M5 Junction 10 Improvements Scheme

Applicant Written Submission of Oral Case for Issue Specific Hearing 3 (ISH3)

TR010063 – APP 9.68

Rules 8 (k)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

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The Infrastructure Planning (Examination Procedure) Rules 2010

M5 Junction 10 Improvements Scheme

Development Consent Order 202[x]

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1. Introduction

1.1.1. The purpose of this document is to set out the Applicant's written summary of its oral case for Issue Specific Hearing 3 (ISH3) held on Tuesday 13 and Wednesday 14 August 2024 in Cheltenham and virtually via Microsoft Teams.

1.1.2. This document does not propose to summarise the oral case of parties other than the Applicant. Summaries of the oral case made by other parties are only included where necessary in order to give context to the Applicant's summary.

1.1.3. Where the Examining Authority (ExA) requested further information from the Applicant on particular matters, or the Applicant undertook to provide further information during the Hearing, the Applicant's response is set out.

1.1.4. This document follows the order of the Agenda published by the Examining Authority on 5 August 2024.

1.1.5. For defined terms and abbreviations, please refer to Section 14 of the Introduction to the Application (APP-001).

1.1.6. The Applicant has provided responses to the ISH3 agenda hearing action notes collectively in Appendix A.

1.2. Items 1 & 2 - Welcome, introductions and arrangements for the hearing; Purpose of the Issue specific hearing

1.2.1. Andrew Tait KC of Francis Taylor Building confirmed that he represents the Applicant and introduced the following members of the Applicant's project team, who would speak as required on the agenda items:

(a) Douglas Haycock, Burges Salmon;

(b) Mike Vaughan, Flood Risk Assessment Lead, AtkinsRéalis;

(c) Colin Cartwright, Environment Lead, AtkinsRéalis;

(d) James Cattermole, Land Assembly Lead, Carter Jonas;

(e) Ian Morrissey, Aquatic Lead, AtkinsRéalis;

(f) Chris Beattie, Project Manager, Gloucestershire County Council;

(g) Nathan Drover, Developer Interface Manager, Gloucestershire County Council;

(h) Lizzie Hall – Ecology Lead, AtkinsRéalis;

(i) Kae Neustadt – Heritage Lead, AtkinsRéalis;

(j) Penny Taylor - Landscape Lead, AtkinsRéalis; and

(k) Craig Jones - Design Manager, AtkinsRéalis.

1.3. Item 3 - Flood Risk, Drainage and the Water Environment

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(i)	The ExA will explore with the EA and the Applicant their consideration of Sequential and Exception Test and the current conclusions in the Statement of Common Ground (SoCG).	The Applicant referred to the conclusions of the SoCG with the EA (REP1-036), stating that it was deemed the sequential test had been passed and that the exception test also needs to be passed. The ExA asked the Applicant to signpost relevant submissions relating to the sequential and exception tests for the flood risk assessment. This information is detailed below.
ISH3.1 - The Applicant was asked to signpost relevant submissions relating to the sequential and exception tests for the flood risk assessment.		
(ii)	The ExA will explore with the Applicant and National Highways the Strategic and Local Road Drainage and management of the surface water runoff during construction and the subsequent operation of the Proposed Development.	The Applicant explained that strategic road drainage should be covered by National Highways, whose network is defined by the Strategic Road Network which includes the M5 motorway. Drainage of local roads is covered by Gloucestershire County Council (GCC). It was agreed between the Applicant and National Highways that the exact boundary is still under discussion between GCC and National Highways. The drainage will be adopted and maintained by one of either of the parties once the boundary is set. The Applicant explained that the drainage plan for the Scheme is that once in operation, drainage will be managed through the embedded mitigation which is part of the drainage design. The preliminary drainage design is based on sustainable drainage mitigation which aims to mimic natural systems and provides some level of treatment for water quality at the same time as providing flow control for flood risk. The preliminary drainage design is set out in the Drainage Strategy Report at Appendix 2.1 of the Environmental Statement (ES) (APP-079). The Applicant explained that the requirements of the drainage system have been assessed both under baseline and with-Scheme scenarios including the mitigation, using the current guidance from the DMRB. As defined under the Appendix 8.3 of the ES (Surface Water Quality Assessment) (APP-111) a detailed assessment was undertaken, including: • an assessment to ascertain acceptable routine runoff quality; and

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		• spillage risk calculations to ensure it is below required thresholds. The Applicant explained that the purpose of this is to ensure that the Scheme's impacts on water quality are reduced to appropriate levels by the mitigation measures, namely filter drains, swales, ditches and ponds and would provide an improvement to water quality compared to the current scenario. The mitigation ensures that runoff from the Scheme is acceptable both for routine runoff and for the risk of a spillage incident occurring within the carriageway of the Scheme drainage catchments.
(iii)	The ExA will explore with the Applicant, the Joint Councils (JC) and the Environment Agency an understanding of the compliance with the Water Framework Directive, and the measures secured through the dDCO.	The Water Framework Directive (WFD) compliance assessment has been published as Appendix 8.2 to the ES (REP3-029). The WFD compliance assessment concludes the proposed Scheme is compliant with the objectives of the WFD, as transposed by The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. In carrying out the assessment, the guidance produced by The Planning Inspectorate (PINS), Advice Note Eighteen was followed and the assessment included the following three stages: • Stage 1 (Screening) – the potentially affected surface water and groundwater bodies within zone of influence of the Scheme were scheduled. • Stage 2 (Scoping) – to assess potential mechanisms of impact on the status of water bodies screened into the compliance assessment, including undertaking information on existing water body status reported at the time, including where relevant reasons for not achieving good status and mitigation measures for heavily modified water bodies were reviewed, alongside further measures for the Severn River Basin District. Scoping was framed by information gathered under the Environmental Impact Assessment (EIA) and was transposed into the assessment under WFD. • Three surface water bodies were scoped into Stage 3:

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		○ River Chelt – Source to M5 (designated heavily modified water body); ○ River Chelt - M5 to confluence with the River Severn; and ○ Leigh Brook – Source to confluence with the River Chelt. • Two groundwater bodies were scoped into Stage 3: ○ Severn Vale - Secondary Combined; and ○ Warwickshire Avon - Secondary Mudrocks. • Stage 3 (WFD impact assessment) - undertaken to provide a detailed assessment of potential impacts against the water body elements that form the status of the water body, more detail around the mitigation that have been identified and a programme of measures for the Severn River Basin District. The WFD impact assessment followed a coloured risk-based approach in line with the guidance (Red, Amber, Yellow, Green, Blue) to indicate the level of risk against objective non-compliance within each of the water bodies. The assessment accounts for embedded mitigation and mitigation defined in the report. The Applicant explained that detail of the assessment can be found at Appendix 8.2A of the ES (WFD Surface Water Impact Assessment) (APP-109) and Appendix 8.2B of the ES (WFD Groundwater Impact Assessment) (APP-6.15). In looking at the potential impacts associated with surface water quality issues, the Highways England Water Risk Assessment Tool (HEWRAT) was used to inform the potential risks of non-compliance with water quality parameters. The Applicant explained that in undertaking the WFD compliance assessment, each mechanism of potential effect was assessed against: ○ Test A - whether the Scheme could cause deterioration in any element of water body classification;

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		○ Test B - whether the Scheme could prevent the WFD status objectives from being reached within the water bodies or the wider River Basin District; and ○ Test C - how the Scheme can contribute towards water bodies reaching their objectives. The Applicant explained that, in terms of the measures secured in the DCO, the embedded design mitigation measures defined under the WFD will be secured under Schedule 2 Requirement 11(1) of the DCO. Specific mitigation is secured under the Register of Environmental Actions and Commitments (REAC) (REP3-031) relating to, for example, the Link Road River Chelt bridge crossing, new culvert design and existing culvert extensions. The mitigation measures are all scheduled and housed in the REAC document.
(iv)	Are the EA and the LLFA content that the Flood Risk Activity Permit (FRAP) aligns with the dDCO and would secure appropriate mitigation? Are all parties content that the dDCO as worded ensures that the FRAP will have been agreed in advance of the commencement of works authorised by the dDCO?	The EA suggested that requirements 11 and 13 of the draft DCO were sufficient, but there would need to be a sufficient commitment to carry out modelling once a contractor is engaged to ensure no detriment. The Applicant explained that REAC item WE15 was updated at Deadline 3, which commits to hydraulic modelling of the construction stage arrangements (see REP3-031). As with any FRAP this needs to be approved by the EA in advance of construction works. Post hearing comment: REAC item WE24 commits to hydraulic modelling of the detailed design and which will also be required to support the FRAPs for permanent works. Neil Hadley, an affected party, asked whether the proposed pipework under the Old Gloucester Road is sufficient and noted that water discharged from the West Cheltenham Allocation site to the River Chelt is through overgrown agricultural ditches, outside the application area. The concern appeared to relate largely to the risk of flooding of neighbouring land and floodwater backing up. The Applicant explained that the existing culvert under the B4634 is very small and old and plans are to replace it with three new culverts, which would reduce the risk of backing-up onto land upstream. The Applicant confirmed it

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		appreciates that the water courses are overgrown and flood modelling has taken that into account. Flood modelling has demonstrated that the proposed changes do not increase flood risk downstream.
(v)	Phasing of attenuation basin construction and consenting process. Are the Environment Agency (EA) and JCs content that this is appropriate and that it is appropriately secured via the dDCO?	The ExA asked the Applicant to summarise how the Secretary of State (SoS) can be assured that sufficient compensatory flood storage will be provided to ensure there is no risk of flooding during construction. The ExA also asked the Applicant to explain how this would be secured. The Applicant explained that flood compensation for the Scheme is provided by these work items: o flood storage at the large flood basin by Junction 10 (Work Item 7); o compensatory floodplain on the River Chelt floodplain, east of the Link Road] (Work Items 5(c) and 5(n)); and o flood compensation on the minor watercourse floodplain north of the B4634 (Work Item 6(d)). The Applicant explained that construction best practice would be to ensure that sufficient compensatory floodplain is in place before any temporary or permanent works are implemented that would displace floodwater. The compensatory floodplain is secured by dDCO Schedule 2 Requirement 13(1) and within the REAC (REP3-031). Additionally, REAC commitment WE24 has been expanded to include the Environment Agency (EA) as a consultee on this aspect of the detailed design. Compliance with the FRAP process will achieve this. Neil Hadley suggested that development at the West Cheltenham site would affect water flows and asked the Applicant to explain the number of units which were used for the modelling. The Applicant explained that the modelling looks at the situation today. It does not look at how many housing units might be built upstream because it is for that development to mitigate itself. The developer will be required to limit

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		runoff to greenfield and possibly brownfield, so there should be no increase in runoff from the site once built.
(vi)	The ExA will wish to explore the principle of the reservoir as well as the practical implications of operation, maintenance and ownership.	The Applicant explained that the EA indicated early in the project that works to sever the flows over the A4019 (by raising the A4019 to meet the new Junction 10) would implicate the road as a flood defence. As such, the EA would expect the road embankment to be designed and maintained as flood defence. The considerations here are described in a working document that is being drafted through discussions in the SoCG with National Highways. The Baseline flood map for the design event (1 in 100-year return period with allowance for future climate change) is provided in the Baseline Modelling Report (AS-047). This indicates the flood depths in this event peak at 1.6m, held against the existing motorway junction, with water retained by the raised embankments of both the M5 motorway and the A4019. During the flood 200,000m^3 flows over the existing A4019, flooding the road along a length of approximately 150 m. The flow over the A4019 peaks at 10.3m^3/s with a maximum depth of around 650 mm on the carriageway. Water overtopping the highway passes north into the catchment of the Leigh Brook. The Applicant explained that works to improve Junction 10, which involve raising the eastern approach from the A4019, will mean that floodwater previously flowing over the A4019 will be retained in the southern fields. The existing properties at Withybridge Gardens, which would still suffer deep flooding, will be demolished. Without mitigation, flood levels in the fields would rise and both spread eastwards and force more floodwater into the M5 culverts and downstream. To mitigate this, the ground level in the fields will be reduced to provide compensatory flood storage, offsetting the displacement of floodwater caused by the Scheme and the severance of the flow path over the A4019. The additional flood storage will keep the flood levels at or below existing flood levels for the equivalent return period events, but the volume held on the floodplain will be appreciably increased to approximately 190,000 m^3. This increase will fall within Reservoirs Act 1975. The Applicant's understanding is provided with the support of an All Reservoirs Panel Engineer (ARPE), appointed by GCC to the role of Construction Engineer for

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		the project, who has provided a statement. The following passages from the statement were read out to provide background to the reservoir issue: • '*Whilst the current volume of water retained by the M5 motorway embankment and A4019 approach to J10 would far exceed 25,000 m^3 above natural ground level, the exception provided in Regulation 3(d) of SI 2013 No.1896 would apply: that is, where there was no intention to attenuate or store water, road embankments are not treated as large, raised reservoirs.* • *It is a 'grey area' in respect to how undertaking works **without** compensatory storage would affect the exemption under the above regulation. It could be argued that, whilst the works will lead to an increase in flood depths in the southern field albeit no increase in flood level at the design event, the intention would not be to store water thereby retaining the exemption but this reasoning would need to be ratified by the Environment Agency reservoirs safety team. However, flood modelling work has identified that without flood storage, water levels at J10 would rise by over 100mm and hence a significant effect in ES terms. This would affect the motorway, local highway network and residential developments at Butlers Court and upstream of Withybridge Lane. Furthermore, the Environment Agency requires that displaced floodwater is not passed forward to the downstream landowners and hence having to store it at source.* • *Whilst it is not anticipated that the Piffs Elm culvert through the M5 motorway will be 'artificially blocked' for the purposes of attenuating flows **with** the compensatory storage in place, extra water will be retained by virtue of the flood storage area and the extension of the culvert, as well as raising of the A4019 which implies an intent to hold water. Hence, the creation of the compensatory storage area means that the new body of water and its associated raised structures might meet the definition of a 'large, raised reservoir' given in Section 1A of the Act. It should be noted that only during flood events that are more*

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		extreme than the 1 in 25-year return period, would overland flows develop from the River Chelt that will enter the flood storage. • *For clarity, both the A4019 and M5 (including slip roads) would be deemed large raised structures used for storing water. It is important to say that, regardless of the application of the Act, the Environment Agency has previously indicated that the works to sever the flows over the A4019 will implicate the road as a flood defence.* • *DMRB document LA113 entitled "Road drainage and the water environment" covers this situation. It states that where "an embankment (as part of a project) has the potential to hold a large volume of floodwater such that it would be defined as a reservoir, national legislation must be followed."* The Applicant explained that, in terms of the practical application/operation and ownership, the statement provides that: • *Statutory reservoirs in England are regulated by action under the Reservoirs Act 1975 (the Act).* • *In common law, the owner of a reservoir is liable for any damage caused should there be an uncontrolled release of water from a reservoir.* • *The Act allocates responsibility for reservoir safety to an 'undertaker'. This undertaker can be the owner, operator or a nominated representative of a group of owners or company, or other organisation. For M5 J10 this flood storage area is proposed to be managed through an agreement between GCC and National Highways.* • *The undertakers are ultimately responsible for reservoir safety including day to day operation, monitoring, maintenance and repair of the reservoir and appointment of qualified civil engineers to design and supervise construction of the reservoir ("the construction engineer"); to supervise the reservoir at all times ("the supervising*

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		engineer") and periodically inspect the reservoir ("the inspecting engineer").
		
		• *The Environment Agency is the Enforcement Authority. Its role to ensure that the undertaker complies with the requirements of the Act (offences under the Act are primarily strict liability criminal offences).*
		
		• *Upon registration, the Environment Agency decides whether the reservoir is high or not-high risk. It is likely that the proposed reservoir will be classified as a high-risk reservoir.*
		
		• *The undertaker of a high-risk reservoir must ensure that the reservoir is under the supervision of a Supervising Engineer at all times (from issue of the Final Certificate). A statement on the performance of the reservoir is given annually to the undertaker and copied to the Environment Agency. In the long term, it is proposed that the reservoir be managed as a joint undertaking with:*
		
		  • *National Highways being the undertaker responsible for day to day management and maintenance of the motorway and slip road embankments and Piffs Elm Drainage Culvert which passes under the motorway; and*
		
		  • *GCC would be the undertaker for all other elements (including being the nominated representative for dealing with the Environment Agency, appointing the Supervising Engineer, preparing and testing the on-site plan and appointing the Inspecting Engineer).*
		
		The Applicant acknowledged that how this role is managed between GCC and National Highways needs to be agreed.
		
		• *The undertaker is also required to commission an Inspecting Engineer to inspect the reservoir at least every 10 years (initially two years from issue of the Final Certificate). The Supervising Engineer can call for an inspection at any time.*

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		• *When a reservoir is inspected, the Inspecting Engineer might recommend measures in regard to maintenance or that need to be taken to ensure its safety. Satisfying the recommended actions is the responsibility of the undertaker and is enforced by the Environment Agency. This requirement is key future liability on GCC and National Highways, although the future cost of this liability entirely depends on the behaviour and condition of the motorway, slip road and A4019 embankments.*
		
		• *If GCC plans any alterations to the flood storage reservoir, which increase or decrease its capacity, it will need to again appoint a Construction Engineer.*
		
		• *If GCC or National Highways plan any works that might affect the safety of the reservoir, GCC and National Highways will need to ensure that the works are supervised by a qualified civil engineer (as defined under the Act). This will not constrain GCC or National Highways ability to undertake routine maintenance. The Supervising Engineer will be available to provide advice if there is any doubt.*
		
		• *The following additional operations and maintenance requirements have been identified to manage the effectiveness of the compensation/flood storage area. It is noted that only the final two points are required as a direct result of the areas being designated a reservoir under the Act:*
		
		  • *Clearing of inlet trash at Piffs Elm.*
		
		  • *Clearing of the outlet head wall at Piffs Elm.*
		
		  • *Maintenance of the Piffs Elm culvert to be free of debris.*
		
		  • *Additional landscape maintenance of the designated spill areas (if required), typically mowing 3 times a year.*

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		• *Any future repair works to embankments and culvert within acceptable period, if recommended by the Inspecting Engineer.* The ExA referred to the use of the term 'grey area' and asked whether the Applicant is taking a precautionary approach by assuming the Reservoirs Act 1975 applies. The Applicant explained that it is working from the advice of its ARPE, who believes it will be designated as a reservoir. EA also stated that it is a reservoir. The Applicant has taken a precautionary approach and has implemented this into the Scheme design. Following comments from National Highways, the ExA asked the Applicant for clarification regarding the legal responsibility for the reservoir barrier. The Applicant agreed to provide the draft technical note to the EA. It was also noted that the depth of floodwater sitting against the M5 embankments is not changed by the Scheme. The Applicant explained that absent agreement with National Highways, the Reservoirs Act 1975 will by default impose obligations on the undertaker of the reservoir. **Post hearing note**: the purpose of any side agreement with National Highways wouldn't be to alter the interpretation of the Reservoirs Act 1975 but to define and apportion liabilities and indemnities between the parties.
ISH3.2 - The Applicant was asked to provide technical note relating to the reservoir to the EA. ISH3.4 – Both the Applicant and National Highways were asked to provide an updated position relating to the reservoir at D4. ISH3.7 - The Applicant was asked to confirm whether the Secretary of State has the power to impose liability on National Highways in relation to the reservoir.		
(vii)	The ExA will seek an understanding of the progress of negotiations with the landowner where there is the prospect of an increased depth of flooding and seek to understand	The Applicant explained that the Flood Risk Assessment (AS-023) describes the areas within the Order Limits that are affected by small increases in flood level, although these areas (except the compensatory floodplain formed

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	the implications for the Scheme in the event an agreement has not been secured prior to the end of the examination.	immediately east of the Link Road at Work Items 5(o);) are already flooded in the baseline. The Scheme Hydraulic Modelling Report (AS-048) describes the impact on flood depths on the River Chelt Floodplain. The Flood Risk Impacts Technical Note (AS-049) details the impact on flood depths arising from the minor watercourse near the B4634 at the southern end of the Link Road. The Applicant explained that the impact assessment is described in ES Chapter 8 (REP1-015). The description of magnitude for adverse impacts is set out by LA113 of DMRB. Where the magnitude of adverse impacts on third-party land was considered minor (10 mm to 50 mm) or worse (> 50 mm) and/or it was considered economically or environmentally unsuitable to provide additional mitigation measures, the probability and consequences of flooding were considered to establish whether there was a change in flood risk. This analysis found the Scheme is not expected to cause a material increase in flood risk elsewhere. The Applicant explained that the predicted effects are: • on farmland in the River Chelt floodplain, both upstream and downstream of the Link Road, where the fields either side of the Link Road are predicted to incur a localised increase in flood level of up to 60 mm, from 160 mm to 220 mm; and • on farmland between the B4634 and Withybridge Lane, where flood depths increase in the watercourse just downstream of the road by 30-40 mm from 140 mm to 180 mm in the design event, with a more widespread reduction in flood depth across the fields. However, at this location, the greatest impact was predicted for more frequent events, nothing at 1 in 2-year events, but a widespread 20-30 mm, from 100 mm to 130 mm, in 3 fields, at 1 in 5-year events and 1 in 10-year events. Negligible impacts were predicted for 1 in 20-year events and above. However, the Applicant explained that it is consulting with affected landowners to ensure they are aware of, and accept, the increases in flood levels. The Applicant is also seeking rights through the draft DCO for increased flooding

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		on farmland (within the Order Limits). The areas are within the draft DCO to acquire permanent rights should negotiations fail. There are no measures required outside of the Order Limits. In terms of negotiations with landowners, the Applicant explained that consultation has been ongoing since 2022, with meetings specifically taking place in 2023. There are seven interested parties: • An agreement has been reached with Robert Hitchens Limited; • There are five agreements in negotiation with: Malcolm & Susan Hulbert, Ann & Charles Arkell, Andrew and Sara Hulbert, Grace Grey and John Olney and Terry Smith. The ExA asked the Applicant to clarify whether it is seeking agreement with the relevant landowners, but that if the negotiations are unsuccessful the DCO would secure all necessary permanent rights. The Applicant confirmed this is correct and that these rights are set out in Schedule 5 of the draft DCO. Neil Hadley referred to the three new pipes being built under the Old Gloucester Road (B4634) and asked the Applicant to clarify why they were being built, referring to the possible future growth in the West Cheltenham Allocation. The Applicant explained that flooding at the B4634 currently goes through one small, old culvert with the rest of the floodwater flowing across the top of the road. The three new culverts will send all floodwater under the road. The small increase in flood depth downstream occurs because the culverts in the current design do not perfectly match the flow mechanism of water going over and under the road in the existing conditions. The culverts are not there to deal with an increase in future flow caused by any development upstream. It is for those developments to account for themselves and there is legislation in place to ensure this happens.

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		The ExA queried whether the design resolves the current problem and prevents the Scheme from resulting in any worse effect. The Applicant explained that the Scheme will result in a minor improvement upstream. The Applicant also confirmed that the existing culvert is more of a lidded channel, and that the design is for 3 box culverts, not circular pipes.
ISH3.3 - The Applicant was asked to provide references to the plots affected by an increased depth of flooding.		
(viii)	The Applicant and EA will be asked to confirm their positions with respect to their view on drainage consents and whether they are appropriately covered in Requirement 13.	The Applicant explained that Schedule 2, Requirement 13(1) of the draft DCO implies a Flood Risk Activity Permit (FRAP) from the EA will be required for the flood storage and compensatory floodplain. Commitments WE15 and WE24 in the REAC (REP3-031) commit to undertaking this process for both the temporary (construction) and permanent (operational) stages of the project. With regard to the ordinary water course, GCC, as the lead local flood authority, has agreed to disapply Section 23 of the Land Drainage Act 1991 such that ordinary water course consents will not be required. This is confirmed at Article 3A of the draft DCO. WE23 of the REAC commits to consultation with GCC as lead local flood authority on the detailed design of the works which may alter the flow of the ordinary watercourse in the Scheme local area. It was understood by the Applicant that the EA had no concerns regarding requirement 13 or the FRAP process. The ExA asked the Applicant to provide a copy of the agreement on the disapplication of Section 23 of the land Drainage Act 1991. A copy of an email between Peter Siret of the lead local authority and Chris Beattie on 17 June 2024 has been submitted at Deadline 4 (see below).
ISH3.5 - The Applicant was asked to submit to the examination the email from the lead local flood authority confirming agreement regarding the disapplication of s.23 Land Drainage Act 1991.		
(ix)	The ExA will seek clarification from the Applicant and the EA on the outstanding matters referred to in the SoCG.	The Applicant explained that discussion is ongoing with regard to matters outstanding and the Applicant expects to submit a new iteration of the SoCG

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		at D4. The SoCG, as of 18 June 2024 (REP1-036) described the following as outstanding: • Item 7.1 – Further investigation is required at the detailed design stage to determine the need for bank protection and the requirements of that bank protection. The Applicant explained that REAC item WE4 (REP3-031) has been updated to state that the EA will be consulted on this aspect of the detailed design. • Item 7.2 – Detailed design of the flood storage area. The Applicant explained that REAC item WE17 has been updated to state that the EA will be consulted on that aspect of the detailed design. • Item 7.3 – Timing with regards to construction activities on the Leigh Brook. The Applicant explained that REAC item B28 was added to address this matter. • Items 8.1, 8.2 and 8.3 all relate to the classification of the Link Road and A4019 works as essential infrastructure. The Applicant noted that these issues had been discussed earlier in the hearing and that the discussions had would be brought into those items. • Item 8.4 – Flood Risk. The Applicant explained that the embedded mitigation included is based on the flood risk hierarchy and is described in the Flood Risk Assessment (AS-023). The Applicant explained that it will follow up to the EA to confirm whether this item can be closed.

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		• Item 8.5 - Flood risk during construction (sequencing). The Applicant explained the issue should be progressed through the extension of WE15 in the REAC. • Item 8.6 - Groundwater regime in flood compensation area and flood risk. The Applicant explained that the Groundwater Technical Note referred to in the Flood Risk Assessment was submitted to the EA in July 2024 and has been appended to the to the latest version of the SoCG (REP1-036). • Item 8.7 - Definition of extensive Flood Zone 3b. The Applicant explained that a figure showing Flood Zone 3b and how that relates to the Scheme will be appended to the next iteration of the SoCG. • Item 8.8 - Design of bank protection under River Chelt Bridge. The Applicant explained that this has been identified as a detailed design consideration, the ES has assumed a worst case of hard bank protection to be used that location. • Item 8.9 Future attainment of good status. The Applicant explained that the EA is to review the updated Chapter 8 (REP1-014) following Deadline 1 submission. • Item 8.10 - Ordinary watercourse model to be agreed with the flood risk specialist at the EA. The Applicant has submitted the Ordinary Water Course model to the EA.

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		The Applicant confirmed that further discussions are scheduled with the EA prior to Deadline 4 to discuss the matters noted above.
ISH3.6: The Applicant was asked that within an updated SoCG, with the Environment Agency to provide details of what is agreed in respect of whether the scheme is essential infrastructure (including vulnerability). To the extent there is disagreement, explain how the conclusion reached would be different. There needs to be assessment of what would happen in either event given EA's reticence to confirm their position.		

1.4. Item 4 - Traffic and Transport

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(i)	The Applicant and National Highways will be asked to explain their respective position with regard to the modelling that has been undertaken in support of the Proposed Development and compliance of the base model with TAG requirements, including journey time validation (delay) on the A4019.	National Highways suggested that there was a TAG compliance issue concerning journey times along A4019 because the Applicant had used a mix of mean average and median average. The ExA asked the Applicant to provide clarity on this issue. The Applicant explained that compliance with TAG is set out in Tables 1 to 4 of TAG Unit M3.1. The criteria require that only a proportion of elements need to pass, and it is recognised that you will not get validation of every route within a traffic model. The Applicant's model meets the criteria in TAG as set out in Appendix K of the Transport Assessment (APP-140). Regarding journey time criteria, the requirement in Table 4 is that modelled times should be within 15% of surveyed times (or 1 minute, if higher than 15%) (acceptability criteria is greater than 85% of cases). Between 94% and 96% of the journey time routes in the Applicant's strategic traffic model pass the TAG validation criteria. For the routes that fail (i.e. westbound along the A4019 and then north up the M5 to Junction 9 and the second route is westbound along the A4019 to the A30 and then north to Tewksbury), they are only marginally outside the threshold in the west/northbound direction and pass in the east/southbound direction. For the AM, the routes are 5.4% to 5.6% outside the 15% threshold, for the interpeak they are 0.9% to 2.6% outside the 15% threshold and for the PM the routes are 0.9% to 9.4% outside the 15% threshold. The traffic volumes on the routes validate extremely well with observed data and the Applicant believes the model presented is a robust assessment. The issue appears to relate to signal timings around the A4019 as the signals on the road will be demand dependent. Strategic models cannot exactly replicate that as they use fixed timings, and therefore there is some inconsistency which is recognised. Since the assessment validates on all other criteria and overall, the Applicant believes the difference in journey times do not change the conclusions that can be drawn from the modelling. In response to a suggestion from National Highways that the validation issue could be resolved through changing signal timings on the A4019, the Applicant explained that it is not a straightforward process to adjust signal timings in the model as doing so will alter the routing on the network and could change validation for other parts of the road network. Recognising the uncertainty of

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		forecasting into the future, the Applicant's position is the traffic model more than meets the requirements to support assessment for the Scheme. The ExA asked the Applicant whether it is aware of the implications of altering the model in the way suggested by National Highways. The Applicant confirmed that it has not altered the model and there are problems with doing so, since it would be necessary to understanding what the signal timings were in 2015, which are now unknown. It would require a theoretical assessment which may not reflect what the timings were. The ExA asked the Applicant to confirm what the problem would be validating the Saturn model using signal timings which supported National Highway's concern. The Applicant explained that it adds complications as it would alter journey times for traffic in the westbound direction and would have knock on implications on the other arms of the junction. The ExA asked the Applicant to confirm whether it has carried out the assessment using a median average. The Applicant explained that modelling under Saturn is based on average flow over three-hourly peak periods. Consequently, journey time validation will usually be done using mean journey times, to be consistent with the average or mean traffic flows, but the median is sometimes chosen. The median was chosen for the Applicant's traffic model and is used for validation of all journey time routes in the base year traffic model. Separately, the Applicant has carried out analysis to compare validation against mean journey times on the A4109 and the Scheme passes the validation criteria using the mean rather than the median. This detail was provided in a note to National Highways.

ISH3.8 - Applicant to confirm whether the median was used for the traffic assessment and to consider the consequences of what the using different journey times may be.

ISH3.9 - Both the Applicant and National Highways were asked to explain each party's position in respect to traffic modelling, compliance with TAG and sensitivity testing.

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(ii)	The ExA will explore the current position with respect to the Transport Assessment and modelling and its ability to support the examination of the DCO proposals (including need, geometric design etc).	Following comments made by from National Highways, the Applicant provided an explanation of the degree to which National Highways have been engaged and the need for the Scheme. The Applicant explained that the JCS process looked at a range of scenarios with different combinations of interventions which included scenarios with greater or lesser improvements for public transport and active modes of transport. These were tested through public examination that National Highways would have been party to. The conclusion reached was that the Scheme was in principle the one that needed to come forward. This need was reinforced through the modelling undertaken to support the outline business case for the Housing Infrastructure Fund (HIF) Outline Business Case. Therefore, the development of the Scheme was undertaken in the context of the principle of Scheme, i.e. the need for south-facing slip roads at M5 Junction 10 and the West Cheltenham Link Road, having been previously established. Therefore, the Scheme alternatives were considered within the policy context of the principal elements of the Scheme having been predetermined by the JCS. Following comments from the ExA, the Applicant agreed to provide a document and timeline explaining how the JCS supports need for the Scheme (see below). In respect of need, the Applicant confirmed that the transport assessment carried out for the DCO has been undertaken to primarily assess the impacts of the Scheme, rather than to specifically re-establish the need case. The ExA referred to the four scenarios referred to in the Transport Assessment and asked the Applicant to explain the highway arrangement for each. The Applicant explained that: • Scenario Q relates to the future situation with no Scheme but with dependent development. • Scenario P relates to the future situation with no Scheme and no dependent development.

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		• Scenario R relates to the future situation with dependent development and the Scheme. • Scenario S relates to the future situation with the Scheme but without dependent development. The Scheme is the same in all scenarios in which it is included. The ExA noted that there appears to be some inaccuracies in the volume over capacity figures of Appendix L of the traffic forecasting report. The Applicant agreed to review this section. The ExA's referred to the Applicant's response to question 15.0.3 of the first set of ExA's questions and asked the Applicant to revisit the question and assess whether a large percentage of vehicles use the signposted route. The Applicant explained that the assessment uses the same parameters within the Saturn model as it does for operational scenarios and that there are no restrictions on routing. Therefore, traffic is assigned based on the most advantageous route for the user who would not necessarily use the signposted route. This is likely to be a realist representation, since many drives now use Satnavs set to fastest route or are familiar with the local road network and thus, well aware of alternatives to the signposted routes. The Applicant noted that it is difficult to determine what proportion of drivers would follow the signposted route even if this was not the most advantageous route for them. The Applicant also noted that there will be some suppression of background traffic demand on the signposted routes because of the construction work.

ISH3.10: The Applicant was asked to provide a document clearly explaining how the JCS supports the need case for the Scheme

ISH3.11 - The Applicant was asked to review Appendix L of the traffic assessment (specifically volume over capacity figures) to address potential discrepancies identified by the ExA.

ISH3.12: The Applicant was asked to revisit ExQ1 15.0.3 in respect of slip road closure and to run traffic modelling relating to usage of the signposted route by all/most vehicles.

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(iii)	The ExA will seek clarification on the position with respect to the representations concerning site access.	<u>Access to Neil Hadley's land</u> The Applicant explained that the Scheme proposes a replacement field access on to the B4634 to replace the existing access. Notwithstanding this, the Applicant is aware that there appears to be another well-used access to the field from Hayden Lane which will be unaffected by the Scheme. The B4634 will be widened in the location of the proposed access and will be 10.1m wide compared to the existing road which is 6.1m wide. This is an improvement over the current situation. Additionally, a bell mouth access with radii of 6m and an access track of 3.6m wide would be provided with a gate set back 15.8m from the highway. This would allow suitably sized vehicles to stop off the road when turning in and out of the site whereas the current access is 2m back from the carriageway with no space for vehicles to stop off road. The signalised junction would create gaps in traffic flow which will aid agricultural vehicles when turning in and out of the site. There is also a proposed speed limited reduction from 50mph to 40mph along this section of the B4634. The ExA asked the Applicant to confirm if there are any departures from DMRB standards for Mr Hadley's access. The Applicant explained that there are no departures from DMRB standards for the access, but there are some departures relating to visibility along the B4634. Neil Hadley explained that he is concerned that his land is within the strategic allocation and that the traffic light system proposed could make it difficult to access the land. He referred to suggestions he had raised in terms of the use of a roundabout or central turning lane. The Applicant explained that it has taken a clear stance regarding the provision of accesses to sites that are allocated and those that are not. In the case of Mr Neil Hadley's land, there is provision of the main access to the whole of allocation A7, which is part of the Scheme. However, in terms of the subdivision of the plot and any perceived access into a future development site on Mr Neil Hadley's land in isolation, it is not something the Applicant thinks is justified on policy grounds. <u>Access to Bloor Homes Limited and Persimmon Homes Limited development</u>

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		The representatives for Bloor Homes Limited and Persimmon Homes Limited made a number of submissions suggesting that: • the alternative access to be provided in place of the three existing agricultural accesses into the land north of Tewksbury Road is not safe or suitable for peak periods, requesting a north/south access directly from the junction; and • the removal of access to the safeguarded land has created a ransom situation, in circumstances where the fund relies on funding from the safeguarded land. The Applicant explained that the existing accesses to the safeguarded land are direct field accesses of the A4019. The main access (to field No GR216008) is located opposite Withybridge Lane junction as identified as J on Streets, Rights of Way and Access Plans Regulation 5(2)(k) Sheet 12 (APP-009 and APP-010). At this location, the A4019 currently has two eastbound lanes and one westbound lane. These are separated by a non-standard right turn lane, with limited storage length for turning vehicles. Five years of collision data for the period 1 January 2016 to 31 December 2020 shows that there were two serious and two slight collisions recorded at or near this location. Vehicles turning into or out of this access have potential conflict points with two eastbound lanes, including merging traffic from the M5 southbound and one westbound lane of the A4019 as well as right turning traffic into and out of Withybridge Lane, which is in very close proximity. The second existing field access onto the A4019 is located just to the west of the existing layby and is identified as L on Streets, Rights of Way and Access Plans Regulation 5(2)(k) Sheet 12 (APP-009/010). The ExA asked for the dimensions of the first existing access and whether the access being provided is better. The Applicant explained that the existing gateway to the west of the GCC owned land is 3.8m in width.

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		Over a series of questions, the ExA asked whether the Applicant's proposed access road creates issues for manoeuvring agricultural vehicles. The Applicant explained that the proposed access offers the advantage of joining the A4019 at the signalised junction, whereas currently vehicles must cross two lanes of westbound or eastbound traffic and sit in a substandard right turn lane. While it may be a more difficult access from a manoeuvring point of view with more turns, it is better from a safety point and avoids delay waiting to join a busy A4019, with the signalised junction having a timing of 90 seconds to 2 minutes. The ExA asked the applicant whether it is correct that larger vehicles that can currently manoeuvre out of the gate at plot 12/3 will be unable to manoeuvre. The Applicant explained that it has carried out swept path analysis since receiving the information about combine harvesters and trailers the Applicant has run swept path analysis with a 3.5m wide combine harvester with a length of 18m, which worked reasonably. Looking at the proposed access on a plan doesn't do its width justice. The northern spur has a minimum width of 8.3m, which is wider than a typical single carriageway road. After the give way line, this changes to a 5m access track with a 1m wide hardened verge on each side, providing a total running width of 7m. The Applicant's position is that it is not fair to say that the access is less convenient, while there are less turns involved now there is a vehicle safety issue and an operator safety issue pulling out onto a busy A4019. The ExA asked the Applicant whether the new turns will restrict the operation of vehicles that can access the fields today. The Applicant explained that it does not believe it will restrict access. The issue is more whether the agricultural vehicles will pass each other on the track as it has gone from an individual access point to a shared access point. It is more an issue of convenience than useability. Additionally, combine harvesters will be used once per annum per field and will normally be escorted due to the size of the vehicle coming down a public highway, therefore it would be useful to understand frequency of use as well. The representative for Bloor Homes Limited and Persimmon Homes Limited requested a copy of the swept path analysis from the Applicant.

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		The Applicant explained that there is clearly a difference in opinion regarding the type and size of vehicles which need access. Once that information is confirmed, the Applicant can update the swept path analysis, if needed, and will then share that information. The ExA asked the Applicant to address the issue raised relating to access into the safeguarded land and any conflict between the Scheme and future development, the appropriateness for Scheme to deal with it and the ransom arrangement raised. The Applicant explained that the provision of a direct access, other than replacement for those being lost, into future development sites is being provided onto sites which are allocated. The Scheme acknowledges the safeguarded land in terms of it looking to safeguard, from the local road perspective, the ability for any forthcoming development on the safeguarded land to enter onto the local road network. The capacity can be achieved within the local road network, the Scheme would not need to be redeveloped to achieve the access that is required. The Scheme stops short of providing an access that is required because the Applicant thinks this would be pre-determining the future planning of the site. The Scheme is cognisant of the fact that its design year goes 11 years past the JCS plan term. In terms of the JCS, the safeguarded land is reasonably the most likely site outside of the allocations to come forward, post plan and moving towards the design year. The ExA asked the Applicant whether the Scheme results in a ransom arrangement. The Applicant explained that the Scheme does not prejudice access being provided to the site. It happens to go through part of GCC's (as landowner) land as part of the overall area for development of the safeguarded land, if it is released. In that context, the land ownership interest of GCC is no different to any other landowner interest (there would be arrangements between the landowners in the usual way for equalisation in any case). The fact that GCC (as landowner) happens to have an interest in part of the site should not alter the overall position as to the relationship between landowners.

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		The ExA asked whether Bloor Homes Limited and Persimmon Homes Limited's land would have a lesser frontage onto the adopted highway post Scheme. The Applicant explained that the key question is where the access would be in a no-scheme world. The land holding which currently exits onto the A4019 to the west of GCC's land is narrow and is in very close proximity to the existing exist slip road. The Scheme will remove the touchpoint or separate it from the carriageway by means of the cycleway/footpath, but whether it would have been a viable access point in a no Scheme world is the question. The ExA noted that the Bloor Homes Limited and Persimmon Homes Limited parcel has a long frontage abutting the A4019 and asked whether the Scheme makes them reliant on an access on third party land which is not adopted highway. The Applicant explained that Bloor Homes will still have a significant stretch of road frontage, which it may benefit from for access in the future. There is a separate consideration between the two landowners who make up the safeguarded land site.
ISH3.13: The Applicant was asked to provide clarity on the width of access points to fields north of the A4019 and how those fields are being farmed. The Applicant was further requested to comment as to the relative betterment or detriment of its proposals. ISH3.14: The Applicant was asked to confirm whether the safety incidents referred to on the A4019 involved farming movements and activity associated with farm accesses. ISH3.15: The Applicant was requested to provide two plans:one overlaying the current highway boundary and a secondagainst the future adopted highway boundary to understand existing and future relationships between adopted highway and land parcels today and in the future.		
(iv)	The Applicant and National Highways will be asked to explain their positions with respect to all Departures from Standard sought in the Safety Report submitted at Deadline 2.	When developing the Scheme, the Applicant's consultants held a call with National Highways Safety and Engineering Standards specialists for geometry on 8 September 2021. During the call the scope of the proposed slip road departures were discussed to assess National Highways' understanding of acceptability. The Applicant was asked to submit the departures into National Highways DAS system, where they were given 'Provisional Agreement' on 19 November 2021. National Highways' guidance states that Provisional Agreement may be given early in the Scheme life cycle by a Technical Specialist for a departure that is critical to Scheme success and, in principle, can be approved. A full application is

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		always required before a departure may be incorporated into the works. The departures will be resubmitted for full approval at detailed design stage. In terms of the departures, there is one for each of the four-slip road relating to the proposed merge and diverge types. The design standards using the forecast traffic flows is that compliant design would be a lane drop and lane gain arrangement, but as the M5 is a 3-lane motorway, as discussed with National Highways the Applicant's proposal was to go one step down in the capacity layout with a goal style of diverge and then merge. The departure relates to the merge and diverge points, not the length of the connector road itself. These are currently at the provisional agreement stage. The ExA asked the Applicant to explain the 10 departures from DMRB standards on the local roads. The Applicant explained that the local road departures focus on a variety of issues. One relates to the gradient of a cycle track on the western side of the A4019. A number (three or four) relate to reduced footway widths, principally relating to tie-in points - the Scheme is not deficient as the departure arises where it ties into existing footways. There is a departure relating to visibility on the B4634 from the Hayden Hill farm access - it is a current departure which the Applicant has identified because it is within the footprint of the Scheme, and it remains largely unchanged. There are a few departures on the B4634 around the Hayden Hill junction relating to visibility on approach. Departure number 14 is a horizontal alignment departure on an access road, which will be a manual for streets design rather than DMRB design – the departure relates to a reduced horizontal radius curve on this access for properties. Finally, at Uckington Junction there is a departure for aspects not covered by standards, relating to 2 service roads coming into the green in quite close proximity to a stop sign at the proposed signalised junction. The ExA asked the Applicant for further information on Departure from Standard (DfS) 10. The Applicant explained that the main mitigation for this DfS is that traffic is moving away from the diverge with a widening of the carriageway. In this case, a lane is being gained and vehicles are being tapered out, not in towards themselves.

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		The ExA asked the Applicant for further information on DfS 11. The Applicant explained that the Scheme ties in 5 to 10m beyond the access, but the larger visibility of 95m is a feature of the existing road which is unaffected by the Scheme's proposals. The Applicant explained that it is not relying on it being an existing departure and it is comfortable with it being within the Scheme. There is a proposed speed limit reduction in the area from 50mph to 40mph, which is secured by Article 14(5) and Schedule 3 Part 4 of the DCO, which makes it an offence to drive above the speed limit. The ExA asked the Applicant for further information on DfS 13. The Applicant explained that the departure is based on an existing situation, the Scheme ties in before Hayden Lane junction and it is not doing any works there. Visibility to the east is limited by an existing boundary fence. The Applicant will look to assess the departure on the basis it is a current layout which is being improved by reducing the speed limit from 50mph to 40mph, and by introducing a signalised junction which will slow vehicles down. The Joint Councils asked the Applicant whether the plan and report which had been submitted to GCC's departure panel have been approved. The Applicant explained that they were considered and signed off by GCC.

ISH3.16: The Applicant was asked to consider the impact that the update to CD122 of DMRB will have on its safety assessments, if any.

ISH3.17: The Applicant was asked to review table 3-4 in safety report and to provide plans showing the location of departures from DMRB standards.

ISH3.18: The Applicant was asked to include additional explanation for DFS 10 with regard to appropriateness of that departure from standards relating to taper widths given road safety context and highway considerations rather than land availability and cost.

ISH3.19: The Applicant was asked to provide an explanation for DFS 11, 12 and 13 with respect to the appropriateness of shortening visibility lengths due to changes in speed limits.

ISH3.20: The Applicant was asked to review and explain whether it is appropriate to rely on existing departures from DMRB standards where the prevailing road layout or volumes of traffic are changed.

ISH3.21: The Applicant to provide response in relation to road safety audit item 5.46 of the SoCG with National Highways.

1.5. Funding

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(i)	The Applicant to provide an explanation as to how they foresee the funding being delivered and over what timeframe to plug the gap between the HE funding and the cost of the Proposed Development.	The Applicant explained that HIF funding is to be utilised first, current projections suggest this would be fully drawn by Summer 2027, ahead of the current funding availability period. Residual funding will be secured via s.106 contributions from dependent development and the Applicant is continuing to refine the approach taken. The relevant developers have indicated commencement of their developments during early 2025 and as late as financial year 2027/2028. The Applicant notes that it is possible that insufficient levels of s.106 funding could be secured by the planned works commencement date, which is currently Q3 2025, in this case the commencement of works will be delayed until such time as all of the necessary funds are committed to enable full delivery of the works. This position would not change the intention to progress land assembly at the earliest opportunity. The Applicant noted that, on the basis of the current methodology, approximately 38% of funding gap is associated with JCS Policy A4 North-West Cheltenham, approximately 29% is associated with JCS Policy A7 West Cheltenham and approximately 33% is associated with the safeguarded land. Whilst funding could be secured ahead of conclusion of the SLP process, it may be necessary to rely on funding secured from developments which are anticipated to come forward under the emerging SLP. The SLP is anticipated to make a Regulation 22 submission to the Secretary of State in April 2026. The Applicant continues to work with its ECI contractor, and other partners, to identify opportunities to refine or engineer the Scheme in order to identify opportunities for value engineering. To date, a substantial number of opportunities have been identified and the Applicant is progressing these.. In a series of questions, the ExA asked the Applicant to explain whether the £81m funding gap is to be apportioned in the percentages quoted above, to explain how the ratios were calculated and to explain the status of the methodology in planning terms. The Applicant confirmed that this is correct. The methodology the Applicant has consulted on is based on the relative benefit of the Scheme once in operation at the design year, looking at dependent traffic on slip roads of the improved M5

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		Junction 10 and M5 Junction 11. The policy basis, INF7, allows the Applicant to seek s.106 contributions towards delivery of the Scheme. The Applicant considers that the methodology is a fair way to distribute cost between the three independent housing sites. The Local Planning Authority (LPA) have applications for 7,000 houses and approximately 130,000m^2 of employment across seven applications. The transport assessments for those applications seek to determine their specific impacts or dead weight. The DCO modelling used 1,700 units and not all will have a specific level of deadweight, in terms of the tests this causes some challenges because not all the developments will have that level of deadweight. Therefore, the Applicant is working with developers and met with them on 24 July 2024 and will meet again on 21 August 2024 to revisit the principles and see if another can be found. The first methodology used was based on trip rates at the front door and the second was based on the distance vehicles travelled on the network elements improved by the Scheme. The third, which the Applicant preferred, was based on the impact on the M5 Junction 10 and M5 Junction 11 slip roads. The Applicant is apportioning the benefits of external trips from Cheltenham but there is a case that it should have been based on severe impacts on the local road network. Regarding the local impact, the 1,700 deadweight is where the local road networks fail on Princess Elizabeth Way, Withybridge Lane and Old Gloucester Road. The Applicant is trying to determine whether there is a more compliant approach by determining site specific severe impacts and apportioning the gap on that basis, but some developers prefer a flat trip rate as being more equitable. The ExA noted that the only evidence it has seen regarding s.106 agreements is a planning permission for 260 dwellings. The Applicant explained that this agreement was reached in relation to the Persimmon development for 260 dwellings and was based on a similar methodology to that proposed. There are now 7,000 homes coming forward which shows a much larger quantum of s.106 that can be achieved. The s.106 relating to the Persimmon development shows that the funding approach is feasible and is supported by the planning authority.

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		The ExA asked the Applicant whether it accepts that s.106 monies will be delivered on a phased basis, and at what point it will have the confidence to start construction. The Applicant explained that it will need to discuss timing and phasing as part of its ongoing discussions with developers. The Applicant noted that it has received several letters of support from developers with regard to working towards and agreed position on the methodology. Following the DCO, the Applicant would need to reach a governance gateway in respect of the decision to build and the s.106 agreements would have to be in place. The ExA asked the Applicant about its confidence that funding will be available within 5 years. The Applicant explained that it is important to secure the commitment for funding via s.106 agreement and to further explore the cashflow position once the commitment has been agreed. The ExA asked the Applicant whether it would have the confidence to start construction if the current planning applications are granted subject to s106 which assure that monies will come forward within phasing arrangements within the s.106. The Applicant explained that it would, within the timescales of the compulsory acquisition timeline. The ExA asked the Applicant whether the county council is underwriting the Scheme. The Applicant explained that it is not GCC's position that it would underwrite the £81m at this time. The ExA asked the Applicant how it will ensure that it has the £81m for the Scheme where it seems unlikely it will have this amount of money within the 5-year period. The Applicant explained that there is a difference between commitment to receiving payment at some point and receipt. If there is commitment for payment

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		the Council is content to proceed as it will receive the money at some point. There would need to be consideration of bridging loans to enable to cash flow position to be managed. This is not the same as underwriting, which would mean that the developers would not need to commit anything as the works would be done in any case. The Applicant's position is that if the commitment is clear and the s.106 is in place then that is enough to start and ensure the cashflow is managed. National Highways made a number of comments, including that National Highways standard position would be that the Applicant should put in place a bond for the cost of the works. The Applicant explained that instead of a bond, it has tabled a proposal for National Highways to be involved in a notice to proceed and gateway review where the Applicant would demonstrate full funding security. The numbers discussed by National Highways in respect of the bond are not commercially achievable in the market and this has been made clear to National Highways. The ExA asked whether there is anything in the DCO as drafted which would prevent commencement in advance of National Highways' agreement. The Applicant confirmed that, as drafted, there is not anything in the draft DCO that makes reference to this position. National Highways have put forward draft protective provisions. Moreover, the Applicant has proposed that the issue is controlled by way of contractual side agreement with National Highways. The side agreement was sent to National Highways in May and the Applicant is waiting for comments.
ISH3.22: The Applicant was asked to confirm policy status of the s.106 methodology. ISH3.23: The Applicant was asked to provide a statement giving a narrative around drawing down funds, the timeline for s.106 funds to be confirmed and received, overlayed against the anticipated start date for construction.		
(ii)	Homes England and the Applicant will be asked to provide an explanation of the Homes England Funding in respect of the amount, the	The Applicant explained that milestones within the contractual Grant Determination Agreement (GDA) do not predicate the drawdown of the funding. The drawdown happens and then milestones are used to monitor progress. The expenditure forecast is routinely updated and is agreed with Homes England and

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	security and the timing of the funding and the contractual milestone trigger points.	is not necessarily required. Homes England provided a response to say that there is flexibility within the contracted parameters of the GDA, (e.g. changes to milestone dates fall within Homes England's delegated authority). If the Grant Recipient requests a change which would take the project outside of the contracted parameters of the GDA this would need to be referred to MHCLG / HMT for consideration and decision making, depending on the nature of the request. Therefore, the funding is secure and there are mechanisms to review changes. The ExA asked the Applicant about the assurance that referral to MHCLG / HMT will be positive. The Applicant confirmed that, provided it stays within the parameters of the GDA, escalation to HCLG and HNT isn't required. The way Homes England have approached delivery of other Schemes within the portfolio is that a commitment is made prior to commencement of the build stage. A review is undertaken prior to commencing the works, for example on Arle Court, an agreement was reached on the funding necessary to deliver the construction contract, and that funding was committed to before GCC awarded the contract and commencing works. The ExA referred to the letter from Homes England and asked for clarity on how the process will work in practice without the full money required. The Applicant explained that, making reference to Homes England's response under Q5.0.14 (REP3-073), that 'flexibility also extends to the timing and amounts of grant drawdowns to suit the expenditure forecast profile, based on the progress of the Scheme through its various stages of design and delivery.' Effectively, an assessment made at a given point in time regarding what the expenditure forecast requires enables decision making to be made at that point in time. The ExA asked how the Applicant will commence development in Autumn 2025 if it doesn't currently have the money. The Applicant explained that it currently considers that the commencement of works will be delayed until such time as the necessary funding is secured to enable the full delivery of the Scheme under a notice to proceed process.

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(iii)	The Applicant will be asked to evidence if there are other sources of funding available, and the timing, and certainty of delivery to be explained. Please make reference to any alternative funding mechanisms which may be being developed.	This agenda item was discussed as part of the above.
(iv)	National Highways will be asked to provide evidence of why it is considered the assessment of the cost has not properly taken account of inflationary pressures and current market conditions.	National Highways made a number of comments on the Applicant's assessment of costs for the Scheme, including that it would share specific concerns with the Applicant. The Applicant explained that it would take away the information that National Highways can provide and that it would respond at Deadline 4. A number of points raised by National Highways are adequately covered by the Applicant's estimate, the risk registers and allowance determined for risk covers some of the points raised (e.g. biodiversity net gain and carbon reduction efforts).
ISH3.24: The Applicant was asked to provide detail on the cost of the scheme and whether the calculations include appropriate allowances for risk.		
(v)	The Applicant will be asked to explain whether a series of cost forecasts have been prepared setting out different scenarios over time preparing a range of forecasts which could give reassurance that financing for the project is robust and the funding is available for the worst case forecast?	The Applicant explained that it has not contemplated alternate timescales within the cost estimate and work done to date. It was agreed that the Applicant would do so to provide greater clarity on cost and savings identified.
ISH3.25: The Applicant was asked to provide updated cost estimates taking into account the possibility of the construction date being pushed back.		

1.6. S106 funds

"*further engagement with the relevant developers is undertaken in the coming weeks in order to further develop the contributions methodology with the aim being that an agreement can be reached on a more up to date position*." quote from 52.2 of (REP2-010).

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(i)	The Applicant and Interested Parties will be questioned on the likelihood of the discussions being concluded, and an agreed methodology being before the Examination?	The Applicant explained that it is expecting that the methodology will be resolved in September. The letters of support deal with a range of issues and cast the net a bit further to capture other developers.
(ii)	The Applicant and Interested Parties will be asked to explain the reliance upon s106 funds, the timing of this funding and expected commitment to delivery of the Proposed Development.	The Applicant explained that INF 1, 6 and 7 all refer to cumulative assessments and so it is unlikely that the LPA would support a consent for an individual developer bringing forward a development without strategic mitigation. Cumulatively, GC3M reaffirms the position of deadweight and so while the LPA could advance a site in isolation it would not comply with the JCS assessment. The ExA noted that the argument presented by Bloor Homes is that the Scheme goes beyond what is necessary for their Scheme, noting that the ExA will need confidence that the funding stream deals with these different eventualities. The Applicant confirmed it will make written representations on the detail. However, the Applicant highlighted that the Bloor/Permission letter of support for the funding methodology states that subject to reviewing the revised shortfall funding methodology, we will consider whether it can be supported, noting that we do not object to the DCO scheme in principle agreement to the supporting the funding methodology or any alternative funding provision or works in kind will be subject to certain caveats. The Applicant explained that it is not always the case that funding is phased and, in some cases, where infrastructure is essential to make the development acceptable it will be brought forward. A likely outcome could be a hybrid of direct delivery and advance funding from other developers it is deemed that piece of infrastructure is essential to make that development acceptable.

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ISH3.26: The Applicant to confirm whether acceptance of the Bloor's proposed highway mitigation present a risk to the quantum of funding relied upon.		
(iii)	The Applicant and Interested Parties will be asked to explain the suitability of including the safeguarded land, the reliance that can be put upon the assumptions made and the consequences if the SoS does not agree this is an appropriate approach.	The ExA asked the Applicant to explain how the safeguarded allocations factor into the funding calculations. The Applicant explained that, noting that it won't commence works until funding is committed, the Applicant considers it relevant to consider the SLP coming forward within the compulsory acquisition period. The Applicant is aware, through Regulation 18 consultation for the SLP that there are a significant number of developments that can come forward in the vicinity of M5 Junction 10 which would benefit from the Scheme. The position the Applicant is moving towards is that the current modelling associated with the safeguarded land is a proxy for any other development which may come forward in the area, which could give a degree of flexibility for residual funding. The ExA expressed concern as to how something that may not come forward can be relied on for 33% of the funding gap. The Applicant explained that it understands the ExA's concern, but it is relevant to step back to the GDA contracting process and the due diligence and associated funding requirements and conditions associated with the Scheme funding. In undertaking due diligence alongside Homes England, CBC and TBC during 2020, as part of the contracting process for the original funding, the Applicant assessed the impact of HIF funding in respect to the viability of the identified developments. The funding agreement included conditions to seek to recover funding from the identified developments since the HIF fundings was considered to result in significant financial surpluses accruing to landowners or developers associated with the identified developments. In essence, it is Homes England's position that private sector beneficiaries should be approached for funding to support the delivery of housing in the county. The ExA asked the Applicant to confirm whether the funding from Homes England was intended to deliver the whole project at the time the bid was prepared.

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		The Applicant explained that there was to be a £4m contribution from GCC, but the Scheme was fully funded at the time of the Homes England bid.
(iv)	The ExA will seek clarification on how the timing of the progress on the Local Plan reviews align with the timing of the DCO decision making process?	The ExA noted that the NPSNN and NPPF do not quite align in terms of financial delivery and noted that they struggle to see how it supports developers filling the gap identified. The Applicant explained that Homes England are alive to the gap and have made it clear that so far as the externalities imposed on the network by the developers who will benefit from the Scheme, it is reasonable to anticipate the shortfall should be addressed by those beneficiaries. Clearly, the need underpinning the Scheme is to address the severe impacts (applying the NPPF test) from the strategic allocations and to take a reasonable view regarding what is likely to come forward under the next local plan process (expected for submission in 2026). It is reasonable to make a judgement as to what is likely to be coming forward over the next couple of years, aligning with the 2026 submission. The safeguarded land has been removed from the green belt can reasonably be regarded as a front runner and as a proxy. It is difficult to envisage that there won't be further development given the increase in housing targets after 2031, and it is not unreasonable to assume that over the next two years there will be applications coming forward, in particular in relation to the north-west Cheltenham safeguarded land. A judgement has been reached which underpins the approach of including the developments flows from that development in the model, recognising however that the Scheme has been designed principally to deal with SA4 and SA7. That is why it is reasonable to anticipate that, over the next few years, in alignment with the emerging local plan, something will come forward in north-west Cheltenham and to capture a contribution. INF 7 of the JCS anticipates arrangements will be made by negotiation with developers. Therefore, the methodology is a joined-up arrangement which seeks to capture on a consistent basis the contribution that can be expected from more than one developer.

ISH3.27: All parties were asked to provide a written response in relation to St Modwen's proposal of introducing a requirement relating to funding.

1.7. Environmental matters

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Design		
(I)	The Applicant will be asked to explain: I. the design vision for the project giving detail of where this is set out and how the design has been influenced by	The Applicant explained that the design vision for the Scheme is described in section 2.5 of the Project Design Report (REP3-047). The design vision is set out through the Scheme objectives (listed in section 2.2 of ES chapter 2 (AS-010) and other locations) and aims to: • Unlock the housing and employment opportunities within the west and north-west Cheltenham developments through the provision and future proofing of improved transport network connections. • Integrate the Scheme into the distinct and varying landscape characters present and manage impacts on the flood zone locally. • Provide enhancements for sustainable travel and for biodiversity, addressing requirements for Biodiversity Net Gain (BNG). • Produce a landscape design that contributes to the landscape character of the area and provides visual amenity and screening, with the aim of embedding the Junction 10, the widened A4019 and the Link Road into the landscape. The ExA asked whether this represents a vision, or whether it is simply what the Applicant is doing. The Applicant explained that the design vision sets out what the Scheme seeks to achieve with its design, taken through from the Scheme objectives. The ExA explained that it is a broader question on what the influences were to Scheme design and what the Applicant was seeking to achieve. The Applicant explained that Scheme design has been influenced by sustainability, carbon, landscape, biodiversity requirements, flood management etc. These are the characteristics of the Scheme area that have fed into the

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		design development. The Project Design Report sets out the 10 design principles from National Highways' 'Road to Good Design', it provides further information on how the project design has addressed those principles and how those principles have influenced the design. The design is an iterative process which has developed to address the various relevant factors for the Scheme (factors relevant to the Scheme area and relevant to how the Scheme will interact with the area). The design reflects these factors through its evolution and the design alternatives that have been considered, adopted and discarded.
(a)	the need for sustainability and carbon reduction,	The need for consideration of sustainability and carbon reduction arises from NPS NN (2014) which requires national network projects to produce infrastructure that are sensitive to place, and are sustainable and as aesthetically sensitive, durable, adaptable and resilient. These requirements are fed into the design vision aims of the Scheme with: • integration of the Scheme into the distinct and varying landscape characters that are present. • the provision of enhancements for sustainable travel and for biodiversity; and • the management of impacts on the flood zone locally. The Applicant explained that sustainability and carbon has been a key consideration for the design and there is a strong provision of sustainable travel infrastructure. For example, the Scheme will provide an active travel corridor along the A4019 through the full length of the Scheme and an active travel corridor along the Link Road. Such infrastructure on the A4019 is not present currently. It will also provide additional infrastructure for bus travel compared to what is present currently, with a new bus lane along an eastbound section of the A4019. The Applicant explained that, in terms of carbon reduction, the size and layout of the Scheme has been sized to meet the Scheme's objectives with regard to the provision of an improved transport network in West and north-west Cheltenham. The sizing has been determined through traffic modelling. The requirements for

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		materials (and embodied carbon within those materials) has been determined on this basis and the Scheme design has sought to minimise embodied carbon. With regard to individual structural elements of the Scheme, for example the River Chelt bridge and the Withybridge Underpass, the Applicant has calculated embodied carbon of the various design options considered. Chapter 3 of the ES sets out how embodied carbon has been considered as part of the design development, setting out the development of the Scheme and alternative designs considered for those structures, including what certain aspects were taken forward and others were not. The ExA asked where they can find sustainability/carbon related conclusions. The Applicant explained that embodied carbon calculations are in the Climate chapter of the ES ([REP1-024]). There is also information in the Sustainability Statement which will be submitted at Deadline 4, which summarises the sustainability assessments undertaken through the design to date. It brings together information that is across other documents submitted to date regarding the sustainability discussion.
ISH3.28: The Applicant was asked to prepare and submit a sustainability statement which signposts the areas discussed during the hearing.		
(b)	any changes that have occurred as a consequence of feedback in respect of design input,	The Applicant explained that part of the iterative design process is consultation with stakeholders and taking that into account in design development. Consultation has been undertaken at appropriate stages of the design evolution and are fed back into the design where appropriate. The Applicant explained that the process is set out in the Consultation Report (APP-038) and its appendices (APP-039 to APP-058). These documents set out the detail of the consultation undertaken, the result, key changes taken as a response to consultation, and a summary of those key changes. A summary of when the various consultations were undertaken is set out at section 1.7 of ES chapter 1 (APP-060). The design process for the Scheme has been iterative and the developing understanding of location and requirements of the Scheme and

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		consultation feedback have all fed into the evolution of the Scheme design. Examples of changes include: • the selection of Option 2 for the design of Junction 10 (which is the new gyratory centred around the existing A4019 overbridge) from three options (Options 2, 2A and 2B). They were presented for non-statutory consultation and on the feedback received, Option 2 was the preferred option. Option 2 was the one taken forward as he preferred option. • the link road between Cooks Lane and Moat Lane was removed from the design following feedback from Historic England during the statutory consultation process. The existing road would have required widening and a new connection between the two rural single-track roads created which would have impacted on the setting of the Moat House scheduled monument. • Withybridge lane, where feedback received during statutory consultation relating to possible changes to access for vehicles access through Withybridge Lane identified a preference to retain the current level of access through Withybridge Lane. Options were considered, including closing it completely, one way traffic etc. but feedback meant the current level of access weas retained.
ISH3.29: The Applicant was asked to provide a summary document covering all key design changes that were made as a result of the consultation process.		
(c)	how the local context has influenced the design and how this has responded to the vision	The Applicant explained that NPS NN (2014) requires that national network projects to produce infrastructure that are sensitive to place. As described in Chapter 9 of the ES (Landscape and Visual (LVIA)) (REP1-016) a review of the local landscape character has been undertaken to understand the local landscape context of the Scheme area (starting at paragraph 9.7.8 of ES Chapter 9). This sets out that the local context was investigated and understood. The landscape design of the Scheme was developed subsequently, with the understanding of that context, using a number of landscape design principles (listed at paragraph 9.10.9 ES Chapter 9). The aim of the principles was to enable the Scheme to fit

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		into the surrounding landscape and align with the Scheme vision (see section 2.5 of the Project Design Report), namely: • Integrate the Scheme into the distinct and varying landscape characters present and manage impacts on the flood zone locally. • Produce a landscape design that contributes to the landscape character of the area and provides visual amenity and screening, with the aim of embedding the Junction 10, the widened A4019 and the Link Road into the landscape. The relevant landscape design principles are: • Replacement of woodland and scrub along the M5 and around the new junction to reinstate screening effect and integrate back into the landscape. • Replacement planting along the realigned sections of the A4019 to help embed this route back into the landscape and provide some buffer to the proposed site allocations north of the A4019, as well as ensuring visual amenity for receptors. • Hedgerow along the Link Road with supplementary blocks of wood and individual trees particularly around the bridge to reflect local character of road infrastructure and provide some screening for visual receptors, whilst creating an attractive route for all users. The ExA asked the Applicant to clarify whether 'users' refers to users of PRoWs, the local highway network and fixed point receptors (i.e. dwellings). The Applicant explain that 'users' refers primarily to users of the PRoWs that cross the road, but the visual amenity considerations would reflect the fixed receptors (i.e. houses). The ExA asked whether the environmental barriers, for example, are what is meant in terms of responding to individual residential properties.

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		The Applicant explained that when referring to the residential properties, it relates to how the landscape design has sought to embed the road features back into the landscape as per the landscape design principles.
(d)	what controls are in place to secure the quality of the design needed for a national project	The Applicant explained that it provided some provided information on this topic in response to the 1st Written Questions (7.0.2). The starting point for the design was to provide a quality of design which is in keeping with the local environment, establishes BNG, meets climate change requirements and provides improved transport network connections in West and North-West Cheltenham with the resilience to meet current and future needs. The starting point was a design with a quality to meet those aspects (e.g. BNG putting in enhancements above those required to mitigate any impacts of the Scheme). The controls for the design are the process requirements in place for national projects which the Scheme has followed to date and will continue to follow through detailed design. These are the National Highways' Project Control Framework (PCF), and the details set out in the Design Manual for Roads and Bridges (DMRB): • The purpose of the PCF is to provide a clear, pragmatic approach to project management throughout the development of major road projects, defining what is required throughout each stage. • The PCF defines the activities and products for each stage and has inbuilt reviews at appropriate stages to ensure that the Scheme is on track, taking account of all considerations and delivering against social, environmental and economic objectives. • The Project Design Report (part of the PCF process) contains 10 Design Principles which are set as prompts to challenge projects to realise the wider benefits of good design, and to help designers achieve National Highways' vision of designing an inclusive, resilient and sustainable road network. The Applicant explained that the PCF process has been completed through to PCF Stage 3 and National Highways have provided technical reviews throughout the design process. National Highways signed off the completion of the requirements with its PCF Stage 3 Stage Gate Assessment Review (SGAR3) in

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		October 2023, and the Project Design Report was part of that approval. National Highways confirmed in July 2023 that the Project Design Report satisfied the PCF requirements for this document. National Highways will undertake further stage gate reviews at SGAR 4, following the SoS Decision, and SGAR 5 following acceptance of Detailed Design. The Applicant explained that it proposes to produce a Design Principles Report for submission to Examination at Deadline 4. The draft DCO Requirement 11 will be updated to ensure that the detailed design is in accordance with this report. The aim will be to bring together the design vision and Scheme objectives and define the design principles that are to be incorporated into the detailed design of the Scheme. It will capture the key principles that have shaped the preliminary design submitted and make a commitment that these will be maintained and developed in the future detailed design and delivery phases of the Scheme in accordance with NPS NN (2014) requirements for 'good design'. The ExA asked the Applicant to explain whether this process applied to the strategic road network (SRN) only. The Applicant explained that the design provided for the Scheme was a Scheme design. There is a single design with no distinction between the SRN and local roads. National Highways have therefore commented on the design as a whole. National Highways made a number of comments suggesting that National Highways's engagement with the Applicant was largely related to the SRN rather than local road network. The Applicant explained that there was discussion with National Highways regarding the documentation produced, including the ES and landscape design. Comments, which were positive, were received from National Highways on those documents throughout the design process and the Applicant addressed and acted on these as needed.

ISH3.30: The Applicant was asked to provide confirmation on the controls for the quality of design going forward, how it will proceed and how it relates to the whole scheme and SRN (e.g. the PCF process). The Applicant was further asked to confirm whether SGAR 4 and 5 restrict the whole project from continuing or whether it just restricts the SRN commitment.

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(e)	provide evidence of any external or independent review process to date and whether an independent review process should be in place for the consideration and approval of the future detailed design process.	National Highways made a number of comments, including that it would expect a design panel process to be undertaken. The ExA asked the Applicant why one was not followed. The Applicant explained that National Highways are correct that there was not strictly a design panel review for the project. However, following the PCF process using National Highways as a critical friend for the project was regarded as an appropriate route. The Applicant also noted that there is a clear difference between how National Highways would approach its own Schemes (using an independent and an external party) and asking National Highways to perform that role. The Applicant agreed to provide further detail in writing.
ISH3.31: The Applicant was asked to provide confirmation as to why an external/independent review process has not been undertaken and to provide confirmation on whether a review should be undertaken at this stage? ISH3.32: The Applicant was asked to identify differences between the PCF process which had been followed and what the position would be if following the Applicant were to have followed a design panel process.		
Landscape		
(i)	Joint Council LIR Section 3.5 Can the Applicant and Joint Councils explain the latest position in respect of Barn Farm, the Travellers Site, and properties to the south side of the A4019.	The ExA asked the Applicant to explain how a consultation process with residents on the environmental barriers be achieved and whether the DCO facilitates a consultation exercise. The Applicant explained that regarding the response to the Local Impact Report (LIR) (REP2-009), there is agreement on this point as detailed in item 9/5 of the SoCG. Commitment LV6 of the REAC confirms that there will be consultation with the LPA and directly affected receptors, which embeds the process of involvement or engagement. If there is a disagreement or divergence that will be taken into account. The ExA asked whether the Applicant will be final arbiter.

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		The Applicant explained that these are noise mitigation proposals subject to Requirement 14, which requires submission for approval by the County Planning Authority. The ExA asked whether the consultation would be about the visual appearance of the barriers. The Applicant explained that the consultation will consider noise abatement and visual amenity and/or biodiversity as indicated in LV6. An intrinsic part of this are the noise barriers. The ExA asked the Applicant to explain the visual difference between absorbative and reflective environmental barriers. The Applicant explained that the difference is that reflective barriers reflect noise onto the road while absorbative barriers absorb noise. If there are receptors on the opposite side of the road an absorbative noise barrier is needed, which is why there are two different types of barriers shown. In terms of the noise/environmental barriers, their primary function is to provide noise abatement for affected receptors in noise important areas. In terms of impacts on visual perception, which is identified as a detailed design consideration which will be identified through the consultation process. The ExA referred to the visualisations and asked whether it is a reasonable representation of the barriers. The Applicant explained that the visualisations provide an example of what the barriers could be to provide the noise abatement included in the ES. It is not what they will be as that will be subject to detailed design and consultation. It shows what they could be in terms of height, position and construction but is not an absolute. The SoCG with the Joint Councils (Rep1-034), at item 9.5, details agreement with the Joint Councils on the matters under this heading, subject to detailed design and commitments made in the REAC - these commitments have now come forward.

ISH3.33: The Applicant was asked to provide clarity on landscape effects, in particular the effects on Barn Farm and Sheldon Cottages.

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(ii)	The Applicant and IPs views will be sought in respect of the visualisations, and how well they represent the potential effects on the local character areas and the Green Belt?	The Applicant explained that visualisation have been produced for six locations across the Scheme to provide a visual depiction of the Scheme at those locations. The viewpoint locations of the visualisations were selected in consultation and agreement with the Joint Councils. For each viewpoint, three images have been provided showing the existing view, verified view for opening year and verified view for year 15 (when proposed planting will be taking effect).
		
		The Applicant explained that Viewpoint 1 looks east from Stanboro Lane adjacent to Sheldon Cottages towards Junction 10 northbound entry slip road. Therefore, from what will become the end of Stanboro Lane, and showing the new embankment of the A4019 and the northbound on slip. Each of the viewpoint locations have been selected to show different aspects of the Scheme, and their visual appearance. Whilst the viewpoints have not been selected with regards to the local character areas or the Green Belt, the viewpoint locations are representative of the local character areas that the Scheme is located within, and also include locations that are within, and on the edge of the Green Belt. With regard to the local character areas (described in ES Chapter 9 paragraph 9.7.8 onwards). The Scheme again lies wholly within the SV6B: Landscape Character Area 'Vale of Gloucester'. The Gloucester-Cheltenham-Tewkesbury Joint Core Strategy Landscape Characterisation and Sensitivity Analysis defined the following LCAs within the Scheme extents:
		
		• LCA C Cheltenham, south of the A4019 and east of the Link Road includes:
		  ○ Viewpoints 2 and 3.
		  ○ Viewpoints 4, 5 and 6 sit on the boundary between the LCA C and LCA E.
		• LCA D West of M5 includes:
		  ○ Viewpoint 1 sits on the boundary between LCA D and an uncharacterised area (west of the M5 and north of the A4019).

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		• LCA E Swindon Village to Stoke Orchard (covering the area between north of the A4019 and east of the M5) includes: ○ Viewpoints 4, 5 and 6 sit on the boundary between the LCA C and LCA E. The Applicant explained that the landscape character areas defined in Chapter 9 of the ES are therefore represented across the visualisations. With regards to the Green Belt, Viewpoint 2 is wholly within the Green Belt (this shows the main item of Scheme infrastructure that is wholly within the Green Belt – namely the River Chelt bridge). The other viewpoints are on the edge of the Green Belt land. The ExA noted that there is no viewpoint from the raised land near Hayden Hill Farm and asked whether this viewpoint was looked at. The Applicant explained that it had a longer list of possible viewpoint locations and agreed to provide further information on that. The purpose of the visualisations was to show how the elements of the Scheme could look at year 1 and year 15, not to show all of the Scheme. The visualisations are just one part of the assessment undertaken. The Joint Councils raised comments concerning the use of a plain timber barrier for visualisation 5, and the extent of vegetation shown in the year 15 visualisations being optimistic. The Applicant explained that the brown noise barrier was used in the visualisation as a worst case since the Applicant cannot assume what will be decided through the consultation and as a worst case it will be just a brown noise barrier. Adding planting might have misrepresented how it might look. The visualisations were produced to focus on the earthworks, structures and extent of the existing vegetation lost - the proposals for the landscape are indicative as it is not possible to predict exactly how the Scheme will look at year 15. The 3D visualisation team used generic 3D models which represented the vegetation and assumed heights that the ES had assumed (at year one the heights were assumed between 0.6m and 0.8m and at year 15 the heights were assumed between 5m and 11m). The trees themselves look over mature but the heights are correct. The visualisations also don't show the variety of trees. Reworking the visualisations to reflect this

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		with more accuracy would not affect the overall effect of the visuals and would not provide a better idea of how the planting may provide filtered screening by year 15. On the River Chelt bridge, it is still possible to see through the landscape to the higher hills beyond and under the bridge. The vegetation on the embankment filters the view of the landscape and provides a view of openness in that space, it does not create an overdeveloped feeling. The ExA asked for clarity on whether the year 15 visualisations are a fair reflection of what may be seen. The Applicant explained that in year 15, the girth of the tree trunks wouldn't be as big as shown but the height could be expected and that is what has been assessed. The variety of the trees will be different and more native species will be planted, (e.g. oaks, evergreens and pine). The native species will have more variety in height. Some shrub species on viewpoint 1 look too maintained and would be left to become wilder. This detail has not been added to the visualisations as the Applicant focussed on ensuring the fundamentals were there to show how close the bridge is, the earthworks and their height and whether the vegetation is already there or not. The Applicant could rework the visualisations and it would take some time to get finer detail, but it wouldn't provide any better indication of how the proposed Scheme would look in terms of planting. The Applicant confirmed the visualisations are still a reasonable representation. The ExA asked for further detail on the assessment of the height of trees at year 15. The Applicant explained that it has used between 5m and 11m, which is a standard way of how looking at how trees can be expected to grow (between 3m, 6m and 10m metres for the different species). The visualisations use models of a mature Birch tree of either 5m or 11m high. Birch trees have been used to show the filtering effect although different species and narrower trunks would have been better to use. However, the heights and fullness of the canopy are a reasonable assessment. The assumptions used are set out in the Chapter 9 of the ES (REP1-016).

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ISH3.34: The Applicant was asked to provide clarity on which landscape visualisation points were considered in addition to those which have been submitted to the examination and why they were ultimately discounted. ISH3.35: The Applicant was asked to provide a signposting document relating to what assumptions are for tree growth rates for year 15 in the environmental assessment, and how they relate to visualisations.		
	Additional question	The ExA asked an additional question regarding the recent change to the draft DCO with respect to the Hedgerow regulations and the implications this may have for the landscape assessment. The Applicant explained that it will respond in writing.
ISH3.36: The Applicant was asked to confirm whether the changes to the draft DCO in relation to hedgerows alter the landscape assessment.		
Heritage		
(I)	The Applicant will be requested to explain the degree of uncertainty on the effect of significance concluded for archaeological assets given the current status of investigations.	The Applicant explained that there is always a degree of uncertainty regarding impacts to buried archaeological remains as there is no solid way to tell what is there until excavations have been carried out. The impacts to buried archaeological remains will be unknown unless the entirety of the Order limits has been excavated in advance of the application, which is not considered a prudent or proportionate approach. Whilst the impacts include a degree of uncertainty, the effects can be confidently determined due to the significance of the archaeology being related to the information and understanding of the past that can be garnered through excavation, analysis and interpretation of the remains. The significance of the archaeological remains doesn't necessarily lie in their existence below the ground, but in our ability to understand the past through the appropriate treatment via excavation and recording. "Preservation by record" is the standard for mitigating impacts to archaeological remains that cannot be avoided by development. Even where highly significant remains, worthy of preservation *in situ*, are identified, excavation and assessment must be done in order to assess the sensitivity (value) of the remains. It is not possible to tell what should be preserved *in situ* until some part has been removed for analysis to determine whether it is of national significance – which is

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		something of a paradox in archaeology. Preservation by record and proportionate approaches to removal, recording and assessment, as well as analysis and reporting of the evidential value is considered to mitigate the impacts of removing items from their *in situ* condition. Historic England, in their response to the Examining Authority's questions, has agreed that preservation by record is the appropriate mitigation response to the impacts of the Scheme on archaeological remains (REP3-072). The Archaeological Management Plan, 1st iteration [AS-038] (TR010063/APP/9.8), provides the mechanism by which archaeological remains are preserved by record through identification, evaluation (such as trenching), analysis, and reporting to ensure a less than significant environmental effect. The Applicant explained that the investigations done in advance of the DCO application are considered sufficient to understand the potential significant effects on the historic environment. The level of disturbance along the motorway and existing junction, along with the safety implications of conducting evaluation trenching in those areas, meant that the focus was on identifying and assessing the areas where designs could be changed to avoid or minimise impact to important archaeological remains, namely the new link road. Consultations with the Gloucestershire County Archaeological Advisor and Historic England agreed that the approach was appropriate to the DCO application, recognising that coverage would not be 100% due to problems accessing private land and a design that was in continual development. The early assessments of geophysical surveys and evaluation trenching on the Link Road was done to influence and aid the design of the Scheme and determine whether or not significant impacts to archaeological remains could be avoided if there were way to address impacts to heritage through design changes, which is one of the reasons why the Moat Lane to Cook's Lane connecting road was removed from the Scheme to protect the Moat House scheduled monument's setting. In doing so the Applicant had discussions with Historic England to look at the significance of the assets. Protecting buried archaeological remains is slightly different because of the uncertainty of what is buried (present below ground), before excavations take place. Therefore, in early development the Applicant looked at the most likely level of significant disturbance that would occur to any intact and in situ archaeological remains and have progressed to evaluating them to determine that they are not necessarily worthy of preservation *in situ* and that preservation by record is the appropriate response. The Archaeological Management Plan (AMP) sets out what is required under the siEMP, DCO and REAC. It also sets out the

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		process of how any additional remains that are identified are evaluated and recorded in a manner that is proportionate with their significance in agreement with the LPA's archaeological advisor and Historic England's inspector of ancient monuments, and where necessary their science advisors. The ExA noted that it understands investigations are still ongoing. The Applicant explained that investigations are ongoing in some areas not previously identified as part of the Scheme boundary at the early stage in which geophysical surveys and trenching was done. This was due to the difference in the locations of attenuation ponds and ecological compensation areas. Some areas were not surveyed because land access arrangements were not completed in time and landowners or tenants were unwilling to have work done at that time. The assessments, geophysical surveys and trenching done for the ES along the Link Road were considered sufficient by the LPA to characterise the archaeological nature of the area. The ECI contractor has been given all information from the geophysical surveys and evaluation trenching to progress with the additional geophysical surveys and the approach is agreed with the LPA archaeologist. There will be a Written Scheme of Investigation (WSI), and a second iteration AMP, which will follow the stipulations of the first iteration AMP and the REAC. The further surveys and evaluations will be done in the same manner as those done previously. The ExA asked the Applicant about the timings for these surveys. The Applicant explained that the ECI contractor is currently scoping the geophysical surveys to start in September. Provided there is agreement on land access and suitable conditions the geophysical surveys should be completed before the end of the examination period. Moreover, the impact on archaeology cannot be 100% clearly identified at examination because it is not possible to tell what the archaeology is until it is excavated and so a full understanding is not possible without complete excavation in advance of the application, which is not considered appropriate or proportionate. The Applicant has the background and baseline information which suggests that the areas immediately adjacent to the M5 and the existing junction are heavily disturbed from the construction of those structures and so it is unlikely there will

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		be highly significant remains which cannot be mitigated. The Applicant is aware that there are sensitive areas in the compensation areas and the flood attenuation pools near the West Cheltenham Fire Station which have been discussed with Historic England and the LPA. They have agreed that the process outlined in the AMP 1st iteration is sufficient to meet the guidance of the NPPF and NPS NN. These conditions must be brought forward throughout the entirety of the Scheme, through detailed design and construction as some of the archaeological work may not be able to be done until construction (referred to as construction integrated recording/strip map and sample). The main process in place to address the impacts of archaeological remains is through the requirement of the AMP 1st iteration, which sets out the need and requirements for surveys and identification of heritage assets, their evaluation, and mitigation of impacts, including requirements to consult the LPA and Historic England. The ExA asked the Applicant to provide further information on the evaluation of significance of heritage assets at this stage. The Applicant explained that, in terms of understanding significance of remains, the baseline evidence from the ES (including the archaeological and historic background as well as the assessment of archaeological potential based on the professional judgement of the team that prepared the information) is enough to understand the likely significance of the archaeological remains that would be encountered. The Applicant has been able to prepare a confident assessment of the potential for significant impacts as well as a plan and process through the REAC and AMP 1st iteration for how those impacts would be identified and mitigated. The confidence the Applicant has regarding the nature of the archaeological remains and their significance is largely based on professional and academic understanding of the area and known impacts (location, known impacts of motorway, utilities etc.). The Applicant has a high level of confidence of what the significance of the archaeology would be, the impacts and the appropriate mitigation (the Applicant's representative stated this to be approximately 90% confidence). The Applicant has to do more archaeology, surveys, trenching and mitigation, but it has sufficient information in the studies that have been done and there are sufficient assurances in the REAC and AMP 1st iteration that archaeology will be treated appropriately and provision has been made to be able

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		to make a decision for the DCO based on an understanding of the requirements, the management plans and the commitments.
ISH3.37: The Applicant was asked to confirm the timescalesfor any September geophysical surveys and any subsequent trial trenching, including the likely timescale for a report of findings.		
(ii)	The Joint Councils will be asked to confirm whether they are content that sufficient baseline assessments have been carried out to inform the assessment of significance and the suitability of and security of any mitigation proposed?	N/A
(III)	The Applicant and Joint Councils will be asked for an update on the progress in updating the Archaeological Management Plan [AS-038] and any progress made on reporting geophysical surveys and trial trenches.	N/A
Noise		
(I)	The Applicant will be asked to explain the mitigation measures in Stoke Orchard in the context of the provided answer to 1st Written Question 12.0.1	The Applicant explained that the mitigation measures in Stoke Orchard, referred to in paragraph 6.8.43 of ES Chapter 6 (AS-014) and described in the Applicant's response to 1st Written Questions 12.0.1, have not been included as part of the assessment presented in ES Chapter 6. These mitigation measures are being undertaken by GCC as a separate independent project to the Scheme and are not necessary to support the conclusions presented in ES Chapter 6. These separate works are scheduled to start construction in March / April 2025. As reported in Tables 6-29 and 6-34 of ES Chapter 6 (AS-014), the noise assessment reports that traffic along Stoke Road and through Stoke Orchard will result in a significant adverse effect, as a result of the increase in traffic in this location when the Scheme is open. The mitigation measures described for this location are included in the response to 1st Written Question 12.0.1 are designed to reduce the increase

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		in noise associated with increased traffic along the Stoke Road when the Scheme is open but they have not been included in the assessment. The ExA asked whether it is true that the works responds to a significant adverse effect as a result of the Scheme. The Applicant confirmed this is correct. The ExA asked whether it is true that it is described in the chapter as essential mitigation? The Applicant confirmed it is listed in the mitigation section, but it is not included in the assessment. The ExA asked whether it is a significant adverse effect that is not mitigated? The Applicant explained that this is what is reported currently in the ES chapter. The ExA asked how they can be assured that the mitigation will be in place. The Applicant explained that the works are not within the Order Limits for the Scheme and were not part of the Order Limits for the Scheme, when that adverse effect was identified through the ES Chapter. The works proposed for Stoke Orchard under the separate Scheme were expected to have been completed by now and will now be completed before completion of the Scheme, but they weren't included within this assessment. The Applicant explained that the mitigation is not tied into the DCO. The ExA asked whether the Applicant would accept there will be a significant adverse effect in Stoke Orchard which would weigh against the Scheme in the SoS balance. The Applicant confirmed this is correct and the ES doesn't rely on the separate scheme. The Applicant agreed to provide further information on the works programme.

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		The ExA asked for further information on the need for rehousing and noise mitigation in relation to construction noise. The Applicant explained that the requirement for rehousing or provision of noise insulation have two levels of trigger points: • the level of changing noise involved; and • the duration of the noise impact. The Applicant explained that at the construction stage the noise impact will be generated by construction activities including the operation of machinery. The duration of effect will be determined by the construction activity and the programme for that activity. The information in the ES to date is that while there are construction practices generating noise levels that will exceed that threshold, it is not expected that the duration will be sufficient to trigger the requirements for noise insulation/mitigation. This will be managed through the construction stage by the principal contractor. The Applicant would expect further information to be known when there is a more detailed plan for the construction programme. The ExA raised further queries on how the process would be monitored and how it is secured. The Applicant explained that monitoring would be managed by the principal contractor. This would be managed through commitments in the REAC and the noise and vibration management plan (1st iteration). Further detail will be provided in the 2nd iteration noise and vibration management plan; however, the Applicant agreed to provide further information at Deadline 4. The ExA asked how noise insulation/rehousing would work for Sheldon Cottages and Elms Cottages [sp. Elm Cottage] where noise exceeds certain thresholds. The Applicant explained that it will need to provide further information on Elm Cottage. In respect of Sheldon Cottages, there is a commitment in the REAC that the occupiers will not be present during the construction page. The Applicant has

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		agreed terms for the acquisition of the freehold of Sheldon Cottages to enable the Applicant to ensure they will be vacant during construction.

ISH3.38: The Applicant was asked to provide further information with respect to delivery and timing of the noise mitigation scheme at Stoke Orchard.

ISH3.39: The Applicant was asked to provide further information regarding the primary contractor's involvement with noise monitoring, surveying and determining the need for appropriate rehousing and glazing mitigations etc.

ISH3.40: The Applicant was asked to clarify on any gap between the first iteration EMP and second EMP with regards to noise mitigation.

ISH3.41: The Applicant was asked to explain what the noise impacts are at Elms Cottage/ Sheldon Cottages and what the Applicant's current position is with regard to the need, or otherwise, for any mitigations there.

EIA Methodology

	In the SoCG with Natural England (NE) item 4.1 in dealing with cumulative recreational effects there appears to be a reliance upon the respective planning applications to review their HRA in order to assess the potential for effects on the neighbouring sites with biodiversity and geological interests. The ExA will seek views of parties on this approach?	The Applicant explained that it is not suggested that HRAs of the surrounding housing development are reviewed or would influence the HRA of the Scheme. It is intended the HRA of the surrounding developments will be undertaken separately. The potential increase in recreational pressure will come from the increase in housing, which the Scheme facilitates but does not cause. The potential for in combination effects of the combined housing developments are known and there are existing policy requirements that are in place at a strategic level that have been designed to mitigate in-combination recreational effects of the combined housing developments. It is therefore appropriate to rely on the fact that those housing developments will need to comply with those policy requirements (e.g. planning applications, assessments and HRAs). Natural England are in agreement with the approach taken in the HRA for the Scheme (see RR-027 paragraph 3.2.2), the SoCG with Natural England (REP1-037 paragraph 7.9) and Natural England's response to the ExA's 1st Written Questions (REP3-076 Question 3.1.4). The ExA noted that improvement to the highway network may increase accessibility to sensitive sites and asked how this has been addressed.

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		The Applicant explained that it considers that improving the road would not facilitate access to surrounding designated sites. The Scheme does not provide direct access to any surrounding designated sites (in particular Coombe Hill SSSI - 2km northwest of M5 Junction 10). The existing M5 Junction already provides connectivity to the north, but not to the south and it is this southern connectivity that will be improved as a result of the Scheme, which will help to alleviate congestion across Cheltenham as well as enable the planned development around the junction. The increase in housing and potential increased recreational pressure will be dealt with by the housing developments that will be subject to their own assessments. The ExA asked whether the Applicant accepts the position that improving accessibility in the vicinity of the Scheme would result in more people visiting the sites. The Applicant explained that it does not accept that premise. The ExA asked whether this is Natural England's position. The Applicant explained that it is.
Geology and Soils		
	In the SOCG with NE [REP1-037] at 10.1 reference is made to the provision of a watching brief. How is this secured and what would it facilitate/show?	Natural England's comment in the SoCG (REP1-037) relates to a request to consider the opportunity to recover information on underlying bedrock geological strata underlying the Scheme, particularly in relation to excavation of flood storage area. The geology on the site is not designated as environmentally sensitive and there is no geological environmental designation within the Order Limits or in the study area. Therefore, the watching brief is not considered as essential mitigation. The comment relates to further information being welcomed on the underlying geology if exposed. The final design of the flood storage area is to be confirmed, but if the final design requires excavations to a depth more than 2m and it intercepts the bedrock geology then Natural England will be consulted. The consultation will be confirmed with Natural England regarding the items they

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		are interested in and will be reported back to them. It is a goodwill interaction and does not have a mitigation component to the ES and so it has not been secured.
ISH3.42: The Applicant was asked to confirm whether Natural England are expecting any further information with regard to the issue about the 2m excavation depths and clarify the suggestion in the SoCG that there could be an update to the ES.		
REQUIREMENTS The Applicant and Interested Parties will be requested to provide an update on the approach to consultation and discharge of requirements and detail where matters remain outstanding.		
	The Applicant and the EAs views will be sought on the drafting of Requirements 8,11 and 13.	Requirement 11 The Applicant is aware of the EA's position and provided a response at REP1-043 paragraph 13.3. The Applicant has engaged with the EA regarding this response and the Applicant's position is that it is not prepared to offer an overarching consultative role in detailed design as secured in Requirement 11. It will instead place consultation obligations on specific areas of design in the REAC. As a result of this engagement with the EA, the Applicant has updated the REAC (e.g. WE7 and WE8). If there further points of disagreement between the EA and Applicant, it will continue to engage but its understanding was that this approach was approved by the EA.
	The Applicant and National Highways views will be sought on the drafting of Requirements 3 and 4.	The Applicant understands that the principal area of disagreement was around which body is to be the arbiter of the discharge of requirements. With the help of National Highways, the Joint Councils and Applicant have had a meeting with the Department for Transport to understand what would happen if the role of arbiter was shifted to SoS. The Applicant understands that the Joint Council is content for their role of County Planning Authority, as arbiter, to move to the SoS and the change will be implemented at D4. The change would involve the County Planning Authority moving into a consultative role, much like the LPA as currently secured. This is a significant change across the Requirements and so there are various comments raised by National Highways at Deadline 3 that need to be revisited as a result of the change to the requirements. The Applicant also

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		expects engagement from the Joint Council in relation to the redrafted dDCO to ensure that the county planning authority is protected in the usual way.
	Environmental Management Plan (iterations) The ExA will seek the views of IPs on the role of the EMP, the relationship to the REAC and the supplemental management plans and whether in combination they are satisfied that appropriate mitigation is secured, would be delivered in a timely manner and that they facilitate appropriate monitoring in advance of any harm arising.	N/A
	Register of Environmental Actions and Commitments (REAC) Inconsistency in the REAC relative to the DCO – the Applicant will be asked to explain how these are to be resolved.	The Applicant agreed to carry out a consistency check of the relevant documents.
ISH3.43: The Applicant was asked to check the consistency between language used and commitments in the REAC and DCO documentation.		
	G12 of the REAC– Residents of Sheldon Cottages to be relocated – Applicant to explain how this is to be secured.	See above.
	Has the REAC been changed to reflect the requirement to restrict the timing for construction in respect of the Leigh Brook identified in the SoCG with EA (item 7.3 [REP1-036]?	The Applicant explained that item B28 has been added to the REAC (REP1-031). The objective of item B28 is to minimise disturbance of fish within the Leigh Brook.

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	In the SoCG with the EA item 8.9 refers to the inclusion of shutoff penstocks for each basin – how are these secured?	The Applicant described penstocks and explained that the design of the highway drainage system is addressed in REAC item WE2. This identifies that the drainage design will be finalised as part of the detailed design for the Scheme. The detailed design is secured by DCO Schedule 2 Requirement 11(1). The design of the highway drainage basins will be determined at detailed design; therefore, the inclusion of penstocks, what they will be and how they will be operated is a detailed design consideration. Chapter 8 paragraph 8.7.48 (REP1-015) states that the highway drainage will be designed to prevent spillages. The ExA summarised that the penstocks are a detailed design element with the commitment to prevent pollution being an overriding factor. The Applicant confirmed that it will include something to prevent spillages, which could be penstock or another method which will be a detailed design point.

Appendices

Appendix A. Actions arising from Issue Specific Hearing 3 (ISH3)

Action Point Ref.	Action Point Description	Applicant Response
ISH3.1	The Applicant was asked to signpost relevant submissions relating to the sequential and exception tests for the flood risk assessment..	In the Applicant's Written Submission of Oral Case for Issue Specific Hearing 1 (ISH1))REP01-046), the Applicant set out in section 1.5 (Alternatives), item 4(ii) how the vulnerability of Essential Infrastructure was derived, and that the classification is a decision for the Examining Authority. In the Applicant Response to Examining Authority's First Written Questions([REP3-043) (under Q16.0.5, the Applicant set our similar DCO schemes where the Essential Infrastructure classification had been applied, noting where those schemes included local roads. **Sequential Test** The Applicant described how the Sequential Test was applied in REP01-046. *The Scheme satisfies the Sequential Test (as set out in para 023 to 030 of the **NPPF Flood Risk and Coastal Change guidance**) through demonstration of the **site selection process that took flood risk into account** alongside other constraints (ES Chapter 3 – Assessment of alternatives (APP-062)).* *The Flood Risk Assessment supporting the application is presented in AS-023 (part 1 of 2) and APP-107 (part 2 of 2). Specifically Section 4.3 of the Flood Risk Assessment summarises the Sequential Test for the Scheme.* *The FRA concludes:* • *The Scheme crosses Environment Agency Flood Zone 2 and 3 as are defined in Table 1 para 078 of the NPPG.* • *There are no reasonable alternative lower risk sites available whilst fulfilling the requirements of the Scheme.* • *We consider the vulnerability classification of the Scheme to be Essential Infrastructure as set out in Annex 3 of the NPPF ("Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.")* • *And hence the Scheme vulnerability is compatible with the envisaged flood risk as set out in Table 2 para 079 of the NPPG* **Exception Test** The Applicant described how the Exception Test was applied in REP01-046. *The Scheme satisfies both parts of the Exception Test (in accordance with the Paragraph 031 to 037 of the NPPF), as it will* 1. *provide **wider sustainability benefits to the community, that outweigh flood risk**, by virtue of it encouraging growth in jobs and housing by providing improved transport network connections in west and north-west Cheltenham. This is described by Scheme objective 1, in para 2.2.1 of Environmental Statement Chapter 2, which is APP-061.* 2. *The Scheme has also been demonstrated through the Flood Risk Assessment (presented in AS-023 and APP-107) through its hydraulic modelling to **manage flood risk satisfactorily over the lifetime** of the development,*

Action Point Ref.	Action Point Description	Applicant Response
		with no material increase in flood risk elsewhere.
ISH3.2	The Applicant was asked to provide technical note relating to the reservoir to the EA.	The Technical Note on the proposed Reservoir includes a summary of the potential joint responsibilities between GCC and National Highways for the ongoing operation and maintenance of the reservoir as set out in the preliminary design as included in the initial submission. The position between National Highways and GCC regarding the ongoing responsibilities over the retaining features of the reservoir is still in discussion between the parties. It should be noted that the change proposed by the Applicant to the preliminary design in this area of the authorised development is seen by the Applicant to resolve the ongoing concerns of National Highways regarding the responsibilities of maintenance over the southbound slip road embankment in the southeast of the gyratory, and separately the features of the flood storage area. This is due to the fact that the embankment forming part of the SRN will no longer be a retaining feature of the reservoir. However, the Applicant has agreed to provide a copy of the Technical Note to the EA for information regardless of the fact that the proposed change request to be submitted at Deadline 5 will supercede its content.
ISH3.3	The Applicant was asked to provide references to the plots affected by an increased depth of flooding.	In the event that a private agreement is not reached with respective landowners prior to the end of examination, the Applicant, through the draft DCO, seeks compulsory acquisition powers to acquire new rights over these plots as flood compensation areas. Where the Applicant is not acquiring the freehold, the Applicant is proposing to acquire rights via article 24(1) which sets out that the undertaker may acquire such rights over the Order land as may be required. However, in the case of the Order land specified in column (1) of Schedule 5 the undertakers powers of compulsory acquisition are limited to the acquiring of wayleaves, easements new rights in the land or imposition of restrictive covenants as may be required for the purpose specified in relation to that land in column (2) of Schedule 5. Therefore, Schedule 5 of the dDCO includes the following right to secure the right to flood: *"New rights to construct, use, protect, inspect and maintain a flood compensation area".* By way of example, The new rights as described above are sought for the following plots: Work Number 3(e): 5/10d, 11/1a, 11/1b, 11/1c.

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		Work Number 5(n): 6/10a, 6/11a, 12/2v, 12/2w, 12/2x, 12/9a, 12/10a, 15/3d, 15/4a. Work Number 6(d): 7/3c, 7/4a, 7/4b, 7/4b(i), 7/4c(i), 7/4d, 7/5a, 7/6a, 7/6b, 7/7a, 15/6a 15/8k, 15/8k(i), 15/9a, 15/10a, 16/1a(i), 16/2a, 16/2b, 16/2c, 16/2d, 16/2e, 16/3a, 16/3i, 16/3l, 16/3o, 16/4a, 16/4b, 16/4c, 16/4d. The Applicant has provided the above plots listed again below but separated by landowner. **Robert Hitchins Limited :** 5/10d, 11/1a , 11/1b (assumed sub-soil rights), 11/1c **Unregistered:** 7/4c(i), 11/1b, 15/6a, 16/1a(i), 16/4a, 16/4b, 16/4c, 16/4d. (M Hulbert and Grey & Olney combined) **Gloucestershire** CC: 7/4a, 12/2v, 12/2w, 12/2x, 15/3d, 7/4b, 7/4b(i), 11/1b (GCC in respect of public highway), 7/4d, **Ann & Charles Arkell**: 7/3c, 7/5a **Terry Smith:** 6/10a, 12/10a **Andrew and Sara Hulbert:** 6/11a, 12/9a, 15/4a **Malcolm Hulbert:** 7/7a, 15/9a, 16/2a, 16/2b, 16/2c, 16/2d, 16/2e, **Malcolm Hulbert & Susan Hulbert**: 15/10a , 16/3a, 16/3i, 16/3l, 16/3o. **Grace Grey & John Olney**: 7/6a, 7/6b, 15/8k, 15/8k(i).
ISH3.4	Both the Applicant and National Highways were asked to provide an updated position relating to the reservoir at D4.	The Applicant is planning to submit a change to the Applicant that would remove National Highways from any reservoir duties. The Applicant and National Highways are therefore pausing discussions on the current proposals.

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ISH3.5	The Applicant was asked to submit to the examination the email from the lead local flood authority confirming agreement regarding the disapplication of s.23 Land Drainage Act 1991.	Please see Appendix B for a A copy of the LLFA agreement (Siret - Beattie 2024 pers. Comm 17 June).
ISH3.6	The Applicant was asked that within an updated SoCG, with the Environment Agency to provide details of what is agreed in respect of whether the scheme is essential infrastructure (including vulnerability). To the extent there is disagreement, explain how the conclusion reached would be different. There needs to be assessment of what would happen in either event given EA's reticence to confirm their position..	The current conclusions in the Statement of Common Ground (SoCG), (REP1-036) as of 14 June 2024, was that if the Environment Agency deems the Sequential Test to have been passed, then the Exception Test would also need to be passed. Furthermore, the Environment Agency stated that its internal guidance on reviewing models for flood risk assessments (LIT 14594), implied that it should undertake a detailed review of the Staverton Stream flood model given that the Link Road is classed as 'essential infrastructure' despite it not being on a Main River. As such the Environment Agency requested to review the Ordinary Watercourse model. That flood model, which relates to the southern end of the Link Road, was issued to the Environment Agency in June 2024. I In the Applicant's Written Submission of Oral Case for Issue Specific Hearing 1 [REP01-046] (TR010063 – APP 9.31), the Applicant set out in section 1.5 (Alternatives), item 4(ii) how the vulnerability of Essential Infrastructure was derived and that the classification is a decision for the Examining Authority. In the Applicant's Response to Examining Authority's First Written Questions [REP3-043] (TR010063 - APP 9.43) under Q16.0.5, the Applicant set our similar DCO schemes where the Essential Infrastructure classification had been applied, noting where those schemes included local roads. The Applicant notes the Examining Authority's interest in the implications of the vulnerability classification. The Applicant considers the vulnerability of the Scheme to be essential infrastructure, as defined under the NPPF Annex 3 – "*essential transport infrastructure, including mass evacuation routes, which has to cross the area at risk*". By cross reference to Table 2 at paragraph 79 of NPPG the Scheme's vulnerability is compatible with the envisaged flood risk. In the alternative, if parts of the Scheme are not described as essential infrastructure then it is unclear what it would be classed as none of the other classifications relate to this type of development. Of the various alternative categories, only the less vulnerable category might be most applicable (being commercial development and car parks – although not transport infrastructure as such). Nonetheless, the alternative classifications preclude development in Flood Zone 3b (functional floodplain – as appended to (REP1-036) the June 2024 version of the SoCG with the Environment Agency). This non-compatibility is set out in Table 2 para 079 of the NPPF Flood Risk and Coastal Change guidance. The impact

Action Point Ref.	Action Point Description	Applicant Response
		of this decision would be a possible need to increase the number of culverts under the Link Road (or redesign the floodplain crossing with an alternative design option such as a viaduct or bridge) such that the road embankment was removed from Flood Zone 3b. However, whilst the design was developed with culverts along the full width of functional floodplain, the detailed flood modelling, as set out in the Scheme Modelling Report [AS-048] and Flood Risk Assessment (part 1of 2) (AS-0230) demonstrates no increase in flood risk as a result of the encroachment of the road embankment and fewer culverts. Furthermore, the compensatory floodplain (work items 5(c) and 5(n)) on the eastern side of the Link Road) is sized to address the loss of floodplain arising from that encroachment. Hence the requirement to remove the current design from Flood Zone 3b would need to be agreed with the Environment Agency. The other classifications, except highly-vulnerable (e.g. basement dwellings, police, ambulance and fire stations) are all compatible with Flood Zone 3a. Should the other classifications apply, then the fundamental requirements of development and flood risk as set out in the NPPF still apply (development to be safe and not increase flood risk elsewhere). A change away from an essential infrastructure classification may simply remove the need for the Scheme to pass the Exception Test, as described in Paragraph 164 of the NPPF, and expanded in paragraph 031 of the NPPF Flood Risk and Coastal Change guidance. That said, highly-vulnerable development in flood zone 2, and more-vulnerable development in flood zone 3a, would also require the Exception Test to be passed. A figure showing the relationship of the Scheme and flood zone 3b will be appended to an updated FRA to be submitted into Examination at Deadline 5, as requested by the EA during SoCG discussions.
ISH3.7	The Applicant was asked to confirm whether the Secretary of State has the power to impose liability on National Highways in relation to the reservoir.	The Applicant continues to look into this matter for a definitive position but from a review of the Planning Act 2008 and associated regulations, the Applicant has not identified a restriction against creating infrastructure with maintenance obligations to be carried out by third parties. The Applicant would note also, that as set out in the Notification of Change letter submitted with the ExA on the 12 August, a change application will be submitted at Deadline 5 includes changes to the flood storage area in order to ensure that the slip road and M5 embankments are not utilised as a retaining feature of a reservoir. The Applicant understands that this change will resolve the issues identified by National Highways.
ISH3.8	Applicant to confirm whether the median was used for the traffic assessment and to consider the	The Applicant confirms that all base year modelled journey times have been validated against median observed journey times. The validation criteria for traffic modelling are set out in TAG Unit M3.1, Tables 1 to 4. The criteria do not require all individual elements of the base model to pass the applicable criterion, but instead defines a minimum proportion of

Action Point Ref.	Action Point Description	Applicant Response
	consequences of what the using different journey times may be	elements that need to pass to demonstrate that a traffic model adequately validates against observed data. For journey time validation the TAG criterion is that more than 85% of modelled journey time routes should be within 15% of surveyed times (or 1 minute, if higher than 15%). The base year traffic model used for the assessment of the Scheme meets all the TAG validation criteria, including that for journey time routes, as presented in Section 18 of the Transport Model Package Report (APP-140). At least 94% of journey time routes in the base year model pass the TAG validation criteria, which exceeds the minimum proportion of 85% required by TAG. The two journey time routes along the A4019 meet the TAG validation criteria in the eastbound direction, but marginally exceed the criteria in the westbound direction by between 0.9% and 9.4% depending on the period modelled. Furthermore, competing or alternative routes to the two routes in question along the A4019 fully validate in the base year model against observed journey times in full compliance with TAG criteria. This indicates that the marginal exceedance of the TAG validation criteria for the two modelled westbound journey times is very unlikely to materially influence route choice and thus, the assignment of modelled traffic flows. Consequently, the Applicant considers the traffic modelling undertaken to assess the Scheme to be robust and that the fact that the two journey time routes in the westbound direction along the A4019 marginally exceed the TAG validation criteria does not undermine the validity of the traffic modelling outputs, including route choice, and the conclusions drawn from them. Nonetheless, the Applicant is undertaking a traffic modelling sensitivity test with pertinent parameters adjusted such that the westbound journey times routes along the A4019 meet the TAG validation criteria to understand if this would result in a material difference to the reported traffic modelling outputs. The findings of the sensitivity test will be reported at Deadline 5.
ISH3.9	Both the Applicant and National Highways were asked to explain each party's position in respect to traffic modelling, compliance with TAG and sensitivity testing.	Please refer to the Applicant's response to ISH3.8 above. In addition, TAG unit M3.1 - Highway Assignment Modelling, paragraph 4.3.2 states: "*For general purpose models, the routes for the validation of journey times should cover as wide a range of route types as possible and cover the Fully Modelled Area as evenly as possible. For models developed for the appraisal of specific interventions, routes should include those from which it is expected traffic will be affected by the scheme, as well as covering the scheme itself as appropriate*."

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		The journey time routes selected for the validation of the base year traffic modelling are proportionate and cover all key routes directly impacted by the Scheme. Therefore, they are considered to meet the TAG guidance as set out in paragraph 4.3.2 TAG unit M3.1 - Highway Assignment Modelling.
ISH3.10	The Applicant was asked to provide a document clearly explaining how the JCS supports the need case for the Scheme	Please see Applicant's Technical Note submitted at Deadline 4 (TR010063/APP/9.74).
ISH3.11	The Applicant was asked to review Appendix L of the traffic assessment (specifically volume over capacity figures) to address potential discrepancies identified by the ExA.	The following figures in the Transport Assessment (REP3-033 (clean) and REP3-034 (tracked)) incorrectly show the West Cheltenham Link Road included in Scenarios P and Q. The Transport Assessment and relevant Appendices have been re-submitted at Deadline 4 with these figures corrected. The Applicant can confirm that the traffic modelling undertaken for Scenarios P and Q do not include the link road and the errors in the figures are presentational errors. • Transport Assessment (REP3-033) - Figures 34 & 35 (Scenario P). • Transport Assessment (REP3-033) – Appendix B - All Figures, 8 No (Scenarios S v P and Scenarios R v P) • Transport Assessment Appendix N (REP3-057) – All Figures, 8 No (Scenarios S v P and Scenarios R v P) • Transport Assessment Appendix O (REP3-058) – All Figures, 16 No (Scenarios P, S and R) • Transport Assessment, Appendix L : Traffic Forecasting Report (APP-142) - Figures 6-1 to 6-6 (Scenarios R v P); Figures 6-8 to 6-13 (Scenarios R v P); Figures 6-14 to 6-16 (Scenario P); Figures 6-17 to 6-19 (Scenario R); Figures 7-1 to 7-6 (Scenarios R v Low and High Growth); Figures 7-7 to 7-12 (Scenarios P v Low and High Growth). • Transport Assessment, Appendix L : Traffic Forecasting Report (APP-142) : Appendix E – Figures E1 to E2 (Scenarios Q v P Traffic Flows); Figures E3 to E4 (Scenarios R v Q Traffic Flows): Figures E5 to E6 (Scenarios Q v P Delays); Figures E7 to E8 (Scenarios R v Q Delays); Figures E9 to E10 (Scenario Q).

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ISH3.12	The Applicant was asked to revisit ExQ1 15.0.3 in respect of slip road closure and to run traffic modelling relating to usage of the signposted route by all/most vehicles.	The Applicant has developed an appropriate and proportionate methodology for undertaking a traffic modelling sensitivity test with pertinent parameters adjusted such that a greater proportion of traffic follows the signposted diversion routes during temporary closures of the north-facing slip roads at M5 Junction 10. The outcomes of this sensitivity test will be reported at Deadline 5.
ISH3.13	The Applicant was asked to provide clarity on the width of access points to fields north of the A4019 and how those fields are being farmed. The Applicant was further requested to comment as to the relative betterment or detriment of its proposals.	Plan "current road frontage drawing V2" (see Apppendix C) shows the current widths of all of the gateways or openings and the width of the visible vehicle tracks or ruts (which would be established by heavy consistent use) through these gateways. There is currently one sole access in use to land owned by Elizabeth Counsell and Mary Bruton, which is 3.8m wide, a bridle path also follows this route, and the access serves the arable land. There is a shared access to the land owned by Elizabeth Counsell and Mary Bruton, and Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirley Carter which is 4.4m wide. This appears to currently be used by Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirley Carter only to access their land, and requires a sharp turn east immediately after turning off the A4019. This access does not appear to be in use by Elizabeth Counsell and Mary Bruton. The access further west along the A4019 and serving Elizabeth Counsell and Mary Bruton, is blocked by a number of large trees, stopping access to the land being taken on this route. The Carters have a further two gateways further east along the A4019. The first is not currently in use and is overgrown by the hedge. The other access which is used is 3.9m wide and is used to access the arable field. The Scheme provides access for the above land parcels affected from a new signal-controlled junction onto the A4019, from which all existing access points will be provided with an equivalent gateway from a private means of access (see Sheet 12 of Works Plans – Part 2, submitted at Deadline 4) which will be wider than the current gateways. The land owned by Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirley Carter will still benefit from the two independent access gateways east of the signal-controlled junction on to the A4019. Whilst the new access routes for each landowner will require operators to undertake a turn onto the private means of access and then into the respective field, this very minor inconvenience is far outweighed by the significant improvement of a signal-controlled junction accessing the A4019. This represents a significant safety and at times convenience

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		improvement compared to a direct uncontrolled access direct access onto the A4019, which is the current position of the landowners. Overall, the Scheme delivers improved access to the land north of the A4019, and it is notable that Robert Hitchens Limited, Gloucester Land Company and Mr Doran do not have concerns regarding this access solution that they will also share.
ISH3.14	The Applicant was asked to confirm whether the safety incidents referred to on the A4019 involved farming movements and activity associated with farm accesses.	Full collision data has now been acquired. This data shows that during the seven year period 1 Jan 2017 to 31 December 2024, nine collisions were recorded along the A4019 within the vicinity of the two existing farm accesses. Two of these collisions resulted in serious injury whilst the remaining 7 were slight injury collisions. One serious collision and three slight injury collisions occurred at the location of the M5 J10 off slip onto the A4019 and these are summarised as follows (assume all occurred during daylight on a dry road surface unless stated otherwise): 1. Nose-to-tail slight injury collision on the slip road which occurred when a car collided with the rear of a stationary car waiting to join the A4019 on a wet road surface. 2. Changing lanes slight injury collision on the A4019 whereby a Cheltenham bound driver changed lanes to lane 2 to avoid slowing traffic in lane 1 and collided with a car in lane 2 on a wet road surface. 3. Slight collision involving a car pulling out of the M5 slip road onto the A4019 and colliding with an eastbound cyclist. Cyclist was obscured from the driver's view by the sun. 4. Serious collision involving a car pulling out of the M5 slip road onto the A4019 and colliding with an eastbound cyclist in the dark. A further collision occurred at the A4019 junction with Withybridge Lane. his collision occurred during the hours of darkness when a car turned right out of Withybridge Lane into the path of a motorcyclist travelling towards Cheltenham who sustained slight injuries. Another slight injury collision was recorded on the A4019 just west of Withybridge Lane and occurred on a wet road surface when a pedestrian crossed the road in front of a bus and was clipped by an eastbound vehicle where the driver failed to see the pedestrian as a result of the bus obscuring their view.

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		A seventh collision occurred on the A4019 approach to Withybridge Lane and took place when an eastbound vehicle (car) changed lanes to lane 2 to prepare to make the right turn into Withybridge Lane and failed to see a vehicle (car) already occupying the lane, shunting the vehicle in the central reserve. Two collisions occurred close to the second easternmost farm access. One involved a car travelling towards Cheltenham waiting to turn right into the layby. Two motorcyclists were waiting behind the car which were then hit by another car and then a following motorcyclist. Two of the motorcyclists sustained serious injury. The second collision occurred when a southbound motorcyclist collided with the rear of another motorcyclist on the A4109 resulting in slight injury. None of the collisions recorded in the seven year period involved farm vehicles. The cluster of nine collisions recorded on the A4019 between Withybridge Lane and the M5 off slip reflects the complex nature of this short section of the route with its accesses, bus stops, slip road junction and multiple lanes. Whilst there appears to have been no recorded accidents involving farm vehicles or these accesses within the data received, the Applicant maintains that the movements of large agricultural vehicles at this location adds to the complexities of the existing road layout and increases the overall risk of collisions at this location.
ISH3.15	The Applicant was requested to provide two plans:one overlaying the current highway boundary and a second against the future adopted highway boundary to understand existing and future relationships between adopted highway and land parcels today and in the future.	Please see requested plans to address ISH3.15 in Appendix C to this document. The statements below set out the change each landowner will experience regarding highway frontage. The plans show the freehold ownership of Elizabeth Counsell and Mary Bruton hatched orange and the freehold ownership of Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirley Carter hatched magenta. This is the same of both sheets of the works plans and general arrangement plans. Bloors interest covers both the orange and magenta hatched land. The plans also show the revised highway boundary as a result of the Scheme to demonstrate where highway frontage will be once the Scheme is completed. Both sets of plans demonstrate that the landowners will have the same extent of road frontage following the scheme as before the scheme. Moreover, Elizabeth Counsell and Mary Burton will have an increased frontage onto the A4019. This will result from the highway boundary moving further north beyond the properties Laburnum and Withy Bridge, which will be demolished by the Scheme and are between the land and the A4019. This will increase the frontage from approximately 100 metres to 185 metres. In addition, the change in alignment of the current south bound slip road will

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		mean that the gyratory will be substantially further west than the end of the current slip road, which would be an improvement in respect of an access directly onto the A4019 at this location. There is greater separation between the carriageway and the land owned by Elizabeth Counsell and Mary Bruton because of the Scheme, but an access in this location is no less deliverable following the Scheme than currently from a highway perspective. The private means of access that will serve Elizabeth Counsell and Mary Bruton, Robert Hitchens Limited and Rule Meadow would run along the frontage of the land owned by Elizabeth Counsell and Mary Burton following the Scheme. This could though be simply altered to interact with a new access directly into the land owned by Elizabeth Counsell and Mary Bruton from the A4019 and does not restrict an access at this location. The ability to construct an access for a large-scale development directly from the A4019 into the land owned by Elizabeth Counsell and Mary Burton, is currently very challenging. The obvious large scale development access point being from the land owned by Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirley Carter, or through the land owned by Gloucestershire County Council. Given Bloor's interest across both the orange and magenta hatched land this would be most likely through the pink hatched frontage and still could be. The access to the land owned by Elizabeth Counsell and Mary Bruton is no more challenging following the Scheme than in a no Scheme world, and a such there is no more ransom, or commercial advantage, benefitting Gloucestershire County Council as a result of the Scheme.
ISH3.16	The Applicant was asked to consider the impact that the update to CD122 of DMRB will have on its safety assessments, if any.	The proposed 4 No. NH Departures from Standard were submitted in September 2021 and granted Provisional Agreement in November 2021. All of these depart from the Standard CD 122 - Geometric design of grade separated junctions and at the time of submission the revision version was 1. CD 122 was subsequently updated in November 2021 (rev 1.1.0) and January 2022 (rev 1.1.1). The updates included within these two revisions of the design standard have no impact on the submitted NH departures and these therefore remain valid. Other than the submitted departures from standard, the final preliminary design is in compliance with the current version of CD 122 (rev 1.1.1). Extracts from the two revisions of the design standard are included below, which summarise the changes made at each revision:-

<table>
<tr><th>Action Point Ref.</th><th>Action Point Description</th><th>Applicant Response</th></tr>
<tr><td></td><td></td><td>
Latest release notes
<table>
<tr><th>Document code</th><th>Version number</th><th>Date of publication of relevant change</th><th>Changes made to</th><th>Type of change</th></tr>
<tr><td>CD 122</td><td>1.1.0</td><td>November 2021</td><td>Core document, England NAA</td><td>Incremental change to requirements</td></tr>
<tr><td colspan="5">Revision 1.1.0 - new requirements for dual to single carriageway transitions added (para 2.2); datum points for APTR roads added; diverge Layout G moved from the ENAA to the main body of CD 122; A single lane drop with single lane connector road layout has been added; plus various wording improvement/corrections</td></tr>
</table>
Latest release notes
<table>
<tr><th>Document code</th><th>Version number</th><th>Date of publication of relevant change</th><th>Changes made to</th><th>Type of change</th></tr>
<tr><td>CD 122</td><td>1.1.1</td><td>January 2022</td><td>Core document</td><td>Incremental change to notes and editorial updates</td></tr>
<tr><td colspan="5">Minor editorial changes to correct alignments in Tables 3.21 and 3.32</td></tr>
</table>
</td></tr>
<tr><td>ISH3.17</td><td>The Applicant was asked to review table 3-4 in safety report and to provide plans showing the location of departures from DMRB standards.</td><td>Location Plans showing proposed NH and GCC departures from standard are shown in Appendix A of the Departures from Standard Report. This is submitted at Deadline 4 (TR010063/APP/9.76).</td></tr>
<tr><td>ISH3.18</td><td>The Applicant was asked to include additional explanation for DFS 10 with regard to appropriateness of that</td><td>Full details of proposed departure from standards DFS 10 are included within the Departures from Standard Report submitted at Deadline 4 (TR010063/APP/9.76).</td></tr>
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	departure from standards relating to taper widths given road safety context and highway considerations rather than land availability and cost.	
ISH3.19	The Applicant was asked to provide an explanation for DFS 11, 12 and 13 with respect to the appropriateness of shortening visibility lengths due to changes in speed limits.	Full details of proposed departure from standards DFS 12, 13 and 14 are included within the Departures from Standard Report submitted at Deadline 4 (TR010063/APP/9.76). The numbering of the proposed departures from standard DFS 11 – 15 within Table 3-4 of the Safety Report have a typographical error. These should be DFS 12 – 16 as recorded within the Departures from Standard Report. The reason for the numbering difference is that DFS 11 Barn Farm Culvert extension is a technical structural departure, not a road safety related one, so therefore not included in *Table 3-4 Safety-related Departures from Standard* of the Safety Report. The proposed changes to speed limits are detailed within the Draft DCO and Schedules APP 3.1 Schedule 3 Part 4 and shown in APP 2.14 Speed Limits and Traffic Regulation Plans. Proposed speed limit changes along the B4634 are shown on Sheet 16. The main reason for the proposed speed limit change on the B4634 is that there is an existing 40mph speed limit on the B4634 to the east of the scheme tie in. It would seem more appropriate to extend this 40mph extents given the introduction of the proposed signalised junction rather than retaining the current arrangement of a speed limit increase from 40mph to 50mph on what would become an approach to a signalised junction.
ISH3.20	The Applicant was asked to review and explain whether it is appropriate to rely on existing departures from DMRB standards where the prevailing road layout or	The Applicant has not relied on existing departures from standards, but this has been noted and considered, along with other factors such as any proposed changes to road layout and speed limits, when assessing the proposed departures from standard. Full details of this assessment are included within the Departures from Standard Report submitted at Deadline 4 (TR010063/APP/9.76).

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	volumes of traffic are changed.	
ISH3.21	The Applicant to provide response in relation to road safety audit item 5.46 of the SoCG with National Highways.	The original stage 1 RSA was commissioned prior to the end of preliminary design to aid design development and account for road safety concerns early in the design process. To comply with the requirement of DMRB GG 119 clause 5.17 that a "*Stage 1 RSA shall be undertaken at the completion of preliminary design"* a supplementary interim stage 1 RSA was commissioned at the end of preliminary design. The key changes to the scheme between the designs audited at the stage 1 RSA and the end of preliminary design, such as the bus lane addition and design changes at proposed Site Accesses A and B, were included within information supplied to the RSA team.
ISH3.22	The Applicant was asked to confirm policy status of the s.106 methodology.	The response to this action point is within the Funding Technical Note submitted at Deadline 4 (TR010063/APP/9.75).
ISH3.23	The Applicant was asked to provide a statement giving a narrative around drawing down funds, the timeline for s.106 funds to be confirmed and received, overlayed against the anticipated start date for construction.	The response to this action point is within the Funding Technical Note submitted at Deadline 4 (TR010063/APP/9.75).
ISH3.24	The Applicant was asked to provide detail on the cost of the scheme and whether the calculations include appropriate allowances for risk.	The response to this action point is within the Funding Technical Note submitted at Deadline 4 (TR010063/APP/9.75).

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ISH3.25	The Applicant was asked to provide updated cost estimates taking into account the possibility of the construction date being pushed back.	The response to this action point is within the Funding Technical Note submitted at Deadline 4 (TR010063/APP/9.75).
ISH3.26	The Applicant to confirm whether acceptance of the Bloor's proposed highway mitigation present a risk to the quantum of funding relied upon.	It is not for the Applicant to comment upon the potential acceptance terms of Bloor's planning application, although GCC as host authority will advise the LPA of the impacts and suitability of mitigation as appropriate. However, the Applicant notes that the Joint Councils submitted evidence at D3 (REP3-065) that showed that the Bloor's application and mitigation would still result in problems on the highway network and concluded *that with 100% development, there are widespread congestion issues across almost all of the junctions analysed (both with and without the Elms Park mitigation). This provides a clear indication that this level of development cannot be accommodated in the absence of major scheme intervention.* On this basis, the Applicant is still of the understanding that a section 106 would be required to contribute to the Scheme on the basis that it forms the "major scheme intervention" referred to.
ISH3.27	All parties were asked to provide a written response in relation to St Modwen's proposal of introducing a requirement relating to funding.	The Applicant has reviewed previous DCOs which sought to introduce a requirement or article to provide additional reassurance around funding for its respective scheme. The Applicant is not aware of any example in previous Development Consent Order which set out a Grampian restriction on implementation of a project until total capital expenditure can be demonstrated to be fully funded. Instead, examples of where a funding restriction is used will ensure that the authorised development cannot be implemented and compulsory acquisition provision of a DCO cannot be utilised until sufficient funding has been secured to cover the compulsory acquisition costs of a project. A typical form of such article or requirement can be found at article 9 of the Manston Airport Development Consent Order 2022. The reason this article was required, however, is distinct from the Applicant's position as currently reported in the Funding Statement. In the Manston Airport Development Consent Order , much like other private funding schemes, there was concern during examination that there was insufficient evidence that the applicant held adequate funds to indicate how an order that contains the authorisation of compulsory acquisition is proposed to be funded and that, therefore it was necessary to examine the availability of these funds from other funders. This reasoning can be found at paragraph 212 of the Secretary of State's decision letter and similarly at paragraph 9.8.69 of the Examining Authority's Recommendation Report.

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		The Applicant would point to paragraphs 212-213 of the Secretary of State's decision letter and paragraph 9.8.69-9.8.111 which covers a discussion over the difference between securing sufficient funds to ensure that the costs for compulsory acquisition, noted as including blight and a 10% contingency, and then securing funds for the overall capital expenditure of a project. The Secretary of State at paragraph 213 references that regarding capital expenditure, the test required is that the applicant should provide an indication of how any potential shortfalls are intended to be met (Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land, DCLG, 2013, paragraph 17). This is in contrast to paragraph 9 of that Guidance which sets out that an applicant should be able to demonstrate that there is a reasonable prospect of the requisite funds for acquisition becoming available. This test at paragraph 9 is a higher test with a greater degree of certainty required. This higher test is the reason for requirements and articles like the one found at article 9 of the Manston Airport Order 2022. It ensures that sufficient funding is in place to meet the costs of compulsory acquisition including blight claims. The Applicant has sufficient funding through the Homes England grant to meet the requirements of compulsory acquisition and therefore an article drafted on this basis would be superfluous to requirements. In addition, any requirement that would seek to prevent the implementation or otherwise vesting of land secured under the DCO before funding for all capital expenditure is secured would be beyond the requirements of Guidance. As the Applicant set out in its oral submissions. It is not a requirement for the Applicant to demonstrate that capital expenditure for the project is entirely secured, rather there is only a requirement to provide an indication of how any potentially shortfalls are intended to be met. The Applicant has again presented this indication in its technical note on funding (TR010063/APP9.75) and therefore considers that the requirements of guidance have been met.
ISH3.28	The Applicant was asked to prepare and submit a sustainability statement which signposts the areas discussed during the hearing.	In line with the Design Manual for Roads and Bridges (DMRB) GG103 “Introduction and general requirements for sustainable development and design”, the integration of sustainable development into design enhances the performance of assets and infrastructure. Additionally, paragraph 4.29 of the NPS NN (2014) asks projects to consider sustainability in their design, and to produce sustainable infrastructure through good design. The Applicant has implemented a sustainable approach to the design of the Scheme through an iterative design process that has taken account of the local context of the surrounding area, has considered the resources required (including carbon), and the visual appearance of the Scheme in the surrounding landscape.

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		The Applicant has set sustainability objectives for the Scheme, aligned with the DMRB GG103 guidance, and has then reviewed the design against those objectives through to the completion of the preliminary design at DF3. The Sustainability Statement (Application document:TR010063 APP 9.64), submitted to Examination at Deadline 4, presents the details of the sustainability objectives set for the Scheme, and rating of the preliminary (DF3) design against those objectives. Section 3 of the Sustainability Statement describes the extent to which the Scheme's design has met the sustainability objectives set. Embodied carbon is covered specifically in section 3.4 in this document.
ISH3.29	The Applicant was asked to provide a summary document covering all key design changes that were made as a result of the consultation process..	Signposting details presented below on the consultation undertaken for the Scheme and where this resulted in a design change. Details provided as further evidence, in addition to the information presented at ISH3, of the iterative development of the design, with feedback being sought from stakeholders, and design decisions then made on whether the changes identified should be included into the design. In summary, all of the information on the feedback received and whether this has resulted in a design change, is presented in the Consultation Report [Ref APP-038], ordered against each of the consultation exercises undertaken. The respective locations of this information in the Consultation Report is signposted below: **1. TRO 1006300325 5.1 Consultation Report [ref. APP-038]** **a. Exec Summary (page 18)** i. Pages 23 to 29 summary of key changes in text. Table E-2 Key design changes as a result of statutory consultation feedback **b. Chapter 12 Summary of scheme changes as a result of 2021 statutory consultation (page 349)** i. Table 12-1 - Summary of key changes in response to s42 consultation pages 350 to 355. Sets out key changes following s42. consultation. ii. Table 12-5 - Summary of scheme changes in response to s47 consultation pages 375 to 379. Sets out key changes following s47 consultation. **c. Chapter 14 Additional targeted consultation (page 442)** i. Table 14-4 Key changes as a response to additional targeted consultation pages 426. This sets out matters raised and if there is a design change in the text. **d. Chapter 15 Further targeted consultation (page 439)**

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		i. 15.4 Key changes as a response to further targeted consultation page 439. Text stating there were no design changes following this consultation. **e. Chapter 16 Targeted Consultation on Bus Lane (page 447)** i. 16.4. Key changes as a response to targeted consultation on bus lane page 448. Text stating that the bus lane was included in the Scheme following this consultation.
ISH3.30	The Applicant was asked to provide confirmation on the controls for the quality of design going forward, how it will proceed and how it relates to the whole scheme and SRN (e.g. the PCF process). The Applicant was further asked to confirm whether SGAR 4 and 5 restrict the whole project from continuing or whether it just restricts the SRN commitment.	The Applicant has instructed a technical assurance contractor to audit the quality of design going forwards as part of detailed design. Equally, the Applicant understands that National Highways is also preparing for an independent review of the design. Requirement 11 of the DCO requires that the detailed design for the Scheme is in accordance with the design principles set out in the design principles report (TR010063 APP 9.70). This requirement therefore shapes the overarching design quality going forwards. In addition to the direct controls contained in Requirement 11, Schedule 2 of the dDCO, design reviews with National Highways will continue through the SGAR stages SGAR4 and SGAR 5, and the assessments undertaken at each of these stages will be for the full Scheme (covering both the strategic road network (SRN) and the local road network (LRN). The Applicant does not consider it likely that National Highways would be content to allow the undertaker of the Order onto the SRN where an SGAR 5 report identifies "RED" issues. A further SGAR 5 process will be run by GCC as highway authority post National Highways SGAR 5 to determine whether the Scheme can continue on the local road network. The Applicant therefore considers that the SGAR 4 and 5 processes does constitute a restriction to commencement.
ISH3.31 and 3.32 (combined response)	The Applicant was asked to provide confirmation as to why an external/independent review process has not been undertaken and to provide confirmation on	**Process followed by the project in considering external review and whether a design panel was appropriate:** Whilst the M5 Junction 10 Improvements Scheme is a GCC project, it affects the SRN at M5 Junction 10. It was agreed between the Applicant and National Highways that the project would be run in accordance with the Project Control Framework (PCF), and that National Highways would provide review throughout the Applicant's development of the PCF documentation. The Preliminary Environmental Information Report (PEIR) (available at M5 Junction 10 Improvements Scheme | Highways (gloucestershire.gov.uk)) assessed the Design Fix 2 (DF2) Preliminary Design that was presented at the statutory consultation (December 2021-February 2022), providing an early steer on what effects the Scheme could be

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	whether a review should be undertaken at this stage? The Applicant was asked to identify differences between the PCF process which had been followed and what the position would be if following the Applicant were to have followed a design panel process.	anticipated to give rise to, which provided guidance for further design amendment (including incorporation of essential and embedded mitigation) and environmental assessment. National Highways reviewed the PEIR and provided comments on the Flood Risk Assessment (in July 2021), and the ES topic chapters (Air Quality, Noise, Biodiversity, Water, Landscape, Geology and Soils, Heritage, Materials and Waste, Population and Human Health, Climate and the Cumulative Effects Assessment) in September-October 2021. These reviews were undertaken in advance of these documents being included in the statutory consultation (December 2021-February 2022). No comments were raised about the Scheme design, the description of the sensitivity of the landscape, or the assessed significance of effect on landscape. The potential for consideration of consulting the National Highways Design Panel, or any other external design review panel, was not raised in the comments provided. The National Highways Licence (DfT 2015) advises that National Highways should seek the National Highways Design Panel involvement on the design of road improvement schemes where these are 'in sensitive locations or expected to have a substantial impact on the surrounding landscape'. The Applicant considers that the Scheme is not in a sensitive location with regards to landscape, for example a National Landscape, or a National Park. The Scheme lies wholly within Landscape Character Type 'Settled Unwooded Vale' (as defined in the Gloucestershire LCA) of which a key characteristic is major transport corridors. The PEIR assessment of impacts on landscape character found that, whilst the short term effects could not be mitigated entirely, the increased presence of roads in the landscape would be in keeping with the existing landscape character of the area. The conclusion of the PEIR is that the Scheme would not have substantial impact on the surrounding landscape. With regards to the nearest National Landscape area to the Scheme (formerly designated as the Cotswold Area of Outstanding Natural Beauty (AONB)), the PEIR assessed impacts to the landscape designation of the Cotswold AONB, that the setting of this landscape is highly unlikely to be affected by the Scheme. Given the distance and the existing setting (urban Cheltenham giving way to a rural farmland) the Scheme is able to be absorbed into the setting and have a neutral effect on the AONB landscape character. Therefore the Applicant considered that the Scheme did not meet the requirements for involving the Design Panel. Similarly, National Highways did not identify a need to engage the Design Panel and Design Panel review was not raised by National Highways at any stage.

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		The project continued to develop the design for the Scheme following the principles set out in the Department for Transport's Design Manual for Roads and Bridges (DMRB) and National Highway's The Road to Good Design. Following the results of the statutory consultation, work began on development of DF3 design, additional environmental assessment, and the Project Design Report (PDR) (June 2022). The Project Design Report [REP3-047 and REP3-048] reports how the Scheme has addressed the design principles set out in The Road to Good Design. NH continued to undertake reviews of the Environmental Statement, Environmental Management Plan, REAC, and Project Design Report with detailed comments provided on the following documents : - Cultural Heritage chapter – October 2022 (covering the DF3 design without the bus lane) - Materials and Waste chapter – March 2023 (covering the DF3 design with the bus lane) - Population and Human Health chapter – November 2022 and March 2023. - Climate chapter – October 2022 and January 2023. - Cumulative Effects Assessment chapter – October 2022 and February 2023, - Environmental Management Plan – February 2023 and July 2023. - REAC – March 2023. - Project Design Report – March 2023, with further comment provided in July 2023 that the '*Report satisfies requirement of PCF product - no further comments'.* No comments were received from NH regarding the need for a Design Panel to consider the Scheme design. The Environmental Masterplans were reviewed by NH (August 2023) with a '*no comment*' response. **PCF processes and engagement of the Design Panel:** The PCF process requires that good design be considered through applying the principles of good road design, as set out in The Road to Good Design (Highways England 2018) and where relevant engaging the National Highways' Design Panel. Regardless of the above assessment of the core test for whether a Design Panel may be required under the National Highways governance guidance, the Applicant does accept that there are other indications when a Design Panel may be required which would include circumstances where a project is in a floodplain or includes compulsory acquisition. The Applicant does accept that these circumstances are met in this instance. However, if the Applicant had decided that the Scheme required the engagement of the Design Panel, there would have been provision of initial project information from the Applicant to the Panel to allow the Panel to determine their level of input to the Scheme. The Applicant's understanding from other National Highways projects (such as the M25 J28 DCO

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		Scheme), is that the Panel would screen the project to determine if a full panel review was required. As outlined above, the Applicant considers that the Scheme would have been screened out (on the basis of not being in a sensitive landscape or having a substantial effect on the surrounding landscape), and therefore not considered further by the Design Panel. With regard to the M25 J28 Scheme, it was screened out from Design Panel review on the basis that M25 J28 project was not in a sensitive location and unlikely to have a substantial impact on the surrounding landscape. It should be noted that M25 J28 was both in a floodplain and included compulsory acquisition demonstrating that meeting these elements is not definitive of a requirement to go to a Design Panel. If the Panel had decided not to screen out the project, the Design Panel would have held a review and provided a recommendations report. At PCF Stage 3, the Project Design Report would report on how these recommendations had been addressed, as well as discussing how regard has been paid to the principles set out in The Road to Good Design. Through embedded mitigation measures such as adjusting the vertical alignment of the Link Road and essential mitigation measures such as providing habitat creation areas, the Scheme has iteratively evolved the design in accordance with the principles of good design and with processes outlined in DMRB. **Difference between PCF and Design Panel:** The Design Panel is an element of review that is available but not mandatory within the PCF and it is not a mandatory requirement of the National Highways Licence. The Design Panel process is significantly different to the PCF process. The PCF process provides a broad reaching framework encompassing the relevant activities to be undertaken and considered across all stages of road improvement projects, identifying the National Highways roles and responsibilities and key stages throughout the project lifecycle, including development of options, consultation and products and as such includes consideration of design of the project ('the Road to Good Design is an integral part, needing to be considered in the PDR). The Design Panel by contrast is brought in to discuss aspects of design where a project meets the criteria that trigger the need for such for example, new transport infrastructure in a National Landscape. It is likely to provide comments and recommendations, and would expect to see how these matters have been addressed; but the Design Panel would not have more frequent, regular monitoring throughout the project lifecycle. In response to NPS 4.33, *'…the use of professional, independent advice on the design aspects of a proposal should be considered, to ensure good design principles are embedded into infrastructure proposals'*- the Scheme did consider the use of additional professional independent advice (Design Panel) over and above engaging National Highways to provide external review through the PCF processes throughout the project lifespan. However, the Applicant considered that such additional review was not required for this project as it is not in a sensitive location and was not anticipated to

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		have a substantial impact on the surrounding landscape based on National Highways guidance and knowledge from previous National Highways Schemes. The Applicant further considers that the use of a Design Panel at detailed design stage is not required, for the same reasons.
ISH3.33	The Applicant was asked to provide clarity on landscape effects, in particular the effects on Barn Farm and Sheldon Cottages.	With regards to the assessment of effects on landscape at Barn Farm and Sheldon Cottages in ES Chapter 9 (LVIA) [REP1-016]: VR4 (Barn Farm) already has views through intermittent motorway verge vegetation over the M5 and south towards the junction. The initial loss of verge vegetation during construction has been assessed as Moderate Adverse, improving to Slight Adverse at Year one with the removal of construction activities and as the noise barrier would provide a full screen to the M5. As secured by entry LV6 in the REAC, local residents will be consulted on options for the final design of the noise barrier so that it provides visual amenity as well as noise abatement, with the aim of selecting a design that is visually agreeable taking into account its material and colour and potential planting. The Applicant would note that whilst consultation responses from local residents will be taken into account as far as possible, the purpose and function of the noise barriers must be maintained and approved through Requirement 14 of the dDCO. Additional replacement planting to one or other side of the barrier and elsewhere where vegetation has been lost would grow by Year 15 to provide a vegetated screen which together with the barrier would be an improvement on the existing view of the M5. VR3 (Sheldon Cottages) is currently well set back from the M5 junction with mature dense vegetation and other buildings screening the view. The change to the view (as a result of the Scheme) is therefore much more extensive than at VR4 as the surrounding buildings and vegetation would be lost and the junction embankment moved much closer to the property. Although proposed planting to the embankment would provide good filtering to the view of the junction, the increased proximity of the junction and loss of other intervening vegetation and buildings cannot be fully mitigated, hence the assessed Moderate Adverse effect at Year 15. In terms of landscape character effects in the wider area encompassing Sheldon Cottages, the assessment in ES Chapter 9 [REP1-016] has concluded an overall Slight Beneficial effect. This may seem contrary to the assessment of visual effects for VR3; however, although for VR3 the view has changed, except for the very small section immediately around VR3, the landscape character overall would not essentially be dramatically different to the existing character. Enhancement measures to planting and habitat creation would further improve the character in terms of biodiversity and in terms of settling the transport corridor into the surrounding landscape.

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ISH3.34	The Applicant was asked to provide clarity on which landscape visualisation points were considered in addition to those which have been submitted to the examination and why they were ultimately discounted.	The locations for the visualisations were selected through a review of the Scheme against the locations of the visual receptors. The locations of the visual receptors are shown on Figure 9-3 of Appendix 9.1 [REP3-030]. The Applicant provided five locations for the visualisations for the Joint Councils to comment on and revise or add to as requested by the Planning Inspectorate in S51 advice note [PD-003]. The Joint Councils agreed the locations, and also requested a 6th (opposite Forge House on the A4019). The basis for the section of the locations of each visualisation is summarised below. *Visualisation 1:* – Chosen as most long term significantly affected location. Can be used to represent VR3 and by interpolation VR 15a and some users of M5. *Visualisation 2:* – This visual also represents VR8 and VR7b and shows how the Link Road and the new bridge across the River Chelt appears within the previously undeveloped landscape. Please note that as shown in the Visualisation for Year 1, the new bridge is at a much lower height than the retained trees in the vicinity of the bridge. The Examining Authority may wish to note that this may help clarify a discussion at the accompanied site inspection (ASI1) on the height of the River Chelt bridge relative to the existing trees. *Visualisation 3:* This provides indication of effects for VR9 and users of B4063 (VR26) and by interpolation aids understanding of VR10. *Visualisation 4:* Chosen to indicate changes along the A4019. Can be used to aid understanding VR24, VR25, users of A4019 (VR26), VR 12, VR23. *Visualisation 5:* Chosen to indicate changes along the A4019. Can be used to aid understanding of VR18b, c, VR12 and VR26. *Visualisation 6:* Chosen to indicate changes along the A4019. Can be used to aid understanding of VR19, VR18a and users of A4019 (VR26). With regards to consideration of a visualisation from the B4634 on the higher ground at Hayden Hill, there are no easily accessible views from the road in this location, with the views of the Scheme limited to the properties present. The visual impacts of the Scheme on these properties (visual receptor VR11) are addressed within ES Chapter 9 (LVIA) [REP1-

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		016] and summarised in Table 9-6 in that document. In addition these are private properties and therefore not publicly accessible and therefore it was considered not proportionate to undertake visualisations here. Views from the PROWs to the east of the Link Road would be similar to the montage produced for Visualisation 2 which is from the west of the Link Road.
ISH3.35	The Applicant was asked to provide a signposting document relating to what assumptions are for tree growth rates for year 15 in the environmental assessment, and how they relate to visualisations.	Paragraph 9.15.8 of the LVIA [REP1-016] sets out the assumed planting sizes and predicted growth. Copy of para 9.15.8: *For this LVIA, it is assumed that annual tree and shrub height growth would be between approximately 0.3-0.5m per year, so that if a mix of standard and transplant tree and shrub planting was implemented with standard trees planted at 2-3m tall and whips or transplants at 0.6m – 0.8m high, by year 15 the planting height would be between 5 – 11m (assuming no pruning) and the canopies would be merging. It is assumed that the majority of hedges (excluding any trees) would be cut to around 1.2m as is typical of the character in this area.* There is no definitive growth rate that can be provided for any tree or other plant. All plant growths are dependent on a variety of factors, including; initial planting size, spacing, quality of planting and management, soil conditions, shelter, climate and microclimate. Apart from these environmental factors, there are species that are known to grow quickly and those that grow slower. The eventual heights of mature trees are also generally predictable, but vary according to species. Therefore, for the assessment and the visualisations, a range of growth rates has been assumed based on UK native trees. These assumed growth rates are based on predicted growth rates gathered from various sources including the Woodland Trust (www.woodlandtrust.org.uk/blog/2018/10/fast-growing-trees/) and IEMA (Predicting tree and hedge growth - IEMA). Whilst it is not possible to predict exactly how the Scheme will look at year 15 in terms of soft landscape, as a consequence of local variability in growing conditions and climate, the visualisations provide a good indication of how the Scheme can be expected to look. The visualisations have been produced in order to aid the ExA and SoS in understanding the form and scale of the proposed engineering works in the context of the existing area and have primarily focussed on earthworks and structures and the extent of lost existing vegetation, with an indication of the soft landscape proposals, based on the preliminary design.

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		The Applicant has used generic 3D tree models representing vegetation at the assumed heights. For Year 1, heights of 0.6m – 0.8m have been used. For Year 15, heights of 5-11m have been used. The model trees used do not represent the variety of species proposed and are sometimes shown with a wider trunk girth than is likely for year 15. However, they are shown at a realistic assumed height and do provide a good indication of how the proposed tree planting would provide filtered screening by year 15. In developing the visuals, focus was placed on the accuracy of the existing vegetation which would be lost or retained, and on the accuracy of the proposed built elements, rather than the details of the tree species. Reworking the visualisations to include a more varied tree mix at Year 15 would not add to the understanding of how the Scheme will sit in the landscape over the years. The Year 1 visualisations provide a 'worst case' that can be extrapolated over the years. The Year 15 visualisations, provide an indication of how the Scheme could look as planting matures.
ISH3.36	The Applicant was asked to confirm whether the changes to the draft DCO in relation to hedgerows alter the landscape assessment..	This Action Point refers to the addition in the dDCO of the text at article 3 which amends regulation 6 of the Hedgerows Regulations 1997. The Applicant was asked to confirm whether this change to the text of the dDCO changes the assessments provided to date in the ES. The Applicant can confirm that this change has not had an effect nor is driven by a change to the ES nor any underlying strategy regarding hedgerows. The Applicant's position, in addition, is that this change does not introduce an ability of the Applicant to automatically remove additional hedgerows. Should, during detailed design, the Applicant's strategy regarding the removal of hedgerows change then the Applicant will continue to have to adhere to Requirement 11 which ensures that the authorised development must be designed in detail and carried out so that it is accordance with preliminary scheme design as shown on the works plans, the general arrangement plans, the environmental masterplan and engineering sections drawings unless otherwise agreed in writing by the Secretary of State following consultation with the relevant planning authority and strategy highway authority provided that any amendments would not give rise to any materially new or materially different environmental effects. The Applicant, therefore, considers that it is already limited by the extent to which additional hedgerows could be removed beyond that already assessed. However, should additional hedgerows be identified, and their removal continues to fall within the Rochdale envelope of the assessed authorised development, the amendment at Article 3 ensures that sufficient licence is included in the Order itself to cover the authorised development as consented.
ISH3.37	The Applicant was asked to confirm the timescales for any September geophysical surveys and any subsequent trial	**Assessment Approach:** The baseline evidence provided in the ES Chapter 11 (Cultural Heritage) [APP-070] included assessment of the known heritage assets within a relatively wide study area that was selected to be able to not only identify what impacts the Scheme would have, but also to characterise the known and potential for as-yet unknown archaeological remains. This assessment was based on an examination of information on designated heritage assets, as well as assessments records of the Historic Environment Record (HER) for Gloucestershire, online resources such

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	trenching, including the likely timescale for a report of findings.	as historic mapping, published archaeological research, and examination of 'grey literature' held by the Archaeological Data Service (ADS). Though visits to physical archives was restricted due to COVID, a thorough examination of known archaeological information relevant to the study area was carried out. The conclusion of these assessments was that due to the disturbance caused by the construction of the M5, there was limited potential for highly sensitive (significant) archaeology to be present beneath the existing roadbed or in adjacent areas. The professional assessment was that impacts to any archaeological remains within these areas would be best dealt with post-consent to allow the work to be done when land access agreements were easier and intrusive archaeological work could be coupled with enabling works to provide a higher degree of safety measures for archaeologists working near active roads. The assessments conducted for the ES Chapter 11 (Cultural Heritage) [APP-070] indicated that there may be significant archaeology located near the eastern end of the Scheme, at the location of the attenuation pond near the West Cheltenham Fire Station where nationally-significant Anglo-Saxon archaeological remains were recovered during watching brief activities connected to the construction of the West Cheltenham Fire Station. The nature of these remains are such that the significance of them could not be understood until archaeological excavation, analysis and recording had taken place. Preservation by record is considered the appropriate treatment of these remains, with the level of analysis and recording proportionate to their significance. The Archaeological Management Plan (AMP) [AS-038] provides the mechanism for this investigation to be undertaken after the DCO has been confirmed and prior to the construction of the Scheme. NN NPS paragraph 5.213 notes that "*where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State should require the applicant to record and advance understanding of the significance of the heritage asset before it is lost (wholly or in part). The extent of the requirement should be proportionate to the importance and the impact*". Given the level of previous disturbance through the majority of the Order Limits (from the construction of the existing M5 and J10 junction, as well as developments along the A4019), the pre-application investigations (baseline desk-based research, geophysical survey and trial trenching of the Link Road) were considered proportionate to the importance of the archaeology (given its presumed level of survival) and level of impact and therefore the Applicant considers the Scheme confirms with NN NPS paragraph 5.213 NN NPS paragraph 5.214 states that *"The Secretary of State may add requirements to the Development Consent Order to ensure that this is undertaken in a timely manner in accordance with a written scheme of investigation that meets the requirements of this section, and has been agreed in writing with the relevant Local Authority, Historic England or Marine Management Organisation."* The AMP [AS-038] has been developed to ensure these requirements are undertaken as a requirement of the DCO, acting as an overarching WSI, with requirements for further site-specific archaeological project designs (WSI) to be prepared in consultation with the local planning authority's archaeological advisor and Historic England, where appropriate. This approach has been agreed with Historic England in the SoCG (item 19.1) [REP1-038].

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		NN NPS paragraph 5.215 states "*Where there is a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, the Secretary of State should consider requirements to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction".* The dDCO through Requirement 3 and 9 secures both the production of the AMP and then the specific requirements of that AMP. The AMP [AS-038] provides the requirement for this to ensure consideration of the impacts to heritage assets. The Applicant considers therefore that there has been a sufficient level of archaeological investigation undertaken to date, both on site and in the literature, to support the assessment and conclusions presented in the ES Chapter 11 (Cultural Heritage) [APP-070]. The AMP [AS-038] provides the framework and controls for further investigation to be undertaken in advance of and during the construction stage to manage the archaeology present. The production of and details for the AMP is set out in both requirement 3 and 9 of the dDCO. **Programme:** With regards to the future programme of archaeological investigation, geophysical survey work is due to start in Autumn 2024. On completion of the geophysical survey work, the requirement for trial trenching will be reviewed with the County Archaeologist, and the locations identified for this work. The expected timeframe for these investigations is the geophysical work will be completed before the end of Examination, and the trial trenching undertaken in 2025. As outlined above, whilst further survey work is required in advance of any construction, the Applicant considers that the findings from this work are not required to support the assessment presented in the ES Chapter 11 (Cultural Heritage) [APP-070]. Discussions with the County Archaeologist as part of the SoCG with the Joint Councils, held following the ISH3 (Teams meeting 22 August 2024) noted that the County Archaeologist agreed that the additional geophysical survey and subsequent evaluation trenching would not materially alter the assessment presented in the ES Chapter 11 (Cultural Heritage) [APP-070].
ISH3.38	The Applicant was asked to provide further information with respect to delivery and timing of the noise mitigation	The Stoke Orchard Scheme has recently started the detail design phase. This stage is due to be completed in February 2025 with construction starting in March 2025.

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	scheme at Stoke Orchard.	
ISH3.39	The Applicant was asked to provide further information regarding the primary contractor's involvement with noise monitoring, surveying and determining the need for appropriate rehousing and glazing mitigations etc.	The Scheme noise modelling will be re-run based on the detailed design to determine the requirement for insulation or rehoming in the Operational phase. Any insulation could be installed early in the Construction phase to help minimise the impact of the construction phase. With regards to the Construction phase, it is likely that the Applicant will apply for a Section 61 consent, every six months. This process would require noise modelling to firstly determine maximum noise levels at sensitive receptors, and secondly review noise levels against the programme in order to identify any triggers, as noted in Annex E of BS5228. Paragraph B.3.2.3 of the NVMP (1st iteration) ensures that the Principal Contractor will be responsible for developing a monitoring programme The Noise and Vibration Management Plan (Annex B.3 of the 2nd Iteration EMP) will detail the S61 process, including the requirement for noise outputs from the Construction phase to be modelled and assessed against trigger levels.
ISH3.40	The Applicant was asked to clarify on any gap between the first iteration EMP and second EMP with regards to noise mitigation.	The requirement for noise mitigation will be included in the Noise and Vibration Management Plan (Annex B.3 of the 2nd Iteration EMP), Section 61 and also within the Contractor's Environmental Risk Register. The measures to be employed by the Contractor will include: ○ Working within the core hours. ○ Obtaining approvals from the local authority if working outside the core hours ○ Proactive communication with residents ○ Qualitative and quantitative noise monitoring ○ Standard measures for construction operations ▪ Plant and working methods will be selected to ensure that the minimum possible amount of noise is generated whilst carrying the work out efficiently and cost-effectively. ▪ All plant will be shut down or throttled back to idling speed in between periods of use.

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		▪ All relevant plant will comply with the permissible noise levels set out in the appropriate European Directives. ▪ Every effort will be made to ensure that the plant in use comprises the quietest available models suitable for the purpose, including white noise reversing alarms. ▪ Where possible, fabrication will be undertaken offsite or away from residential properties. ▪ Plant and equipment will be maintained in good working order, with attention being paid to the condition of silencers and acoustic panels. ▪ Static plant (i.e. generators and lighting sets) will be located so as to optimize screening and / or distance attenuation in relation to occupied premises. ▪ Where possible, hydraulic equipment will be used in preference to pneumatic plant. For cleaning out formwork prior to concreting, pressure washing will be used in preference to air lancing where practicable; and ▪ When available low carbon plant will be used. These will have less reliance on engines. ▪ Consideration will be given to providing temporary noise screens where particularly noisy activities are close to residential properties. ▪ Alternative construction methodologies will be considered for construction activities with the potential to cause structural harm to an asset. The 2nd Iteration EMP will also include Scheme specific noise mitigation measures, where these have been identified as a requirement through noise modelling of the detailed design, identification of triggers, and consultation with residents.
ISH3.41	The Applicant was asked to explain what the noise impacts are at Elms Cottage/ Sheldon Cottages and what the Applicant's current position is with regard to	**Construction Noise** Sheldon Cottage - Table 6-18 of ES Chapter 6 [AS-014] provides the results of the construction noise assessment for Sheldon Cottages. It was determined that even with temporary noise barriers in place, the noise levels would exceed the threshold for a moderate or major impact. If the duration of the roadworks, the stockpiling, and the bridgeworks at night, exceeds the duration threshold (which is 10 or more days or nights in any 15 consecutive days or nights, or a total number of days exceeding 40 in any 6 consecutive months), there would be a significant effect.

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	the need, or otherwise, for any mitigations there.	Elm Cottage - Table 6-18 of ES Chapter 6 [AS-014] provides the results of the construction noise assessment for Elm Cottage. It was determined that even with temporary noise barriers in place, the noise levels would exceed the threshold for a moderate or major impact. If the duration of the roadworks exceeds the duration threshold (which is 10 or more days or nights in any 15 consecutive days or nights, or a total number of days exceeding 40 in any 6 consecutive months), there would be a significant effect. Whilst the adverse impacts are predicted to be worse in the evening and night time when the noise level thresholds are lower, the evening (19:00 to 23:00), weekend and night-time (23:00 to 07:00) works will be avoided where possible. Some essential night-time works will be required at Junction 10 itself, such as during the installation of the new bridge decks and during the demolition of the old bridge, as a minimum. For the majority of the works, the daytime adverse impacts are only predicted when the works are 25m or less from the properties, as provided in Table 6-17. As stated in 6.9.21 - In most cases, the roadworks that are very close to a residential property will be transitory in nature and it is unlikely that plant would be consistently working at that distance. Similarly, although the edge of the stockpiling may be within 25m of a property, the stockpiling area is large, and the work will not take place solely at that distance. In this case large stockpiles may be effective at screening noise from elsewhere on the site. Noise impacts during the construction stage will be managed through the 2nd iteration of the Noise and Vibration Management Plan (NVMP). This will be produced by the Applicant in advance of construction, and submitted for approval by the Secretary of State, following consultation with the relevant planning authority, county planning authority and strategic highway authority to the extent that it relates to matters relevant to its functions. The 1st iteration of the NVMP (AS-033) (section B.3.6) sets out that an appraisal for noise insulation or temporary housing six to nine months prior to starting the construction phase of the works or at such time appropriate to the scale and nature of the works will be undertaken. **Construction Vibration** Sheldon Cottage - Table 6-20 of ES Chapter 6 [AS-014] provides the results of the construction vibration assessment for Sheldon Cottages. It was determined that if during the bridge construction the piling method is percussive, the impact would be moderate adverse. Vibration from road compaction could lead to moderate adverse impact, especially on the new access road, which is less than 25m from the properties.

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		Elm Cottage - Table 6-20 of ES Chapter 6 [AS-014] provides the results of the construction vibration assessment for the House in the Tree Pub, which is next door to Elm Cottage on Old Gloucester Road. It was determined that vibration from road compaction could lead to minor impact, at around 50m from the property. A significant adverse effect can be determined when the vibration threshold, for a moderate or major impact, has been exceeded along with the duration threshold, which is 10 or more days or nights in any 15 consecutive days or nights, or a total number of days exceeding 40 in any 6 consecutive months. In Table 6-3 of ES Chapter 6 [AS-014] it states that it is likely that vibration of this moderate level in residential environments will cause complaint but can be tolerated if prior warning and explanation is given to the residents. Therefore, given the transitory nature of the construction works, the impact can be managed through good community liaison (as managed through item PHH4 of the REAC [REP3-031]), and is not considered to be a significant effect. No additional mitigation is identified as being required. **Operation** Sheldon Cottage - Table 6-29 of ES Chapter 6 [AS-014] provides the results of the operational noise assessment, and Paragraph 6.9.98 states "*There have been some benefits caused by the design of the Scheme, such as at Sheldon Cottages, where the new slip road screens the noise from the M5".* Although the slip road is closer and carries its own traffic, the screening effect of the slip road on the busier M5 provides an overall benefit. The benefit is in the opening year only, so not a significant effect. Elm Cottage - Table 6-29 of ES Chapter 6 [AS-014] provides the results of the operational noise assessment, stating that 4 properties on Old Gloucester Road is predicted a minor decrease above the SOAEL in the opening year, in the daytime. One of these properties is Elm Cottage, as the traffic is being moved further away. The dominant source of noise at this property is Old Gloucester Road.
ISH3.42	The Applicant was asked to confirm whether Natural England are expecting any further information with regard to the issue about the 2m	The Applicant has interpreted the Natural England comment in the SOCG [REP1-037] as a request to consider the opportunity to recover information on the underlying bedrock geological strata underlying the Scheme, specifically for the excavation of the flood storage area. As reported in ES Chapter 10 (Geology and Soils) paragraphs 10.5.41 – 10.5.43 [REP1-018] reference to available DEFRA and Natural England datasets on the MAGIC website indicates that the geology on the site is not designated as environmentally sensitive and there are no geological environmental designation within the Order Limits or in the study area. Therefore, the watching brief is not considered as essential mitigation.

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	excavation depths and clarify the suggestion in the SoCG that there could be an update to the ES.	The Applicant has amended the Atkins Response to item 10.1 in the SoCG [REP1-037] to the following, and will liaise with Natural England on the revised wording as follows.: *The final design of the flood storage excavation areas is to be confirmed. If the final design requires excavations to progress to a depth greater than 2m, and therefore intercept the bedrock geology, Natural England will be consulted. From review of available datasets, it is understood that the strata do not have an environmental designation. Therefore, the consultation will confirm with Natural England, the items they are interested in recording during the watching brief. The findings will be reported back to Natural England.* A final SoCG with Natural England will be provided by the Applicant in line with the Examination timetable at Deadline 8.
ISH3.43	The Applicant was asked to check the consistency between language used and commitments in the REAC and DCO documentation.	The Applicant has undertaken a consistency check of the language used and commitments in the REAC and DCO documentation. Updated versions of both documents have been submitted at Deadline 4.

Appendix B. ISH3.5 LLFA email

Vaughan, Mike

From:	SIRET, Peter [redacted]gloucestershire.gov.uk>
Sent:	17 June 2024 15:52
To:	BEATTIE, Chris; BOWN, Graham
Cc:	BLOCKLEY, Jame[redacted]engineering.co.uk; James Mogridge; Vaughan, Mike; Padden, Andrew; John Webster; WATTS, Ben
Subject:	M5 J10 Highway Improvement Scheme Development Consent Order (DCO) - S.23 Disapplication - LLFA Agreement
Follow Up Flag:	Follow up
Flag Status:	Flagged

Dear Sirs,

I refer to your request that any consent required pursuant to Section 23 of the Land Drainage Act 1991 in relation to the above scheme can be disapplied within the Development Consent Order (DCO).

With the understanding that we will be consulted on the relevant details of the consentable works involved in the approved scheme, I confirm on behalf of GCC as the Lead Local Flood Authority, that it consents to the disapplication of S.23 being included in the DCO.

Regards

Peter Siret
Sustainable Drainage Engineer
Flood Risk Management (Strategic Infrastructure)
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Gloucestershire COUNTY COUNCIL
Flood Online Reporting Tool
You can now report property flooding online using **FORT**
If your home or business has been affected by flooding and you would like the Council to investigate the cause, you can report the incident on FORT. Click here or visit "Flooding and Drainage" at www.Gloucestershire.gov.uk.

1

Appendix C. Overlay Plans in response to ISH3-15

C.1. General Arrangement Sheet 12 of 16 with Landowner Title Boundaries

C.2. General Arrangement Sheet 13 of 16 with Landowner Title Boundaries

C.3. Works Plans Sheet 12 of 16 with Landowner Title Boundaries

C.4. Works Plans Sheet 13 of 16 with Landowner Title Boundaries

Scale 1:1250

10m 0m 10m 30m 50m 70m 90m

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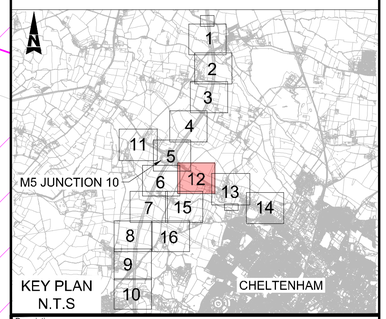
NOTES:

1. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH TR010063/APP/2.9 KEY PLAN AND TR010063/APP/2.9 KEY LEGEND.
2. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER AND OTHER APPLICATION PLANS.

KEY:

- BRUTON AND COUNSELL (ALSO BLOOR INTEREST) LAND BOUNDARY
- BLOOR INTEREST LAND BOUNDARY



KEY PLAN
N.T.S

Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description	ADDED LAND BOUNDARIES					
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
A1	C01	VN	CG	CJ	LJ	02/09/24

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

Project Title: M5 Junction 10 Improvements Scheme

Drawing Title: GENERAL ARRANGEMENT PLANS
REGULATION 5(2)(o)
SHEET 12 OF 16
WITH LANDOWNER TITLE BOUNDARIES

Drawing Number: TR010063/APP/9.68

Original Size:	Scale:	Project Ref. No:	Sheet:	Rev:
A1	1:1250	5228847	12 of 16	C01

FOR CONTINUATION REFER TO SHEET 13

INSET - 13A

FP ZCH1

Uckington Baptist Church

Little Orchard

Old Cart Barn

The Stables

The Grange

LEIGH BROOK

Track

30.0m

Hall

Uckington Farm

Path (um)

The Old Dairy

The Granary

The Coach House

Pigeon Farm Barns

BLOOR INTEREST LAND BOUNDARY

PROPOSED HIGHWAY BOUNDARY POSITION HIGHLIGHTED IN YELLOW

Pigeon House Farm

A4019 TOWARDS M5 JUNCTION 10

UCKINGTON JUNCTION

FOR CONTINUATION REFER TO SHEET 12

FP AUC12

Manor Farm

Old Hall

MOAT LANE

Newhouse Farm

BR AUC14

FP AUC15

Moat House

Moat

Moat Cottage

FP AUC15

FP ZCH1

FP AUC8

1500

DEVELOPERS PARK & RIDE ACCESS

SITE ACCESS A JUNCTION

BUS LANE

BUS GATE

A4019 TOWARDS CHELTENHAM

Track

CHELTENHAM WEST COMMUNITY FIRE STATION

ATTENUATION BASIN 6

PROPOSED ACCESS TRACK

FOR CONTINUATION REFER TO SHEET 14

FOR CONTINUATION REFER TO INSET 13A

Scale 1:1250

10m 0m 10m 30m 50m 70m 90m

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NOTES:

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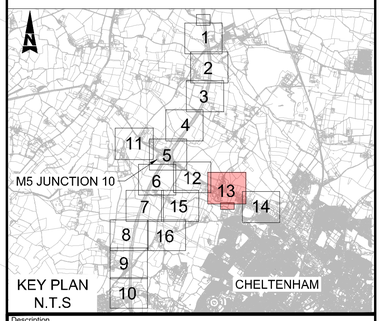
2. THESE PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER AND OTHER APPLICATION PLANS.

KEY:

BLOOR INTEREST LAND BOUNDARY



KEY PLAN N.T.S

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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description ADDED LAND BOUNDARIES						
A1	C01	VN	CG	CJ	LJ	02/09/24

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

Project Title: M5 Junction 10 Improvements Scheme

Drawing Title: GENERAL ARRANGEMENT PLANS REGULATION 5(2)(o) SHEET 13 OF 16 WITH LANDOWNER TITLE BOUNDARIES

Drawing Number: TR010063/APP/9.68

Original Size: A1 | Scale: 1:1250 | Project Ref. No: 5228847 | Sheet: 13 of 16 | Rev: C01

WORK NO. 7
FLOOD STORAGE AREA

WORK NO. 4a

WORK NO. 4d
ATTENUATION BASIN 4

WORK NO. 4c

WORK NO. 1k
CONSTRUCTION COMPOUND 3

WORK NO. 4bb

WORK NO. 29

WORK NO. 4i
CONSTRUCTION COMPOUND 4

WORK NO. 4g

WORK NO. 4g

WORK NO. 27

WORK NO. 29

WORK NO. 10

WORK NO. 5b
CONSTRUCTION COMPOUND 5

WORK NO. 4z

WORK NO. 4f

BR AUC1

A4019

FOR CONTINUATION REFER TO SHEET 5

BRUTON AND COUNSELL
(ALSO BLOOR INTEREST)
LAND BOUNDARY

WORK NO. 4j

WORK NO. 10

WORK NO. 27

WORK NO. 4

PROPOSED HIGHWAY
BOUNDARY POSITION
HIGHLIGHTED IN YELLOW

WORK NO. 4i
CONSTRUCTION COMPOUND 4

WORK NO. 4j

FOR CONTINUATION REFER TO SHEET 6

BODDINGTON CP

UCKINGTON CP

WITHYBROOK LANE

12m RH

Weld Bay

WEST CHELTENHAM LINK
ROAD TOWARDS A4019

WORK NO. 15

WORK NO. 16

A4019 TOWARDS
CHELTENHAM

WORK NO. 4h

WORK NO. 5k

WORK NO. 10

WORK NO. 5k

WORK NO. 5a

WORK NO. 5a

WORK NO. 5c
CONSTRUCTION COMPOUND 6

WORK NO. 21

WORK NO. 5k

WORK NO. 5

WORK NO. 5l

BLOOR INTEREST
LAND BOUNDARY

WORK NO. 30

COOKS LANE

Church View

Forge House

Smithy

Westwall Cottage

Rose Cottage

Track

Drain

WEST CHELTENHAM LINK
ROAD TOWARDS B4634

WORK NO. 5o
FLOOD COMPENSATION AREA

WORK NO. 5n
FLOOD COMPENSATION AREA

FP AUC11

FP AUC12

WORK NO. 4k

FOR CONTINUATION REFER TO SHEET 13

FOR CONTINUATION REFER TO SHEET 15

KEY:

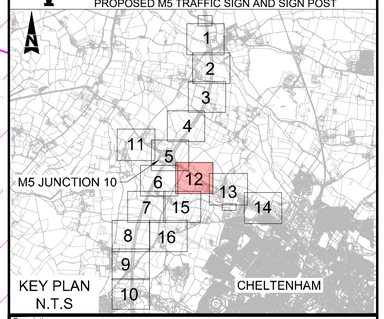
- BRUTON AND COUNSELL (ALSO BLOOR INTEREST) LAND BOUNDARY
- BLOOR INTEREST LAND BOUNDARY

NOTES:

1. THE WORKS PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER AND OTHER APPLICATION PLANS.

KEY

- DEVELOPMENT CONSENT ORDER (DCO) LIMITS
- SCHEME LAYOUT (SHOWN FOR ILLUSTRATIVE PURPOSES)
- EXISTING ORDNANCE SURVEY DATA
- PROPOSED BRIDGE STRUCTURE
- PROPOSED UNDERPASS
- PROPOSED CULVERT STRUCTURE
- EXISTING HIGHWAY
- HIGHWAY WORK CENTRE LINE
- HIGHWAY WORK CENTRE LINE (BUS LANE)
- PRIVATE MEANS OF ACCESS CENTRE LINE
- HIGHWAY WORK LIMIT OF DEVIATION, WHERE NOT COINCIDENT WITH DCO LIMITS
- COMMENCEMENT OF LINEAR HIGHWAY WORKS
- TERMINATION OF LINEAR HIGHWAY WORKS
- NON-LINEAR HIGHWAY WORK LIMIT, WHERE NOT COINCIDENT WITH DCO LIMITS
- ENVIRONMENTAL BARRIER
- UTILITY DIVERSION LIMIT OF DEVIATION, WHERE NOT COINCIDENT WITH DCO LIMITS
- W — WATER DIVERSION (CENTRE LINE)
- T — TELECOMMUNICATION/MEDIA CABLES DIVERSION (CENTRE LINE)
- G — GAS DIVERSION (CENTRE LINE)
- E — ELECTRICITY DIVERSION (CENTRE LINE)
- SITE COMPOUND, SOIL STORAGE OR OTHER TEMPORARY WORKS SITE
- ENVIRONMENTAL COMPENSATION AND MITIGATION WORKS
- ENVIRONMENTAL WORK BOUNDARY, WHERE NOT COINCIDENT WITH DCO BOUNDARY
- FP XXX — EXISTING PUBLIC RIGHT OF WAY (PROW)
- X — EXISTING PUBLIC RIGHT OF WAY TO BE STOPPED UP
- PROPOSED FOOTPATH
- PROPOSED BRIDLEWAY
- PARISH BOUNDARY
- PROPOSED DITCHES
- PROPERTIES TO BE DEMOLISHED
- BAT HOUSE
- FLOOD COMPENSATION AREA
- PROPOSED/EXISTING GANTRY
- PROPOSED M5 TRAFFIC SIGN AND SIGN POST



KEY PLAN
N.T.S

Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
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Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
ADDED LAND BOUNDARIES						
A1	C01	VN	CG	CJ	LJ	02/09/24

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

Project Title: M5 Junction 10 Improvements Scheme

Drawing Title:

WORKS PLANS
REGULATION 5(2)(j)
SHEET 12 OF 16
WITH LANDOWNER TITLE BOUNDARIES

Drawing Number: TR010063/APP/9.68

Scale 1:1250
10m 0m 10m 30m 50m 70m 90m

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Original Size:	Scale:	Project Ref. No:	Sheet:	Rev:
A1	1:1250	5228847	12 of 16	C01

FOR CONTINUATION REFER TO SHEET 13

FOR CONTINUATION REFER TO SHEET 12

FOR CONTINUATION REFER TO SHEET 14

FOR CONTINUATION REFER TO INSET 13A

WORK NO. 4j
WORK NO. 4g
WORK NO. 16
WORK NO. 4
WORK NO. 15
WORK NO. 27
BLOOR INTEREST LAND BOUNDARY
PROPOSED HIGHWAY BOUNDARY POSITION HIGHLIGHTED IN YELLOW
WORK NO. 4o
WORK NO. 4n
WORK NO. 4m
WORK NO. 17
WORK NO. 22
WORK NO. 11
WORK NO. 31
WORK NO. 4l
WORK NO. 4e
WORK NO. 13
WORK NO. 23
WORK NO. 4p
WORK NO. 4aa
WORK NO. 18
WORK NO. 4w
WORK NO. 4r
WORK NO. 24
WORK NO. 4s
WORK NO. 32
WORK NO. 4q ATTENUATION BASIN 6
WORK NO. 4v
WORK NO. 4t
A4019 TOWARDS M5 JUNCTION 10
A4019 TOWARDS CHELTENHAM
A4019
UCKINGTON JUNCTION
UCKINGTON
THE GREEN
MOAT LANE
HOMECROFT DRIVE
SITE ACCESS A JUNCTION
FP AUC8
FP AUC12
FP AUC15
BR AUC14
FP ZCH1
LEIGH BROOK
Uckington Baptist Church
Little Orchard
Old Cart Barn
The Stables
The Grange
Hall
Uckington Farm
The Old Dairy
The Granary
Pigeon Farm Barns
Manor Farm
Old Hall
Moat House
Moat
Newhouse Farm
Track
Path (um)

NOTES:

1. THE WORKS PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER AND OTHER APPLICATION PLANS.

KEY

- DEVELOPMENT CONSENT ORDER (DCO) LIMITS
- SCHEME LAYOUT (SHOWN FOR ILLUSTRATIVE PURPOSES)
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- PROPOSED UNDERPASS
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- PARISH BOUNDARY
- PROPOSED DITCHES
- PROPERTIES TO BE DEMOLISHED
- BAT HOUSE
- FLOOD COMPENSATION AREA
- PROPOSED/EXISTING GANTRY
- PROPOSED M5 TRAFFIC SIGN AND SIGN POST

KEY:

- BLOOR INTEREST LAND BOUNDARY

KEY PLAN N.T.S

M5 JUNCTION 10 — CHELTENHAM

Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description ADDED LAND BOUNDARIES						
A1	C01	VN	CG	CJ	LJ	02/09/24

Drawing Suitability: APPROVED - PUBLISHED

Status: A1

Project Title: M5 Junction 10 Improvements Scheme

Drawing Title: WORKS PLANS REGULATION 5(2)(j) SHEET 13 OF 16 WITH LANDOWNER TITLE BOUNDARIES

Drawing Number: TR010063/APP/9.68

Original Size: A1 | Scale: 1:1250 | Project Ref. No: 5228847 | Sheet: 13 of 16 | Rev: C01

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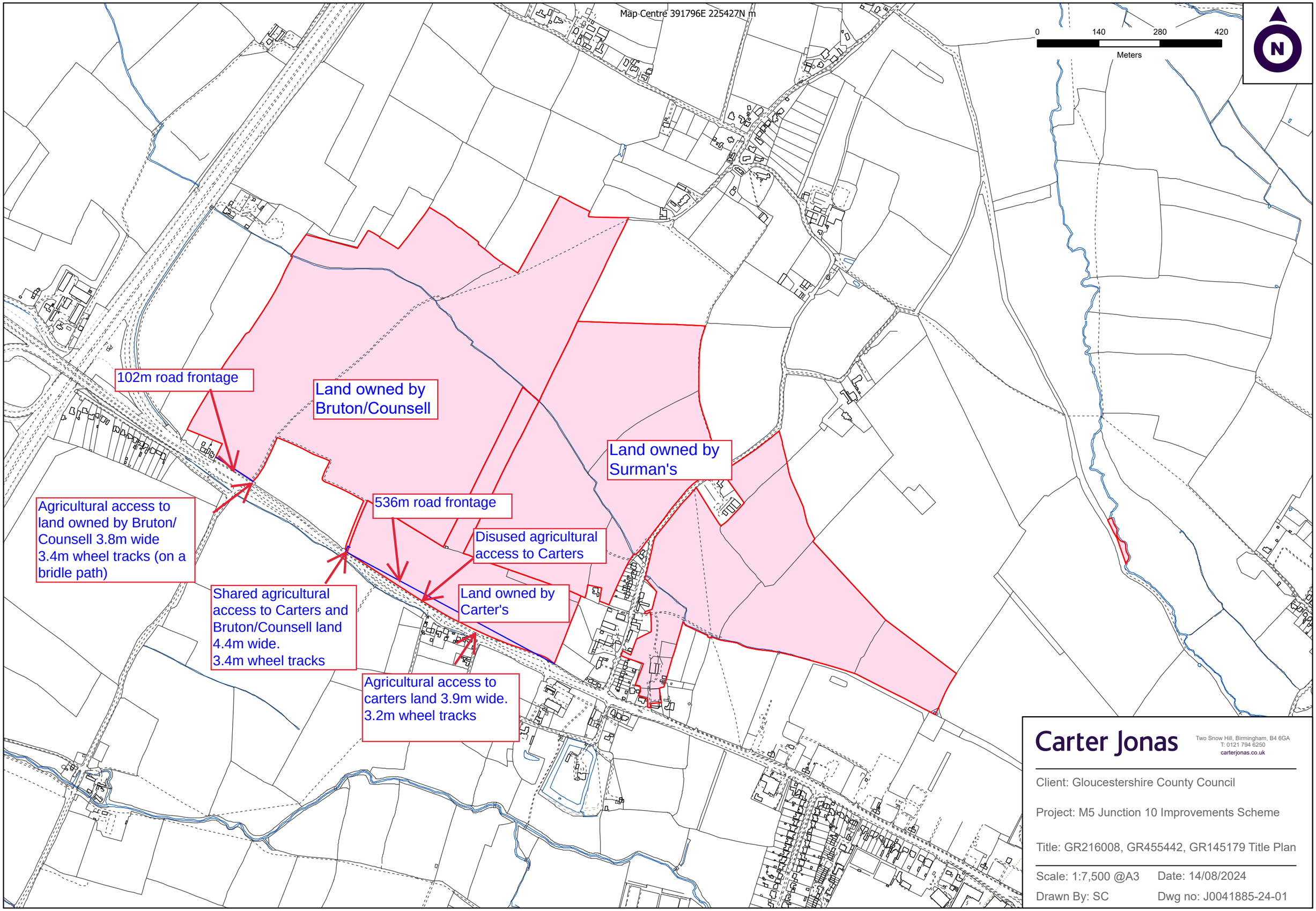
Scale 1:1250 — 10m 0m 10m 30m 50m 70m 90m

Appendix D. Current road frontage plan in response to ISH3.13

Path \\cj.local\geo-data\Land Assembly Services\04 Live Projects\J0041885 - Gloucester County Council M5 J10 (DCO)\03 Technical\04 Order Documents\03 Plan\01 Current\Title Extent Plan\J0041885-24-01 GR216008, GR455442, GR145179 Title Plan.aprx



Carter Jonas

Two Snow Hill, Birmingham, B4 6GA
T: 0121 794 6250
carterjonas.co.uk

Client: Gloucestershire County Council

Project: M5 Junction 10 Improvements Scheme

Title: GR216008, GR455442, GR145179 Title Plan

Scale: 1:7,500 @A3 Date: 14/08/2024

Drawn By: SC Dwg no: J0041885-24-01

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