

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 8

8.1 Draft Statement of Common Ground with the Environment Agency

Planning Act 2008

Rule 8 (1)(e)

Infrastructure Planning (Examination Procedure) Rules 2010

November 2021

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Examination Procedure) Rules 2010****A428 Black Cat to Caxton Gibbet improvements**
Development Consent Order 202[]

Draft Statement of Common Ground with the Environment Agency

Regulation Number	Rule 8(1)(e)
Planning Inspectorate Scheme Reference	TR010044
Document Reference	TR010044/EXAM/8.1
Author	A428 Black Cat to Caxton Gibbet improvements Project Team, National Highways

Version	Date	Status of Version
Rev 0	31 August 2021	Final for Submission - Deadline 1
Rev 1	4 November 2021	Final for Submission - Deadline 4

STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) National Highways Company Limited and (2) Environment Agency.

Signed..... 

Anne-Marie Rogers
Senior Project Manager
on behalf of National Highways
Date: 4 November 2021

Signed 

Neville Benn
Senior Planning Advisor
on behalf of Environment Agency
Date: 4 November 2021

Table of contents

Chapter	Pages
1 Introduction	1
1.1 Purpose of this document	1
1.2 Parties to this Statement of Common Ground	2
1.3 Terminology	2
2 Record of Engagement	3
3 Issues Raised	12

Table of Tables:

Table 2-1 – Record of Engagement	3
Table 3-1 – Environmental matters	12
Table 3-2 – DCO and Legal Matters	42

1 Introduction

1.1 Purpose of this document

- 1.1.1 This Statement of Common Ground (SoCG) has been prepared in respect of the A428 Black Cat to Caxton Gibbet improvements Scheme (the Scheme) made by National Highways Company Limited (National Highways) to the Secretary of State for Transport (Secretary of State) for a Development Consent Order (the Order) under section 37 of the Planning Act 2008 (PA 2008).
- 1.1.2 The order, if granted, would authorise National Highways to construct a new 10 mile (16km) dual 2-lane carriageway from the Black Cat roundabout to Caxton Gibbet roundabout and in addition approximately 1.8 miles (3km) of tie-in works. The Scheme includes the following components:
- a. A new three-level grade separated junction at Black Cat roundabout, with the A1 at the lower level, the new dual carriageway on the upper level and a roundabout between the two at approximately existing ground level. In addition to slip roads, a new free flowing link between the A421 eastbound carriageway and the A1 northbound carriageway will also be provided.
 - b. A new grade separated all movements junction will be constructed to the east of the existing Cambridge Road roundabout to provide access to the new dual carriageway and maintain access to the existing A428.
 - c. At the Caxton Gibbet roundabout, a new grade separated all movements junction will be constructed, incorporating the existing roundabout on the south side of the new dual carriageway and a new roundabout on the north side. The new dual carriageway will then tie-in to the existing A428 dual carriageway to the east of the new Caxton Gibbet junction.
 - d. In the vicinity of the new Black Cat junction, direct access onto the A1 from some local side roads and private premises will be closed for safety reasons. A new local road will provide an alternative route. The existing Roxton Road bridge will be demolished and replaced with a new structure to the west to accommodate the realigned A421.
 - e. New crossings will be constructed to enable the new dual carriageway to cross the River Great Ouse, East Coast Main Line railway, Barford Road, the B1046/Potton Road, Toseland Road and the existing A428 at Eltisley.
 - f. The existing A428 between St Neots and Caxton Gibbet will be de-trunked and retained for local traffic and public transport with maintenance responsibility transferred to the local highway authorities.
 - g. An alternative access will be provided to side roads at Chawston, Wyboston and Eltisley.
 - h. There will be safer routes for walkers, cyclists, and horse riders.

1.1.3 This SoCG has been produced to confirm to the Examining Authority (ExA) where agreement has been reached between the parties to it, and where agreement has not (yet) been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the Examination.

1.2 Parties to this Statement of Common Ground

1.2.1 This SoCG has been prepared by (1) National Highways as the Applicant and (2) the Environment Agency (EA).

1.2.2 National Highways (formerly known as Highways England) became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing National Highways made provision for all legal rights and obligations of National Highways, including in respect of the Application, to be conferred upon or assumed by National Highways.

1.2.3 The EA is a prescribed consultee for this application under Sections 42(1)(a) and 56(2)(a) of the PA 2008.

1.2.4 Collectively National Highways and EA are referred to as 'the parties'.

1.3 Terminology

1.3.1 In Section 3 of this SoCG:

- a. "Agreed" indicates where the issue has been resolved.
- b. "Not Agreed" indicates a final position.
- c. "Under discussion" where these points will be the subject of on-going discussion wherever possible to resolve, or refine, the extent of disagreement between the parties.

1.3.2 It can be taken that any matters not specifically referred to in the Issues Raised chapter of this SoCG are not of material interest or relevance to the EA's representation and therefore have not been considered in this document. It is recognised however that engagement between both parties will need to continue due to their joint vested interest in the area of the Scheme.

2 Record of Engagement

2.1.1 The parties have been engaged in consultation since the pre-application period for the Scheme. A summary of the meetings and correspondence that has taken place between National Highways and the EA in relation to the Application is outlined in **Table 2-1**.

Table 2-1 – Record of Engagement

Date	Form of correspondence	Key topics discussed
20-06-2017	Email from EA Waterways to Highways England	Navigational clearance requirements for any structure built over a navigational river.
29-11-2017	Meeting – River Great Ouse Crossing Structure	Key topics include: <ul style="list-style-type: none"> • Introduction to River Great Ouse crossing structure options. • EA watercourse crossing requirements. • EA approval/licence requirements.
16-03-2018	Email from EA to Highways England	Restored quarry levels in the River Great Ouse base model.
08-06-2018	Email from EA to Highways England	EA confirm any increase in built footprint within the 1% Annual Exceedance Probability (AEP) flood extent, including an allowance for climate change, can be directly compensated for on a volume-for-volume and level-for-level basis.
12-07-2019	Email from Highways England to EA	Hydraulic model shared for EA review.
16-07-2019	Letter from EA (response to Statutory Consultation)	Key topics include: <ul style="list-style-type: none"> • Flood Risk. • Groundwater and Geology. • Ecology.
10-09-2019	Email from Highways England to EA	Structure of technical working groups and forums shared with EA.
18-09-2019	Email from EA to Highways England with attached review of A428 hydraulic modelling	Key topics include: <ul style="list-style-type: none"> • Hydraulic model review. • Flood Risk Betterment. • Proposed design. • Floodplain compensation.

Date	Form of correspondence	Key topics discussed
11-10-2019	Meeting – Environment Technical Working Group	<p>Key topics include:</p> <ul style="list-style-type: none"> • Environmental Impact Assessment (EIA) and environmental themes. • Environmental constraints. • Project timeline. • Red line boundary (Development Consent Order (DCO) Order Limits).
17-10-2019	Meeting – Flood Risk / Water Management Group	<p>Key topics include:</p> <ul style="list-style-type: none"> • A14 lessons learnt. • Bedfordshire Watercourse Responsibilities. • Central Cambridgeshire/ Huntingdonshire Area Watercourses. • South Cambridgeshire Area Watercourses. • EA/Lead Local Flood Authority (LLFA) watercourse boundaries. • Climate Change. • Watercourse Crossings. • Engagement agreements. • Consents. • Water Quality Assessment of Operation Runoff. • Construction.
14-01-2020	Email from Highways England to EA	Bedfordshire Watercourses Technical Note shared with EA for their review.
15-01-2020	Email from Highways England to EA	Request for historical flood event data for fluvial, pluvial, groundwater, sewer, snowmelt, reservoir and other artificial flood sources
28-01-2020	Email from Highways England to EA	<p>Request sent to EA for:</p> <ul style="list-style-type: none"> • Reservoir locations to enable the assessment of the flood risk from reservoirs within the study area. • Flood defences locations. • Average monthly rainfall data. • River gauge data (flows, levels, groundwater) for River Great Ouse and possibly Hen Brook.

Date	Form of correspondence	Key topics discussed
10-02-2020	Email re modelling review from EA to Highways England	<p>Key topics include:</p> <ul style="list-style-type: none"> • Advice on modelling to establish the downstream conditions. • EA request that Highways England update the model report to provide full details demonstrating the method of establishing the downstream boundary. • Flood risk net gain – EA express disappointment that this has not appeared to be an ambition of Highways England. • Flood resilience of St Neots. • Flood risk net gain at Fox Brook and Hen Brook. • Use of restored quarry levels in the flood plain compensation calculations.
14-02-2020	Email from EA to Highways England	Historic flood event data and a map and table showing all the relevant historical flood event data for the chosen area provided by the EA.
25-02-2020	Meeting – River Great Ouse Hydraulic Modelling	<p>Key topics include:</p> <ul style="list-style-type: none"> • Overview of River Great Ouse hydraulic model. • Overview of the project to date from a modelling perspective. • Planned River Great Ouse hydraulic modelling to submission of DCO application. • The potential for flood related works outside of the A428 scope.
12-03-2020	Flood Risk/ Water Management Technical Working Group meeting	<p>Key topics include:</p> <ul style="list-style-type: none"> • Bedfordshire and Cambridgeshire Watercourse Technical Note discussion. • Drainage Strategy Report, and Flood Risk Assessment (FRA). • Maintenance access. • BP access garage outfalls. • Scope of cross sections. • Modelling scenarios/scope/methodology. • Drainage outfall consents. • The inclusion of mammal ledges in the Environmental Statement (ES). • Flow rates in Sustainable Drainage Systems (SuDS). • Presentation of floodplain extents in the technical note for the next Technical Working Group.

Date	Form of correspondence	Key topics discussed
		<ul style="list-style-type: none"> Cambridgeshire County Council and Central Bedfordshire Council requested that justification for or lack of proposed mammal ledges to be provided.
17-04-2020	Email from Highways England to EA	Request for meetings with EA's groundwater manager and the biodiversity manager.
29-05-2020	Email from Highways England to EA	Draft of River Great Ouse Hydraulic Modelling Report (to be appendix of final FRA) and 2D watercourse model shared for EA review.
04-06-2020	Email from Highways England to EA	Draft versions of the A428 Ordinary Watercourse Hydraulic Modelling Report shared with EA.
15-06-2020	Meeting with EA and Highways England	<p>Water Framework Directive (WFD) compliance meeting including:</p> <ul style="list-style-type: none"> Overview of the WFD. Explanation of the draft designs e.g. structures and culverts. Impact assessment and mitigation. SOCG.
25-06-2020	Meeting with EA	To discuss the approach to the groundwater risk assessment.
25-06-2020	Meeting - Environmental Technical Working Group	<p>Key topics include:</p> <ul style="list-style-type: none"> Supplementary consultation. Changes to the scheme since statutory consultation. The status of the ongoing EIA, incorporating design changes. Environmental masterplan development, which would illustrate mitigation. <p>Next steps in stakeholder engagement.</p>
01-07-2020	Email from Highways England to EA	Highways England shared the Ordinary Watercourse Hydraulic Modelling Report, and Ordinary Watercourse Hydrology Report including FEH calculation record with the EA.
03-07-2020	Meeting with EA	Discussion on surface water including an update on progress of the Highways England Water Risk Assessment Tool (HEWRAT) assessment and drainage aspects.
10-07-2020	Email re modelling review from EA to Highways England	<p>Key topics include:</p> <ul style="list-style-type: none"> Option Development. 2D Model - Flood Plain Topography. Model Setup – Scheme Permanent Scenario.

Date	Form of correspondence	Key topics discussed
		<ul style="list-style-type: none"> • Model Setup – Scheme Permanent + Temporary Scenario. • Baseline Scenario. • Proposed Permanent Scheme Scenario.
29-07-2020	Email from EA to Highways England	EA official response to Scheme-wide supplementary consultation, covering the following key topics: <ul style="list-style-type: none"> • Borrow pits. • Flood plain compensation areas. • Waste. • Hydrogeology.
31-07-2020	Email regarding model review of Hen Brook from EA to Highways England	Key topics include: <ul style="list-style-type: none"> • Model boundary conditions. • Channel design. • Evidence of flood plain compensation. • Flow estimates. • Hydrology.
31-07-2020	Email regarding model review of South Brook from EA to Highways England	Key topics include: <ul style="list-style-type: none"> • Evidence of flood plain compensation. • Downstream flows. • interaction between the South Brook and River Great Ouse. • Flow estimates. • Hydrology.
August 2020	Email from Highways England to EA	Issued Groundwater Risk Assessment Technical Note to EA.
06-11-2020	Meeting with EA Land and Water team	Discussions included construction risks, operational runoff and mitigation / drainage proposals.
16-12-2020	Email from EA to Highways England	EA Issued a response to the Groundwater Risk Assessment Technical Note.
19-01-2021	Meeting with EA	In this WFD meeting, it was explained how culverts would be mitigated and opportunities for enhancement of watercourses.
25-01-2021	Pre-meeting Phone conversation with EA	To discuss and understand some of the EA's comments in their response to the Groundwater Water Risk Assessment Technical Note/Approach to the Groundwater Assessment.

Date	Form of correspondence	Key topics discussed
27-01-2021	Email to the EA from Highways England	Issued pre-meeting brief document which included clarifications/responses to address the EA comments to the Groundwater Risk Assessment Technical Note. The brief also included new additional groundwater quality analyses results.
28-01-2021	Meeting with the EA	<p>Key topics discussed included:</p> <ul style="list-style-type: none"> • The EA's response from 16th December to the Groundwater Technical Note. • Approach to the Groundwater Impact Assessment. • Conceptual model and analytical calculations used in the Groundwater quantitative impact assessment. • Groundwater quality analyses results. • Cuttings and Borrow pits groundwater dewatering abstraction and discharge licence. • Borrow pit restoration material and screening.
27-04-2021	Meeting with EA re: Highways England Project Control Framework (PCF) Stage 4 update	<p>Key topics include:</p> <ul style="list-style-type: none"> • DCO application update. • Delivery Integration partner. • Update on flood model review and legal agreement. • Inputs and engagement going forward. • Programme and future meetings.
18-05-2021	Meeting – Flood Risk	<p>Key topic include:</p> <ul style="list-style-type: none"> • Summary of models submitted for review and current status: <ul style="list-style-type: none"> - River Great Ouse - South Brook - Wintringham Brook - Wintringham Tributary - Top Farm - Rectory Farm - Hen Brook • Summary of actions. • Programme for further deliverables. • Programme for further meetings.
08-06-2021	Meeting – Flood Risk	The Technical Response Note to EA comments on the FRA and Ordinary Watercourse Modelling Report was discussed.

Date	Form of correspondence	Key topics discussed
10-06-2021	Letter from the EA to the Planning Inspectorate	Letter detailing the EA relevant representation for the DCO.
14-06-2021	Meeting – Biodiversity	<p>A biodiversity update meeting was presented. Key topics included:</p> <ul style="list-style-type: none"> • Biodiversity assessment: Summary. • Watercourses and WFD status. • River Great Ouse: surveys, mitigation and enhancement. • Other watercourses: surveys, mitigation and enhancement. • Riparian Mammals: surveys, mitigation and enhancement. • Breedon Quarry restoration. • Biodiversity enhancements and net gain.
30-06-2021	Email from the EA to Highways England	Email from the EA to Highways England on timescales for an FRA technical note, draft SOCG and further updates on Protected Provisions.
02-07-2021	Email from Highways England to the EA	Email from Highways England to the EA responding to the EA's points on the FRA technical note, draft SOCG and Protected Provisions.
13-07-2021	Meeting – Protected Provisions	<p>A Protected Provisions meeting took place between Highways England, the EA and Womble Bond Dickinson.</p> <p>The key topics discussed were:</p> <ul style="list-style-type: none"> • Flood Risk Activity Permits. • Continued operational access to the River Great Ouse for river maintenance – paragraph 25 protective provisions. • Protecting Main River Navigation – Article 58 draft DCO • Groundwater Protection. • Notice Requirements - paragraph 22(2) protective provisions.
15-07-2021	Email from Highways England to the EA	Email from Highways England to the EA issuing FRA Technical Note in response to EA correspondence and associated meetings held with the EA.
16-07-2021	Email from Highways England to the EA	Issue of the draft SOCG to the EA.
16-07-2021	Email from the EA to Highways England	Email from the EA to Highways England highlighting some concerns following review of the FRA technical note, including a request to issue details of the additional modelling for Hen Brook. Concerns about the previous Hen Brook modelling and Begwary Brook sensitivity testing were also raised.

Date	Form of correspondence	Key topics discussed
21-07-2021	Email from Highways England to the EA	Email from Highways England to the EA issuing details of the further Hen Brook modelling and responding to concerns on Begwary Brook sensitivity testing.
29-07-2021	Email from the EA to Highways England	Email from the EA to Highways England with responses to the further Hen Brook modelling.
30-07-2021	Meeting – Groundwater	A Groundwater Risk Assessment and management plans meeting took place between Highways England and the EA.
23-08-2021	Email from the EA to National Highways	Response to the draft SOCG received from the EA.
04-10-2021	Email from National Highways to the EA	Email from National Highways to the EA requesting availability to discuss the groundwater risk assessment
07-10-2021	Email from the EA to National Highways	Email from the EA to National Highways sharing their availability and requesting ample time to review the groundwater risk assessment ahead of the meeting.
07-10-2021	Email from the EA to National Highways	Email from the EA to National Highways requesting the document that details the responses to the EA's Relevant Representations.
08-10-2021	Email from National Highways to the EA	Email from National Highways to the EA sharing the responses to the EA's Relevant Representations.
13/10/2021	Email from National Highways to the EA	Email from National Highways to the EA with an invitation to a groundwater risk assessment meeting to be held on 2 nd November 2021.
19/10/2021	Email from National Highways to the EA	Email from National Highways to the EA issuing the updated Groundwater Risk Assessment for review.
02/11/2021	Meeting	Groundwater Risk Assessment discussion between National Highways and the EA.
02/11/2021 and 04/11/2021	Emails from the EA to National Highways	Emails from the EA to National Highways with comments on the SOCG for Deadline 4.
03/11/2021	Email from the EA to National Highways	Email from the EA to National Highways providing comments on the Groundwater Risk Assessment.

2.1.2 It is agreed that this is an accurate record of the key engagement and consultation undertaken between (1) National Highways and (2) the EA in relation to the issues addressed in this SoCG.

- 2.1.3 The issues and matters highlighted in Section 3 of this SoCG summarise the key issues that have been identified in relation to a number of key areas of the DCO application.

3 Issues Raised

Table 3-1 – Environmental matters

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
General Legislation and policy	Chapter 8, Biodiversity [APP-077] Chapter 9, Geology and Soils [APP-078] Chapter 13, Road Drainage and the Water Environment [APP-082] Chapter 15, Assessment of Cumulative Effects [APP-084] Appendix 13.1, Water Framework Directive [APP-217] Appendix 13.4, Flood Risk Assessment [APP-220]	National Highways considers that the Environmental Statement (ES) has identified and appropriately considered all applicable legislation and national policy pertaining to the following assessments undertaken as part of the Environmental Impact Assessment (EIA) of the Scheme: <ul style="list-style-type: none"> Biodiversity [APP-077]. Geology and soils [APP-078]. Road drainage and the water environment (including the Flood Risk Assessment and the Water Framework Directive (WFD) Assessment) [APP-082] [APP-217] [APP-220]. Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. 	The EA is content that these assessments have considered all relevant legislation and national policy.	Agreed	November 2021
General Study area definition and extents	Chapter 8, Biodiversity [APP-077] Chapter 9, Geology and Soils [APP-078]	The study areas adopted by National Highways within the following assessments reflect current best practice and standards: <ul style="list-style-type: none"> Biodiversity [APP-077]. 	The EA is content that the geographical extents of the adopted study areas within these assessments cover the area over	Agreed	November 2021

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Chapter 15, Assessment of Cumulative Effects [APP-084]</p> <p>Appendix 13.1, Water Framework Directive [APP-217]</p> <p>Appendix 13.4, Flood Risk Assessment [APP-220]</p>	<ul style="list-style-type: none"> • Geology and soils [APP-078]. • Road drainage and the water environment (including the Flood Risk Assessment and the WFD Assessment) [APP-082] [APP-217] [APP-220]. • Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. <p>National Highways considers that the geographical extents of the adopted study areas are appropriate to identify the likely direct and indirect effects of the Scheme on sensitive features and receptors.</p>	<p>which direct and indirect effects of the Scheme are likely to occur.</p>		
<p>General Application of expert / professional judgements</p>	<p>Chapter 8, Biodiversity [APP-077]</p> <p>Chapter 9, Geology and Soils [APP-078]</p> <p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Chapter 15, Assessment of Cumulative Effects [APP-084]</p>	<p>The identification of likely significant effects on sensitive features and receptors has been informed by professional judgement and the views of relevant technical specialists, where necessary.</p> <p>National Highways considers the application of professional judgement by its specialists within the following assessments to be appropriate and robust:</p> <ul style="list-style-type: none"> • Biodiversity [APP-077]. • Geology and soils [APP-078]. 	<p>The EA is content with how National Highways has applied professional judgement in the assessments of effects on sensitive features and receptors undertaken and reported.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	<p>Appendix 13.1, Water Framework Directive [APP-217]</p> <p>Appendix 13.4, Flood Risk Assessment [APP-220]</p>	<ul style="list-style-type: none"> Road drainage and the water environment (including the Flood Risk Assessment and the WFD Assessment) [APP-082] [APP-217] [APP-220]. Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. 			
<p>General</p> <p>Assessment assumptions and limitations</p>	<p>Chapter 8, Biodiversity [APP-077]</p> <p>Chapter 9, Geology and Soils [APP-078]</p> <p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Chapter 15, Assessment of Cumulative Effects [APP-084]</p> <p>Appendix 13.1, Water Framework Directive [APP-217]</p> <p>Appendix 13.4, Flood Risk Assessment [APP-220]</p>	<p>The following assessments record the assumptions applied and the approaches taken by National Highways to reduce any uncertainty resulting from any limitations encountered:</p> <ul style="list-style-type: none"> Biodiversity [APP-077]. Geology and soils [APP-078]. Road drainage and the water environment (including the Flood Risk Assessment and the WFD Assessment) [APP-082] [APP-217] [APP-220]. Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. <p>National Highways considers the assumptions adopted in these assessments to be reasonable and appropriate.</p>	<p>The EA is content that the assumptions recorded within these assessments are reasonable and accepts that the limitations encountered do not impact upon the validity of the reported findings.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>General Worst-case scenario: limits of deviation</p>	<p>Works Plans [APP-009] [APP-010] Engineering Sections [APP-017 to APP 022] Chapter 8, Biodiversity [APP-077] Chapter 9, Geology and Soils [APP-078] Chapter 13, Road Drainage and the Water Environment [APP-082] Chapter 15, Assessment of Cumulative Effects [APP-084] Appendix 13.1, Water Framework Directive [APP-217] Appendix 13.4, Flood Risk Assessment [APP-220]</p>	<p>The following assessments have taken into account the lateral limits of deviation forming part of the Scheme design, as defined on the Works Plans [APP-009] [APP-010], and the vertical limits of deviation defined on the Engineering Sections [APP-017 to APP 022]:</p> <ul style="list-style-type: none"> • Biodiversity [APP-077]. • Geology and soils [APP-078]. • Road drainage and the water environment (including the Flood Risk Assessment and the WFD Assessment) [APP-082] [APP-217] [APP-220]. • Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. <p>National Highways considers that the maximum extents of possible deviation accounted for in these assessments represent the realistic worst-case assessment scenario.</p> <p>National Highways to clarify position on limits of deviation with the EA.</p>	<p>The EA is yet to confirm that these assessments have appropriately considered the worst-case scenario in relation to the potential for the Scheme design and/or its construction to deviate within the lateral and vertical extents defined on the Works Plans and Engineering Sections.</p> <p>The EA is yet to comment on NH's proposed approach to limits of deviation in the dDCO.</p>	<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
General Worst-case scenario: design criteria and climate allowances	Appendix 13.3, Drainage Strategy Report [APP-219] Appendix 13.4, Flood Risk Assessment [APP-220]	Climate change provisions in line with DMRB CG 501 and other best practice have been taken into account within the drainage design [APP-219] and the Flood Risk Assessment [APP-220] .	The EA is content that the climate change provisions included within the drainage design and the flood risk mitigation proposals take account of latest UK Climate Projections 2018 (UKCP18).	Agreed	November 2021
General Presentation of results	Chapter 8, Biodiversity [APP-077] Chapter 9, Geology and Soils [APP-078] Chapter 13, Road Drainage and the Water Environment [APP-082] Chapter 15, Assessment of Cumulative Effects [APP-084] Appendix 13.1, Water Framework Directive [APP-217] Appendix 13.4, Flood Risk Assessment [APP-220]	The following application documents present the approaches to, and outcomes of, assessments undertaken to identify the likely significant effects of the construction, operational and (where relevant) the maintenance phases of the Scheme: <ul style="list-style-type: none"> • Biodiversity [APP-077]. • Geology and soils [APP-078]. • Road drainage and the water environment (including the Flood Risk Assessment and the WFD Assessment) [APP-082] [APP-217] [APP-220]. • Assessment of cumulative effects (as related to the topics and subject of interest to the EA) [APP-084]. National Highways considers that the format and methods used to present the assessments undertaken are clear and unambiguous.	The EA is content with the formats and styles adopted by National Highways in presenting the details of the assessments undertaken.	Agreed	November 2021

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Scheme Design Route / junction design selection</p>	<p>Chapter 2, The Scheme [APP-071] Chapter 3, Assessment of Alternatives [APP-072]</p>	<p>National Highways has undertaken thorough and comprehensive route studies, junction appraisals and optioneering studies during the design-development of the Scheme, in pursuit of establishing its preferred design solution, as described in Chapter 2, The Scheme [APP-071] and Chapter 3, Assessment of Alternatives [APP-072] of the Environmental Statement.</p> <p>In considering, evaluating and balancing constrains and opportunities, National Highways considers that the preliminary design of the new dual carriageway represents the optimum solution to meet the Scheme objectives.</p>	<p>The EA is content that the studies, optioneering exercises and appraisals undertaken by National Highways are appropriate from a design perspective.</p>	<p>Agreed</p>	<p>November 2021</p>
<p>Waste Waste management</p>	<p>Chapter 2, The Scheme [APP-071] Chapter 10, Material Assets and Waste [APP-079] First Iteration EMP [APP-234]</p>	<p>National Highways has undertaken an assessment of the quantities and types of waste that construction of the Scheme would generate, as reported in Chapter 10, Material Assets and Waste of the Environmental Statement [APP-079], and has set out within the First iteration EMP [APP-234] how waste would be managed and disposed of.</p> <p>National Highways considers that both the assessment of waste and the management and disposal measures that would be implemented are comprehensive and robust.</p>	<p>The EA is content with the approach to, the findings of, and the mitigation measures within, the assessment of waste arising from construction of the Scheme.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Biodiversity Data collection methods, baseline data and the identification and sensitivity of relevant features and receptors</p>	<p>Chapter 8, Biodiversity [APP-077]</p>	<p>The baseline conditions have been collated using desk-based and field-based techniques, and through consultation with stakeholders.</p> <p>National Highways considers the scope, coverage and timing of surveys undertaken to establish the baseline conditions and sensitive features and receptors are in line with best practice and appropriate to inform the assessment of direct and indirect effects reported in the Biodiversity assessment [APP-077].</p> <p>National Highways is currently undertaking a suite of surveys covering terrestrial habitats, aquatic habitats and certain species, and is carrying out searches for any new records of flora and fauna, to ensure the baseline data relied upon in the biodiversity assessment is kept up to date. The following lists indicate the surveys being or completed during 2021 and outlines the pre-construction surveys planned for 2022. Further information will be submitted at Deadline 4 of the Examination.</p> <p>2021 Ecological Surveys</p>	<p>Subject to the following paragraph, the EA is content with the scope, coverage and findings of the data collection and surveys undertaken inform the assessment of effects on the identified sensitive features and receptors.</p> <p>The EA has identified that further updates to the ecological surveys are likely to be required as the Scheme progresses, in order to provide up-to-date ecological information.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<ul style="list-style-type: none"> • Terrestrial habitats including Phase 1 Habitat and flora surveys – Survey(s) completed. • Aquatic Habitats – Survey(s) completed. • Bats – Survey(s) ongoing. • Barn Owl – Survey(s) completed. • Reptile – Completed. • Great Crested Newts: Survey(s) completed. <p>2022 Pre-construction ecological surveys</p> <p>The following pre-construction are currently envisaged to be undertaken in the applicable survey window(s) in 2022. The scope and extent of these surveys will be dependent on the relevant and applicable findings of the 2021 surveys:</p> <ul style="list-style-type: none"> • Terrestrial habitats including Phase 1 Habitat and flora surveys. • Aquatic Habitats. • Bats. • Badger. • Otter and water vole. • Other Mammals. 			

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<ul style="list-style-type: none"> • Breeding Birds. • Wintering Birds. • Hobby. • Red Kite. • Barn Owl. • Reptiles. • Great Crested Newts. • Invasive Non-native species. 			
Biodiversity Construction and operational effects	Chapter 8, Biodiversity [APP-077]	The biodiversity assessment [APP-077] has identified that adverse and beneficial effects on habitats, species and designated sites would result from construction and operation of the Scheme; however, none of these effects would be significant. National Highways considers that the assessment findings accurately reflect the likely effects of the Scheme.	The EA is content with the conclusions of the assessment and the significance of the reported effects.	Agreed	November 2021
Biodiversity Embedded and essential mitigation	Chapter 2, The Scheme [APP-071] Chapter 8, Biodiversity [APP-077] Figure 2.4 Environmental Masterplan [APP-091]	National Highways considers that: <ul style="list-style-type: none"> • The embedded mitigation measures illustrated on the Environmental Masterplan [APP-091]. • The essential mitigation measures set out in the First Iteration EMP [APP-234] 	Subject to the following two paragraphs, the EA is content that the form, nature and extent of the biodiversity mitigation measures, including associated monitoring, are appropriate and acceptable. In relation to construction mitigation, the EA has highlighted that	Agreed	November 2021

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	<p>First Iteration EMP [APP-234]</p> <p>Schedule of Mitigation [APP-235]</p>	<p>are appropriate to avoid, prevent, reduce, manage, control and (where necessary) monitor the adverse effects of the Scheme on habitats, species and designated sites during its construction and operation.</p> <p>As set out within the First Iteration EMP (Annex F) [APP-234], the proposed works to watercourses would be programmed to minimise impacts during fish spawning (typically March-June), where possible.</p> <p>Across the Scheme, specific culverts, which provide underpasses including mammal ledges, will be installed to allow wildlife to cross the new dual carriageway.</p> <p>Where a culvert conveys a public watercourse, the design shall be determined in consultation with the Environment Agency. Culvert designs will also consider the use of softer engineering for scour and erosion protection that allows for some continued channel movement, maintenance of habitat condition and water treatment, where appropriate and practical.</p>	<p>consideration should be given by National Highways to the timing of works within watercourses, to avoid sensitive times around fish spawning.</p> <p>In relation to embedded measures, the EA has noted that given the adverse ecological impacts associated with culverts, new and/or replacement culverts should be kept as short as possible, with culverts being oversized and set below natural bed level (>30cm). The EA recommends that their positioning should not inadvertently result in invert levels creating a potential barrier to eel and fish migrations, and that mammal ledges should also be included.</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Road drainage and the water environment</p> <p>Data collection methods, baseline data and the identification and sensitivity of relevant features and receptors</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p>	<p>The baseline conditions have been collated using desk-based and field-based techniques, and through consultation with stakeholders.</p> <p>National Highways considers the scope, coverage and timing of surveys undertaken to establish the baseline conditions and sensitive features and receptors are in line with best practice and appropriate to inform the assessment of direct and indirect effects reported in the Road Drainage and the Water Environment assessment [APP-082].</p>	<p>The EA is content with the scope, coverage and findings of the data collection and surveys undertaken to inform the assessment of effects on the identified sensitive features and receptors.</p>	<p>Agreed</p>	<p>November 2021</p>
<p>Road drainage and the water environment</p> <p>Construction and operational effects</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p>	<p>The road drainage and the water environment assessment [APP-077] has identified that adverse and beneficial effects on water quality, hydromorphology, groundwater and drainage would result from construction and operation of the Scheme; however, none of these effects would be significant.</p> <p>National Highways considers that the assessment findings accurately reflect the likely effects of the Scheme.</p>	<p>The potential operational phase impacts upon flows within South Brook and Rockham Ditch due to sealing of the A1 Black Cat Underpass require further assessment.</p>	<p>Under discussion</p>	

<p>Road drainage and the water environment</p> <p>Embedded and essential mitigation</p>	<p>Chapter 2, The Scheme [APP-071]</p> <p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Figure 2.4 Environmental Masterplan [APP-091]</p> <p>First Iteration EMP [APP-234]</p> <p>Schedule of Mitigation [APP-235]</p>	<p>National Highways considers that:</p> <ul style="list-style-type: none"> The embedded mitigation measures illustrated on the Environmental Masterplan [APP-091]. The essential mitigation measures set out in the First Iteration EMP [APP-234] <p>are appropriate to avoid, prevent, reduce, manage, control and (where necessary) monitor the adverse effects of the Scheme in relation to water quality, hydromorphology, groundwater and drainage during its construction and operation.</p> <p>Commitment ESS – RD1 in Table 3-12 of the Register of Environmental Actions and Commitments (REAC) within the First Iteration EMP [APP-234] confirms that:</p> <p><i>‘The Principal Contractor will develop and implement a Water Management Plan (WMP) based upon the outline Water Management Plan in the First Iteration EMP.</i></p> <p><i>The outline Water Management Plan will include, but not be limited to, information relating to the delivery of the following:</i></p> <ul style="list-style-type: none"> <i>Controlling and minimising the risk of pollution to surface waters and groundwater by managing</i> 	<p>Subject to the matters bullet-pointed below as raised its Relevant Representation, the EA is content that the form, nature and extent of the road drainage and the water environment mitigation measures, including associated monitoring, are appropriate and acceptable.</p> <p>In relation to construction mitigation, the EA has recommended that:</p> <ul style="list-style-type: none"> Measures will be required during the construction phase to prevent sediment run-off, and other polluting substances, from entering watercourses. National Highways liaises with local river-based clubs and erects signs and notices about its plans for the works upstream and downstream on the River Great Ouse, to ensure that construction works do not unreasonably impede the rights of other river users, such as fishermen or boats in transit. National Highways undertakes works over the River Great Ouse only during daylight hours (and in good visibility), and furthermore to reduce impacts on river users, undertake works from 1 	<p>Agreed</p>	
--	---	---	---	---------------	--

		<p><i>construction site runoff and the risk of chemical spillages; and</i></p> <ul style="list-style-type: none"> • <i>Managing pollution and physical impact risks when undertaking works within, over, under and adjacent to water bodies.'</i> <p>These measures will be further developed by the Principal Contractor during the detailed design stage and incorporated into the Second Iteration EMP.</p> <p>During the construction stage, the Principal Contractor will establish a Community Relations Manager (as set out in the Project team roles and responsibilities of the First Iteration EMP [APP-234]) for the duration of the construction phase to liaise with the public, stakeholders, Interested Parties and affected landowner(s) to minimise disruption.</p> <p>The Principal Contractor's Community Relations Manager will open lines of communication with the river-based clubs and other stakeholders so that all parties can be kept informed and up to date with the construction programme and the best practicable means of minimising impacts on river users for business or leisure.</p> <p>The Applicant refers the Environment Agency to section 4.4 of Annex F of the First Iteration EMP [APP-234] which</p>	<p>November through to 31 March or Easter (whichever is sooner).</p> <ul style="list-style-type: none"> • National Highways provides safety boats suitable for rescue (manned by competent personnel) along with a sufficient number of marshals throughout the area of the works, and to be alert to potential risks related to flooding. • In times of flood, works over the river be suspended, cancelled or postponed, to ensure the health, safety and well-being of any on-site contractors. • National Highways consults (and includes) the EA in its accident and emergency planning for the Scheme, particularly for spillages, which will facilitate fast and effective emergency responses for environmental protection. <p>In relation to embedded measures, the EA expressed its satisfaction with the proposed road drainage design but has noted:</p> <ul style="list-style-type: none"> • The requirements of the WFD in relation to maintenance or improvement of water quality standards within local 		
--	--	---	---	--	--

		<p>details how works affecting navigation along the River Great Ouse will be undertaken. Set out in paragraphs 4.4.1 and 4.4.2 are the extent of closures (estimated 10 weeks over an eight month period) and when the works would be undertaken.</p> <p>Set out at paragraph 4.4.3 of Annex F of the First Iteration EMP [APP-234] is an outline methodology for the physical closure of the river, including the use of a dory type safety boat. Paragraph 4.4.3 also confirms that the Environment Agency will be consulted during further development of the proposed construction methodology at the detailed design stage.</p> <p>The construction team responsible for the works over the river and in the floodplain will subscribe to the Environment Agency's SSA service and will take action to suspend, cancel or postpone any activities where these cannot be commenced or continued safely due to increased river levels.</p> <p>The Applicant will take the opportunity to engage further with the Environment Agency on this matter during the detailed design phase.</p> <p>The Outline Water Management Plan contained within Annex F of the First Iteration EMP [APP-234] sets out a draft action plan which contains measures</p>	<p>waterbodies, to ensure impacts are not negative.</p> <ul style="list-style-type: none"> • That designing ponds and wetland areas with shallow bank slopes and variation in plan-form can help to improve their ecological value, and that planting should consist of native species characteristic of the local area and ideally be sourced locally. • The need for inclusion of pollution control devices and appropriate engineering to be implemented at every opportunity, to facilitate more effective containment of chemical and fuel spillage and surface water run-off. • That written proposals for long term effective maintenance and repair of pollution prevention assets must be included and adhered to. • It would be good practice for National Highways to install penstocks, to give ponds and watercourses another level of protection against highway spills. 		
--	--	---	--	--	--

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>that will be employed in the event of an incident or emergency, including spillages. Table F4-3 of Annex F sets out incident categories, monitoring outcomes and proposed actions.</p> <p>The content of the draft action plan will be developed and refined further by the Principal Contractor, in consultation with the EA, and incorporated into the Second Iteration EMP. This is set out in Paragraph 4.6.2 of Annex F Water Management Plan of the First Iteration EMP [APP-234].</p>			
<p>Geology and Soils</p> <p>Data collection methods, baseline data and the identification and sensitivity of relevant features and receptors</p>	<p>Chapter 9, Geology and Soils [APP-078]</p>	<p>The baseline conditions have been collated using desk-based and field-based techniques, and through consultation with stakeholders.</p> <p>National Highways considers the scope, coverage and timing of surveys undertaken to establish the baseline conditions and sensitive features and receptors are in line with best practice, and are appropriate to inform the assessment of direct and indirect effects reported in the Geology and Soils assessment [APP-082] relating to controlled waters and contamination.</p>	<p>The EA is content with the scope, coverage and findings of the data collection and surveys undertaken to inform the assessment of effects on the identified sensitive features and receptors.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Geology and Soils</p> <p>Construction and operational effects</p>	<p>Chapter 9, Geology and Soils [APP-078]</p>	<p>The Geology and Soils assessment [APP-078] has identified that adverse and beneficial effects on controlled waters and those associated with contamination would result from the construction, operation and maintenance of the Scheme; however, none of these effects would be significant.</p> <p>National Highways considers that the assessment findings accurately reflect the likely effects of the Scheme.</p> <p>Based on additional in-situ test permeability determined for the glacial till, undertaken in June 2021, a more conservative quantitative dewatering assessment for potential excavation that may require temporary dewatering in this location (i.e. the Eltisley Landfill Area) is being prepared – this assessment will be included in the groundwater risk assessment addendum report being prepared and will be shared/discussed with the Environment Agency in due course for review and approval, before submission to the Examining Authority.</p>	<p>Subject to the following paragraph, the EA is content with the conclusions of the assessment and the significance of the reported effects.</p> <p>The EA notes that further assessment of the potential impacts from the Eversden-Eltisley landfill may be required, depending upon the outcome of more conservative quantitative dewatering assessment for the glacial till, in this location.</p>	<p>Agreed</p>	<p>November 2021</p>
<p>Geology and Soils</p> <p>Embedded and essential mitigation</p>	<p>Chapter 2, The Scheme [APP-071]</p> <p>Chapter 9, Geology and Soils [APP-078]</p>	<p>National Highways considers that:</p> <ul style="list-style-type: none"> The embedded mitigation measures illustrated on the Environmental Masterplan [APP-091]. 	<p>Subject to the points raised below, as raised in its Relevant Representation, the EA is content that the form, nature and extent of the geology and soils mitigation measures, including</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	<p>Figure 2.4 Environmental Masterplan [APP-091]</p> <p>First Iteration EMP [APP-234]</p> <p>Schedule of Mitigation [APP-235]</p>	<ul style="list-style-type: none"> The essential mitigation measures set out in the First Iteration EMP [APP-234] are appropriate to avoid, prevent, reduce, manage, control and (where necessary) monitor the adverse effects of the Scheme relating to controlled waters and contamination during its construction and operation. <p>The limitations of the quantitative risk models and the need for further real-time groundwater level monitoring are acknowledged by the Applicant. The values used in the modelling have been presented to the Environment Agency and meetings have been held to provide further clarification.</p> <p>The Applicant has been undertaking groundwater level monitoring at strategic locations across the Scheme since October 2019, and this will continue during the construction phase of the Scheme.</p> <p>Subject to agreement with the Environment Agency, and where necessary, prior to construction, a programme of groundwater quality monitoring will be undertaken to address any potential impact further, particularly in areas where temporary groundwater dewatering may be required during</p>	<p>associated monitoring, are appropriate and acceptable.</p> <p>The EA confirms that the Qualitative Risk Assessments for proposed construction dewatering are acceptable but notes that:</p> <ul style="list-style-type: none"> The Quantitative Risk Assessments models are approximations and that even with conservative parameters, the results from such models may significantly underestimate real-life impacts. Accordingly, the EA is likely to require continuous groundwater level monitoring at strategic points during the construction phase of the Scheme so that any unforeseen unacceptable impacts can be identified at an early stage, and mitigation measures provided. Dewatering water may be discharged to surface watercourses; therefore, the Water Quality Risk Assessment should be revised to take into account Environmental Quality Standards protective of fresh inland waters. <p>In relation to permanent dewatering, the EA does not support this type of</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>construction and for a short period post-construction works. The scope of monitoring will be defined during detailed design post-DCO consent (further details on monitoring are provided in Sections 4.1.1, 4.5 and 1.8.16 of Annex F of the First Iteration EMP [APP-234]). Provision for additional monitoring boreholes, as required, and any strategic monitoring points will be discussed and agreed with the Environment Agency prior to finalising the programme.</p> <p>As set out in Section 4.1.8 – 4.1.9 of Annex F within the First Iteration EMP [APP-234], and as part of the Second Iteration EMP, a construction dewatering strategy will be prepared. This will include a Water Quality Risk Assessment (WQRA) which will be reviewed and revised as required to consider Environmental Quality Standards (EQS) and ensure a best practice approach is followed. This approach seeks to adequately protect fresh inland waters, avoiding significant adverse impacts and compliance with the Water Framework Directive for receiving watercourses.</p> <p>As part of the detailed design, secant pile walls will be used to isolate areas of deep excavation such as the A1 underpass to avoid or minimise</p>	<p>proposal and urges National Highways to design the Scheme in a way that avoids any such requirement.</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>groundwater ingress to the excavation. Isolated material within the excavation will be dewatered in accordance with the construction dewatering strategy which will consider all necessary WQRA and EQS measures and best practice approaches. As provided in Section 4.1.8 – 4.1.9 of the First Iteration EMP [APP-234], methods to reduce further ingress of groundwater into borrow pits/dewatering during excavation will also be considered including working in a smaller area at a time or sealing the borrow pit/excavation by a suitable method. It is expected that some temporary dewatering will still be required during the construction phase, and the Water Management Plan will be updated to ensure that it includes suitable methods in consultation with the Environment Agency to manage any risk identified from ongoing water quality monitoring.</p> <p>At the time of DCO submission the possibility of permanent dewatering was assessed as a worst case (see paragraph 13.9.118-123 of Chapter 13, Road Drainage and the Water Environment [APP-082] of the Environmental Statement). However, it has since been confirmed that no permanent dewatering is required.</p>			

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Flood Risk Assessment</p> <p>Data collection methods, baseline data and the identification and sensitivity of relevant features and receptors</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Appendix 13.4 Flood Risk Assessment [APP-220]</p>	<p>The baseline conditions have been collated from a variety of sources including desk-based information, ground investigations and consultation with stakeholders.</p> <p>National Highways considers the scope and coverage of the information used to establish the baseline conditions to be in line with best practice and appropriate to inform the assessment flood risk (both to, and from, the Scheme during the construction and operational phases) associated with the following potential sources, as reported in the Flood Risk Assessment [APP-220]:</p> <ul style="list-style-type: none"> • Fluvial. • Surface water. • Groundwater. • Sewers. • Artificial sources. 	<p>The EA is content with the scope, coverage and findings of the data collection and ground investigations undertaken as part of the assessment of effects relating to flooding and flood risk both to, and from, the Scheme during its construction and operational phases.</p>	<p>Under discussion</p>	
<p>Flood Risk Assessment</p> <p>Modelling</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Appendix 13.4 Flood Risk Assessment [APP-220]</p>	<p>National Highways' approach to undertaking the flood risk assessment has been based around a source-pathway-receptor model, which has been developed to model:</p> <ul style="list-style-type: none"> • The flood risk to the Scheme as a receptor. 	<p>The EA is content that the adoption of a source-pathway-receptor approach to the modelling of flood risk is appropriate to establish the risk of flooding both to the Scheme, and as a consequence of the Scheme.</p>	<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<ul style="list-style-type: none"> The flood risk to other receptors as a consequence of the Scheme. <p>Hydraulic modelling has been undertaken for significant flood risk areas including detailed 1D and 2D fluvial modelling of:</p> <ul style="list-style-type: none"> River Great Ouse. Hen Brook. Rectory Farm (Rectory Farm Brook). South Brook. <p>National Highways considers this approach to be robust and appropriate for this Scheme, and that no further flood modelling is required to inform the assessment of flood risk.</p> <p>If any significant changes to the design watercourse crossings are made, further hydraulic modelling will be undertaken and submitted to the Environment Agency for review. Discussions have been and are continuing to be undertaken with the landowners that are impacted by the increase in floodplain depths on their land. An agreement will be sought with any landowner that may be impacted by flood risk because of the Scheme.</p> <p>With regard to the area of land adjacent to the River Great Ouse that is predicted</p>	<p>Following a review of the hydraulic models developed and used to establish flood risk, the EA is content with their scope and extent.</p> <p>The EA has identified within its Relevant Representation that any changes made to the design of watercourse crossings at the detailed design stage could result in an increase in flood levels within third party land, unless sufficient mitigation is provided. In the event that design changes are made, the EA will seek a commitment from National Highways to undertake and share further hydraulic modelling to ensure there is no increase in flood risk. The EA also notes this may need to form a requirement of the dDCO.</p> <p>Following a review of the FRA, the EA has identified that an area of land adjacent to the River Great Ouse (outside of the Order Limits) is predicted to experience an increase in flood depths of up to 16mm. The EA accordingly requests National Highways provide evidence of the affected landowner's acceptance to this increase.</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>to experience an increase in flood depth of up to 16mm, National Highways is engaging further with the landowner on this matter with the aim to securing their acceptance on the predicted increase in flood depth. Agreement with landowners for the identified modelled increased flood risk at the viaduct crossing is anticipated for the following reasons:</p> <ul style="list-style-type: none"> • The small extent of increased flood risk at the corner of the site that already floods. • The overall reduction in flood depth across the site. <p>There is a reduced Climate Change Allowance (CCA) that needs to be applied to the Scheme, following the July 2021 Government CCA applicable to the Scheme. This reduction in climate change would reduce or remove any flood risk increase on the site.</p>			
<p>Flood Risk Assessment Breedon Quarry</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082] Appendix 13.4 Flood Risk Assessment [APP-220]</p>	<p>In establishing and modelling the future baseline conditions, National Highways has taken account of the approved restoration scheme for Breedon Quarry (and its associated levels).</p>	<p>The EA is content with how the approved restoration scheme for Breedon Quarry has been taken into account as part of the flood modelling.</p> <p>The EA notes that whilst the hydraulic modelling undertaken for the River Great Ouse assumes that the Breedon Quarry restoration</p>	<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
			<p>works will be completed prior to construction of the Scheme commencing, these restoration works are ongoing. The EA is concerned that if the restoration works are not completed in advance, then it could potentially impact on the functioning of the floodplain compensation area and result in increased flooding elsewhere. Accordingly, the EA seeks written confirmation of the completion date from the operator of Breedon Quarry that its restoration works will be completed ahead of the commencement of Scheme construction. If confirmation is not possible, then the EA seeks a commitment from National Highways to demonstrate that there will be no loss of floodplain, or increase in flood risk elsewhere, based on existing land levels at Breedon Quarry.</p>		
<p>Flood Risk Assessment Construction and operational effects</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082] Appendix 13.4 Flood Risk Assessment [APP-220] Environmental Masterplan [APP-091]</p>	<p>The assessment has concluded that flood risk to and from the construction and operational stages of the Scheme from fluvial, surface water, groundwater and sewer flooding would be low, and accordingly there would be no significant flooding-related effects. National Highways considers that the assessment findings are robust.</p>	<p>The EA is not yet content with the conclusions of the flood risk assessment. In relation to land identified to accommodate construction compounds and soil storage areas, the EA seeks confirmation from National Highways on their locations relative to floodplain extents, due to the potential to: reduce flood storage</p>	<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>The Scheme construction compounds and soil storage areas are illustrated on the Environmental Masterplan [APP-091]. To assist the Environment Agency, National Highways has prepared the information requested that does indicate some compounds may be located within 100 year storm event floodplains. Flood mitigation is to be provided by National Highways where required, to ensure no increased flood risk to surrounding sites.</p>	<p>capacity; cause blockages (from materials getting washed away and deposited in river systems); and increase flood risk elsewhere.</p> <p>As the information provided indicates that some compounds will be located in the 1 in 100 year floodplain extent, details of proposed flood risk mitigation measures during the construction phase need to be provided to the EA for review to ensure these are appropriate and acceptable.</p> <p>The proposed mitigation measures should be clearly set out in both the FRA Technical Note (which we are awaiting for review) and the First Iteration EMP. Any agreed mitigation measures should be reviewed again at the detailed design stage and set out in the Second Iteration EMP, which we would wish to be consulted on.</p>		
<p>Flood Risk Assessment</p> <p>Embedded and essential mitigation</p>	<p>Chapter 2, The Scheme [APP-071]</p> <p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p>	<p>National Highways considers that:</p> <ul style="list-style-type: none"> The embedded mitigation measures illustrated on the Environmental Masterplan [APP-091]. The essential mitigation measures set out in the First Iteration EMP [APP-234] 	<p>The EA is not yet content that the form, nature and extent of the embedded mitigation measures incorporated into the design of the Scheme, and the essential mitigation measures that would be implemented during construction of the Scheme,</p>	<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	<p>Figure 2.4 Environmental Masterplan [APP-091]</p> <p>Appendix 13.4 Flood Risk Assessment [APP-220]</p> <p>First Iteration EMP [APP-234]</p> <p>Schedule of Mitigation [APP-235]</p>	<p>are appropriate to avoid, prevent, reduce, manage and control flood risk during construction and operation of the Scheme.</p>	<p>are appropriate and reduce effects to acceptable levels.</p> <p>The EA has highlighted the importance of constructing each flood compensation area prior to the commencement of construction of the relevant road sections to prevent an overall loss of floodplain, and seeks a commitment from National Highways to incorporate this into the construction phasing plan at the detailed design phase.</p> <p>No details of the essential flood risk mitigation measures that would be implemented during construction of the Scheme have been included in the First Iteration EMP (as detailed in our comments under 'construction and operational effects'). As such, we are unable to confirm that we are content these measures are appropriate and would ensure there is no increase in flood risk elsewhere.</p> <p>A clear phasing plan should be provided, which shows which section of floodplain compensation relates to which new section of road / area of lost floodplain and will therefore be built prior to that loss.</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Water Framework Directive</p> <p>Data collection methods, baseline data and the identification and sensitivity of relevant features and receptors</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Appendix 13.1 Water Framework Directive Assessment [APP-217]</p>	<p>The baseline conditions have been collated from a variety of sources including desk-based information and consultation with stakeholders.</p> <p>National Highways considers the scope and coverage of the information used to establish the baseline conditions is appropriate, and in line with best practice, to inform the WFD assessment on relevant WFD waterbodies.</p>	<p>The EA is content with the scope, coverage and findings of the data collected to inform the WFD assessment of relevant WFD waterbodies.</p>	Agreed	November 2021
<p>Water Framework Directive</p> <p>Construction and operational effects</p>	<p>Chapter 13, Road Drainage and the Water Environment [APP-082]</p> <p>Appendix 13.1 Water Framework Directive Assessment [APP-217]</p>	<p>The WFD assessment has concluded that that no significant adverse impacts to WFD relevant water bodies would occur as a result of the Scheme, and that the Scheme is compliant with the WFD objectives for all relevant WFD waterbodies.</p> <p>National Highways considers that the assessment findings are accurate and robust.</p>	<p>The EA agrees with the findings of the WFD assessment.</p>	Agreed	November 2021

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Water Framework Directive Embedded and essential mitigation</p>	<p>Chapter 2, The Scheme [APP-071] Chapter 13, Road Drainage and the Water Environment [APP-082] Figure 2.4 Environmental Masterplan [APP-091] Appendix 13.1 Water Framework Directive Assessment [APP-217] First Iteration EMP [APP-234] Schedule of Mitigation [APP-235]</p>	<p>National Highways considers that:</p> <ul style="list-style-type: none"> The embedded mitigation measures illustrated on the Environmental Masterplan [APP-091]. The essential mitigation measures set out in the First Iteration EMP [APP-234] <p>are appropriate to avoid, prevent, reduce, manage, control and (where required) monitor the adverse effects of construction or operation of the Scheme on the current or predicted WFD status of water bodies.</p>	<p>The EA is content that the form, nature and extent of the embedded mitigation measures incorporated into the design of the Scheme, and the essential mitigation measures that would be implemented during construction of the Scheme, are appropriate and reduce effects to acceptable levels.</p>	<p>Agreed</p>	<p>November 2021</p>
<p>Water Framework Directive Enhancements</p>	<p>Chapter 2, The Scheme [APP-071] Chapter 13, Road Drainage and the Water Environment [APP-082] Figure 2.4 Environmental Masterplan [APP-091] Appendix 13.1 Water Framework Directive</p>	<p>The Environmental Masterplan [APP-091] illustrates the locations and lengths of potential watercourse enhancement opportunities that could be delivered as part of the Scheme.</p> <p>Subject to the DCO being consented, National Highways' Principal Contractor would develop a WFD mitigation and enhancement strategy at the detailed design stage of the Scheme. The strategy would include the development of options, in line with current best</p>	<p>The EA agrees with the number and location of potential watercourse enhancements and that it is appropriate for National Highways' Principal Contractor to develop these proposals in further detail at the detailed design stage of the Scheme.</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
	Assessment [APP-217] First Iteration EMP [APP-234] Schedule of Mitigation [APP-235]	practice, which would deliver enhancements along watercourses within the Order Limits of the Scheme, undertaken in consultation with the EA, as committed to in the First Iteration Environmental Management Plan [APP-234].			
Cumulative effects assessment Baseline data	Chapter 15, Assessment of Cumulative Effects [APP-084] Appendix 15.1 Long list of other developments [APP-228] Appendix 15.2 Assessment matrix [APP-229]	National Highways has undertaken an assessment of the likely significant cumulative effects of the Scheme on the environment resulting from the cumulation of effects with other existing and/or approved developments and projects. The assessment has considered: <ul style="list-style-type: none"> • Existing completed projects. • Approved but uncompleted projects. • Ongoing activities. • Plans or projects for which an application has been made and which are under consideration by consenting authorities. • Plans and projects which are reasonably foreseeable. Cumulative developments and projects were initially identified through a long list [APP-228], with qualifying developments	The EA is content with the developments and projects identified within both the long list and shortlist, and how these have been categorised within the assessment (as related to its topics and areas of interest to the EA).	Agreed	November 2021

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>subsequently shortlisted [APP-229] for consideration in the assessment.</p> <p>National Highways considers that its approach to identifying other development projects, their shortlisting and subsequent inclusion in the cumulative effects assessment is robust and appropriate (as related to its topics and areas of interest to the EA).</p>			
<p>Cumulative effects assessment Construction and operational effects</p>	<p>Chapter 15, Assessment of Cumulative Effects [APP-084] Appendix 15.1 Long list of other developments [APP-228] Appendix 15.2 Assessment matrix [APP-229] Chapter 8, Biodiversity [APP-077] Chapter 9, Geology and Soils [APP-078] Chapter 13, Road Drainage and the Water Environment [APP-082]</p>	<p>The cumulative effects assessment has concluded that no significant adverse cumulative effects would occur specifically in relation to the following topics arising from the effects of the Scheme interacting cumulatively with other planned projects and developments:</p> <ul style="list-style-type: none"> • Biodiversity [APP-077]. • Geology and soils [APP-078]. • Road drainage and the water environment [APP-082]. <p>National Highways considers that the outcomes of the cumulative effects assessment in relation to development interactions are accurate.</p>	<p>The EA is content with the conclusions of the cumulative effects assessment and the significance of the reported effects (as related to its topics and areas of interest).</p>	<p>Agreed</p>	<p>November 2021</p>

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Borrow pits Restoration</p>	<p>Chapter 2, The Scheme [APP-071]</p> <p>Chapter 9, Geology and Soils [APP-078]</p> <p>Borrow Pits Optioneering Report [APP-246]</p> <p>Borrow Pits Excavation and Restoration Report [REP3-011]</p>	<p>Four areas of land have been incorporated into the design of the Scheme for use as borrow pits during construction. The associated temporary loss of agricultural soils, including those considered best and most versatile, has been assessed and reported in Chapter 9, Geology and Soils [APP-078].</p> <p>National Highways' intention is that these areas of land would be restored progressively during construction of the Scheme, in line with the approach set out in Chapter 2, The Scheme [APP-071].</p> <p>Subsoil and topsoil stripped from these areas would be reinstated to a condition that enables them to be returned to agricultural standards and be offered back to landowners.</p> <p>In the event that landowners do not wish to have the land returned to them for agricultural use, National Highways will evaluate alternative options and uses for these areas.</p> <p>Information regarding borrow pits is reported in the Borrow Pits Excavation and Restoration Report submitted at Deadline 3 of the Examination [REP3-011].</p>		<p>Under discussion</p>	

Table 3-2 – DCO and Legal Matters

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Draft DCO Article 58 – Works in the River Great Ouse</p>	<p>APP-025</p>	<p>Article 58 of the draft DCO [APP-025] seeks appropriate powers to temporarily suspend the public right of navigation over any part of the River Great Ouse that is located in the Scheme Order Limits for the purpose of construction of the Scheme.</p>	<p>As the Navigation Authority for the Great Ouse we are responsible for ensuring the navigation channel and any adjoining defined spaces are appropriate to allow the safe movement of traffic on the river. We define this as the 'Navigation Envelope'. The minimum channel width is 12 metres and the minimum headroom or "airdraft" is 3 metres above normal retention levels (of the water in that channel). Any reduction in the Navigation envelope with temporary and permanent structures should be eliminated or minimised in both the construction and operational phases related to the proposed Black Cat to Caxton Gibbet Road Improvement Scheme.</p> <p>We therefore need to protect this navigation route to ensure that the works do not unreasonably impede the rights of other river users and that any restriction on navigation is kept to a minimum.</p> <p>Impact</p> <p>There are many impacts associated with the loss of the Navigation Envelope; in particular this would impede the rights of the river users</p>	<p>The discussions on Article 58 and the need for any amendments are ongoing.</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
			<p>who are legally registered to navigate under the Anglian Water Authority act 1977 and the Environment Agency (Inland Waterway) Order 2010.</p> <p>Solution</p> <p>We believe this can be secured within Article 58 of the DCO. We wish to continue discussions with the Applicant to reword where necessary the current provisions relating to Navigation in Article 58.</p> <p>During a subsequent discussion the EA has confirmed that it is largely content with Article 58 subject to discussing and confirming the practicalities and some drafting points in the article itself.</p>		
<p>Draft DCO Requirement 8 – Contaminated land and groundwater</p>	<p>APP-025</p>	<p>Requirement 8 of the draft DCO [APP-025] provides sufficient control should contaminated land, including groundwater be found during construction of the Scheme.</p>		<p>Under discussion</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
<p>Draft DCO Requirement 14 – Flood compensatory storage</p>	<p>APP-025</p>	<p>Requirement 14 of the draft DCO [APP-025] provides sufficient control of the authorised development and its impacts on floodplain compensation by requiring that no part of the authorised development is to commence until a detailed floodplain compensation scheme for that part is submitted to and approved by the Secretary of State, after consultation in all cases with the EA.</p>		<p>Under discussion</p>	
<p>Draft DCO Protective Provisions</p>	<p>APP-025</p>	<p>The protective provisions, as set out in Part 3 of Schedule 9 of the dDCO [APP-025], that are relevant to the EA. The protective provisions are appropriate for the protection of the EA's statutory duty and obligations.</p>	<p>Flood Risk Activity Permits</p> <p>We would wish to retain the ability to agree the crossing for the River Great Ouse. This is due to the potential for changes within the detailed design phase to result in structural impacts upon localised hydrology and flood risk.</p> <p>Impact</p> <p>The DCO proposal requests disapplication of regulation 12 of the Environment Permitting Regulations 2016. This relates to the formal requirement for a flood risk activity permit for permanent and temporary works in, under, over or within 8 metres of any designated main river. Alterations to the engineering design during the detailed design phase</p>	<p>The discussions on the protective provisions and the need for any amendments to allow the disapplication of Regulation 12 of the EPR 2016 are ongoing.</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
			<p>could impact upon flood water conveyance and potentially affect third parties.</p> <p>Solution</p> <p>In the draft DCO, the applicant has sought to dis-apply regulation 12 of the Environment Permitting Regulations 2016 and so make unnecessary the requirement for separate flood risk activity permits from the Environment Agency. Section 150 of the Planning Act 2008 provides such disapplication cannot take place without our specific consent. We are not currently in a position to give this consent but have provisionally agreed to dis-apply regulation 12 subject to being able to agree protected provisions. We are continuing to engage with discussions with the applicant on this matter.</p> <p>During a subsequent discussion the EA has confirmed that it agrees in principle that Regulation 12 of the EPR can be disapplied in relation to a flood risk activity permit only, subject to the protective provisions being acceptable.</p> <p>Continued operational access for river maintenance</p>		

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
			<p>We require the retention of our ability to access the River Great Ouse in order to undertake our permissive powers for maintenance or evidence gathering.</p> <p>Impact</p> <p>Any prevention, through lack of access or operation development, of our access to main rivers could result in the potential exacerbation of flood risk. This would occur in the event that we were unable to access locations to remove debris, repair flood defences or river banks etc.</p> <p>Solution</p> <p>We need to ensure that our operational team retain the ability to access the River Great Ouse to undertake our permissive powers. This could be achieved either through expanding upon paragraph 25 of the Protective Provisions, a requirement of the DCO or an agreement between our organisation and the applicant with regard to access provision throughout the detailed design period. Any agreement should also cover phasing arrangements for the scheme to ensure year-round access. We propose to have ongoing</p>	<p>The discussions on the protective provisions and the need for any amendments to paragraph 25 of the protective provisions are ongoing.</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
			<p>discussions with the applicant with regards to this point and can hopefully provide further update within the pre-examination phase of the DCO process.</p> <p>During a subsequent discussion the EA has confirmed that it agrees in principle that the protective provisions are adequate in respect of maintaining the EA's access subject to ongoing discussions over the specifics of paragraph 25.</p>		
<p>Draft DCO Associated consents / licenses / permits</p>	<p>APP-025 APP-029</p>	<p>The Consents and Agreements Position Statement [APP-029] identifies the consents, licences or permits that National Highways will need to obtain outside of the dDCO in order to deliver the Scheme. This document contemplates the disapplication of specific legislation on the basis that those powers are contained within the draft Order. This approach is appropriate for the Scheme.</p> <p>National Highways is seeking to disapply the following legislation detailed in the Consents and Agreements Position Statement:</p> <ul style="list-style-type: none"> The requirement for Water Abstraction and Water Transfer 	<p>The scheme has the potential to cause adverse impacts to the water environment during both construction and operational phases. The draft DCO seeks to disapply Section 24 of the Water Resources Act 1991(b). In order for us to agree to this we would need, in advance:</p> <ul style="list-style-type: none"> A satisfactory groundwater risk assessment. An acceptable construction dewatering strategy containing all of the information that would normally be required for an abstraction licence application. <p>We have previously engaged with the applicant regarding an earlier iteration of the groundwater risk</p>	<p>The disapplication is subject to the consent of the EA and those discussions are ongoing.</p>	

Issue	Document Reference	National Highways Position	Environment Agency Position	Status	Date
		<p>Licences under Section 24 Water Resources Act 1991.</p> <ul style="list-style-type: none"> • The requirement for Water Impoundment Licences under Section 25 Water Resources Act 1991. • The requirement for Flood Risk Activity Permits under the EPR 2016 (please see line above for specifics) • The requirement for a Water Activity Permit under EPR 2016. 	<p>assessment for the proposed scheme (Appendix 13.7 Groundwater Risk Assessment Report [APP-226]).</p>		