meeting)	Agreed
Water environment	Water Impoundment Licence	We cannot agree to disapply a Water Impoundment Licence, and you will need to apply for a licence separately. It is current EA policy that we will not agree to the disapplication of s.25 Water Resources Act 1991. We advise that it may take up to 4 months for the application process; the licence will need to go to Natural England for comments (due to the Site of Special Scientific Interest (SSSI) designation) and may need to be advertised. We recommend sending an application to our National Permitting Service as soon as possible.	Highways England notes the Environment Agency's position in this regard and proposes to submit a draft licence application to the Environment Agency as soon as is practicable.	Agreed.
Water environment	Ground Water Activity Permit	A Ground Water Activity Permit may be required to discharge rainwater run-off from the highway through a soakaway and into ground water. The EA have requested further details so as to determine whether this licence can be disapplied under s150 of the Planning Act.	Pollution control measures provided for within the scheme including attenuation and water quality treatment. Further, in keeping with the Memorandum of Understanding between the Highways Agency and Environment Agency – Annex I – Water Environment, dated March 2011, and the Environment Agency's 'Approach to Groundwater Protection' Guidance, including	Under discussion



Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			Position Statement G13, dated February 2018, it is anticipated that a ground water activity permit will not be needed. Should the results of the GI and the determination of the ground water levels or the presence of any so far unforeseen contamination, dictate that a permit is required, an application will be made. It has been agreed with the EA that such an application at this point will not be unreasonably withheld.	
Ecology	Fish (removal) licence	We understand a licence to move fish may be required for works to Bolder Mere Lake. At present we are unsure whether EAs Protective Provisions will be sufficient to remove the requirement for a Permit. Permits are usually obtained by specialist contractors undertaking the specialist fish works.	Fish removal is likely to be a requirement as a result of works at Bolder Mere and as part of the proposed mitigation strategy to improve water and habitat quality in the lake and potentially at Stratford Brook if the proposed construction methodology changes (currently no in-channel working anticipated). The EA have indicated that permits will need to be obtained by the sub-contractor undertaking the works at a later date and therefore it is not necessary for the DCO to disapply this consent.	Agreed

Appendices



Appendix A. Correspondence



A.1. Meeting (28.06.17)

We are awaiting these minutes, but have proceeded with the submission given the date (2017) and approval of these minutes in subsequent meetings.



A.2. Meeting (19.12.17)



Meeting notes

Subject: Date and tim Meeting place Present:		Meeting no: Minutes by: Representing:	2 Environment Agency
Meeting place		Minutes by:	
	ee: EA Office Reading		Environment Agency
Present:		Representing:	Environment Agency
			Highways England Atkins Atkins Atkins Atkins Atkins Atkins Atkins
ITEM DES	SCRIPTION & ACTION	DEADLIN	E RESPONSIBLE
safe	Ith & safety – NW started the meeting w ty moment concerning recent cold weat cting visibility whilst driving		
be the from a teat correction. Atking Clarific and Other responsible for the front from the front fron	explained he was the principal contact at EA and had taken and of specialists in relevant fields but espondence/discussions should go through the contact at EA and had taken and the specialists in relevant fields but espondence/discussions should go through the contact would forward details of specialists. The specialists of specialists and the special spe	n over ted by ugh its to 16 th Jan wo don	CG
land Cour unre CG (Sour Aqui Pilin	g Works would be the main concern for his project – there were no other signific	county cipal EA	

NOTE TO RECIPIENTS:

Distribution:

Date issued:

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File ref:

All present plus

20/02/18

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ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	issues of concern based on the information provided to date.		
4.0	Ground investigation works are scheduled to be undertaken in the new year, but the results would not be available to inform the ES. As part of the GI a number of global groundwater monitoring boreholes would be installed. CG noted that consent to abstract would be needed for the boreholes.		
5.0	Stratford Brook was noted as the most important watercourse to be affected by the works, but the stretch affected was the least interesting being slow, turbid and choked with Himalayan Balsam. ED and TR queried whether EA had modelling data for the watercourse – CG undertook to check. It was noted that remodelling with new climate change data would be required. The proposed crossing of the Stratford Brook was discussed. CG noted that the EA expect a minimum 8m buffer zone to be provided on both sides of the watercourse, with a larger buffer zone provided where possible. EA would also like improvements made to the Brook.	16 th Jan	CG
6.0	Bolder Mere was discussed and ED explained the issues associated with the surrounding SPA. The proposed scheme has an NMU route alongside the A3 which would affect Bolder Mere. As it is a WFD waterbody guidance from EA is required on what mitigation they require. Currently it is classified as 'moderate' quality and there should be no deterioration. A WFD assessment would be required as part of the DCO submission. JW noted that HE Designated Funds may be available for improvements to Bolder Mere		
7.0	CG confirmed that EA were content for licences to be wrapped up as part of the DCO subject to the agreement of EA functional and legal teams.		

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Plan Design Enable



A.3. Meeting (09.03.18)



Meeting notes

Project:	M25 J10/A3 Wisley Interchange Improvement		
Subject:	Water Framework Directive		
Date and time:	9 Mar 2018	Meeting no:	002
Meeting place:	EA Office Wallingford Minutes by:		è
Present:	or :	Representing:	Environment Agency Environment Agency Atkins Atkins



1.0 Introductions and apologies

RESPONSIBLE

MH

.0 Introductions and apologies
this Stiff the (WR and WQ) sends apologies

2.0 Consultation with NE and EA

Consultations undertaken so far by Atkins particularly relevant to WFD assessment:

- (Natural England (NE) lake specialist
 (NE site officer)
- rre (EA Geomorphologist) informal chat

ACTION on MH: send notes on NE meetings through EA

Consultation with LLFA (Surrey County Council)

 Surrey CC are very likely to defer responsibility for decisions on WFD compliance on Ordinary waterbodies to the EA.

ACTION on MH: email Surrey CC to confirm that they are happy to defer in this way (we are undertaking the WFD assessment in this way, is that OK?)

3.0 WFD Classification elements – how to address these in WFD assessment

- Effects on Biological, Physico-Chemical and Hydromorphological elements will be addressed explicitly within the WFD assessment
- Effects of Specific Pollutants and Chemical Elements (Priority Substances and Priority Hazardous Substances) will be addressed through the HAWRAT (Highways Agency Water Resource

Next meeting:	TBA
Distribution:	All present plus Darielle Proctor
Date issued:	File ref:

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ITEM DESCRIPTION & ACTION

RESPONSIBLE

Assessment Tool) review being completed as part of the water quality assessment being carried out in the ES Water Chapter¹.

 Note the effect of scheme on WQ is likely to be a betterment (given that the old drainage system from the road is being improved).

ACTION: MH to check with assessment covers the chemical elements of relevance to Lake Waterbodies.

MH

4.0 Approach to assessing scheme components in WFD assessment

- Group assessment by water body
- · Address scheme components in the following groups
 - Scheme components that individually could have impact at waterbody scale (Boldermere and Stratford Brook crossing) to be dealt with individually and in most detail.
 - Scheme components that are unlikely to have impact at waterbody scale, (e.g. culvert at east end of Elm road and NMU crossing of M25), will be addressed individually but assessment kept brief (a precautionary approach)
 - Scheme components that are very unlikely to affect waterbody status, or for which approach to mitigation is generic, (e.g. realignments and crossings of drainage ditches, drainage of road runoff to both surface water and ground water), will be addressed generically.

5.0 Boldermere

- Small catchment area, likely that the lake is at least partially dependent on inflows direct from groundwater: two outflows (formal and informal).
 See map/photos in Appendix A.
- Scheme proposed to encroach into lake along northern shore. Not certain yet on the extent of the encroachment; design evolving to balance combination of factors, with impact on SSSI / SPA a high priority. However, the proposed scheme would likely encroach into marginal tall fen habitat and very probably open water.
- · Consultation with NE revealed their focus to be:
- o Impact on species supported by designated habitats
- Moving the lake towards a more natural function (hydrological regime and morphology).
- Improvement of water quality; NE files indicate that road runoff to lake does occur (a high priority would be to address this).
- · Points raised by EA:
 - o Concerned about runoff from the A3
 - Consider effects of physical works (change to lake morphology) on water quality (for instance, would reducing the volume of the lake increase concentration of pollutants or would disturbance of lake bed remobilise pollution?)
 - Be aware of Crassula present in the lake. Consider methods to manage this although aware it's difficult.
 - Focus on modification of lake shore to create additional marginal habitat as compensation for loss of marginal habitat along northern shore.

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Plan Design Enable

Design Manual for Roads and Bridges Vol 11, Section 3 Part 10 HD 45/09 Road Drainage and the Water Environment (2009) explains that the thresholds selected for HAWRAT have been developed with the EA and are consistent with the requirements of the WFD





ITEM DESCRIPTION & ACTION

RESPONSIBLE

- · Way forward (summary of discussion)
 - If the scheme does affect Boldermere, we will need to clearly demonstrate that other options with a lesser effect on Boldermere have been considered, and why an option that affects Boldermere is being taken forward (e.g. avoids damage to other designated habitat, technical feasibility, safety considerations).
 - Mitigation / compensation for effect of the scheme on Boldermere would have to be carried out within the waterbody (i.e. off-site compensation is not permitted under WFD regulations).
 - o A "net gain" approach was agreed as a pragmatic way forward to developing a mitigation / compensation package for the effects of the proposed scheme. This does allow for some detrimental effects to the lake, provided that these are balanced by improvements elsewhere. The improvements would need to be judged as providing more benefit than being lost to the detrimental effects. Note that the WFD does not allow for deterioration in any WFD component (e.g. biological, physicochemical, hydromorphology, supporting elements) hence "net gain" (or at least no deterioration) would need to be demonstrated for each of these components.
 - As a principle, mitigation close to the point of impact (the north shore) would be preferred to mitigation further afield.
- Survey Topographic
- Survey of area around the lake and the lake shallows (within wadable depth) proposed.
- Limited boat survey to establish deep point of lake also specified (meres have a predictable bowl shape, meaning that full bathymetry survey of very limited value).
- Survey needs to be detailed enough around perimeter to understand profile of lake between woodland finger and lake shallows, particularly for area proposed as lost to scheme.
- Survey Biological
- Proposed detail of survey in notes of meeting with Ruth Hall <u>ACTION</u>: MH to send through to EA.
- These details were discussed and agreed as appropriate to the needs of the investigation.

MH

FT

6.0 Stratford Brook bridge crossing

- · Replacement of culvert with open span crossing welcomed by EA
- Francesca to visit site and come back with suggestions for potential mitigation / enhancements at site. Discussed at the meeting were:
- Realignment of channel through the proposed crossing and downstream to existing culvert to improve morphology / allow mammal passage.
- Daylighting to reduce shading
- "Easy win" modifications to existing culverts to reduce their backwater effects
- Bat and bird boxes
- Facilitating mammal passage under bridge
- Note proximate historic landfill may constrain works that can be done
 in this area.

7.0 Permit requirements

 Probable that all required permits (Flood Risk Activity Permits (FRAPs)) will be wrapped up within the DCO.

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Plan Design Enable

Planning Inspectorate scheme reference: TR010030 Application document reference: TR010030/APP/8.2 (Vol 8) Rev 0





ITEM	DESCRIPTION & ACTION	RESPONSIBLE
	 A FRAP will be required for Stratford Brook. A FRAP would only be required for the habitat compensation areas adjacent to the Wey and Mole if proposed works affected ground levels on the floodplain e.g. wetland creation. Note that FRAP cover both flood risk and environmental aspects. 	
8.0	Operational controls Compound area near Ripley roundabout needs to be set back as far as possible from Stratford Brook. Pollution control measures need to be implemented during construction for all works in or adjacent to watercourses. Ensure measures to manage effects on fish of in channel works are in place.	
9.0	Any other business ACTION: MH to send copy of the WFD assessment completed at PEIR stage of project to Francesca. • Groundwater connectivity with Boldermere	МН
	ACTION: CG to see if groundwater team can provide any insight into this. • Formal mitigation measures HMWB	CG
	O Wey – ACTION: MH to put in a formal request to the EA for these measures. O Boldermere – the EA will not hold any measures for this HMWB Plans for water body catchments O Refer to RBMP and Wey and Mole Catchment Partnerships. Note that Surrey Wildlife Trust is the Host Organisation for these partnerships. Signal crayfish are known to be present on the Wey. If there is a barrier between the Stratford Brook and the Wey, a white clawed crayfish survey is recommended. Francesca may be able to inform following site visit.	MH

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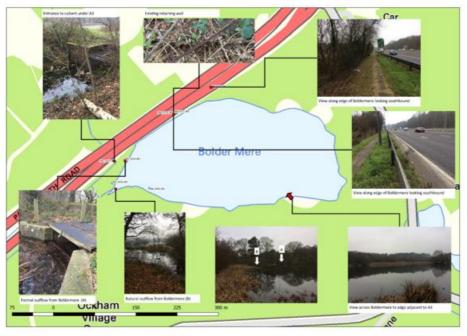
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Meeting notes

Appendix A



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A.4. Meeting (13.04.18)







Meeting Notes

Project:	M25 junction 10 / A3 Wisley interchange improvement scheme		
Subject:	Flood Risk		
Meeting place:	EA Wallingford Meeting no:		
Date and time:	13 April 2018 Minutes by:		
Present:		Representing: EA EA Atkins	

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
1.	Health & Safety CG highlighted the need to check vehicle road worthiness prior to setting off on journey. TR highlighted the risk of cycling/walking through flood water. Even if the path is well known to the user, there may be hidden hazards under the water presenting significant risk to life. JM gave the example of erosion of towpaths next to watercourses which would lead to people falling into flooded watercourses.		
2.	Stratford Brook TR presented the modelling approach for Stratford Brook. The model is built as a Flood Modeller 1D only flood model. The topographic data used is the 2005 channel survey provided by the EA for this project and the latest lidar data. The inflow hydrology has been defined using the standard FEH approach.		

Next meeting:

Distribution:				
Date issued:	02 May 2018	FileRef:	515	

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ea meeting fra 13 apr 2018





ITEM

3.



·I	LAVALIN Member of the SNO-LevelIn Group	/	
	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	Simulations have been run for the 1 in 25, 1 in 75, 1 in 100 and 1 in 100CC flood events.		
	JM suggested we should obtain some check survey of the brook to validate the 2005 survey data. Unless we can provide a robust justification for using the old survey data.	15/06/18	TR - Atkins
	Bolder Mere Lake During the production of the FRA the review of the EA's reservoir inundation mapping showed that there is a flood extent associated with failure of Bolder Mere. The extent inundates a section of the A3 adjacent to the lake.		

31/05/18

15/06/18

CG - EA

TR - Atkins

Buxton Wood footbridge EA confirmed that the current model results in this

TR queried whether the EA had any knowledge of

the lake being classified as an impounding structure. EA unaware but CG will check. Atkins to review the topography around the SW

corner of the lake to identify if there is any impoundment. On the basis of the outcome of

this the FRA will be duly updated.

area will be updated soon as a new version of the Lower Wey model will be issued in the coming months. Until that is issued we can continue to use the data from the current model. If the new model is issued prior to submission for the DCO we may need to update the findings of the FRA.

5 EA highlighted the area proposed for habitat creation is within the River Model floodplain therefore flooding must be considered within the

proposals, however if the proposals do not include changing ground levels, there should be no issue.

Contains sensitive information ea meeting fra 13 apr 2018



A.5. Letter (24.05.19)

creating a better place

Environment Agency

Atkins
Western House Block C
Peterborough Business Park
Lynch Wood
Peterborough
PE2 6FZ

Our ref: WA/2017/123763/03-L02 Your ref: ea meeting fra 13 apr 2018 (002)

Date: 24 May 2018

M25 Junction 10 / A3 - Wisley Interchange - review of minutes and actions from flood risk meeting on 13 April 2018.

Thank you for sending the minutes from our 13 April flood risk meeting to us on 14 May.

There is only one minor point that we raised that has not been captured in the meeting minutes. We advised that if there are any structures (e.g. in-channel structures in watercourses) that are to be removed (e.g. for Water Framework Directive purposes), such removals will need to be reflected in any Flood Risk Assessment.

There was an action for us to provide more information about the reservoir flood risk associated with Bolder Mere:

I have confirmed with my colleague (Reservoirs Act Coordinator - South East) that Bolder Mere is classified as a 'large raised reservoir' under the relevant legislation. The owner/operator of the reservoir is Surrey Wildlife Trust, who have appointed a Supervising Engineer for the reservoir – It has a capacity of 65,000m³ and is currently classified as a 'Category D' (lower risk) reservoir.

We would strongly advise you to contact Surrey Wildlife Trust and the Supervising Engineer for Bolder Mere to ensure that they are aware of the proposals for the reservoir. There is a risk that the development adjacent to and of the reservoir itself may lead to a change in the risk category class, which may require (potentially substantial) changes to be made to the reservoir to ensure it can continue to operate safely – this should be discussed with the Supervising Engineer. The on-site and off-site plans should also be reviewed and updated if necessary.

I have informed our Reservoir Safety team of the proposals. If you have any further general queries <u>for us</u> about the proposals, our Reservoir Safety team can be contacted directly via <u>reservoirs@environment-aqency.qov.uk</u>.

Please could you send us a copy of the final minutes with our one addition included.

We look forward to next being consulted with your hydraulic model produced for the Stratford Brook, as discussed at our meeting in April.

Cont/d..



If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,



End 2



A.6. Meeting (02.08.18)







Meeting notes

Project:	M25 junction 10 / A3 Wisley Interchange Scheme			
Subject:	Environment Agency – Contaminated Land and Hydrogeology			
Meeting place:	Environment Agency, Red Kite House, Howbery Park, Wallingford, OXON, OX10 8BD			
Date and time:	2 Aug 11:00 Minutes by: Atkins			
Attendees:		Representing:	Environment Agency Atkins	

ITEM	DESCRIPTION	ACTIONS
1.	Safety moment Highways England: Fire on verge of motorway. Spark flew as a result of a burst tire which set fire to dry crops in adjacent agricultural field. Luckily, the farmer was irrigating a field nearby and used the equipment to put the fire out.	To be aware of surroundings and be conscious of potential, indirect hazards of vehicle failures.
2.	Introduction	
	Discussion of the scheme and the current design stage (past stage 2) and is imminently (mid-August) expected to be fixed at stage 3.	To provide the stage 3 fixed design to
	It has been confirmed that a gas pipe requires re-routing due to limited space available for land take parallel to the eastern side of the	Craig and Clark once available.
	A3. It has been proposed that the gas pipe is tunnelled beneath the A3 to the south of Boulder Mere at around 5 - 6 m bgl. Groundwater is expected to be around 6 m bgl. If dewatering is required, it could potentially impact the ecological receptors to the west of the A3.	Waiting on further information from design team regarding the new
	Suggestion made by design team to use land west of Buxton Wood as an additional borrow pit to those already confirmed. Issues with this proposed location include alluvium (if present) and potential impacts to surface water and groundwater. This proposed borrow pit location has not been confirmed by design team.	proposed borrow pit location.

Contains sensitive information







SNC · LAVALIN Member of the SNO-Lavetin Group

DESCRIPTION ITEM

Land contamination input into the Environmental Statement

a) Ground Investigation phasing

A phased approach to GI has been suggested. The areas of significance with regards to contaminated land/environmental receptors to undergo GI first. i.e. proposed locations of borrow pits, land of proposed pipe diversion, historical landfill and Wisely Airfield. As all the GI will not be completed prior to DCO submission, these locations are crucial and should be assessed for DCO.

GI to confirm depth of groundwater, monitor ground gas and groundwater with attention to historical landfills and other identified sources of potential contamination.

Proposed submission is September/October 2018.

GI data provided within the ES (as much as possible or to a satisfactory level) to cover key areas relative to geo-enviro effects.

If the data collected from the GI is not ready in time for DCO submission then the ES will state that the data and relevant documents would be submitted to the Environment Agency for review prior to groundworks.

Information required regarding drainage and proposed drainage, as poor infiltration and heavily used road expected to produce contaminated run-off. SUD design/attenuation ponds etc to be detailed

Piling Risk Assessment: No expected pathways to be created from piling so if a PRA is not deemed necessary then at the least a controlled waters qualitative risk assessment would be submitted.

ES G&S chapter to include info on the reason for the nearby environmentally sensitive designations i.e. if its terrestrial then any dewatering is unlikely to impact.

Be aware of public participation of the scheme so include as much detail as possible in the ES.

If mineral extraction to be carried out then hydrogeological risk assessment may be required.

Confirm groundwater abstraction rate and demonstrate it will not affect ecological receptor.

ACTIONS

LG: Double check other services beneath the scheme. DF/EA?: Revisit

details for licence application requirements as still unsure if exempt.

DF: Has any data for Wisely Airfield been utilised?

LG: Check Wisley RHS groundwater abstraction data

DF: Advise project management team with the phased approach to the GI for DCO submission.

DF: Liaise with other teams - develop. reasons for ecological designation and drainage.

Contains sensitive information







ITEM	DESCRIPTION	ACTIONS
4.	Temporary de-watering requirements a) Contractors proposals For the diversion of the gas pipe: If groundwater is at < 6 m bgl, preferred method suggested by contractor is to use cofferdam, pipe jacking (10x20x20) and localised dewatering and discharge from sump pump into same stratum. Can only cofferdam entrance and exit and the centre would remain unknown so might not be ideal. Craig happy for any localised groundwater abstracted to be discharged back via soakage however due to the relatively impermeable Bagshot beds a soakage test might be required as surface water runoff may have a higher impact. Currently awaiting Skanska's construction method statement which will detail groundwater management method. Pump testing may be required based on the proposed dewatering	LG: Research groundwater flow direction LG: Research Bagshot soakaway testing in vicinity
	method (if groundwater is higher than ~7 m bgl). b) Section 32 consent timeline For dewatering: Exemption of licence (dewatering for construction) application if the works are less than 6 months and not effecting ecological receptors within 250 m. where the abstraction is within 500 m then dewatering volume limit to decrease from 100 m³ a day to 50 m³ a day. Turnaround time for application after submission is 3-4 weeks. If the dewatering is limited then the licence is not required and only a soakaway licence needs obtaining.	DF: If test pumping is required then liaise with Craig and Steve.
5.	Scheme re-design summary Confirmed proposed pipe diversion south of Boulder Mere. Possible design proposal for additional borrow pit west of Buxton Wood.	
6.	AOB	None

Contains sensitive information



A.7. Meeting (15.08.18)







Meeting Notes

Project:	M25-J10, Ecology, Water Quality and Water Framework Directive			
Subject:	Consultation Meeting with E	nvironment Agency		
Meeting place:		Meeting no:		
Date and time:	15 August 2018 - 10:30- 14:00	Minutes by:		
Present		Representing:	EA - Planning EA - Fisheries & Biodiversity EA Lake Specialist, Water Quality EA, Water Quality HE, Environment Advisor Atkins, Water Lead & Water Quality Atkins, Aquatic Ecology Atkins, WFD	

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
1.	Apologies from (Atkins, Terrestrial Ecology) and (Atkins, Aquatic Ecology)		<responsible></responsible>
2.	Impacts of proposed scheme on minor water bodies WFD currently focusses on impact of scheme on Boldermere and Stratford Brook. Feedback from EA (EA long form letter, comment EA-E-30) asking for confirmation that potential impacts on smaller features would be considered and, where appropriate, addressed (probably through ES).		Action ED - share survey and any proposed actions coming out of survey with EA (e.g. whether the Boldermere receiving water course realignment is an

Next meeting:

Distribution:

Date issued: 16 August 2018 File Ref:

NOTE TO RECIPIENTS:

These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

marc huband meeting notes







ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	 Atkins confirmed that reconnaissance surveys were programmed for water features that had been identified as potentially affected by the scheme in the WFD assessment, but not taken forward. The purpose of these surveys is to establish the ecological value of water features, the likely impact of the scheme and hence determine appropriate mitigation. The features being surveyed shown in Map 1 below. 		opportunity to improve the morphology of this channel)
3.	Boldermere – water quality		
	Phosphorous Boldermere is currently failing against WFD objectives for Phosphorous and Phytoplankton. As Competent Authority for the WFD, EA are therefore very keen that the scheme should not cause deterioration in P. There was consensus during discussions that the road network was unlikely to be a key source of P in Boldermere. However, it was agreed that Atkins should undertake a literature search to support this collective professional opinion, to provide evidence to support statements in the WFD assessment and ES that there is limited opportunity to address the P failure in Boldermere through the scheme. Action MR. EA have undertaken some provisional work to identify likely sources of P in the lake. Potential sources include septic tanks serving local houses. As part of this work the EA have requested monitoring on these streams.		Action MR
	Other Pollutants besides P P currently drives failure of Boldermere against WFD objectives because P concentration in the lake is monitored. However, the project needs to make a sensible assessment of how the scheme contributes to potential failures (or improvements) against other WFD chemical targets. The current design of the proposed scheme redirects road runoff (previously passed to the lake) direct to the ditch taking the outflow from the lake (i.e. road runoff bypasses the lake). Assuming drainage network surveys confirm this design is feasible, it will be implemented as part of the scheme. In this case a logical written argument demonstrating improvement to WQ of Boldermere can be presented, supported by output from HAWRAT assessment. Action MH. If the drainage network surveys establish that direct discharge to Boldermere cannot be avoided, the Atkins team will re-open discussion with the Agency about mitigation measures (and associated evidence base) necessary to ensure,		Action MH





ATKINS Member of the SNS-Lavalla Broup

oldermine Age of ES someontrodies. It ween the south are appropriate the sear about the sear about the noduces of the sear arginal arginal arginal is marginal to the ological oject ir on the ological of the ological ological of the ological ol	imum, no worsening of the water quality of the cere. Action MR. Increased and the water quality of the cere. Action MR. Increased and the water features and by the cere and		Action MH & MG
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oject ir	n May 18 by (Atkins		
CL), a	recognised SSSI lake specialists, d the following:		
•	A good range of biotypes (4 to 5) are present in the lake that support varying aquatic invertebrate communities. Still awaiting raw species data so that the		
• [Four non-native invasive species that compromise the current conservation		
0	the south shore, growing both above and below the waterline, but not extending far into open water. A few		
	other locations were seen on the northeast shore. No practical control.		
o	Elodea nuttallii - dominates the lake through most of the open water. At the extent recorded (well over 50% frequency) - this is unfavourable in terms of SSSI condition. No practical		
	•	awaiting raw species data so that the relative importance of the habitats to target species can be confirmed. • Four non-native invasive species that compromise the current conservation status of the site and cause it to fail the SSSI condition assessment. • Crassula helmsii - abundant around the south shore, growing both above and below the waterline, but not extending far into open water. A few other locations were seen on the northeast shore. No practical control. • Elodea nuttallii - dominates the lake through most of the open water. At the extent recorded (well over 50% frequency) - this is unfavourable in terms of SSSI condition. No practical	awaiting raw species data so that the relative importance of the habitats to target species can be confirmed. • Four non-native invasive species that compromise the current conservation status of the site and cause it to fail the SSSI condition assessment. • Crassula helmsii - abundant around the south shore, growing both above and below the waterline, but not extending far into open water. A few other locations were seen on the northeast shore. No practical control. • Elodea nuttallii - dominates the lake through most of the open water. At the extent recorded (well over 50% frequency) - this is unfavourable in

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ATKINS Member of the SNG-Lawella Broup

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	 Carp. Evident in a range of sizes estimated from 40 cm to as large as 85 cm (the latter a dead fish in exces of 15 kg). Turkish crayfish also observed. Burrowing activity not likely to be an issue but may well act to constrain a disturb aquatic invertebrate community. 		
	 Along the southern sore the natural hydrosere is generally good and not like to benefit from disruption e.g. mechanica excavation works. 		
	 A3 shoreline only significant concentration of Phragmites. 	on	
	The current proposals to mitigate for encroachment of the scheme into Boldermere ar as follows:	e	
	 A3 shore – recreate the marginal habital lost to scheme by replicating the existing habitat at the face of the new retaining wall. Conceptually this would be shifting the existing margins of the lake 10m into the lake (how practical this concept is wineed to be developed through the design process). Action Atkins to integrate habitat mitigation works into the design of the retaining wall. Action IM. 	I II n	Action IM
	Southern shore — advise that the Boldermere SSSI unit would benefit from development and implementation of a management plan for vegetation along the southern shore. The plan would aim to improve the marginal habitat upon which the invertebrate species for which the SSSI is designated are dependent. It is proposed to develop this plan in partnership with Surrey Wildlife Trust (owners of the site). The habitat improvements could form part of the SPA enhancement package works associated with the scheme. Potential features of the plan discussed at the meeting included: Woodland management to reduce shading of the lake, thus increasing	or ois	
	light to generate the marginal macrophyte communities required fo various stages of the lifecycle of targ invertebrates [Note reduced shading should be concentrated at the top of the natural hydrosere - the "drier" areas being less favoured by Crassu	et	

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ATKINS Member of the SNG-Lavalla Straup

ITEM	DESCRIP	TION AND ACTION	DEADLINE	RESPONSIBLE
	0	and allowing natural colonisation of low vegetation towards the lake edge.] Physical modification of other ponds / wetland features to create additional habitat favoured by target invertebrates [note that excavation of the margins of Boldermere is not favoured because of the potential spread of Crassula and other invasives and potential unintended damage to the lake margin]. Any works would need to be agreed with SWT (and NE), who have been heavily involved in the development of mitigation, compensation and		
	o	enhancement measures thus far. Netting programme to reduce carp population within the lake – agreed within the meeting to be a worthwhile means of encouraging the return of the fish population of the lake to its more natural state (clearwater sliver species). Action EA (FT) to provide data on the number of fish captured/removed from an earlier fish removal attempt.		Action EA (FT) to provide data on the number of fish captured/remove d from an earlier fish removal attempt.
	a ma crea sout	on ED – engage with SWT to develop inagement plan / works schedule for tion of compensatory habitat on thern shore of Boldermere and new in water habitat elsewhere within the		Action ED
	Envi Com sess Invit he w	on BH – confirm invitation for ronment Agency to next spensatory Habitat development sion with SWT and other partners. ation to be sent to and rill then distribute to the relevant staff in the Agency.		Action BH [already done]
	the s asso unlik hydn	e was a consensus in the meeting that small reduction in lake volume ciated with encroachment of A3 is ely to affect P concentration or omorphology of lake. However, this still is to be demonstrated		
		P Concentration – mass balance based on existing concentrations and proposed reduced volume (check against WFD objectives and EQRs to confirm no risk of forcing a change in element status) Action MR. Hydromorphology – simple routing calculation to demonstrate minimal change in peak outflow resulting from		Action MR

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ATKINS Member of the SNO-Levella Straup

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	 Consenting requirements for works on Boldermere 		Action MH
	 Boldermere not main river or ordinary watercourse, hence not need for FRAP 		
	 Any works to move or manage fish will need consent from EA 		
	 Discharge of any water generated by dewatering of temporary works will need to be undertaken in accordance with regulations 		
	Action MH – to pass this information onto Consents Management Person on Project		Action MH
5.	Stratford Brook		
	Stratford Brook South Culvert		
	The current proposal for strengthening this culvert is to construct a new independent bridge deck over the existing culvert. Under this scenario, the existing culvert will no longer be load bearing. It is probable that the base of the existing culvert has no structural function and is not reinforced. Hence, an initial assessment suggests it may be possible to break out the base of the existing culvert (or a channel say 1 ½ to 2m wide in the middle of the culvert base) to reduce the impounding effect of this structure on the upstream watercourse. Action MH – to register the environmental benefit of breaking out the base of the culvert with Structures Team (Action MH – to determine whether an additional modelling run needs to be completed to account for absence of base of this culvert in Flood Risk Assessment (Atkins)		Action MH
	Wisely Lane Bridge Full span wide structure well received by Agency. Mammal Passage Existing culverts under the A3 and its slip roads as well as the new bridge proposed by the scheme under the Wisely Lane Extension present a barrier to mammal movement along the Stratford Brook. The project team and Agency have very little data with which to assess the importance of the Brook as corridor for movement of mammals (e.g. otter water vole). Best practice would be to install a mammal shelf on Wisely Lane Bridge as part of implementation of a new crossing.		

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ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	The Agency would welcome the construction of mammal shelves within the existing culverts under the A3 and slip roads.		Action MH
	Action MH – investigate feasibility of mammal shelves under A3 culverts and how to register need for mammal shelf on Wisely Lane Bridge with structures team		7100011 11111
	Channel improvements downstream of A3 crossing		
	The channel downstream of the A3 crossing is straight and of uniform cross section. It is also heavily shaded. Potential that simple restoration works within this reach could significantly improve this habitat.		
	Including these restoration works as part of the scheme are likely to be viewed as an enhancement by the wider project team.		Action MH
	Action MH – explore opportunities for funding restoration of this section of channel as part of the scheme.		
	White Clawed Crayfish Survey		
	It was agreed by Agency and Atkins that survey for white clawed crayfish on Stratford Brook in vicinity of the A3 crossing would not be necessary PROVIDED that inspection for white clawed crayfish was carried out immediately prior to all works in channel. A Precautionary Method of Working statement for inspection (and local relocation from outside the footprint of any works) would be needed.		
6.	Drainage Strategy		<responsible></responsible>
	The scheme is adapting an existing road drainage network, rather than creating a new one. This existing drainage network discharges to some existing ponds / lakes (see map 2 below)		
	Reconfiguring the existing road drainage network to direct runoff to (flowing) ditches would be difficult. The Atkins team propose to continue the discharge to the ponds (expect for Boldermere), but will ensure that the discharge rates generated by the new scheme do not increase above the baseline condition and that the quality of discharge is maintained or improved. The potential impact of the road drainage on the water environment will be assessed using guidance from the Design Manual for Roads and Bridges (DMRB). The guidance (HD 45/09 (DMRB, Volume 11, Section 3, Part 10)) states		







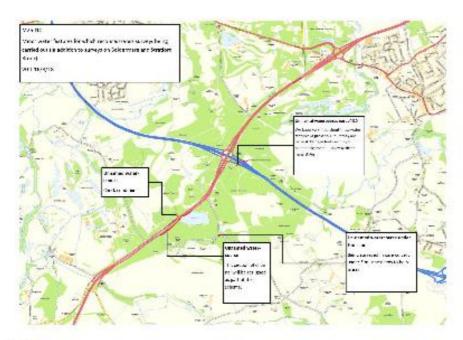
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	continue to discharge into ponds / lakes there will be non-compliance with the DMRB		
7.	Qualitative nature of WFD assessment Feedback from the EA on the WFD assessment included a comment that future versions of the document should be more quantitative. Future versions of the assessment (and ES) will provide more quantitative assessment on matters of water quality through presentation of results of a HAWRAT assessment for management of runoff from roads. See earlier suggestions in these notes for provision of simple evidence base for effect of change in Boldermere lake volume of P concentration and outflows.		
8.	In meeting of 2/8/18 EA Atkins In meeting of 2/8/18 EA Atkins In meeting of 2/8/18 EA In meeting of 2/8/18 In meeting of 2/8/18		Action MH



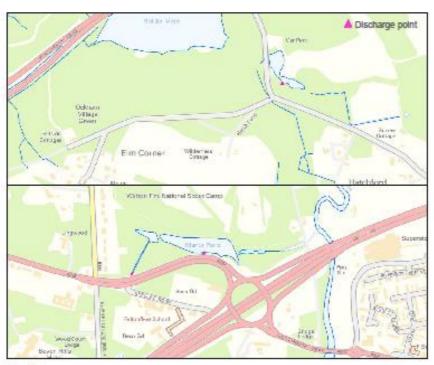








Map 1



Map 2



A.8. Meeting (28.11.18)





Agenda

Project:	M25 Junction 10/Wisley Interchange			
Subject:	Environment Agency – 28.	cy – 28.11.18		
Meeting place:	DEFRA, Nobel House, 17 Smith Square, London, SW1P 3JR	Meeting no:		
Date and time:	28 November 2018 15:30	Minutes by:		
Attendees:		Representing: Environment Agency Atkins Atkins Atkins Atkins Atkins		

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment	All
3.	Scheme updates CG confirmed that the targeted consultation documents were received. NW provided an update to the changes of the scheme, following feedback from the Statutory Consultation undertaken at the beginning of the year. These included reducing the size of the J10 roundabout, removing some of the over-bridges and adjusting the Non-Motorised User (NMU) routes and access roads, including changes to the access route at Painshill Park. One of the focus points looked at the impacts at Bolder Mere and work was undertaken to minimise the amount of widening required. The route will now be relocated on the west side of the A3. CG commented that the changes are positive for Bolder Mere and for the scheme in general and had no significant comments to make. NW explained that the scheme now includes information on construction compounds. Running parallel to the review of stakeholder feedback, cost estimates were being reviewed and an exercise was carried out to assess where money could be saved. This resulted in Design Fix 3 which is likely to be taken forward at the Development Consent Order (DCO) application.	

Environment Agency - 28.11.18





Discussion on Environment Agency (EA) assets

CG confirmed that he did not consider that there would be too much of an impact on EA interests. CG queried the extra construction material required and the requirement for a borrow pit, as recently discussed with the EA. KB confirmed that at this stage this is not an option and that construction materials will be imported from a rail head at Woking

CG highlighted that the EA is reviewing the impacts to Stratford Brook and will provide comments on this shortly.

NW explained that although still in the scheme design, the flood storage area will be removed following feedback from the EA. There had been uncertainty on whether this was required previously and was included until confirmation that by EA that it was not required.

NW referred to discussions taking place between the EA and regarding the proposals at Bolder Mere. CG confirmed that the engagement is going well and was content with the proposed approach.

NW highlighted ground investigations (GI) and asked for further confirmation that the EA is content that GIs are not required for the DCO submission. CG confirmed that this is the case.

CG said that this approach is ideal but the EA does not believe that this approach is ideal but the EA contaminated land specialist who manages the Thames area (within which the majority of the scheme falls), is satisfied. CG indicated that with regards to J10 has differed to the majority of the scheme falls).

KB explained that the perspective is that there is a low risk of land contamination.

KB said that due to the presence of the Special Protection Area (SPA) and the requirements to produce a Habitats Regulation Assessment for a DCO submission, all impacts need to be quantified, this is not possible until a GI is completed. As GI data is not available a constraint will be included so that ground water levels outside of the red line boundary will not be affected. Discussions have taken place with the contractors about how work can be undertaken around this.

There was a discussion on prioritising areas for Gls. KB explained that it is possible that priority areas will be removed as the GI works need to get started and this will be done on land that is accessible and/or access has been granted. If possible, the GI works will commence at Ockham. Contractors have already done walkovers and some of areas are not freely accessible and will require clearance.

CG said that as long as the EA has some assurance in the application then that will be acceptable. KB explained that wording has been prepared that effectively says that the GI works will go into the order. The wording states that the appropriate risk assessments will be undertaken in line with CRL11 and that these will be submitted to the EA and relevant local authority ahead of any work commencing. These will also be written into the DCO requirements.

CG requested that the EA be sent the wording for review.

KB added that under the current programme the GI reports will not be completed until 2020 after the Examination.

Environment Agency - 28.11.18





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ITEM	DESCRIPTION NW asked if the EA would like to see the Environmental	RESPONSIBLE
	NW asked if the EA would like to see the Environmental Statement ahead of submission.	
	CG stated that this is not necessary. If Highways England wished for input the EA is happy to review but there would be a charge for time and resources.	
5.	Consents and licenses updates	
	CG confirmed that Flood Risk Activity Permits can be included in the DCO. NW said that protected provisions will be prepared for this.	
	CG referred to the deemed approval given under the East-West rail scheme - the EA is pushing back against Network Rail on this and believe it should now be deemed refusal.	
	KB explained that 'deemed approval' after two months for the GI has been included in the wording.	
	ZC explained the wording in the template Protective Provisions is for 'deemed approval'.	
	NW did not consider that a Water Discharge Environmental Permit will be required as the scheme is not polluting with pollution prevention measures in place.	
	CG explained that the EA pushed for drainage improvements and knows that these will be included in the scheme. On this basis it was agreed a Water Discharge Environmental Permit will not be required	
	The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage. CG noted that abstraction licensing is about to move into	
	Environmental Permitting Regulations.	
	KB confirmed that unless EA is changing limits, the scheme will be within these.	
	NW asked if a Water Impoundment Licence will be required or if works can be tied up in the DCO application. A replacement retaining wall by the A3 at Bolder Mere and works to the existing earth dam at Bolder Mere would be required. CG confirmed that this could be included as part of the DCO	
	KB asked if there is a need for a Ground Water Activity Permit to discharge water from a soakaway into ground water. Until the GI works are undertaken it is not known if this will be required.	
	ACTION: CG to check if a Ground Water Activity Permit is required.	
	NW asked if a licence is required to move carp out of a pond at Bolder Mere and relocate.	
	ACTION: CG to check if a license is required and advise.	

Environment Agency - 28.11.18





ITEM	DESCRIPTION	RESPONSIBLE
6.	Protective Provisions ZC explained that where consents can be included in the DCO, Protective Provisions are to be offered, It is important that the EA is satisfied with the text. No work would be started before the relevant details are shared with the EA. A request was made that the EA provide comments to the protected provisions by 07 December as this is when a draft version of the DCO will be submitted to PINs for review. ACTION: ZC to share a word copy of the template Protective Provisions wording with the EA via email. ACTION: CG to review and discuss with legal advisors	ZC / CG
7.	AOB CM provided information on the Statement of Common Ground schedule – CM will prepare a draft version of the SoCG and share with CG ahead of the meeting scheduled for 12.12.18. CG referred to the Cost Recovery Agreement. The EA has approximately thirty hours left on J10. ACTION: CG to send across updated costs and timings.	All



A.9. Meeting (12.12.18)





Meeting Notes

Project:	M25 J10 / Wisley Interchange Scheme		
Subject:	Environment Agency meeting notes – 12.12.18		
Meeting place:	Telephone meeting	Meeting no:	
Date and time:	12.12.18	Minutes by:	
Present		Representing:	Environment Agency Atkins CJ Associates (for Atkins)

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment	All
3.	Statement of Common Ground aims and objectives	CM
	CM talked through the aims for the Statement of Common Ground (SoCG) and what we hope to achieve and when.	
4.	Timeline CM confirmed that the Development Consent Order submission is planned in early 2019 so over the next few months it is hoped that the issues and concerns identified will be resolved or marked as 'disagreed' prior to this.	СМ
5.	Environment Agency governance CG confirmed that this will be signed off by him or the planning team leader. Anything that is legal will have to go to the legal team — it can be quite difficult to get a quick response from them.	CG
6.	Environment Agency SoCG experience CG confirmed that he has been involved with SoCGs before.	CG

NOTE TO RECIPIENTS

These meeting notes record SNC-Lavalin understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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ITEM	DESCRIPTION	RESPONSIBLE
7.	Key Environment Agency issues	CG
	Ecology – although there has been a resolution to what is going on in terms of mitigation and there has been agreement on Scheme mitigation there need to be further details. The EA needs to provide Atkins with recommendations that have been discussed on net gain delivery of Stanford Brook.	
	Floor Risk – the EA is happy with everything that has been submitted to date and all that is needed is around the detail.	
	Ground Investigations – As these have not started provisions will be required in the DCO that works will be undertaken satisfactorily.	
	Water Framework Directive and water quality, particularly around Bolder Mere – detail is required about the water quality assessments. NW explained that there have been some issues with the smaller water courses.	
8.	AOB	All

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A.10. Targeted Consultation Response (13.12.18)

creating a better place

Environment Agency

Stakeholder Engagement Team Highways England M25 J10 / A3 Wisley Interchange Our ref: WA/2018/125963/01-L01

Date: 13 December 2018



M25 J10 / A3 Wisley Interchange - Targeted Non-Statutory Consultation - November 2018

Thank you for consulting us with the revised plans following changes to the scheme.

We are pleased to see that many of the changes will result in a reduced environmental impact compared to the previous proposals, including a more limited impact on Boldermere lake through the re-design of the scheme.

We do not believe that any of the changes proposed in this consultation raise any new issues to those that we have been discussing during the pre-application process, and set out again below for clarity.

Flood risk

We note that 'Key Change 5' states that a new flood compensation area was to be provided for the Stratford Brook. However, we understand from further discussions since the consultation was released that this compensation area is no longer required. This will need to be sufficiently demonstrated in the Flood Risk Assessment accompanying the Development Consent Order (DCO) application.

Additionally, the plans show areas that have been highlighted for habitat compensation adjacent to both the River Wey and the River Mole. It is unclear whether these compensation areas are simply land to be opened to the public, or whether any habitat enhancement works are planned. In flood risk terms, we would like to stress that no loss of floodplain storage should result from any works in the floodplain on these sites, which could include land raising or the storage of materials. Any works within 8 metres of a main river will require a Flood Risk Activity Permit from us.

Ecology

In the introduction to the consultation brochure, one of the environmental design objectives for the scheme is to "avoid, reduce, mitigate and/or compensate for any significant adverse effects or substantial harm...". We believe you should be stronger with your message and commit to achieving a biodiversity net gain for the scheme.

We are currently liaising with Atkins for potential net gain schemes on the Stratford Brook through the Environment Designated Fund. We also note in the consultation brochure that you are also providing a 'green bridge' over the A3, which appears to be an enhancement project rather than mitigation, which could also contribute towards the scheme's overall net gain.

We would strongly support this commitment to achieving net gain in support of the government's ambitions for new development as set out in the 25 Year Environment Plan.

Cont/d..



As noted in the 'Flood risk' section above, we would like to be consulted with details of any proposed works in the habitat compensation areas adjacent to the River Wey and the River Mole. In particular for the area of land next to the Wey, our flood risk team are currently developing a flood scheme on the opposite side of the river at Manor Farm and are consequently looking at opportunities for wetland creation and river restoration in the local area.

The plans for the A3 junction at Ockham show several attenuation features adjacent to the new slip road. We would like to ensure the design of these features maximises their value for biodiversity and does not consist of any bed or bank reinforcement. Any outlets into the Stratford Brook should be designed with a natural entry route. This is a relatively good quality stretch of the Stratford Brook and we need to ensure that any works to do not lead to detriment.

Groundwater and land contamination

Although not specifically related to this consultation, it is worth summarising our current position on these matters.

We understand from recent discussions that the dewatering works that were proposed for the gas main realignment works are no longer taking place and that techniques that do not involve dewatering will be used, predominantly to avoid impacts on groundwater-sensitive habitats in the area. We also understand that no borrow pits are proposed in the local area for the scheme.

Given the above, our only outstanding issue is that ground investigation works have not yet commenced. We have agreed that the application can be submitted without this information, subject to these works being provisioned within the DCO.

Water Framework Directive (WFD) and water quality

We have no outstanding major issues with these aspects, subject to a review of the final WFD report and water quality assessment.

We are pleased that the revised scheme will have a more limited direct impact on Boldermere. Whilst we have agreed in-principle to the mitigation measures proposed for these impacts, we are yet to see the detail of these measures.

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,



End :



A.11. Meeting (14.12.18)

creating a better place

Environment Agency

WA/2018/125863/01-L01

C J Associates 26 Upper Brook Street London W1K 7QE

Date: 14 December 2018

Follow-up to initial legal meeting for M25 J10 / A3 Wisley Interchange – Meeting date: 28 November 2018

Our ref:

Thank you for your time at our meeting at Nobel House, London on 28 November to discuss updates to the M25 J10 project and to begin discussions on the legal matters for the Development Consent Order (DCO) application.

Firstly, we would like to confirm that we received your copy of the draft Protective Provisions, which was sent to us by on 3 December. As I mentioned in a recent call to you, our legal team have now produced a set of 'standard' EA Protective Provisions (PPs) and I have attached these to the e-mail with this letter. These updated PPs reflect recent updates to legislation (e.g. Environmental Permitting Regulations) and we would expect these updated PPs to be used as the basis for the PPs to be included in your DCO application.

At the meeting, we discussed some of the other licences/consents (beyond Flood Risk Activity Permits) that may be required for the scheme:

Impoundment licence: We understand that this is for impoundment works on the weir structure on Boldermere lake. I have spoken to my colleagues in our Integrated Environment Planning team who would deal with applications for these licences, and they have confirmed that without further details of the exact proposals, they are unable to confirm whether a licence would be required but have stated that one is likely to be required.

We would appreciate if you could send us further details of the impoundment proposals, so that we can review these and determine whether a separate licence application will be required, or whether our PPs will be sufficient to address our concerns.

Further details about impoundment licensing can be found on the gov.uk website at: https://www.gov.uk/business/environmental-management-water-impound-store-water.

Discharge consent: We understand from the meeting that you are unsure whether a discharge consent will be required for discharging road runoff drainage to groundwater and/or surface water. Firstly, please be advised that discharge consenting now falls under the Environmental Permitting Regulations.

Again, it would be helpful if you could send us further details of the proposals for groundwater/surface water discharge, so that we can determine whether an

Cont/d..



Environmental Permit would be required, or whether our PPs will be sufficient to address our concerns.

Further details about discharging to surface water or groundwater can be found on the gov.uk website at:

https://www.gov.uk/quidance/discharges-to-surface-water-and-groundwater-environmental-permits.

Fish (removal) Permit: We understand that a Permit to move fish may be required for your works in the Boldermere lake. A colleague in our fisheries team is unsure whether our PPs will be sufficient to remove the requirement for a fish (removal) Permit. He also noted that such a Permit usually only takes 10-20 days to obtain consent and that these Permits are usually obtained by any specialist contractors that you may employ to undertake the specialist fish works within Boldermere as part of the scheme.

Further details about fisheries Permits can be found on the gov.uk website at: https://www.gov.uk/quidance/permission-to-move-live-fish-to-or-from-a-fishery.

Finally, I also took an action from the meeting to provide you with an updated cost recovery agreement for our planning advice, as our current agreement is almost fully used (there are approximately 28 hours left as of today). I hope to provide this to you in the New Year, but note that we have sufficient time on our current agreement to cover at least the next few meetings and we may not need to start using any new agreement at all if all of our issues are resolved prior to the DCO application.

If you have any queries about the matters raised in this response, please do not hesitate to contact me.

Yours sincerely.



End 2



A.12. Site Visit (22.01.19)





Meeting Notes

Project:	M25-J10 Scheme		
Subject	Notes on Boldermere Site Meeting		
Author:			
Date:	22/01/2019 1300 to 1600	Project No.:	
Distribution:		Representing:	Surrey Wildlife Trust Surrey Wildlife Trust Environment Agency County Recorder, Odonata Atkins Atkins Atkins Natural England Environment Agency Atkins Atkins

Purpose of meeting

To review proposed options for mitigating and offsetting the effects of encroachment of the A3 into the NW shore of Boldermere. These options are set out in Section 6 of the Ecological Survey and Condition Assessment report produced by Goldsmith Ecology (November 2018, Appendix A).

Outcome of meeting

Considered in conjunction with the amendments (section 3 below), it was agreed by those in attendance that Section 6 of the Ecological Survey and Condition Assessment report produced by Goldsmith Ecology sets out an appropriate scope for mitigating and offsetting the effects of encroachment of the A3 into the NW shore of Boldermere. All recognised that further detail on these measures would need to be developed during future design phases of the project.

Additional actions coming out of the meeting are presented in section 4 of these notes.

Amendments

Area 8 works; northern shore

Any works within Area 8 on the northern shore should be undertaken in a manner that maintains a barrier to site users, in so much that easy access for visitors to the lake shore is not facilitated and that the overhanging branches (at the lake scale) are maintained at the prescribed % cover for favourable condition. It was noted that the overhanging branches also provide shelter and screening for wildfowl using the lake.

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Area 8 works; south-east corner (board-walk area)

Noted that this was one of the best stands of alder carr present on site and that the understory, dominated by Carex ssp., had high intrinsic ecological value. Tree works within this area should be avoided as to not compromise existing habitat structure.

Area 8 works; eastern shore

Opportunities to roll back the existing *Phragmites* reedbed through the reduction of shading checks caused by the presence of mature trees (oak and birch) were discussed. It was thought that the reedbed was unlikely to extend landward much beyond its present limit due to drier ground conditions. Tree works within this area are therefore not advisable.

Area 6

A small number of self-seeded Rhododendron (approximately 6No. plants) were observed in the area during the walkover. Agreed that these should be removed and/or treated to prevent further establishment. These works are in addition to the management for this area identified in the Ecological Survey and Condition Assessment report (Appendix A).

Area 4 works

Although there was evidence of recent management, many small saplings (mainly birch) were becoming established in the *Molinia* heath within the area. Noted that the samplings were currently of a size that could be dug up from the area. Also, noted by SWT that the fringe of birch on the landward side of the heath area were encroaching and that these could be removed (to increase the size of the open area) without affecting lake screening.

Noted that dead wood on ground is a valuable habitat resource. Some or all cleared trees should be retained as dead wood in the area (e.g. as stacks, hibernacula or just felled trees in situ).

Management of invasive non-native species (INNS)

The Ecological Survey and Condition Assessment report (Appendix A) sets out actions for management of INNS. Mitigation / offsetting for the effects of encroachment of the A3 into the NW shore of Boldermere should contribute to these actions as follows:-

- A management programme to reduce/remove the existing carp (and bream, if present) population(s) in Boldermere. Carp are noted as a potential constraining factor on lake habitat function through their effects on clear water habitat function.
- A feasibility assessment of the likely effectiveness of implementing a management plan for the following
 invasive non-native species known to be present in Boldermere: narrow-clawed crayfish (Astacus
 leptodactylus; New Zealand pigmyweed (Crassula helmsii) and Nuttall's waterweed (Elodea nuttallii). This
 assessment will inform how SWT could address these species over the long term.

Additional actions

Screening between A3 and Boldermere

Request from SWT that formal screening between road and lake should be provided as part of the M25-J10 scheme by HE along the NW shore of Boldermere. The reduction in traffic noise generated by this screening would improve the habitat potential of Boldermere, and in particular the translocated reed bed. Atkins (Companies) agreed to pass this request back to HE. Atkins also confirmed that willow would be replanted between the new reedbeds and the re-aligned road as part of the mitigation works along the NW shore (see section 6.1. of the Ecological Survey and Condition Assessment report for details) i.e. if formal screening could not be justified as part of the scheme the replanted willows would, in time, create a screen.

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Enhancement of water features on Replacement Land and in Enhancement Areas

Brief descriptions and concept sketches of measures to mitigate for the effect of the scheme on minor watercourses (e.g. road side drains) are set out in Appendix F of the WFD assessment for the scheme (copy in Appendix B of these notes). These sketches can be up-issued in future revisions of the WFD assessment and will be developed further as necessary during detailed design. Contributions / ideas from SWT on these designs would be welcome. Action: (by 22/2/19 if possible - to include in up-issue of WFD assessment)

Appendices

Appendix A - Boldermere Ecological Survey and Condition Assessment report_Final.pdf Appendix B - Additional Mitigation (originally App F of Dec 18 WFD Assessment)

Appendix C - Map of replacement, compensation and enhancement land

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Appendix A. Ecological Survey and Condition Assessment report produced by Goldsmith Ecology (November 2018)







Appendix B. Appendix F of M25 J10 WFD Assessment entitled 'Brief descriptions and concept sketches for additional mitigation (specific)', issued to PINS Dec 2018.

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Meeting Notes

Project:	M25-J10 Scheme				
Subject	Measures to mitigate the effects of the scheme and provide enhancement on Stratford Brook				
Author:					
Date:	22/01/2019 1215-1300 Project No.: 5158141				
Attendence		Representing:	Environment Agency Atkins Atkins Atkins Environment Agency Atkins Atkins		

Purpose of meeting

A new bridge over the Stratford Brook and its floodplain is proposed to accommodate a new access to Wisley Lane. The December 2018 version of the WFD assessment for the scheme records the effects of this proposed structure on the water environment as follows:

"The structure is expected to have minor localised adverse effects on a) the macrophyte and phytobenthos quality element (shading reducing photosynthetic activity); b) the macroinvertebrate quality element (loss of habitat resulting from reduction in / loss of aquatic and riparian vegetation) and c) the hydromorphological quality element (simplification of riparian zone associated with shading and footprint of structure)." [section 4.7].

ES assessment of impact is as follows:

In the absence of mitigation, the ES assessment will report the potential for significant effects on the ecological and morphological function of the watercourse. This is due to the placement of a new crossing structure over a section of the watercourse which currently exhibits good watercourse and riparian habitat complexity (within the context of the wider watercourse). Effects relate to loss of riparian trees and concomitant reduction in habitat connectivity and the effects of deck shading on in-channel aquatic communities.

This new bridge to accommodate access to Wisley Lane is immediately upstream of the A3 Wisley interchange. Existing structures accommodate Stratford Brook as it flows beneath the interchange. Road strengthening works are required on one of these structures (the 'Stratford Brook South' culvert that supports the southern slip road over the brook). No works are proposed as part of the scheme on the other structure (a culvert carrying the brook beneath the main A3 and southern slip road).

This note records the outcome of a discussion on measures necessary to mitigate the residual effects of the bridge accommodating the new access to Wisely Lane, and the potential for enhancements to the water environment within the confines of the Scheme boundary that could be incorporated into the Scheme.

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Outcome of discussion

It was agreed that the following mitigations would be implemented as part of the scheme:-

- Mitigation embedded into the design of the bridge accommodating the new access to Wisley Lane. This will
 be a wide-span structure that retains the existing natural plan and cross-sectional form of the watercourse.
- Replanting of riparian trees that will be lost because of ground clearance works required for construction of the new crossing structure, reinforcement of Stratford Brook south culvert and access to watercourse/riparian restoration areas.
- Provision of a mammal shelf under the new access to Wisley Lane to accommodate movement of
 mammals underneath this new structure. This mitigation is only required if passage cannot be achieved on
 dry land under the bridge during the 100-year climate change flood event.
- Tree and scrub clearance within the riparian zone of the brook and red line boundary of the scheme
 upstream of the A3 crossing to improve light conditions within the channel, potentially increasing marginal
 and in-channel aquatic vegetation and in turn increasing habitat variability for macroinvertebrates and fish.
 Such works would need to be undertaken in a way that serves the interests of the both the river and the
 Stratford Brook section of Wisley Airfield SNCI.
- Watercourse physical habitat restoration, namely the creation of backwater habitats and addition of large wood features, to improve physical habitat complexity and provide refuge for aquatic species.

The Environment Agency would prefer to see additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage Highways England to provide environmental enhancement as part of the scheme. Highways England view is that the above measures are probably appropriate to mitigate the effect of the scheme; however, they are prepared to incorporate further measures provided these generate sustainable benefit to the water environment at reasonable and affordable cost. The principal barrier to determining whether additional measures can be implemented as part of the scheme is technical information on the form, dimensions and material composition of existing structures. Hence it was agreed that, once this information become available as during detailed design of the scheme, a feasibility investigation would be undertaken by Highways England into the measures bulleted below, and the outcome of this study would inform a final agreement on the mitigation / enhancement measure package.

- Removal/modification of the sill within the Stratford Brook South Culvert to remove flow impoundment and facilitate fish passage.
- Retrofitting a mammal pass solution within the Stratford Brook South Culvert.
- Modifications to the culvert passing between the A3 and the northern slip road to improve fish and mammal passage.
- Management of the invasive non-native species Himalayan balsam (Impatiens glandulifera) along the reach.

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A.13. Email (07.02.19)





Further to the meeting held 28th November 2018 (with minutes approved by the EA in December 2018) we would be grateful to

It was agreed that two consents could be disapplied under s150 of the Planning Act 2008 and included within the DCO with your 1) Flood Risk Permit for works affecting Stratford Brook including a new bridge, changes to structure of the existing culvert; and 2) Water Impoundment License for works on the Bolder Mere retaining wall and works to the existing earth dam at Bolder Mere

Lastly, there remains an outstanding query on:
6) whether or not a Groundwater Activity Permit is needed to discharge road drainage during operation from a soakaway into the groundwater and the November 2018 meeting minutes indicate the you were going to look into this and confirm back to us.

If there is any further information that you require from me please do not hesitate to contact me.



Email (14.02.19) A.14.





125863 (M25 J10 - EA Legal meeting follow-up - 28 Nov 2018).pdf 154 KB



Apologies for the delay in responding to your e-mail below

In my December response to the meeting in November (re-attached for reference), we requested further details of the proposed impoundments and discharges to confirm permitting requirements and whether the PPs would offer sufficient protection. I cannot recall that we have been provided this additional information.

Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD







A.15. Email (19.02.19)



Subject: RE: M25 j10 / Wisley interchange improvement scheme - s150 consents

Dear Chris,

In response to your queries below and following my e-mail to you dated 14 February requesting further information on some of the matters below:

- Flood Risk Activity Permit/s (FRAP/s): We agree that the FRAP/s for the proposed works can be disapplied and included within the DCO, as long as our standard Protective Provisions (PPs) that we have provided to you previously are going to be used. If you are proposing any changes to our PPs, we may need to review this approval for disapplication.
- Water Impoundment Licence: We have requested further details of the proposed Boldermere impoundment to confirm whether we are happy to disapply this licence.
- 3) Discharge Consent (road drainage): We have requested further details of the proposed discharge. Although we acknowledge that there should be an overall improvement in the drainage regime post-development, discharges to surface water now fall under the Environmental Permitting Regulations, so such a consent may need to be disapplied or applied for.
- Abstraction Licence: We agree that this could be dealt with at a later date (if required).
- 5) Waste Permits: Although I do not believe we discussed these Permits at our November 2018 meeting, we agree that these could be dealt with at a later date if they are required.
- Groundwater Activity Permit: As with the Discharge Consent above, we have requested further details of the proposed groundwater discharge of road drainage.
- 7) Fish (removal) Licence: At our November meeting we also discussed the need for a fish (removal) licence. In our response to you dated 14 December, we stated that any fish (removal) licence should be applied for by any specialist contractors undertaking these works for you. It will take 10-20 days for consent.

I trust that this is sufficient for now. We look forward to receiving further information about points 2, 3 and 6 above.

If you have any further queries in the meantime, please do not hesitate to contact me, or we can discuss these matters at our meeting this Friday.

Kind regards,

Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD



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Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk



A.16. Meeting (22.02.19)





Meeting Notes

Project:	M25 J10 / Wisley Interchange Scheme			
Subject:	Environment Agency meeting – 22.02.19			
Meeting place:	Telephone meeting			
Date and time:	22.02.19, 11am			
Present:		Representing:	Environment Agency Environment Agency Atkins Atkins CJ Associates (for Atkins)	

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment	All
	MH and IM were recently involved with an incident whereby a dog hid under their car whilst out on site (it was being bullied by two other dogs). They were not aware as they drove off. The dog is fine but was injured. When driving, we generally expect animals to get out of the way of a moving car. However, in this case the animal was stressed and using the car for shelter. Be aware of circumstances in which normal behaviour of animals might alter their normal response.	

NOTE TO RECIPIENTS:

These meeting notes record SNC-Lavalin understanding of the meeting and intended actions arising therefrom.

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ITEM	DESCRIPTION	RESPONSIBLE
3.	Screening and scoping of Water Framework Directive assessment	
	CG confirmed that an up-dated issue of the Water Framework Directive (WFD) assessment has been received and is being reviewed by the Environment Agency (EA).	
	ACTION: The EA will provide comments on the WFD assessment by 13.03.19.	
	MH explained that a version of the Environmental Statement (ES) and WFD assessment is almost complete and will be submitted along with the Development Consent Order (DCO). The Planning Inspectorate (PINs) has provided feedback and asked that the EA and Atkins reach a common understanding on a) the scheme elements that have been screened into the assessment and b) the scope of the assessment.	
	A precautionary approach to screening and scoping has been adopted by Atkins (on behalf of Highways England) and is set out in paragraphs 3.3.7 and 3.3.14 of the WFD assessment. PINs specifically requested an agreement for scoping out Nitrate Vulnerable Zones and Surface Water Safeguard Zones from the assessment (probably because Atkins specifically state this in paragraph 3.3.13).	
	MH highlighted what has and has not been scoped within the WFD assessment.	
	CG queried Article 4.7 which he does not think has been discussed. MH explained that work is being undertaken under the assumption that article 4.7 is not required – because the effects of the scheme on WFD water bodies can be mitigated or compensated.	
	ACTION: MH to include a statement in the WFD assessment to confirm that an application for derogation under Article 4.7 will not be made for this scheme.	
	IM said that the screening process (in terms of water features) is also set out in the ES. The WFD assessment and ES align in terms of the screening of potential effects of the scheme on the water environment.	







Bolder Mere and Stratford Brook measures of mitigation

Bolder Mere

MH said that following a site visit of 22.01.19 Graham Steven at Natural England has said that overall, he is cautiously optimistic that an agreement can be reached on the mitigation and enhancement proposals. CG said that in general the EA will be guided by Natural England and Surrey Wildlife Trust (SWT) on the deciding any proportionate mitigation for this site.

MH explained that was keen that two additional items are added to the proposals:

- tree works can be undertaken around the Alder Carr area in the south-east corner of the lake; although this is already good wet woodland habitat, it can be improved by management interventions.
- the undertaking of a feasibility assessment to increase the diversity of the macrophytes. The works that are proposed on the southern shore will improve the marginal macrophytes which are currently constrained in this area by the encroachment of scrub and the shade from nearby trees. There is also an issue with invasive waterweed, of which part of the feasibility assessment will look at practical management of this plant.

Atkins is positive that an agreement can be reached to incorporate these requirements and establish common ground.

There was a discussion on management of road runoff from the A3 into Bolder Mere. Currently, there is a direct discharge into Bolder Mere from the road which has raised concern. The preliminary design that will be submitted along with the DCO includes a component that collects runoff from the road, pipes it along the front of Bolder Mere, treats it (probably mechanically) and returns it to the river downstream, thus avoiding direct discharge of road runoff to Bolder Mere. However, detailed drainage survey is not yet available and the critical elevations on culverts are unknown, so it is not certain whether this proposed drainage solution will work. To ensure a road drainage solution is implemented that adequately protects Bolder Mere, there is a condition in the DCO that that works cannot proceed on this stretch of the road until a drainage solution has been signed off with the EA

ACTION: Atkins to share the draft conditions with the EA when they are available.

CG confirmed that Francesca will provide further information early next week.

Stratford Brook

CG explained that in the notes from the meeting of 22.01.19 there are disagreements on what constitutes adequate mitigation for the river crossing. Atkins propose that the river restoration measures (set out in Figure A at the end of this document and provided for clarity but not presented at the meeting) are proportionate mitigation measures specifically targeted to ameliorate the effects







of the bridge on the water environment. CG said that although these mitigations are welcomed some of them might only have temporary benefits and details on management plans are required.

The EA would prefer to see improvements to the fish passages at the south culvert under the slip road rather than the creation and improvement of habitats, as this would have bigger impacts. IM explained that the concerns about fish passage are understood but the key point is that the structure constructed by the scheme will not be impeding fish movement. CG recognised this but said that Francesca is concerned that the bridge will sterilise this stretch of Strafford Brook. Further information on Francesca's concerns would be useful. MH talked about the possibility of making the bridge structure smaller.

ACTION: CG to share Francesca's comments.

The Agency are also concerned that the feasibility study could conclude that none of the additional mitigations can be delivered. In this instance only the works in Figure A will be implemented. MH confirmed that the feasibility assessment will not be done prior to DCO submission (and hence cannot inform any decisions prior to DCO).

The following work is required to reach an agreement:

- Atkins will research how the works in Figure A can be maintained in order to extend their effective life. ACTION: MH. [Post meeting note: maintenance of these works can be incorporated in the management programme for the SPA area being developed as part of the Scheme; this will likely run for five years; beyond then a commuted sum with the landowner or SWT can be agreed for longer term management]
- The EA will propose what mitigation would be considered proportionate and appropriate for the effect of the bridge, should the feasibility assessment conclude that none of the proposals in the meeting note are feasible. ACTION: CG
- Both the EA and Atkins will consider whether mitigation works on replacement and enhancement land (as shown in Appendix F of the WFD assessment) should be counted as mitigation for effect of the bridge on Boldermere. (ACTION: CG and MH).
- Further information is needed on the wording of a condition on the DCO that secures an undefined mitigation package. ACTION: MH.
- CG to organise a teleconference between Atkins and Francesca. ACTION: CG.

Ephemeral headwater ditches

The WFD assessment and the ES both refer to the effects of the Scheme on ephemeral headwater ditches. There are a number of small drainage channels, often dry, that will either be realigned or potentially lost to the Scheme. These modifications are minor enough a) not to cause deterioration at waterbody scale and b) to





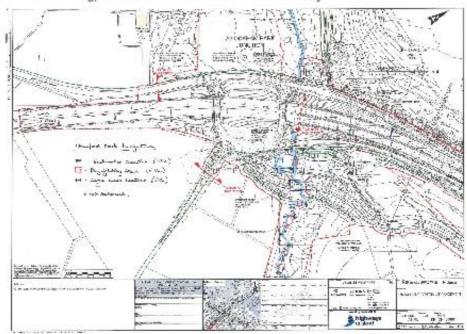
ITEM	DESCRIPTION	RESPONSIBLE
	only be considered to have site scale effect in the Environmental Assessment process. However, they still form part of the water environment, and hence their modification warrants consideration in the WS / ES process.	
	CG said that EA's interest in these is limited as they are not key rivers and there are not likely to be any objections or comments on mitigation proposals. However, the EA encourages improvements where improvements can be made.	
	MH pointed to appendix F which provides details on mitigation and enhancement proposals.	
	It was explained that SWT is also providing feedback on the proposals for mitigation for dragonflies and damselflies.	
	Ground water (Chobham Bagshots Beds water body) It was explained that Ground Investigation information is not currently available for the Scheme. CG said that the EA understands that this will come but there are small worries about this. At present the WFD assessment presents an argument that the effects that the scheme is likely to have on the Chobham Bagshot Beds water body can be readily mitigated by minor modifications to design. The EA believes that this is a pragmatic and appropriate approach.	
	Section 150 (disapplying permits and consents) CG confirmed that the Flood Risk Activity Permits can be disapplied. CG queried the works on the Section 150 queries. ACTION: CM	
	to follow up. CG confirmed that the only licence required is for fish removal. CG confirmed that an abstraction licence can be dealt with at a later date. An application will need to be made when the works are to be undertaken.	
5.	CM asked if CG is happy to put new monthly meeting slots in the diary for the next six months. CG agreed that this is fine. CG highlighted that there are about 15 hours of EA time left under the current Planning Performance Agreement.	
6.	MH confirmed that a discussion has taken place with Surrey County Council about the WFD assessment at which they said that they would follow the EAs' lead. CG confirmed that with regards to the ditches in WFD terms Francesca will review the document as a whole. None of those ditches would be WFD watercourses. Some of them might be owned by Highways England and the others would fall within the local flood authority. It was suggested that the wildlife trusts might have an interest as well.	







Figure A – River Restoration measures embedded into M25J10 design as of Feb 19 [not shared at meeting, but added to these minutes for information]





A.17. Letter (27.03.19)

creating a better place

Environment Agency

Atkins Ltd 1 Oasis Park Stanton Harcourt Road Eynsham Witney OX29 4AH Our ref: WA/2017/123763/08-L01

Your ref: 5158141

Date: 27 March 2019

Dear

Stratford Brook & Boldermere site visits and discussions re: ecological mitigation & net gain proposals - 22 January 2019 for M25 Junction 10 / A3 Wisley Interchange junction improvement proposals.

Thank you for sending through the notes from the site visits to Boldermere and Stratford Brook on 22 January, which we received on 6 February. I apologise for the delay in sending our comments to you on these matters, which is due to our ongoing internal discussions about the proposed mitigation measures, particularly for the Stratford Brook.

We thank you for your continued engagement with us on these issues. We felt that it would be useful to set out our current position in advance of our second site visit meeting this Friday, 29 March.

Our greatest concerns are still about the proposed mitigation measures for the Stratford Brook, which we have provided detailed comments about below. Following our most recent meeting, you have questioned the importance of improving fish passage on the Stratford Brook as there are barriers downstream on the Wey. This is irrelevant - we have a strategy for improving fish passage on the Wey and ultimately we will always seek improvements to fish passage when works are being carried out to or within the vicinity of an impounding structure.

Comments on Stratford Brook proposed mitigation measures

You note in the meeting notes that the WFD assessment for the scheme states that the new bridge structure over the Stratford Brook will "have minor localized adverse effects...". We request that it is also noted that the new structure will exacerbate the impact of the existing culverts which have had a significant impact on the Stratford Brook.

The notes also state that the Environmental Statement assessment of impact states the following in relation to riparian trees: "Effects relate to loss of riparian trees and concomitant reduction in habitat connectivity and the effects of deck shading on inchannel aquatic communities." Loss of riparian trees will also result in the loss of root structure within the bank which provides an important habitat for fish and invertebrates. The bridge will effectively sterilise this section of watercourse, which in combination with the existing impounding effect, will create a featureless, shallow environment. Reducing the impounding effect of the downstream structure will help to restore the channel's morphology and thereby reduce the impact of the new bridge.

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The remainder of our comments relate to section 2 of the notes (outcome of discussion) and specifically the proposed mitigation measures for the Stratford Brook.

Although we welcome all of the proposed measures, we feel that they do not fully mitigate or compensate for the impact of the new structure. In order to fully compensate, the same area of habitat would need to be created elsewhere which would include an equivalent sized bridge/culvert being removed. Unfortunately there is limited opportunity to achieve this within the vicinity of the scheme and therefore we require additional measures in order to ensure biodiversity net gain. Reducing the impounding effect of the downstream structure would help to mitigate some of the effects of the new bridge. Although the new bridge will result in the loss of macrophytes and root structure within the banks, removing the impounding effect will help to restore a more natural channel morphology. Artificial features could also be introduced into the channel under the bridge to mimic natural refuge.

With regards to the tree and scrub clearance within the riparian zone of the brook and the red line boundary of the scheme upstream of the A3, this is welcomed but as discussed at our meeting, will only have a temporary positive impact.

With regard to the proposed backwater, we are not averse to the creation of backwaters but we would question its benefit if the impeding structure downstream is not removed. The main limiting factor to a healthy fish population in this instance is the presence of the impounding structure downstream that is preventing fish from migrating upstream. Backwaters also aren't necessarily appropriate for high gradient streams. This is also a temporary measure as backwaters do silt up over time. In addition, there is limited opportunity to improve the in-channel habitat of the Stratford Brook within the red line boundary. Our preference would be for the removal/modification of the Stratford Brook South Culvert sill over the creation of backwater habitats and in-channel habitat improvements as this will have a much more significant and longer lasting positive impact. It is our view that these additional measures are essential compensation and will help to mitigate the impacts of the existing Highways England structures which have had a significant impact on the Stratford Brook.

The sentence in the notes which states "The Environment Agency would prefer to see additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage Highways England to provide environmental enhancement as part of the scheme." does not sufficiently reflect our requirements. We would like this sentence to be changed to: "The Environment Agency would prefer to see require additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage require Highways England to provide environmental enhancement as part of the scheme."

We maintain concerns that the feasibility studies for works on the Stratford Brook are to be completed after Development Consent Order (DCO) approval. It is not clear to us how, if essential mitigation measures are found to be non-viable, any works would be acceptable. We would not wish to find ourselves in a position where the scheme is approved, but appropriate mitigation measures cannot be implemented, leading to a detrimental impact on the Stratford Brook. It is not clear to us why such feasibility studies cannot be undertaken in advance of the application. We need to have a level of surety at the application stage. Unfortunately, based on the current information available to us, we are likely to raise an objection at the application stage, given that we cannot be certain that appropriate mitigation will be delivered as part of the scheme.

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In relation to the potential removal/modification of the sill on the Stratford Brook South Culvert, if this is not feasible for technical reasons, a fish easement should be installed instead. We are currently working with the Wey Landscape Partnership (hosted by Surrey Wildlife Trust) to develop and deliver the Wey FWD (Fish Passage and Wetland Delivery) project. This project aims to improve fish passage and tackle other reasons for WFD failures throughout the Wey Catchment. We will be delivering fish passes at two structures downstream of the Stratford Brook in the next couple of years, thereby reconnecting the Thames to the Wey. The Stratford Brook South Culvert does not currently comply with Highways England best practice (Volume 4, section 2, part 7 of the Design Manual for Roads and Bridges) which states that culverts should accommodate wildlife and fish migration. Significant works are being carried out within the vicinity of this structure and therefore the opportunity to reverse the impacts of this structure should be sought, as it is unlikely that road improvement works will be happening again in this area for a potentially significant amount of time.

We are concerned that mammal passage solutions through the Stratford Brook South Culvert and the culvert passing between the A3 and northern slip road are only included as 'potential' mitigations, subject to further feasibility studies. These works should be carried out as essential mitigation because these existing structures do not comply with Highways England best practice for culvert design. In addition, Volume 10, section 1, part 9 of HE's Design Manual for Roads and Bridges requires mitigation for the effects of existing roads to always be considered when improvements or major maintenance works are planned adjacent to the watercourses. This includes in areas where otter populations can be expected to spread during the lifetime of the improvements. Although otters are relatively sparse in the Wey catchment, we have evidence that their range is expanding in adjoining catchments and we recently had a report of a dead otter (suspected road kill) at the top of the Wey Catchment.

The second to last bullet point in the notes which reads: "Modifications to the culvert passing between the A3 and the northern slip road to improve fish and mammal passage.", should be changed to read: "Modifications to the culvert passing between the A3 and the northern slip road to improve water depths for fish passage and improve mammal passage at high order events (if possible a 100 year climate change event)." Please note that this could be achieved through a single design.

Ordinary watercourse / ephemeral ditches proposed mitigation measures

Please note that we still have a remit on these types of watercourse under the Water Framework Directive. We previously discussed providing compensation for the loss of open channel through delivering enhancements elsewhere on other watercourses. We would still support this, but want to ensure that you still intend to mitigate through good design as well. This would involve employing best practice in line with Highways England Design Manual for Roads and Bridges and the guidance previously supplied by Francesca. For instance, we would expect the invert of any culverts to be set well below bed level and dressed with gravels. Culverts should also incorporate mammal passage where appropriate and be designed to minimise the size of the headwalls.

Some of the enhancements outlined in Appendix B are proposed for what appear to be small ditches and ephemeral watercourses. It is not clear whether these are to compensate for impacts elsewhere on other ordinary watercourses but if so, we would expect these enhancements to be delivered at locations where they can provide more ecological benefit.

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Additional mitigation measures listed in 'Appendix F'

Paragraph F.1.1.5 lists mitigation measures proposed for Boldermere. However, this list does not include the diversion of road drainage from the A3, which we understand has now been confirmed. We would expect this to be included within the package of mitigation measures.

In relation to the mitigation measures for Chatley Wood Pond in the Mole catchment (paragraph F.2.3.1), opportunities for creating and/or enhancing wetland habitat should be explored at Chatley Wood Replacement Land where in close proximity to River Mole.

Similarly to the above, Opportunities for creating and/or enhancing wetland habitat should be explored at Park Barn Farm Replacement Land where in close proximity to River Wey. This area does not seem to have been included within the proposed mitigation measures, so there is no paragraph reference but would fit into section F.2.4.

We trust that you will find these comments useful in advance of our site visit meeting on 29 March and as you further develop your mitigation measures in advance of the DCO submission.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency, are a response to a pre-application enquiry only and do not represent our final views in relation to any future planning application made in relation to this site. We reserve the right to change our position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any gueries about this response, please do not hesitate to contact me.

Yours sincerely,



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A.18. Site visit (29.03.19)

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Project: M25 J10 / A3 Wisley Interchange Improvements

Subject: Stratford Brook site visit meeting – proposed mitigations

Meeting

Date/Time: 29 March 2019 - 14:00 - 16:30

Notes By:

Attendees:



Meeting notes:

- Atkins would like a clear steer on EA requirements if fish passage improvement works through A3 South culvert cannot be carried out.
- Atkins/Highways England (HE) are committed to carry out feasibility studies (as per previous correspondence) for Stratford Brook mitigation works. There is an issue of disagreement over what needs to happen if culvert works are found to be not feasible or prohibitively expensive.
- Atkins explained that there is still some uncertainty regarding the feasibility of discharging A3 road drainage away from Boldermere – and that this will be confirmed at detailed design stage following Development Consent Order (DCO) approval. Again, Atkins would like a steer from EA about the fall-back position if these drainage works prove to be not feasible or prohibitively expensive.
 - ACTION: EA to clarify.
- CG noted that an EA concern is about 'surety' of works taking place. VG noted that DCO requirements should provide a level of surety for these issues.
- IM noted that Atkins/HE are happy to take a steer from us on the range of options to be considered as part of their feasibility studies.
- IM confirmed that feasibility studies (and detailed design) will not begin until after DCO approval.
- IM ran through the mitigations that have been currently proposed by Atkins, including tree works, creation of a new backwaters and large wood addition. FT advised that as per previous EA comments, whilst these works were generally supported, they do not provide sufficient mitigation for the proposed works. If it was a choice between improving fish and mammal passage through the existing culverts and the currently

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proposed mitigations, the EA would prefer the former.

- We discussed potential other options if culvert works are not feasible:
- FT noted that as a last resort, we could accept the enhancement/restoration of a length of watercourse (equivalent to the length affected by the new bridge) downstream of the two A3 culverts.
- SS advised that partial removal of the culvert sill would be preferable before enhancement/restoration.
- SS further advised that if no removal of the sill was feasible, we would prefer to see improved connectivity through the culvert (e.g. through the use of baffles), again prior to enhancement/restoration.
- IM asked what we would be happy with if flood risk teams advised that sill works were not feasible from a flood risk perspective? SS feels that this is unlikely to be an issue.
- SS advised that ultimately he feels there will be something that we can agree to through the feasibility work.
- IM again queried what our position would be if no options were found to be possible through feasibility work? SS/FT reiterated that an enhancement/restoration of an equivalent length of watercourse downstream of the A3 culverts (not upstream) could be acceptable.
- IM noted that such works may not be possible downstream of the A3 culverts, unless through working with the landowner, because this stretch is not included within the redline boundary for the scheme.
- CG noted that as a very final fallback position, we may accept a commuted sum payment to carry out enhancement/restoration works on an equivalent section of watercourse.
- Therefore, the preferred order of mitigations for the EA are:
 - Full mammal & fish passage improvement works to existing A3 culverts.
 - 2. Partial removal / notching of concrete sill in A3 South culvert.
 - Improved connectivity (e.g. through use of baffles) through A3 South culvert.
 - Enhancement/restoration of length of watercourse equivalent to new bridge width downstream of A3 culverts.
 - Commuted sum.
- VG asked why EA had not requested equivalent culvert works to developer of Wisley Airfield development. VG confirmed that the red-line boundary of the airfield application included the Stratford Brook (as a SANG) and extended to the A3 South culvert. The new bridge over the Stratford Brook was also included as part of that application. CG was unsure who had dealt with this application in the EA and therefore unsure on what EA had or had not requested as part of the application.
- VG noted that the new bridge will also provide an access to Wisley Airfield if the development ever goes ahead.
 - ACTION: CG to review EA comments on Wisley Airfield planning application and clarify EA position/requests.

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A.19. Letter (09.04.19)

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Date: 06/03/2019

Documents seen:

- M25 junction 10/A3 Wisley interchange TR010030 5.4 Water framework directive assessment report- Volume 5 Feb 2019
- -Atkins Road drainage water quality assessment 21/02/2019

Comments:

Overall a good the approach recommended by the EA as used for the HS2 project. The WFD assessment which considers the two key objectives of the directive: future objective status and no deterioration in status. Below are a few thoughts/outstanding issues:

- 3.3 screening and scoping: Agree with what has been scoped in and out. Have spoken to (DRWPA Lead) and she's happy this scheme poses little to no risk to DRWPA status.
 Also not likely to impact NVZs.
- -Elm Lane Ditch appears to be impacted by WY1 which has been incorporated into the WFD assessment for the River Wey waterbody. However it also appears to form part of Boldermere Lake's upstream catchment. Therefore it would be sensible to include this as part of the WFD assessment and consideration of potential impacts on the lake. Particularly the potential water quality risk associated with construction run-off and how this might reach the lake through current drainage pathways and how this would be mitigated.

-Groundwater Bagshot Beds

There is currently a shortfall in the understanding of the GW flows and processes and the potential impact the piling works may have on the groundwater body as well as the GWDTEs (Boldermere). This could impact lake levels which might compromise WFD and Natural England SSSI objectives. Therefore at present may be a risk to WFD compliance. Likely need to be assessed further to demonstrate WFD compliance.

Note to Clark- I'm not sure how involved GW team have been in this consultation?

-Stratford Brook- Having discussed the morphological impact with minor localized is an appropriate categorization of the risk for the Stratford brook. Their report acknowledges that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localized adverse effects residual to the embedded design. It will be important going forward that they can 'firm up' some of these mitigation measures that can offset the morphological impact associated with the bridge. The key morphological impact from the new bridge appears to be associated with the loss of riparian habitat below the open span bridge. Extra info in red box below on riparian habitat and hydromorphological status.

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Structure of riparian zone forms part of the Hydromorphology quality element of river waterbodies. Definition: The abundance and diversity of plants present at the wetted edges of the channel, on the banks and bank top, including their complexity of structure.

We would be concerned with:

- the direct or indirect loss of vegetation in the riparian zone
- changes to the range of plant species present
- changes to the structure of vegetation cover along the river length

The current Reasons for Not Achieving Good status in Stratford Brook can be linked to morphological pressures. Invertebrates are failing due to physical modification. According to our ecologists in A&R the channel is straightened with very little habitat diversity. Over deepened in places, narrow channel resulting in marginal plants overgrowing the channel resulting in heavy shading and little in-channel macrophytes. Some of the mitigation measures proposed have the potential to offset the impact from the bridge crossing and also help mitigate some of the current pressures. A suitable combination of mitigation measures outlined in F.2.2 of appendix F should be used to offset the scheme impacts and maintain WFD status. Note to clark: FBG are probably best placed to determine if the current measures are sufficient enough to offset the morphological/biological impact and I know discussion are ongoing to iron these measures out, but the ones that have been suggested appear to be sensible.

-Boldermere

4.7.26 it is encouraging to see the plans to re-direct road runoff to downstream of the lake as this may ensure the salinity WFD element remains at High post construction and reduced the risk of WFD chemical failures. It isn't clear if the impact on water quality at this new discharge location has been included in any of the drainage/WQ assessments (I may have missed this). This should be included if not done so. Also in terms of lake levels and groundwater/surface water inputs it would be good to see if changing the surface water inputs into the lake would have an impact on lake levels (potentially not as it is suggested the lake is supported by groundwater levels). This concern could be addressed with the further hydrological/groundwater assessments that still need to be done (see Groundwater Bagshot Beds section above).

Boldermere lake WFD assessment appears to have overlooked to some extent the potential impact from the actual construction phase and work involved in moving the retaining wall and associated earth works. Although only a short term activity there is a potential there for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. There should be a detailed method statement for this specific element of the scheme to demonstrate how this risk will be reduced and WFD status protected.

Compliance with the WFD status of Boldmere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. Boldermere is currently failing WFD due to the Total Phosphorus and Phytoplankton which are closely linked. For example, the removal of carp

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from the lake which is proposed has the potential to help address the WFD failure as their foraging activates re-suspend sediments which could contain Phosphorus. Therefore the proposed eradication of carp could have a positive impact on WFD status and restore more natural nutrient cycling processes. It is important that the proposed measures are 'firmed up' working with the EA and NE to ensure deterioration can be avoided. It would be useful to have an Ongoing maintenance plan/Adaptive environment management plan for Boldermere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required. Because WFD compliance is somewhat dependent on these measures this will be important and it should be demonstrated how effective these have been. The ongoing maintenance plan will answer questions around how long the mitigation measures will occur for (i.e. how many years following construction will carp removal occur for?)

Note to clark: FBG are probably best placed to determine if the current measures are sufficient enough to offset the morphological/biological impact and I know discussion are ongoing to iron these measures out, but the ones that have been suggested appear to be sensible.

In the hydromorphological assessment in appendix c, they have listed river Hydro-morphological quality elements: 'Hydrological Regime (e.g. quantity and dynamics of flow and connection to groundwater) and Morphology (e.g. river continuity, river depth and width variation, structure and substrate of river bed, and structure of riparian zone)'. It is important that they have identified the correct quality elements for lake hydromorphology and assessed accordingly against those rather than river quality elements. Note to may have these?

In terms of the hydromorphological status of the lake there appears to be no change other than the actual size of the lake (loss of open water habitat). The D.2 Technical note on WFD Compliance for Boldermere by Atkins demonstrates that the morphologyicsal changes to the lake (i.e. reduction in overall size) isn't likely to have much of an impact on Total Phosphorus concentrations. The north shore habitat is proposed to be translocated and this is more value ecologically. Hydromorphology is only a 'supporting element' for WFD which means that if all other elements were at High status and Hydromorph wasn't the waterbody would still be classified as Good status. Therefore it boils down to if the hydromorphological changes from the scheme will prevent the other elements such as inverts and macrophytes achieving the future WFD objective status/favourable conditions. There will essentially be, post-construction, a slightly smaller but potentially a better quality lake assuming the proposed mitigation measures are in place. Ultimately if Natural England are satisfied that the SSSI favourable conditions and macrophytes/invert associated with its designation will not be compromised by hydromorphological changes to the lake than this should be sufficient.

-Mole and Wey

The outstanding minor localized adverse impact is as a result of a very small proportion of the total number of road discharges. At a WFD waterbody/catchment scale, there isn't likely to be a deterioration in water quality as a result of the drainage which is to minor watercourses (non WFD) and drainage ditches.

-General

Any impoundment or dewatering and associated discharge activities could require a licence/discharge permit from the environment agency. It is therefore recommended to consult the relevant sections of the .gov website at the earliest possible stage to determine if a licence/effluent permit is required.

Overall following discussion with Jo Shanahan who has been involved in major WFD assessments we agreed they have gathered a proportional evidence base for the associated risk

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(potentially not for GW at present). Jo didn't feel that it would need to go down the article 4.7 routefor the rivers as the impacts are likely to be localized and not on a WFD waterbody scale. It is less clear for Lakes and seems to be much more dependent on these mitigation measures being agreed. I haven't been able to discuss with Sian as she has been away but it would be useful to get her view as a lakes specialist as to whether the proposed measures sufficiently offset any risk to WFD status particularly the lake hydromorphology element as I believe part of the WFD status for lake hydromorphology is the actual size of the lake which is going to be directly impacted.

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A.20. Meeting (10.04.19)





Meeting Notes

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Project:	M25-J10/A3 Wisley Interchange Scheme			
Subject:	Project update (Programme; Draft DCO requirements; Draft ES chapters 8 & 10; Consents; Statement of Common Ground)			
Author:				
Date:	10/04/2019 2.00-4.00pm	Project No.: <p< td=""><td>roject no</td><td>,</td></p<>	roject no	,
Attendee		Representing:		
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ITEM	DESCRIPTION			RESPONSIBLE
1.	Welcome and Introductions RH welcomed all to the meeting and introductions were given. RH noted that she had forwarded the draft DCO requirements relevant to the Environment Agency (EA) this morning for their review. CG noted that he had received them and forwarded to the legal team.			
2.	Project and Programme update JW gave an update on the project, highlighting the statutory consultation which took place February/March 2018 and changes to elements of the scheme that were re-designed during April to August as a result of feedback received. The changes to the design were moderate and as such a further targeted non-statutory consultation took place in Now/December 2018. As a result, further revisions to the design were incorporated in March this year and Highways England are currently out for a further round of consultation. JW noted that this has put back the timing of the DCO submission. CG stated that he had reviewed the consultation documentation and didn't expect any major concerns. JW confirmed that the project had recently obtained endorsement from Highways England Investment Decision Committee and agreement to the budget for the project's development. JW confirmed that Highways England had appointed a contractor to deliver the ground investigation works (Osbourne) in January this year. He confirmed that a drainage and gas mains survey would also form part of the package of works to be delivered. CG asked when these would be starting. JW confirmed that would start after the Easter break (22 April).			







JW talked through the high-level programme "M25 Jct 10 / A3 Wisley Interchange Project - Summary Programme Rev 3.0 dated 20/02/2019". A copy was provided to CG. JW confirmed that the DCO submission was expected at the end of May, with the possibility that it might be put back to June. In line with the programme a DCO decision is expected at the end of September 2020 (end of Highways England stage 4). Construction due to start Spring 2021.

JW stated that Highways England had appointed multiple Delivery Integrated Partners (DIP) to deliver project across England. The DIP who would be delivering the M25 J10 scheme was Balfour Beatty, using Atkins as their design consultant and the consortium being known as Balfour Beatty Atkins (BBA). The consortium will take over management of the project sometime between August and October 2019.

JW stated that BBA were keen to look at what works could be done ahead of construction preparation or ahead of DCO award (advanced works and statutory diversions) and that the feasibility of this was currently being assessed. CG asked whether these would be undertaken under permitted development of separate planning applications. JW stated that he couldn't confirm this at present.

JW referred to the Smart Motorway Programme (SMP) M25 Junction 10-16 running in parallel with Junction 10 construction works. CG asked if an application had been submitted for these works.

ACTION: JW to provide CG with contact details for the Project Manager.

Post meeting note (PMN): Contact details provided to CG on 11.04.19

: Email:

Tel 0300 470 3576.

Draft DCO Requirements

CG stated that he had sent the draft requirements through to the EA legal team to comment. He confirmed that legal had reviewed them briefly and found them generally to be acceptable subject to two items – keen to define what is meant by 'intrusive ground works to avoid any later disagreements about what this constitutes. JWn questioned specifically what element of ground works a potential concern were. CG stated that he was unable to elaborate and that on legal matters it was preferable for direct liaison between Highways England and EA legal teams. JWn added that a definition could be added to the requirements to be clear, based on feedback from EA as to what they might be looking for here.

CG stated that the second item was in reference to paragraph 3 (4) in relation to statement 'cease construction activity in the vicinity of that contamination', what is meant in terms of 'vicinity' needs clarification. CG stated that EA legal had suggested wording 'cease construction in all areas that would reasonably be regarded as at risk from contamination' for example. JWn added that the wording 'in vicinity' was fairly standard. CG added that these were provisional comments.

ACTION: EA legal team to feedback formally to Highways England legal (BDP Pitmans) regarding the draft DCO requirements.

CG referred to the latest version of the EA Protective Provisions (April 2019).CG confirmed that track changes directly onto the Provisions would be helpful and sent directly to the EA legal team. JWn asked what had driven further changes to the PPs. CG confirmed that DeFRA have







recently produced a standard set of PPs that they want to be used on all DCOs. JWn emphasised that Atkins were keen to ensure that the requirements addressed matters to the satisfaction of the EA as they relate to any uncertainty in relation to the GI and the proposals so that the EA are comfortable with what will be put forward in the DCO application.

JWn asked whether there was anything else EA were expecting to see in relation to the requirements as they relate to the EAs remit. CG said that the only other issue for the EA on the project is the Stratford Brook enhancement works. CG stated the concerns related to the feasibility study and the results of these in relation to what mitigation could be implemented. RH asked CG whether following the site visit (29.03.19) the EA were more confident that mitigation could be delivered as a result of the study. CG confirmed that they were more confident. RH stated that this was the hierarchy of mitigations set out in the meeting note of the site visit.

CG questioned whether the scheme's red line boundary excluded an area of the SB between the A3 south culvert and the new proposed bridge and whether this was where the backwater works was going to be. NW clarified that this work was planned upstream of the new bridge. CG confirmed that he was happy with the RLB therefore, as Jong as there is adequate space allowed for the back water works and assuming there are no works planned between the slip road culvert and the new bridge. NW confirmed there were no works planned in this location. JWn added that this land was not within the RLB and therefore there was no provision for works in this area.

JWn emphasised that in terms of the DCO requirements it would be important to have <u>sufficient</u> scope within the wording to cover any uncertainty in the mitigation proposed as a result of the feasibility study. RH confirmed that the study was part of the mitigation proposals contained with the WFD and would not take place until after the DCO application.

4. Draft ES Chapter 8: Road Drainage and Water Environment MR stated that the project had completed an assessment of where highway runoff is discharged to surface and ground water (GW), stating that most of the highway runoff discharges to ground water.

MR confirmed that the project had followed DMRB guidance and undertaken a method C assessment which had highlighted a medium risk to GW quality. She stated that therefore the project will have to undertake a more detailed risk assessment once the GI data was available. The more detailed risk assessment will determine the need for and nature of the mitigation required to protect groundwater

MR referred to the Water Framework Directive (WFD) and Water Quality (WQ) Technical Note that has been sent to CG for EA comment. CG confirmed that the EA are due to respond by the 16 April. CG has already sent comments from the IEP team, but he stated that these are draft and subject to further consultation.

CG confirmed that he had discussed the issue of risk to GW with the EA GW land contamination team and confirmed that they had not indicated any concerns on the GW risk given it is not principal acquarance. He added







that some of the comments from IEP team about GW modelling not being understood will be superseded by comments from Craig Hampton.

A discussion was had regarding the approach adopted in the ES to dealing with uncertainties surrounding the absence of GI data at this stage. A 'likely' reasonable worst-case methodology was outlined, and it was agreed that Atkins would issue copies of the draft chapters to the EA so that they could confirm their agreement that our approach to dealing with these uncertainties was robust.

CG stated that the EA have always understood from the beginning GI was going to be available after the DCO. He confirmed that the EA were happy with the risk that that presented based on what we expect could be the GW risks and the geology and aqua flow that are in that location. On that risk-based approach the EA were happy to take that approach. He added that had this been on a chalk principle aquaphor EA would not have accepted but given what is known about the location, current drainage situation and nature of development the EA are happy to take that risk. He added that the project will have to think about how this is' presented in the ES.

CG referred to the current A3 discharges into Bolder Mere and noted that the proposed mitigations (as to whether it will be possible to re-route the road drainage to surface water discharge downstream of Bolder Mere). have been included as a feasibility study. CG stated that EA were under the impression that that was more of a certainty. MR confirmed that it is still subject to a feasibility study as it is dependent on drainage surveys. JWn stated that it is a very unlikely that the proposed mitigation would not be feasible. CG confirmed that he has an action from the site visit (29.03.19) to state what the EA position would be should it be not possible.

JW stated that with the GI Highways England was prioritising with the contractor features around Bolder Mere with the expectation that data could be provided in the earlier stages of GI to feed into the DCO examination. KB confirmed that the drainage survey is part of the package.

Draft ES Chapter 10: Geology and soils

KB stated that it is understood that the EA are content with the assessment approach detailed in the PEIR and the absence of GI data. However, in correspondence dated 24th October 2018, the EA have stipulated that the DCO application will need to provide sufficient information about the critical and very high-risk areas identified as part of the scheme. -KB stated that we do not consider there to be any critical or high-risk areas in relation to Geology and soils. KB stated that the project would like confirmation of agreement by the EA that the PEIR / ES Chapter provides the level of information required and also confirmation of agreement of the assessment approach and the absence of GI data.- CG confirmed that

JWn asked whether we are planning to share draft ES chapters. CG stated they would welcome review of them. The standard turnsround for consultation is 21 days.

ACTION: KB to send draft ES chapter 10 to EA with covering email requesting confirmation that the chapter provides sufficient information







and confirmation of agreement of the assessment approach and the absence of GI data.

ACTION: Chapter 10 to be sent to CG by 16.04.18. Chapter 8 (including flood risk) to be sent prior to its updating with feedback on the WQ technical note (to be sent 12.04.19) PMNI: Chapters sent on 05.06.19

Consents (Ground Water Activity Permit)

RH acknowledged that Atkins are due to send information requested by EA on a complet of issues to do with s150 consents.

A discussion was had regarding the need for a Ground Water Activity (GWA) Permit. KB stated that a constraint has been included in the ES which states that no active dewatering will be undertaken as this cannot be quantified and therefore the impact to ecological receptors cannot be assessed. The DCO therefore includes a restriction on any active dewatering.

CG stated that if you don't disapply a licence/permit within the DCO, but this is then subsequently needed, an application will need to be made through the normal permitting process, unless an exemption applies. CG stated that any assessment in this respect would need to ensure that it was compliant with Regulations and that any applications would be assessed on their merits.

CG referred to the list of consents that has been requested to enable the EA to determine what will need to be covered under PPs or in the schedules. He confirmed that internal colleagues will need to review this and confirm whether they are happy for consents to be disapplied or whether permits will be required.

KB added that without the GI data the project is unable to prove that any discharges to ground would not be at a concentration's higher than Drinking Water Standards and therefore the GWA permit could not be included at this point. -CG confirmed that if the EA could not be certain in this regard, they would not disapply it.

CG stated that if EA are provided with the full list of all the consents and licences that the project is expecting or likely to be required – this can then be clarified by legal -whether some can be disapplied.

ACTION: Atkins to send list of consents/licences to EA by 18.04.19 PMN: Sent on 06.06.19

Statement of Common Ground

RH confirmed that a draft of the SoCG is underway. The aim is for a draft to be submitted with the DCO application. She confirmed that it will need to be updated in light of on-going discussions. Given these outstanding issues the timing of sending over to EA will need to be reviewed.

JWn stated that the project is keen to submit the SoCG with the DCO

JWn stated that the project is keen to submit the SoCG with the DCO application, but this will be the position at the time of submission, which are likely to change throughout the examination period.

CG stated that he might be able to tun the SoCG around faster than the standard 21 days given he is the main consultee.

ACTION: RH to confirm timeline for consultation on SoCG by EA.

8. Next steps/AOB

JW referred to the need for future meetings. CG/RH confirmed next one is scheduled for 08 May. This will be reviewed one week prior.



			SNC·LAVALIN	ATKINS
9.	Ac	tions:		
	1.	EA legal team to feedback formally to Highways England legal (BDP Pitmans) regarding the draft DCO requirements. PMN: Received on 10.06.19	CG	
	2.	Atkins to send list of consents/licences to EA (by 26.04.19). PMN:	RH	
		sent to EA on 05.06.19	RH	
	3.	Atkins to confirm timeline for consultation on SoCG by EA (by 18.04.19)	MR	
	4.	Atkins to send draft ES chapter 8 including flood risk) prior to its updating with feedback on the WQ technical note PMN: Sent on 05.06.19	KB	
	5.	Atkins to send draft ES chapter 10 to EA with covering email requesting confirmation that the chapter provides sufficient information and confirmation of agreement of the assessment approach and the absence of GI data. PMN: Sent on 05.06.19	CG	
	6.	JW to send SMP details to CG.PMN: Sent on 11.04.19.	JW	
				П



A.21. Letter (18.04.19)

creating a better place

Environment Agency

Atkins Chilbrook 1 Oasis Park Stanton Harcourt Road Eynsham Witney OX29 4AH Our ref: WA/2019/126333/01-L01 Your ref: TR010030/APP/5.4

Date: 18 April 2019

Dear

M25 Junction 10 / A3 Wisley Interchange - Review of Water Framework Directive & Water Quality Assessments.

Thank you for sending us the Water Framework Directive (WFD) Assessment (document reference: HE551522-ATK-EAC-J10-RP-LW-000001; PINS reference: TR010030/APP/5.4), which we received on 20 February; and to Megan for sending the Water Quality Assessment Technical Note (dated: 21 February 2019; project ref: 5158141), which we received on 21 February.

I apologise for the delay in providing our comments on these assessments; I have had to consult widely internally due to various issues encountered across the Stratford Brook, Boldermere and groundwater quality and quantity (resources).

Following our most recent meeting on 10 April, I received additional comments from our groundwater (resources) team, who have expressed concerns with the lack of groundwater information and how the scheme may impact on groundwater resources and sensitive Site of Special Scientific Interest (SSSI) sites in the locality of the scheme. Until we have reviewed how you have addressed this issue in the Environmental Statement (ES) Chapter 10 (Geology & Soils), at this point we are concerned that we may have an objection to the Development Consent Order (DCO) application based on this lack of information.

Overall position on the assessments

Overall we are pleased with the scope and breadth of the submitted reports, taking into account that further site investigation works need to take place before the mitigation measures can be finalised. The reports are clear and well laid out. We agree that you have provided a proportional evidence base for the associated risk, except for groundwater.

We judge that the scheme will not need to go down the WFD Article 4.7 route for rivers, as the impacts are likely to be localised and not on a WFD waterbody scale. This is however less clear for Boldermere, which is much more dependent on appropriate mitigation measures being agreed and put into place to ensure compliance with WFD objectives. Saying this, as long as the lake doesn't become so small as to no longer function as a lake (and our understanding is it only reducing in size by a relatively small

Cont/d



amount), the habitat features around the edge and lake bed morphology are more important to the lake function and we acknowledge that these are being taken into consideration through the proposed mitigation.

As noted in the introduction to this letter, we have serious concerns from a groundwater resources perspective – our detailed comments on this matter are on pages 5 and 6 of this response.

WFD Assessment - screening & scoping

We agree with what has been scoped in and out. We agree that this scheme poses little to no risk to Drinking Water Protected Area (DrWPA) status, and is also not likely to impact on Nitrate Vulnerable Zones (NVZs).

Biodiversity net gain

We are concerned that the scheme's objectives no longer include a commitment to achieving biodiversity net gain, which we understood through our pre-application engagement would be committed to. We would like confirmation of whether the scheme will provide an overall net biodiversity gain.

Stratford Brook

We agree that 'minor localised' is an appropriate categorisation of the risk for the Stratford Brook. The report acknowledges that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localised adverse effects residual to the embedded design. It will be critical going forward that you can 'firm up' these mitigation measures at the earliest opportunity to offset the morphological impact associated with the bridge, as we have discussed with you separately at our site visit meetings, most recently on 29 March. Our position remains that the proposed 'embedded mitigation' will not be sufficient to mitigate the impacts on their own.

The key morphological impact from the new bridge appears to be associated with the loss of riparian habitat below the open span bridge. The information below provides additional context on riparian habitat and hydromorphological status:

Structure of riparian zone forms part of the Hydromorphology quality element of river waterbodies. Definition: The abundance and diversity of plants present at the wetted edges of the channel, on the banks and bank top, including their complexity of structure.

We would be concerned with:

- the direct or indirect loss of vegetation in the riparian zone
- changes to the range of plant species present
- changes to the structure of vegetation cover along the river length

The current 'Reasons for Not Achieving Good' (RNAG) status on the Stratford Brook can be linked to morphological pressures. Invertebrates are failing due to physical modification. The main factor impacting on the morphology of the channel upstream of the A3 is the presence of the impounding structure associated with the A3 slip road culvert. This structure is currently impounding 100-200m of habitat upstream of the A3

Cont/d... 2



and preventing fish from migrating upstream. The structure also exacerbates the impact of the new Stratford Brook crossing, as in addition to the loss of vegetation structure within the channel, there will also be an absence of morphological features that would otherwise provide refuge for fish.

Some of the mitigation measures proposed have the potential to offset the impact from the bridge crossing and also help mitigate some of the current pressures, but we have already separately provided our advice that additional mitigation measures to address the impacts of the existing A3 slip road culvert should be included where feasible.

Overall therefore, we agree that the new Stratford Brook crossing and strengthening works to the A3 slip road culvert will not prevent the achievement of WFD Good Ecological Status (GES). However, it must be acknowledged that the scheme presents a significant opportunity to reverse the detrimental impacts of an existing Highways England asset and achieve WFD objectives by restoring 100-200m of natural channel morphology and opening up a significant reach of watercourse to fish, an opportunity which is unlikely to be available again for some decades given the scope of works proposed to the junction.

Boldermere Lake

In section 4.7.26 of the WFD Assessment, we are encouraged by the plans to re-direct road runoff to downstream of the lake as this will help to ensure the salinity WFD element remains at 'High' post-construction and reduce the risk of WFD chemical failures. It is not clear that the impact on water quality at this new discharge location has been included in any of your drainage or water quality assessments; this will need to be assessed.

Also, in terms of lake levels and groundwater/surface water inputs it would be good to see if changing the surface water inputs into the lake would have an impact on lake levels, although we acknowledge that this is potentially not the case as it is suggested that the lake is supported by groundwater levels. This concern could be addressed with the further hydrological/groundwater assessments that still need to be completed.

The Boldermere Lake WFD assessment appears to have overlooked to some extent the potential impact from the actual construction phase and work involved in moving the retaining wall and associated earth works. Although only a short term activity, there is the potential for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and Phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. You should produce a detailed method statement for this specific element of the scheme to demonstrate how this risk will be reduced and the WFD status protected.

Compliance with the WFD status of Boldmere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. Boldermere is currently failing WFD due to the Total Phosphorus and Phytoplankton, which are closely linked. For example, the proposed removal of carp from the lake has the potential to help address the WFD failure because their foraging activities re-suspend sediments that could contain Phosphorus. Therefore the proposed eradication of carp could have a positive impact on WFD status and restore more natural nutrient-cycling processes. It is therefore critical that the proposed measures are 'firmed up' - working with us and Natural England - to ensure that deterioration can be avoided. We recommend that an ongoing maintenance plan and/or adaptive environment management plan is produced for

Cont/d.. 3



Boldermere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required. Because WFD compliance is somewhat dependent on these measures, it will be important to demonstrate how effective they have been. The ongoing maintenance plan can clarify how long the mitigation measures should occur for, for example how many years following construction carp removal should carry on.

In the hydromorphological assessment in Appendix C, please note that you have listed river hydromorphology quality elements: Hydrological Regime (e.g. quantity and dynamics of flow and connection to groundwater) and Morphology (e.g. river continuity, river depth and width variation, structure and substrate of river bed, and structure of riparian zone). You should amend this to identify the correct quality elements for Lake hydromorphology and assess accordingly against those rather than river quality elements.

In terms of the hydromorphological status of the lake there appears to be no change other than the actual size of the lake (loss of open water habitat). The D.2 Technical Note on WFD Compliance for Boldermere demonstrates that the morphological changes to the lake (i.e. reduction in overall size) isn't likely to have much of an impact on Total Phosphorus concentrations. The north shore habitat is proposed to be translocated and this is more ecologically valuable. Hydromorphology is only a 'supporting element' for WFD which means that if all other elements were at 'High' status and Hydromorphology wasn't, the waterbody would still be classified as 'Good' status. Therefore it boils down to whether the hydromorphological changes from the scheme will prevent the other elements such as inverts and macrophytes achieving the future WFD objective status/favourable conditions. There will essentially be, post-construction, a slightly smaller but potentially better quality lake - assuming the proposed mitigation measures are in place. Ultimately if Natural England are satisfied that the SSSI favourable conditions and macrophytes/invert associated with its designation will not be compromised by hydromorphological changes to the lake then this should be sufficient.

Mole & Wey

The only minor localised adverse impact is a result of a very small proportion of the total number of road discharges. At a WFD waterbody/catchment scale, we agree that there is unlikely to be a deterioration in water quality as a result of the drainage to minor watercourses (non-WFD) and drainage ditches.

Elm Lane Ditch

This appears to be impacted by WY1, which has been incorporated into the WFD assessment for the River Wey waterbody. However, it also appears to form part of Boldermere Lake's upstream catchment. Therefore it would be sensible to include this as part of the WFD assessment and consider the potential impacts on the lake. In particular the potential water quality risk associated with construction run-off, how this might reach the lake through current drainage pathways and how this would be mitigated.

Ordinary watercourses

The scheme will result in the culverting and realignment of several ordinary watercourses within both the Wey and Mole catchments. We agree with the conclusion that this will result in a minor localised impact (worst case scenario) and support the generic guidance on the principles of WFD compliant design outlined in section 5.4. However, we advise that the following guidance is also included within section 5.4 to ensure these impacts are

Cont/d.. 4



fully mitigated:

- The loss of open channel should be compensated for by providing an equivalent length (or greater) of new open channel habitat or a significant reach of enhanced open channel habitat.
- Opportunities to improve an existing culvert should be sought where culverts are being extended/replaced.
- Mammal fencing should be used to guide mammals into culverts where mammal ledges are being provided
- Re-aligning a watercourse should take preference over culverting.
- Where bed and bank reinforcement is required, compensation should be provided by enhancing an equivalent (or greater) length of riparian habitat.
- Generic guidance on the principles of WFD compliant design for outfalls and SuDS should be provided, for example providing natural surface water discharge routes rather than concrete outfalls that result in the loss of natural bank.

Section 4.7.18 states that preliminary designs involve ephemeral ditches being replaced by more formal drainage infrastructure or realigned, but that no mitigation measures have been embedded into the design. Instead mitigation is proposed in the form of enhancement of water features on replacement land and enhancement areas. We are not clear why you have taken this approach. You should in the first instance seek to take opportunities to restore these channels to a more natural state - for example by realigning - where possible. Where this is not possible, we support the statement that 'the scale/quality mix of these possible enhancements will need to be at least commensurate with that of the impact'.

Groundwater quality

We have reviewed the documents from a groundwater quality perspective and they are satisfactory to the point they have reached, albeit additional information will need to be provided in due course. The WFD Assessment indicates a number of times that further site investigation will be undertaken, in particular to establish groundwater flow direction.

Similarly with the Water Quality Assessment, it concludes the scheme provides a medium level of risk. We accept this in part because of the nature of the receiving aquifer - mainly the Bagshot Formation. The report does however indicate that mitigation measures and further risk assessment will be required and we would concur with this approach.

Groundwater resources

There is currently a shortfall in the understanding of the groundwater flows and processes and the potential impact that piling works may have on the groundwater body as well as the Groundwater Dependent Terrestial Ecosystems (GWDTEs) – Boldermere in this case. Ultimately, the works could impact lake levels which might compromise WFD and Natural England SSSI objectives for the lake. There is therefore at present a risk to WFD compliance. Further assessment of this is therefore of critical importance.

Paragraph 4.3.9 of the WFD Assessment gives a wide range of groundwater depths (0.2 – 16.0 metres below ground level) compared to the variable depths of the proposed scheme components which have the potential to impact on the quantitative status of the groundwater body. We note that this paragraph also references ES Chapter 10 for a "detailed discussion" on groundwater levels, which we have not yet had the opportunity to review.

Cont/d. 5



Paragraph 4.7.32 confirms that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localised adverse effects residual to the embedded design. The final set of measures need to be developed based on the results of the detailed ground investigations to be undertaken to assess the baseline groundwater levels and flow direction. These measures to be developed during the detailed design stage should ensure that the proposed scheme components do not form a barrier to groundwater flow and do not adversely affect groundwater contribution into Boldermere.

Therefore overall, due to the lack of data to determine the groundwater levels and flow direction, it is currently not possible to assess the impact of the proposed scheme on groundwater resources and on the quantitative status of the groundwater body. This fact is addressed in WFD Assessment and a comprehensive site-specific ground investigation is proposed as additional specific measure (CB_a Ground investigations and design alteration of piling and retaining walls). Upon completion of the ground investigations, it would be possible to assess the impacts of the proposed scheme on groundwater resources

Given this, we are concerned by the presence of Boldermere and the Ockham and Wisley Commons SSSI, which are critical in the quantitative assessment of groundwater status. Currently, the available data is not enough to assess the impacts of the scheme on such dependent features. Further detailed investigation is critical at this point. Any comments on the effectiveness of the proposed measures could only be made after the baseline conditions (groundwater levels and flow directions) are known. Only after the baseline is established will it be possible to design the scheme components affecting groundwater resources.

Therefore, based on the information that we have seen to date, on hydrogeological grounds we may have an objection to the scheme until the proper baseline groundwater conditions are known. Once we have this information, we would be in a position to assess the effectiveness of the proposed measures. Currently there is no solid evidence to conclude if the scheme is acceptable or not. In short, we need to see a Hydrogeological Risk Assessment, which is stated will be undertaken once ground investigation is completed. However, we make this statement on the basis that we have not yet reviewed ES Chapter 10, which may go some way to allaying our concerns on this matter.

Impoundments and/or dewatering

Any impoundment and/or dewatering and associated discharge activities could require a licence/discharge Permit from us. Please note that from 1 January 2018, the licensing exemption on dewatering is no longer valid. Therefore, an application has to be submitted to us for an abstraction licence to carry out dewatering activities.

We therefore recommended you consult the relevant sections of the gov.uk website at the earliest possible stage to determine if a licence or Permit is required.

Final comments

Our comments are based on our available records and the information as submitted to us

Please note that the views expressed in this response by us are a response to a preapplication enquiry only and do not represent our final view in relation to any future planning application made in relation to this site. We reserve the right to change our

Cont/d.. 6



position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any queries about the matters raised in this response, please do not hesitate to contact me.

Yours sincerely,



End 7



A.22. Letter (26.04.19)

creating a better place

Environment Agency

FREEPOST

Our ref:

WA/2018/125963/02-L01

M25 junction 10 / A3 Wisley Interchange (via e-mail)

Date:

26 April 2019

Dear Sir/Madam.

M25 junction 10/A3 Wisley Interchange improvement scheme

Pre-application consultation

Additional non-statutory targeted consultation

Section 42 Planning Act 2008

Thank you for consulting us on the above targeted non-statutory consultation.

Our only comment on this consultation is in relation to the removal of the previously proposed flood compensation area for the new bridge over the Stratford Brook.

We have looked through all of our previous pre-application correspondence and whilst we have been notified verbally that the review of the Stratford Brook model has demonstrated that the flood compensation for the new bridge is no longer required, we have not yet been provided any evidence to this effect. We are therefore not currently in a position to confirm that flood compensation is no longer required until we have seen such evidence.

We need to see a detailed Flood Risk Assessment (FRA) that clearly demonstrates that there will be no increase in flood risk.

We note in the 'Key Design Changes' that the proposed compensation area for the Stratford Brook is "no longer required" and that this has "been agreed with the EA". We have no issue with the principle of the compensation area being removed, but only on the understanding that the new bridge and road works do not lead to a loss of floodplain storage. Only a detailed assessment within an FRA will establish whether your plans lead to any loss of floodplain storage. Any loss of floodplain storage will need to be compensated for on a level for level basis up to the 1 in 100 plus 35% flood level. Therefore, it might be slightly premature to make statements about flood compensation for the Stratford Brook not being required.

We look forward to reviewing a detailed FRA in due course, or as part of the Development Consent Order application.

If you have any queries about this response, please do not hesitate to contact me.

Cont/d..



Yours faithfully,



End 2



A.23. Meeting (07.05.19)





Meeting Notes



Project:	M25-J10/A3 Wisley Interchange Scheme			
Subject:	Water Framework Directive Assessment – Groundwater Quantity			
Author:				
Date:	07/05/2019 10.00-11.00 am	Project No.:	<pre><pre><pre><pre>project no></pre></pre></pre></pre>	
Attendees		Representing:	Environment Agency Environment Agency Atkins Atkins Atkins (By phone) Atkins (By phone) Atkins (By phone) Atkins	

ITEM DESCRIPTION RESPONSIBLE

Meeting objectives and expectations

NW outlined the objective of the meeting which is to respond to a concern raised in a letter dated 18/4/19 from the Environment Agency (EA) in which they provide feedback on the Water Framework Directive (WFD) assessment for the scheme. In the letter, the EA raised concerns following a review by their groundwater (GW) resources team, about the lack of GW information and how the scheme may impact on GW resources and sensitive SSSI sites in the locality of the scheme. The EA state in their letter of the 18/04/19 that until they have reviewed how Atkins/Highways England have addressed this issue in the Environmental Statement (ES) (Chapter 10), at this point they are concerned that they may have an objection to the DCO based on this lack of information. :

NW explained that although Ground Investigation (GI) data is being collected, this is not going to be available until after the DCO is submitted. Therefore Atkins/Highways England will need to prepare the ES and WFD assessment with the information currently available.

The aim of the meeting is to agree with the EA a suitable conservative methodology for assessing the effect of the scheme on GW bodies and SSSI features (and appropriate mitigation). The methodology should be built around a "reasonable worst case" for a) GW flows and b) the effect of the scheme on those flows.

а

CG noted that BD had not been involved in the pre-application discussions to date.

JG outlined the agenda items which included updating BD on the project to date to provide some context.







Scheme context

KB gave an overview of the scheme (slide 4).

KB referred to the additional road and overbridge that will run into RHS Wisley. The overbridge will be piled but this is not extensive. She referred to Bolder Mere (BM) and the widening of the A3, moving the existing retaining wall adjacent to BM. There is another retaining wall the other side of the A3 to BM to restrict the land take and protect a badger set. The roundabout is being elongated on one side to reduce congestion and reduce land take. The works extend along the M25 due to widening and impact on bridges. There will be a new local access road for the Girl Guides, north of Redhill on the west side of the A3 and a local access road to the east side of the A3.

KB emphasised that although the area of the scheme is large, works are discreet and ground works are not extensive.

3. Current groundwater conceptual understanding

JG outlined the WFD GW features (slide 5) in the area of the scheme, including Chobham Bagshot Beds GW body, Ockham and Wisley Commons SSSI, which includes BM lake. She highlighted various features of the works that relate to these, particularly around BM.

JG outlined the bedrock and superficial geology of the area (slide 6).

JG summarised the existing GW information, available from previous ground investigations in the area. She stated that part of the reason for taking the reasonable worst-case approach is the lack of available GW data. JG referred to two previous GIs undertaken south of the works area on Wisley airfield. She stated that this data is highly limited, consisting of a single round of manual dips from May 2014, with one additional dip in 2012. Using this data a highly indicative GW flow direction can be estimated (slide 7 and 8) from May 2014. GC asked what the conditions were like at this time. JG stated it is the summer after the GW flooding in Jan/Feb 2014.

JG referred to the GW flow direction indicated on the slide (8) as fitting with the topography and the surface water catchments. This needs to be confirmed by the GI and was emphasised as indicative only at this stage.

JG referred to BM and the existing and planned retaining walls. She added that not much is known about the structure of the existing retaining wall (conditions below ground) as there are no records, except for its length of 175 m. There is also a lack of information about GW levels in this location. She confirmed that the project had accounted for this in the approach to mitigation, based on a worst-case scenario. The existing retaining wall is proposed to be replaced with a new retaining wall slightly further into the lake, the location of which has been discussed previously with the Agency.

The preliminary design extends the new retaining wall to 226 metres in length and will have an approximate retained height of 1.5 metres. This might change once more detailed topographical data is available. A retained height of 1.5 m would mean a depth below ground of approximately 3 m (based on rule of thumb). KB confirmed that the GI has started, with ground clearance happening at present and GIs starting within days.







Proposed long-term approach

JB outlined the proposed long-term approach (slide 10). She stated that in line with other aspects of the ES (contaminated land risk and other WFD elements) the intention is to undertake the GI during the DCO process. After the GI is completed, a hydrogeological risk assessment will be undertaken, including a piling assessment and conceptual understanding of GW flow direction. This will provide the GW information which is then used to update the design and either roll back in terms of worst-case scenario or implement the mitigation measures identified.

KB confirmed construction will not start until the result of assessment have been agreed.

KB added that control measures have been included within the DCO, so that no intrusive construction works can be undertaken until GI data is obtained and all appropriate assessments have been completed.

JG stated that we would be looking for EA agreement on this approach. BD confirmed that she was content that this was a suitable approach.

Proposed mitigation

JG outlined the worst-case scenario in terms of proposed mitigation which is what we will be designing for (GW flow and levels).

She highlighted the worst-case scenario as the GW flow direction indicated by the arrow on slide 11, as being perpendicular to the existing retaining wall, in a north west to south east direction. In this direction, the retaining wall would be a barrier to GW flow through the aquifer and into BM

JG highlighted that, if the GW flow direction is south east (SE) to north west (NW) (opposite to worst case), the existing retaining wall may be keeping water in BM by being a barrier to flow. In this scenario, if the existing retaining wall is removed, we could be releasing water from BM lake

JG confirmed therefore that the project is aware of the different scenarios depending on the direction of the GW flow. CG asked if the plan was to put in the new retaining wall before taking the existing one out. KB confirmed that this was correct.

JG outlined the design mitigation for the worst-case scenario (GW flow direction NW to SE) as being King Sheet Piling®. The advantage for GW is that only some of the sheet piles extend the full depth below ground, the retaining wall would therefore not impede GW flow. She confirmed that this approach had been used in the same situation on the East West Rail Phase 1 project to address the EA's concerns that sheet piling would be a barrier to GW flow, and also used by Highways England on other schemes.

JG confirmed that we were looking to agree the approach with EA and to determine whether the EA are content with the mitigation measures. BD stated that the approach made sense.

KB added that GI had been prioritised for BM and that it is our aim to make this available during DCO examination. BD asked what the extent of the GI was. KB confirmed it was close to 600 boreholes in total across the scheme area. KB pointed out the planned location of the boreholes around BM (triangulated around the Lake) to understand GW flow. KB stated the BM discharges from BM and flows under the A3 into a marsh







area - she added that if this is what surface water is doing that GW is likely to be similar.

CG referred to the draft ES chapters and NW confirmed that we will be releasing the drafts of Chapters 8 and 10 following this meeting. EA will then provide formal feedback on the approach. KB confirmed the existing GW level data will be included in Chapter 8 as opposed to Chapter 10 (referenced between the chapters).

RH asked if EA felt they had received enough information (once having reviewed the draft ES chapters) to clarify whether the EA are content with the proposed approach based on the worst-case scenario, to address the concerns expressed in their response to the WFD and the potential for an objection to the scheme on this basis. BD stated that they would need to look at the ES chapters but based on information presented the approach made sense and she was content with the worst-case scenario and that the mitigation refers to the worst case.

Discussion was had regarding the WFD and need to address other comments received. It was agreed that the WFD would be updated to respond to comments received on 18/04/19 and sent back to EA for comment. JG added that the key conclusions of the WFD will be in Chapter 8 of the ES. CG stated that it would be useful to have a summary of changes made to the WFD as a result of EA feedback.

MH clarified two elements of discussion around the scheme regarding GW – that at this stage we need to present a worst case that we are designing against and then satisfying the EA that there is flexibility within the mitigation to be able to deal with the worst case. CG agreed. He added that from a planning perspective they would not want a scheme that was approved but then there is no viable solution to mitigate the impact. EA need to be satisfied that mitigation is possible.

MH further clarified – there is the worst case where the flow is coming across the A3 and into BM, and a much more likely alternative where water is flowing from BM towards the A3. CG added that if the water was going from BM towards the A3 (NW) and concern was about losing water, then standard sheet piling should be used. MH added it is about having flexibility with regards to the permeability of the piling which King Sheet piling® does.

CG added that Craig Hampton had referred to species in BM (SSSI) and whether they were sensitive to water quality and hence potentially impacted by proposals. His suggestion was for GW quality monitoring. JG confirmed that this would be picked up by ecology. KB added that GW quality monitoring is included as part of the GI. A question was raised regarding surface water quality monitoring. NW confirmed that this would be included.

BD asked how many rounds of baseline GW monitoring would be done and whether it will be undertaken for dry and wet conditions. KB/JG confirmed that there would be 3 rounds to inform the risk assessments. If as a result of these assessments there is a need for more monitoring following this to inform design, this will be undertaken. BD stated that her question related to concerns around seasonal changes in GW flow. KB confirmed this would be considered in the risk assessments. Additional monitoring would be targeted.







MH referred to EA feedback on the WFD and reference to impacts on BM during construction phase and the request for more details on this. MH noted that this information is usually presented in the Construction Environmental Management Plan (CEMP) and that it would be preferable for this information to be presented in the CEMP as opposed to the WFD Assessment Report to avoid duplication.

Next steps/AOB

NW highlighted the need for feedback on the ES chapters and approach by Highways England SGAR date if possible (28 May). CG stated that he will respond as soon as possible.

RH outlined the outstanding actions for Atkins to send over to EA for their review and comment:

- 1. Draft ES Chapters 8 and 10
- 2. Comments on EA response to the WFD
- 3. Statement of Common Ground
- 4. Letter regarding s150 consents and licences
- 5. Draft meeting note form 10.04.19



Email (16.05.19) A.24.



Please find attached two files.

- The spreadsheet is a cost estimate for channel restoration works to a 100m reach of the Stratford Brook. It uses rates in an EA costing spreadsheet (Environment Agency, 2015a), and is based on some conservative assumptions (e.g. 100 m of restoration, multiple measures, fully enabling activities). The sum is £116k. More detail in "Intro" tab.
 Updated text explaining our agreed approach to identifying an appropriate mix of mitigation measures for Stratford Brook.

Tenvironment Agency, 2015a. Long term costing tool for flood and coastal risk management. [online] Bristol: Environment Agency (Published 2015) Available at: https://www.gov.uk/government/publications/long-term-costing-tool-for-flood-and-coastal-risk-management [Accessed 16 May 2019]. – the spreadsheet is in the zip file.

Atkins, member of the SNC-Lavalin Group Oasis Business Park, Eynsham, OX29 4AH



A.25. Email (21.05.19)



Dear

Thank you for your e-mail regarding our comments on the recent non-statutory consultation in relation to the requirement for floodplain compensation on the Stratford Brook.

I confirm that we agree that the Stratford Brook model that we have reviewed demonstrates that the bridge will not have a significant impact on flood risk, and we also agree with the conclusions of the model report, which includes that compensation is not required.

However, it will still be important to demonstrate within the FRA submitted with the application that the bridge will not cause an increase in flood risk, using the model results as evidence. As we have previously stated, it is important that the FRA – although a technical document – can be easily read by a 'lay person' to understand these conclusions. We would be happy to review the FRA (or the section relevant to this matter) prior to submission of the application if so desired.

If you have any further queries on this matter, please do not hesitate to contact me.

Kind regards

Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD





Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning Thttps://doi.org/10.100/journal-agency.gov.uk



A.26. Letter (22.05.19)

creating a better place

Environment Agency

Atkins Ltd 1 Oasis Park Stanton Harcourt Road Eynsham Witney OX29 4AH Our ref: WA/2017/123763/09-L03 Your ref: WFD App F v1.07 160519

Date: 22 May 2019

Dear

M25 J10 Scheme - Stratford Brook Mitigation Strategy and Commuted Sum

Thank you for your e-mail date 16 May 2019 with the updated Water Framework Directive (WFD) Appendix F (listing the proposed mitigation strategy for the Stratford Brook) and commuted sum calculations/figure.

Whilst we cannot definitively confirm that the calculations used to obtain the commuted sum figure are reasonable – given that they do not relate to a specific, known project – we do feel that the final figure of £116,200 is appropriate for the proposed impacts and we are willing to accept it for the purposes of the application submission.

Please note the following comments / clarifications / corrections for the WFD Appendix / Stratford Brook mitigation strategy:

Page 2 – Paragraph F.1.1.8 (c) - There are two specific concerns that we have with this paragraph, which may require additional wording to clarify:

- "Reasonable cost" is not defined anywhere. We appreciate that you may not be in a position to give an exact figure, but we would like some agreement that the calculated costs of any measures will be shared and discussed with us upon completion of the feasibility studies. Ultimately, it will be for you to demonstrate to us that the costs for any measures could be justly considered "unreasonable" against the project.
- 2. We would also not wish the commuted sum figure of £116,200 to be the determinant of "reasonable cost" and this should be clarified within the Appendix, i.e. the commuted sum figure should not be considered the maximum cost of any mitigation works. It must be made clear within the Appendix that the commuted sum payment should only be considered as an absolute last resort.

Page 2 – Footnote 1 – Please note that the first preferred option listed ("full mammal and fish passage works on Stratford Brook Culvert (North)") was applicable to both North & South culverts.

Page 3 – Measure SB_a; first bullet ('backwater creation') – The fourth sentence states that the bed levels of the backwaters will be set below the bed level of the Stratford Brook.

Cont/d...



We are concerned that such design lead to fish becoming trapped in the backwater during low flow events. The backwaters must be designed to allow fish to escape as levels recede, and we would expect to see this confirmed as part of the detailed design of the backwaters.

Pages 3/4 – Measure SB_a – On our previous site visit we also agreed that the additional of coarse gravels in relevant areas would be included in these proposals.

Page 4 – Measure SB_c – The 'Purpose' description is not correct. A mammal shelf would mitigate for the impact that the new Underbridge could have on mammal passage at high flows.

Page 4 – Measure SB_d – The 'Additional mitigation (specific)' and 'Purpose' descriptions appear to have been copied from measure SB_c and are not relevant to the proposed mitigations. In terms of the purpose of these measures, removing or modifying the sill would improve 100-200m of upstream habitat that could compensate for the residual effects of Stratford Brook. The other measures would mitigate the impacts of the existing Highways England structures in accordance with Highways England guidance for new developments.

Page 4 – Measure SB_d – Below the second bullet point (sill removal/modification), a new bullet point should be added to assess improving fish passage through the use of e.g. baffles (as listed in footnote 1 at the bottom of page 2).

If you have any queries about these comments, please do not hesitate to contact me.

Yours sincerely,



End 2



A.27. Letter (23.05.19)

creating a better place

Environment Agency

Atkins Ltd 1 Oasis Park Stanton Harcourt Road Eynsham Witney OX29 4AH Our ref: WA/2017/123763/08-L01 Your ref: 5158141

Tour rei: 515614

Date: 27 March 2019

Dear

Stratford Brook & Boldermere site visits and discussions re: ecological mitigation & net gain proposals - 22 January 2019 for M25 Junction 10 / A3 Wisley Interchange junction improvement proposals.

Thank you for sending through the notes from the site visits to Boldermere and Stratford Brook on 22 January, which we received on 6 February. I apologise for the delay in sending our comments to you on these matters, which is due to our ongoing internal discussions about the proposed mitigation measures, particularly for the Stratford Brook.

We thank you for your continued engagement with us on these issues. We felt that it would be useful to set out our current position in advance of our second site visit meeting this Friday, 29 March.

Our greatest concerns are still about the proposed mitigation measures for the Stratford Brook, which we have provided detailed comments about below. Following our most recent meeting, you have questioned the importance of improving fish passage on the Stratford Brook as there are barriers downstream on the Wey. This is irrelevant - we have a strategy for improving fish passage on the Wey and ultimately we will always seek improvements to fish passage when works are being carried out to or within the vicinity of an impounding structure.

Comments on Stratford Brook proposed mitigation measures

You note in the meeting notes that the WFD assessment for the scheme states that the new bridge structure over the Stratford Brook will "have minor localized adverse effects...". We request that it is also noted that the new structure will exacerbate the impact of the existing culverts which have had a significant impact on the Stratford Brook.

The notes also state that the Environmental Statement assessment of impact states the following in relation to riparian trees: "Effects relate to loss of riparian trees and concomitant reduction in habitat connectivity and the effects of deck shading on inchannel aquatic communities." Loss of riparian trees will also result in the loss of root structure within the bank which provides an important habitat for fish and invertebrates. The bridge will effectively sterilise this section of watercourse, which in combination with the existing impounding effect, will create a featureless, shallow environment. Reducing the impounding effect of the downstream structure will help to restore the channel's morphology and thereby reduce the impact of the new bridge.

Cont/d..



The remainder of our comments relate to section 2 of the notes (outcome of discussion) and specifically the proposed mitigation measures for the Stratford Brook.

Although we welcome all of the proposed measures, we feel that they do not fully mitigate or compensate for the impact of the new structure. In order to fully compensate, the same area of habitat would need to be created elsewhere which would include an equivalent sized bridge/culvert being removed. Unfortunately there is limited opportunity to achieve this within the vicinity of the scheme and therefore we require additional measures in order to ensure biodiversity net gain. Reducing the impounding effect of the downstream structure would help to mitigate some of the effects of the new bridge. Although the new bridge will result in the loss of macrophytes and root structure within the banks, removing the impounding effect will help to restore a more natural channel morphology. Artificial features could also be introduced into the channel under the bridge to mimic natural refuge.

With regards to the tree and scrub clearance within the riparian zone of the brook and the red line boundary of the scheme upstream of the A3, this is welcomed but as discussed at our meeting, will only have a temporary positive impact.

With regard to the proposed backwater, we are not averse to the creation of backwaters but we would question its benefit if the impeding structure downstream is not removed. The main limiting factor to a healthy fish population in this instance is the presence of the impounding structure downstream that is preventing fish from migrating upstream. Backwaters also aren't necessarily appropriate for high gradient streams. This is also a temporary measure as backwaters do silt up over time. In addition, there is limited opportunity to improve the in-channel habitat of the Stratford Brook within the red line boundary. Our preference would be for the removal/modification of the Stratford Brook South Culvert sill over the creation of backwater habitats and in-channel habitat improvements as this will have a much more significant and longer lasting positive impact. It is our view that these additional measures are essential compensation and will help to mitigate the impacts of the existing Highways England structures which have had a significant impact on the Stratford Brook.

The sentence in the notes which states "The Environment Agency would prefer to see additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage Highways England to provide environmental enhancement as part of the scheme." does not sufficiently reflect our requirements. We would like this sentence to be changed to: "The Environment Agency would prefer to see require additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage require Highways England to provide environmental enhancement as part of the scheme."

We maintain concerns that the feasibility studies for works on the Stratford Brook are to be completed after Development Consent Order (DCO) approval. It is not clear to us how, if essential mitigation measures are found to be non-viable, any works would be acceptable. We would not wish to find ourselves in a position where the scheme is approved, but appropriate mitigation measures cannot be implemented, leading to a detrimental impact on the Stratford Brook. It is not clear to us why such feasibility studies cannot be undertaken in advance of the application. We need to have a level of surety at the application stage. Unfortunately, based on the current information available to us, we are likely to raise an objection at the application stage, given that we cannot be certain that appropriate mitigation will be delivered as part of the scheme.

Cont/d.. 2



In relation to the potential removal/modification of the sill on the Stratford Brook South Culvert, if this is not feasible for technical reasons, a fish easement should be installed instead. We are currently working with the Wey Landscape Partnership (hosted by Surrey Wildlife Trust) to develop and deliver the Wey FWD (Fish Passage and Wetland Delivery) project. This project aims to improve fish passage and tackle other reasons for WFD failures throughout the Wey Catchment. We will be delivering fish passes at two structures downstream of the Stratford Brook in the next couple of years, thereby reconnecting the Thames to the Wey. The Stratford Brook South Culvert does not currently comply with Highways England best practice (Volume 4, section 2, part 7 of the Design Manual for Roads and Bridges) which states that culverts should accommodate wildlife and fish migration. Significant works are being carried out within the vicinity of this structure and therefore the opportunity to reverse the impacts of this structure should be sought, as it is unlikely that road improvement works will be happening again in this area for a potentially significant amount of time.

We are concerned that mammal passage solutions through the Stratford Brook South Culvert and the culvert passing between the A3 and northern slip road are only included as 'potential' mitigations, subject to further feasibility studies. These works should be carried out as essential mitigation because these existing structures do not comply with Highways England best practice for culvert design. In addition, Volume 10, section 1, part 9 of HE's Design Manual for Roads and Bridges requires mitigation for the effects of existing roads to always be considered when improvements or major maintenance works are planned adjacent to the watercourses. This includes in areas where otter populations can be expected to spread during the lifetime of the improvements. Although otters are relatively sparse in the Wey catchment, we have evidence that their range is expanding in adjoining catchments and we recently had a report of a dead otter (suspected road kill) at the top of the Wey Catchment.

The second to last bullet point in the notes which reads: "Modifications to the culvert passing between the A3 and the northern slip road to improve fish and mammal passage.", should be changed to read: "Modifications to the culvert passing between the A3 and the northern slip road to improve water depths for fish passage and improve mammal passage at high order events (if possible a 100 year climate change event)." Please note that this could be achieved through a single design.

Ordinary watercourse / ephemeral ditches proposed mitigation measures

Please note that we still have a remit on these types of watercourse under the Water Framework Directive. We previously discussed providing compensation for the loss of open channel through delivering enhancements elsewhere on other watercourses. We would still support this, but want to ensure that you still intend to mitigate through good design as well. This would involve employing best practice in line with Highways England Design Manual for Roads and Bridges and the guidance previously supplied by Francesca. For instance, we would expect the invert of any culverts to be set well below bed level and dressed with gravels. Culverts should also incorporate mammal passage where appropriate and be designed to minimise the size of the headwalls.

Some of the enhancements outlined in Appendix B are proposed for what appear to be small ditches and ephemeral watercourses. It is not clear whether these are to compensate for impacts elsewhere on other ordinary watercourses but if so, we would expect these enhancements to be delivered at locations where they can provide more ecological benefit.

Cont/d... 3



Additional mitigation measures listed in 'Appendix F'

Paragraph F.1.1.5 lists mitigation measures proposed for Boldermere. However, this list does not include the diversion of road drainage from the A3, which we understand has now been confirmed. We would expect this to be included within the package of mitigation measures.

In relation to the mitigation measures for Chatley Wood Pond in the Mole catchment (paragraph F.2.3.1), opportunities for creating and/or enhancing wetland habitat should be explored at Chatley Wood Replacement Land where in close proximity to River Mole.

Similarly to the above, Opportunities for creating and/or enhancing wetland habitat should be explored at Park Barn Farm Replacement Land where in close proximity to River Wey. This area does not seem to have been included within the proposed mitigation measures, so there is no paragraph reference but would fit into section F.2.4.

We trust that you will find these comments useful in advance of our site visit meeting on 29 March and as you further develop your mitigation measures in advance of the DCO submission.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency, are a response to a pre-application enquiry only and do not represent our final views in relation to any future planning application made in relation to this site. We reserve the right to change our position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,



End 4



A.28. Email (05.06.19)



In Ruth's absence, please find attached for your review:

- ES Chapter 8: Road drainage and the water environment
 ES Chapter 10: Geology and soils

Our apologies for not being able to send these to you on Friday as Ruth mentioned in her email to you last week. However, we would be grateful for your comments at the earliest, although we appreciate the 21 days usually required for reviews, but with the DCO due to be submitted on 14 June, it would be appreciated if you could give an indication of when you would be able to provide your feedback.

Please let me know if you have any questions at this time and I will endeavour to assist in Ruth's absence

Many thanks in advance.

Working on behalf of Highways England Highways England Customer Contact Centre 0300 123 5000 www.highways.gov.uk

Planning Inspectorate scheme reference: TR010030 Application document reference: TR010030/APP/8.2 (Vol 8) Rev 0



A.29. Email (06.06.19)



Further to the correspondence between yourself and of CI Associates (acting as part of the stakeholder engagement team for Highways England) including your letter of 14th December 2018 and email of 14th February 2019, we have set out below responses to the points in your email of 19th February 2019 using the same numbering (and incorporating the comments in your letter of 14th December 2018) to: address your requests for further information, where required; to set out our current understanding of the position for each permit/licence based on our previous discussions; and to highlight the next

Response to EA re Consents

- us discussions considered in this response are as follows:

 28" November 2018 meeting to discuss numerous points and including an agenda item on permits / disapplication of permits

 14" December 2018 letter from EA sending draft Protective Provisions and requesting further information about certain permits

 14" December 2018 letter from EA sending draft Protective Provisions and requesting further information about certain permits

 14" February 2019 email from

 15" February 2019 email from

 16" Stakeholder engagement team for Highways England to

 16" February 2019 email from

 18" February 2019 email from

 19" February 2019 email from

 2019 email from

 2019 Explain Exp
- 19th February 2019 email from
 4th April 2019 Meeting with EA,

Item 1. Flood Risk Activity Permit/s (FRAP/s):

Under the Environmental Permitting (England and Wales) Regulations 2016 as amended, a Flood Risk Activity Permit is required from the Environment Agency for any works in, under or over a main river, within 8m of a non-tidal main river or for any works that interfere with the course of a main river, including the construction of an outfall to a main river.

Item 2. Water Impoundment Licence:

The design of the proposed scheme includes construction of new retaining walls at Bolder Mere and at Manor Pond, with encroachment into both waterbodies, to accommodate widening of the A3 and A245 respectively, together with an extension to the culvert at Bolder Mere. Bolder Mere is also noted to be ocated within the Octaham and Wisley Common SSSI and as such does not meet the requirements of the low risk impoundment checklist as set out in the Enricomment Agency's Guidance: Water management: abstract or impound water,' adeed 24th 24th 27th 2015 Use understand that impoundments increases are not seen to be a consideration of the control of the

Next Step: EA to confirm agreement to disapply section 25 and whether any further additional protective provisions need to be agreed in exchange.

Item 3. Water Discharge Activity Permit (road drainage):

(EA) explained that the EA pushed for drainage improvements and knows that these will be included in the scheme. On this basis it was agreed a Water Discharge Environmental Permit will not be required.

Again, it would be helpful if you could send us further details of the proposal for ground

As you will be aware, The EA Guidance "Discharges to surface water and groundwater: environment of the surface water and groundwater: environment of the surface water and groundwater."

M25 junction 10/A3 Wisley interchange TR010030 8.3 Statement of Common Ground with Environment Agency



The Scheme has used \$500\$ to provide mitigation for both the quality and attenuation of highway run from the provision of ponds as narrow linear assets or exampled values for inferented to as alternation measures, but they also provide water quality treatment. Where space is limited the provision of ponds as narrow linear assets or exampled values for inferented to as attenuation for blood but no running and value or runtil treatment.

Where highway run-off discharges to a watercourse, the DMRB Method A surface water quality tests were undertaken to inform the risk assessment (Chapter 8 of the ES). With the incorporation of SuDS in the design the results show that the Scheme will not give rise to any significant adverse effects on the water quality of watercourses receiving highway run-off. Further details on the results of the DMRB Method A tests can be found in Chapter 8 (Road Drainage and the Water Environment) of the Environmental Statement. A copy of the draft ES chapter 8 is included with this letter.

in line with the Memorandum of Understanding between the Highways Agency (now Highways England) and the Environment Agency (Annex 1 – Water Environment) dated March 2011, and the Environment Agency's 'Guidance on Discharges to surface water and groundwater: environmental permits', dated 16° October 2018, our view is that a water discharge activity permit will not be required because the Scheme makes provision for the use of oil separators and/or SUDS.

Further, at this time we do not anticipate that any dewatering (of surface water to surface water to surface water to surface water to surface water of surface waters in a reas outside the SSS in the future then water discharge activity permit will be contractor for those areas, outside of the COO process.

We would be grateful if you could confirm your agreement with this.

Status: We do not believe a water discharge activity permit will be required for highways drainage but it may be required as part of dewatering activities as noted above

Next Step: EA to confirm agreement that a water discharge activity permit will not be required for the highway run-off discharge forming part of the Scheme and to provide feedback (to be noted in SOCG) as to whether there are any particular concerns that we should be aware of should a contractor subsequent identify a need for dewatering at a later stage (that results in a requirement for the discharge of any extracted surface water), notably to assure examination that this need not be an impediment to the implementation of the Scheme once consented

Item 4. Abstraction Licence:

Your view as illustrated in the 28th November 2018 meeting minutes

"The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage. Clarke Gordon noted that abstraction licensing is about to move into Environmental Permitting Regulations.

Katle Bristow confirmed that unless EA is changing limits, the scheme will be within these."

You have confirmed in your email of 19th February 2019 the following:

"We agree that this could be dealt with at a later date (if required)."

Status: It is not anticipated that this licence will be needed because it is not expected that the construction works will need to abstract more than 20 cubic metres per day, which is the abstraction limit prescribed in the Water Resources Act 1991 (or for any dewatering of surface waters that may be required to accommodate construction works, the abstraction will meet the conditions of the surface water abstraction exemption as noted in regulation 6 of the Water Abstraction and Impounding (Exemptions) Regulations 2017). It has been agreed that if a licence is needed in the future, this will be applied for separated by the contractor outside of the DCD process.

Next Step: Record the agreed position within the Statement of Common Ground (SoCG) with the EA and to seek EA's view on whether there are likely to be any difficulties in obtaining such a licence in the future should a need be identified at the construction stage

Item 5. Waste Activity Permits:

Your view as illustrated in the 28th November 2018 meeting minutes:

"The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage."

You have further requested in your email of 19th February 2019 the following:

"Although I do not believe we discussed these Permits at our November 2018 meeting, we agree that these could be dealt with at a later date if they are required."

Status: It is not possible to determine whether there is likely to be a need to store excavated materials for reuse in sufficient quantities to exceed the relevant limits or durations stipulated in the Waste (England and Wales) Regulations 2011 as amended or to store waste under an exemption as listed in Schedul 2 of the Environmental Permitting (England and Wales) Regulations 2010 as amended. In addition, at this relevance is not known whether there will be a need to treat any manmade materials on the site, such as crushing rubble. It has therefore been agreed that if a need for a waste activity permit is identified in the future, that this will be applied for separately (by the contractor) outside of the DCO process. We do not therefore seek to disapply his type of permit.

Next Step: Record the agreed position within the SoCG and to seek EA view on whether there are likely to be any difficulties in obtaining such a permit in the future should a need be identified at the construction stage.

Item 6. Groundwater Activity Permit:

Your view as illustrated in the 28th November 2018 meeting minutes

asked if there is a need for a Ground Water Activity Permit to discharge water from a soakaway into ground water. Until the GI works are undertaken it is not known if this will be required.

ACTION:

You have commented in your letter of 14th December 2018 the following:

"We understand from the meeting that you are unsure whether a discharge consent will be required for discharging road runoff drainage to groundwater and/or surface water. Firstly, please be advised that discharge consenting now falls under the Environmental Permitting Regulations

Again, it would be heligful if you could send us further details of the proposal for groundwater/surface water discharge, so that we can determine whether an Environmental Permit would be required, or whether our PPs will be sufficient to address our concerns."

You have further requested in your email of 19th February 2019 the following:

"As with the Discharge Consent above, we have requested further details of the proposed groundwater discharge of road drainage." $\frac{1}{2}$

We respond as follows:

As part of the development where there will be discharge of road run-off to ground, the drainage design includes soakaways and infiltration trenches to provide attenuation and water quality treatment. In determining the need for a ground water activity permit for the Scheme, we are guided by two key documents

- 1. Firstly, the Memorandum of Understanding between the Highways Agency (now Highways England) and the Environment Agency (Annex 1 Water Environment) dated March 2011 ("MOU 2011"). This states that a permit from the EA is not required to discharge highway run-off to groundwater, in line with relevant legislation: section 100 of the Highways Act 1990 and the Environmental Permitting Regulations (England and Wales) 2010 (as amended).
- 2. Secondly, the EA's 'Approach to Groundwater Protection' Guidance dated February 2018 version 1.2, which states that 'some discharges to ground (such as clean roof drainage or highway drainage) may not require permits'. The guidance lists a number of Regulatory Position Statements, setting out which activities can be carried out without a permit. Position-Statement 31s of particular relevance and indicates that suitably designed infiltration 5u0s used for surface run-off from roads are a suitable mechanism of discharging to ground provided that the conditions of the G13 Regulatory Position Statement are met, including a requirement that the discharge does not pose an unscreptibile risk of polition to groundwater.

Based on these documents, we therefore understand that a Groundwater Activity Permit will not be required provided it can be demonstrated that the requirements of G13 will be met

The M25 110 development is not located within any Drinking Water Protected Area or Source Protection Zone and the discharge from the soakaways will consist of rainwater run-off from the highway, through suitably designed pollution prevention controls (including the use of SuDS where appropriate). Where highway run-off discharges to ground or ephemeneal watercourses, DMBR Method C effects of outline run-off in groundwater tests were undertaken and recordation Chapter 8 (Road Drainage and the Water Environmental Statement: With the incorporation of SuDS in the design the assessment contained in the environmental Statement concludes that the test Scheme would not environmental Statement concludes that the test Scheme would not environmental Statement concludes that the interest scheme will be a supported by the service of the Scheme would not environmental Statement that determined the likely significant effects of the Scheme on the water environmental and that all necessary intigation in sensing the service of the Light of data support that the Contract of the Scheme will be supported by the Scheme of the Scheme on the water environment and that all necessary intigation in sensing the support of the Environmental Statement. We therefore conclude that on this basis the Scheme will meet the requirements in the GSI Scheme of the Scheme of the

As previously discussed with you, the DCO has been drafted to include a requirement precluding any intrusive ground works from being undertaken until a site investigation and risk assessment has been approved by the Secretary of State. In the event that detailed ground investigations indicate the presence of the previously discussed with you, the DCO has been drafted to include a requirement precluding any intrusive ground works from being undertaken until a site investigation and risk assessment has been approved by the Secretary of State. In the event that detailed ground investigations indicate the presence of the previous previous

contamination we understand that a groundwater activity permit may need to be obtained and an appropriate remediation strategy and other mitigation measures agreed under the DCO requirements process. As we have previously agreed that the risk of this situation occurring is low, we assume that this matter is better dealt with outside of the DCO rather than seeking to disapply the requirement as a matter of general principle. We would welcome your view on this and whether you envisage any particular concerns about the likelihood of such a permit being granted should this situation arise. You will be aware that the ground investigations have now commenced on site and we hope that it will be possible to provide some results in time to inform the examination of the DCO.

Please confirm whether this approach is acceptable to you

Status: We do not believe this permit is required for the reasons set out above but acknowledge that there is a low risk that following detailed ground investigations, the need for a permit may subsequently be identified. We hope to be better placed to consider this further during the course of the examination received in the control of the examination of the examination

Next Step: Please confirm your agreement to our position above and indicate whether you have any particular concerns about the likelihood of such a permit being granted should the need arise in the light of ground investigations and risk assessments that will be undertaken at the implementation stage.

Item 7 Fish (removal) Permit:

Your view as illustrated in the 28th November 2018 meeting minutes:

"Neil Watson asked if a licence is required to move carp out of a pond at Bolder Mere and relocate ACTION: to check if a license is required and advise."

to check if a license is required and davise.

"We understand that a Permit to move fish (under section 27A of the Salmon and Freshwater Fisheries Act 1975) may be required for your works in the Bolder Mere lake. A colleague in our fisheries team is unsure whether our PPs will be sufficient to remove the requirement for a fish (removal) Permit. He also noted that such a Permit usually only takes 10-20 days to obtain consent and that these Permits are usually obtained by any specialist contractors that you may employ to undertake the specialist fish works within Bolder Mere as part of the scheme."

You have further stated in your email of 19th February 2019 the following:

"At our November meeting we also discussed the need for a fish fremoval) licence. In our response to you dated 14 December, we stated that any fish fremoval) licence should be applied for by any specialist contractors undertaking these works for you. It will take 10-20 days for consent."

We respond as follows

In addition to the above points raised, in your letter of the 14th December you also raised the issue of a fish (removal) permit in respect of works at Bolder Mere.

M25 junction 10/A3 Wisley interchange TR010030 8.3 Statement of Common Ground with Environment Agency



Construction works at Bolder Mere (associated with the advancement of the retaining wall along the A3 alignment into the water body) are likely to require fish removal activities to exclude fish from the construction zone along the northern section of the water body. Prior to construction of the new retaining wall fish will be captured by methods other than rod and line (e.g., electric fishing, netting and piaced within the same water body) in an area offseted by the working area within Bolder Mere will first be segregated through the placement of exclusion stop nets to prevent fish from re-entering the working area within Bolder Mere will first be segregated through the placement of exclusion stop nets to prevent fish from re-entering the working area within Bolder Mere will first be segregated through the placement of exclusion stop nets to prevent fish from re-entering the working area within Bolder Mere as placed after completion of the works.

At present, no in-channel working is anticipated to facilitate construction works along the Stratford Brook (associated with the new Stratford Brook overbridge crossing/refurbishment of the esisting culvert), however, there remains the potential for dewatering activities should changes to the proposed construction methodology he required. In this instance, fish would be captured by methods other than rod and line (typically electric fishing in a watercourse of this physical character) and placed within the same watercourse upstream of the effective area. The section of watercourse upstream of the working area is considered to provide the beat chalablate for fish and therefore the most custable receptor is called the receptor water. The working area with instance water with stratford Brook would be temporar with the placement of exclusions top nets across the channel (upstream and downstream and downstream and downstream of the working area) to prevent fish from re-entering. This approach negates the requirement to either permanently, or temporarily, translocate fish from the Stratford Brook as part of this activity. Again, a watching brief would be in place to manage the capture and movement of any remain fish during dewatering activities.

We would anticipate that permits would normally be obtained as you state in your letter, by the sub-contractor undertaking the works. Please can you confirm that in light of the further information above (and inclusion of activities affecting fish at Stratford Brook), you still agree with this approach.

Next Step: Please re-confirm your agreement to this approach and that you do not anticipate there to be any significant issues that might affect the granting of such permits etc at a later stage.

We would be grateful to hear from you with confirmation / comments on the above position in relation to each consent identified above and next steps for each permit identified, at your earliest opportunity

The table below sets out the list of relevant EA permits/licences to the M25 J10 development and our intention to disapply the requirement to obtain these under s150 of the Planning Act 2008, or not.

Permit/Consent/License Type	Disapply under s150 of Planning Act 2008 or not
Flood Risk Activity Permit(s)	Yes
Water Impoundment Licence(s)	Yes
Water Discharge Activity Permit(s)	No – not required for highway drainage.
	May be required for discharge of abstracted surface water
	(as part of any dewatering activities at Bolder Mere) back
	to surface water, if dewatering activities are identified as
	being required by the contractor.
Abstraction Licence(s)	No – will obtain permit separately if required
Waste Activity Permit	No - will obtain permit separately if required
Groundwater Activity Permit(s)	No – not required
Fish (removal) Permit	Not a prescribed consent under s150Planning Act 2008 -
	this consent can be obtained by HE's contractor separately
	if required.



Highways England Customer Contact Centre 0300 123 5000 www.highways.gov.uk



A.30. Email (06.06.19)





DF3.2 WFD Assessment M25 J10 v0.03 050619a.pdf .pdf File

Dear

Please find attached the Water Framework Directive assessment report. We look forward to receiving your comments and feedback at the earliest.

Thank you in advance for your review of all the documents and information we have sent over to you today and yesterday.

Kind regards



Atkins – South East Roads Investment Programme

Working on behalf of Highways England

Highways England Customer Contact Centre 0300 123 5000 www.highways.gov.uk



A.31. Email (07.06.19)





A.32. Letter (10.06.19)

creating a better place



C J Associates 26 Upper Brook Street

London W1K 7QE Our ref: WA/2019/126333/02-L01

Date: 10 June 2019

Dear

M25 J10 / A3 Wisley Interchange – 'Water Framework Directive Assessment – Groundwater Quantity' meeting, 7 May 2019

Thank you for sending through the minutes from our 7 May meeting, which we received on 5 June.

We are happy that the minutes are an accurate reflection of the meeting and do not wish to propose any changes.

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,

Strategic Planning Specialist





A.33. Letter (14.06.19)

creating a better place

Environment Agency

CJ Associates 26 Upper Brook Street London W1K 7QE Our ref: WA/2018/125863/04-L01

Date: 14 June 2019

M25 J10 / A3 Wisley Interchange improvement scheme – meeting 10 April 2019: review of meeting minutes; review of DCO Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater; review of Permits / consents / licences required and/or to be disapplied; review of Statement of Common Ground.

Prior and further to our meeting of 10 April 2019, thank you for sending us:

- The Development Consent Order (DCO) Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater (received 10 April).
- The minutes from the meeting (received 5 June).
- The list of Environment Agency (EA) Permits/consents/licences required and/or to be disapplied (received 6 June).
- The Statement of Common Ground between Highways England (HE) and the EA (received 12 June).

Please see below for our comments on these matters. Please note that our comments on the 'Permits/consents/licences required and/or to be disapplied' are provisional and subject to further review and comment by our legal team.

Review of meeting minutes

We are satisfied that the minutes are an accurate reflection of the meeting, except for the dates ("PMN") referenced in sections 5, 6 & 9(2)(4)(5), which are incorrect (i.e. the submission dates of documents by you to us).

Review of DCO Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater

Our only issue of concern relates to the Requirement for Contaminated Land and groundwater, paragraph 2(b) which states that "...carrying out of the authorised development does not make worse any adverse conditions or risks associated with such existing sources of contamination...". This does not comply with the normal context of a planning development, whereby after development the site should not fall back into contaminated land regime as defined by Part 2A of the Environmental Protection Act 1990. Although this is unlikely to apply to this development, if gross contamination was discovered during the course of works, we would expect you to remediate it and not just

Cont/d..



leave it saying you have not made the situation worse.

We have no concerns with the Requirements for Bolder Mere and Stratford Brook, with the caveat that they reference other documents that we have not yet had the opportunity to review.

Review of Permits/consents/licences required and/or to be disapplied

As noted in the introduction to this response, these comments are <u>provisional</u> and subject to further review by our legal team. These comments have been sent to you early as requested and details are subject to change.

We have listed our comments on the Permits/consents/licences in the same order that they were sent to us:

- Flood Risk Activity Permits (FRAP): We confirm our agreement to disapply FRAP, subject to our acceptance of the final Protective Provisions.
- 2. Water Impoundment Licence: We cannot agree to disapply a Water Impoundment Licence, and you will need to apply for a licence separately. It is current EA policy that we will not agree to the disapplication of s.25 Water Resources Act 1991. We advise that it may take up to 4 months for the application process; the licence will need to go to Natural England for comments (due to the Site of Special Scientific Interest (SSSI) designation) and may need to be advertised. We recommend sending an application to our National Permitting Service as soon as possible.
- 3. Water Discharge Activity Permit: We agree that the Regulatory Position Statement for Temporary dewatering from excavations to surface water (https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water/temporary-dewatering-from-excavations-to-surface-water) does not apply. It is therefore it is likely that a Water Discharge Activity Permit would be required for dewatering activities required within Boldermere (or within 500m of the SSSI), should this prove to be necessary.
- 4. Abstraction Licence: We note that a licence should not be required, but will be applied for by contractor if necessary. We cannot pre-judge any licence application, but assuming that any abstracted water will be returned to the same catchment (i.e. non-consumptive), this could be relatively low risk, subject to some possible restrictions, especially in relation to protection of sensitive areas (i.e. the Thames Basin Heath Special Protection Area and SSSIs).

You should refer to the Wey Catchment Abstraction Licensing Strategy (https://www.gov.uk/government/publications/wey-catchment-abstraction-licensing-strategy), which states that: "Applications for new non-consumptive abstraction licences or those with net environmental benefit may be permitted, but may be subject to restrictions to protect local features and any bypassed reach. Restrictions will be determined on a case-by-case basis and applications will be subject to the normal licence determination process." (paragraph 3.1.2) and "All applications for abstraction licences will be assessed in relation to their direct and indirect impacts on protected areas. If an abstraction is deemed to potentially impact a protected area, the licence (if granted) may be conditioned with local, site specific restrictions to ensure the protected area is not impacted. These conditions may be more restrictive than the strategy outlined throughout this document." (paragraph 3.5).

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Cont/d	4



- Waste Activity Permit: We note that a Permit should not be required, but will be applied for by contractor if necessary. We cannot pre-judge any Permit application.
- 6. Groundwater Activity Permit: Your e-mail (dated 6 June) states that the development is not in a Drinking Water Protected Area (DrWPA). However, the development site is partially in the Wey catchment DrWPA (GB106039017630) and within a DrWPA Surface Water Safeguard Zone (GB106039017630), we therefore assume you are just referring to groundwater DrWPAs? We agree that if any activity meets requirements of HE/EA Position Statement & Groundwater Protection Position Statement G13 then a Permit will not be required. We cannot pre-judge any Permit application.
- Fish (removal) Permit: We agree with the approach for any specialist subcontractor to apply for Permit/s as required. We cannot pre-judge any Permit application.

Review of Statement of Common Ground (SoCG)

Overall, the SoCG is a good reflection of our current position with you. I would suggest the minor changes below before it is signed. As of sending this letter I am not in the office to be able to sign the document and return to you and will not be in a position to do so until Wednesday 19 June. I recommend that the changes outlined below are made and I will be happy to sign the document and return to you on 19 June for submission to the inspector.

All of the changes relate to the 'Issues Table':

Boldermere ('Enhancements (Biodiversity net gain & waterbody recovery)') – pages 19-21: HE response, last sentence notes Requirement 12 relating to agreeing works on Stratford Brook – I believe this should read Requirement 10 for Bolder Mere works. Text needs amending.

WFD Assessment ('Ephemeral & headwater ditches') – page 24: EA comment "...not key rivers..." should be amended to "...not main rivers...".

Mole Water Body ('Proposed mitigation') - page 23: I would suggest this is 'agreed'.

Geology and soils ('Mineral extraction') - page 26: I would suggest this is 'agreed'.

Water Environment ('Water Impoundment Licence') - pages 30-32: This will need to be 'Not agreed' as per comments above.

Ecology ('Fish (removal) Permit') - pages 32-33: I would suggest this is 'agreed'.



I believe that this completes all of the outstanding actions from our 10 April meeting. We will provide further updated comments on the Permits/consents/licences once it has been reviewed by our legal team, should they have any further comments (or changes) to make to my comments above.

I will await an updated SoCG from you, which I will sign and return as soon as possible following receipt.

We look forward to being formally consulted on the DCO application in due course.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency, are a response to a pre-application enquiry only and do not represent our final views in relation to any future planning application made in relation to this site. We reserve the right to change our position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

Thank you for your thorough pre-application engagement with us on this scheme. If you have any queries about the matters raised in this response, please do not hesitate to contact me.

Yours sincerely,



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