



The Planning Inspectorate

The Planning Act 2008

**A428 Black Cat to Caxton Gibbet
Road Improvement scheme**

Examining Authority's Report
of Findings and Conclusions

and

Recommendation to the Secretary of State for
Transport

Examining Authority

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18 May 2022

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OVERVIEW

A428 Black Cat to Caxton Gibbet Road Improvement scheme TR010044

The application for A428 Black Cat to Caxton Gibbet Road Improvement scheme, dated 26 February 2021, was made under Section 37 of the Planning Act 2008 and was received in full by The Planning Inspectorate on the same date.

The Applicant is National Highways, although at the time the application was made it was known as Highways England.

The application was accepted for Examination on 23 March 2021.

The Examination of the application began on 18 August 2021 and was completed on 18 February 2022.

The development proposed comprises the construction of a new 16 kilometre dual 2-lane carriageway, including three grade-separated junctions, between the Black Cat roundabout and the Caxton Gibbet roundabout, together with approximately 3 kilometres of tie-in works, and the diversion of a high-pressure gas pipeline.

Summary of Recommendation: The Examining Authority recommends that the Secretary of State should make the Order in the form attached.

REPORT TABLE OF CONTENTS

1.	THE PROPOSAL AND THE SITE	1
1.1.	BACKGROUND AND LOCATION	1
1.2.	THE APPLICATION AS MADE.....	2
1.3.	THE APPLICATION AS EXAMINED	4
1.4.	RELEVANT PLANNING HISTORY	5
2.	THE EXAMINATION.....	6
2.1.	APPOINTMENT OF THE EXAMINING AUTHORITY	6
2.2.	THE PERSONS INVOLVED IN THE EXAMINATION	6
2.3.	THE EXAMINATION AND PROCEDURAL DECISIONS.....	6
2.4.	OTHER CONSENTS.....	13
2.5.	STRUCTURE OF THIS REPORT	15
3.	LEGAL AND POLICY CONTEXT	17
3.1.	INTRODUCTION	17
3.2.	THE PLANNING ACT 2008	17
3.3.	NATIONAL POLICY STATEMENTS.....	18
3.4.	EUROPEAN LAW AND RELATED UK REGULATIONS	18
3.5.	OTHER LEGAL PROVISIONS	20
3.6.	MADE DEVELOPMENT CONSENT ORDERS	24
3.7.	THE NATIONAL PLANNING POLICY FRAMEWORK	24
3.8.	OTHER RELEVANT POLICY STATEMENTS	24
3.9.	LOCAL IMPACT REPORTS	26
3.10.	THE DEVELOPMENT PLAN.....	26
3.11.	LOCAL TRANSPORT PLANS.....	27
4.	ISSUES RAISED AND ASSESSMENT OF EFFECTS	28
4.1.	INTRODUCTION	28
4.2.	PRINCIPAL ISSUES IN THE EXAMINATION	28
4.3.	ISSUES ARISING IN WRITTEN SUBMISSIONS	29
4.4.	LOCAL DEVELOPMENT PLANS	29
4.5.	ENVIRONMENTAL IMPACT ASSESSMENT	30
4.6.	ASSESSMENT OF ALTERNATIVES	33
4.7.	CUMULATIVE EFFECTS ASSESSMENT.....	35
4.8.	TRANSBOUNDARY EFFECTS	36
4.9.	HABITATS REGULATIONS ASSESSMENT.....	36
4.10.	CONCLUSIONS.....	37
5.	THE NEED FOR DEVELOPMENT	38
5.1.	BACKGROUND AND POLICY CONTEXT.....	38
5.2.	THE APPLICATION	40
5.3.	LOCAL IMPACT REPORTS	42
5.4.	THE EXAMINATION	44
5.5.	CONCLUSIONS.....	52

6.	HIGHWAYS AND TRAFFIC MATTERS	54
6.1.	BACKGROUND AND POLICY CONTEXT	54
6.2.	THE APPLICATION	55
6.3.	LOCAL IMPACT REPORTS	58
6.4.	THE EXAMINATION	59
6.5.	CONCLUSIONS	111
7.	BIODIVERSITY	116
7.1.	BACKGROUND AND POLICY CONTEXT	116
7.2.	THE APPLICATION	117
7.3.	LOCAL IMPACT REPORTS	119
7.4.	THE EXAMINATION	121
7.5.	CONCLUSIONS	137
8.	HISTORIC ENVIRONMENT	139
8.1.	BACKGROUND AND POLICY CONTEXT	139
8.2.	THE APPLICATION	140
8.3.	LOCAL IMPACT REPORTS	142
8.4.	THE EXAMINATION	144
8.5.	CONCLUSIONS	163
9.	CLIMATE CHANGE AND CARBON EMISSIONS	166
9.1.	BACKGROUND AND POLICY CONTEXT	166
9.2.	THE APPLICATION	167
9.3.	LOCAL IMPACT REPORTS	169
9.4.	THE EXAMINATION	170
9.5.	CONCLUSIONS	184
10.	GOOD DESIGN	186
10.1.	BACKGROUND AND POLICY CONTEXT	186
10.2.	THE APPLICATION	187
10.3.	LOCAL IMPACT REPORTS	188
10.4.	THE EXAMINATION	188
10.5.	CONCLUSIONS	194
11.	CONSTRUCTION METHODS AND EFFECTS	196
11.1.	BACKGROUND AND POLICY CONTEXT	196
11.2.	THE APPLICATION	197
11.3.	LOCAL IMPACT REPORTS	200
11.4.	THE EXAMINATION	201
11.5.	CONCLUSIONS	210
12.	AIR QUALITY	212
12.1.	BACKGROUND AND POLICY CONTEXT	212
12.2.	THE APPLICATION	212
12.3.	LOCAL IMPACT REPORTS	215
12.4.	THE EXAMINATION	215
12.5.	CONCLUSIONS	220

13.	NOISE AND VIBRATION	222
13.1.	BACKGROUND AND POLICY CONTEXT.....	222
13.2.	THE APPLICATION	223
13.3.	LOCAL IMPACT REPORTS	225
13.4.	THE EXAMINATION	226
13.5.	CONCLUSIONS.....	235
14.	FLOOD RISK, WATER QUALITY AND RESOURCES	237
14.1.	BACKGROUND AND POLICY CONTEXT.....	237
14.2.	THE APPLICATION	238
14.3.	LOCAL IMPACT REPORTS	240
14.4.	THE EXAMINATION	241
14.5.	CONCLUSIONS.....	254
15.	LANDSCAPE AND VISUAL EFFECTS	255
15.1.	BACKGROUND AND POLICY CONTEXT.....	255
15.2.	THE APPLICATION	256
15.3.	LOCAL IMPACT REPORTS	259
15.4.	THE EXAMINATION	260
15.5.	CONCLUSIONS.....	264
16.	LAND USE.....	265
16.1.	BACKGROUND AND POLICY CONTEXT.....	265
16.2.	THE APPLICATION	266
16.3.	LOCAL IMPACT REPORTS	268
16.4.	THE EXAMINATION	269
16.5.	CONCLUSIONS.....	272
17.	SOCIO-ECONOMIC EFFECTS	273
17.1.	BACKGROUND AND POLICY CONTEXT.....	273
17.2.	THE APPLICATION	273
17.3.	LOCAL IMPACT REPORTS	277
17.4.	THE EXAMINATION	278
17.5.	CONCLUSIONS.....	291
18.	DIVERSION OF HIGH-PRESSURE PIPELINE.....	294
18.1.	BACKGROUND AND POLICY CONTEXT.....	294
18.2.	THE APPLICATION	295
18.3.	LOCAL IMPACT REPORTS	296
18.4.	THE EXAMINATION	297
18.5.	CONCLUSIONS.....	301
19.	SIGNIFICANT CUMULATIVE EFFECTS	302
19.1.	BACKGROUND AND POLICY CONTEXT.....	302
19.2.	THE APPLICATION	302
19.3.	LOCAL IMPACT REPORTS	304
19.4.	THE EXAMINATION	305
19.5.	CONCLUSIONS.....	311

20.	FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT	312
20.1.	INTRODUCTION	312
20.2.	PROPOSED DEVELOPMENT DESCRIPTION AND HRA IMPLICATIONS	313
20.3.	FINDINGS IN RELATION TO LIKELY SIGNIFICANT EFFECTS (LSE)	315
20.4.	HRA ASSESSMENT CONCLUSIONS	320
21.	CONCLUSION ON THE CASE FOR DEVELOPMENT CONSENT	330
21.1.	INTRODUCTION	330
21.2.	CONSIDERATIONS IN THE OVERALL PLANNING BALANCE.....	331
21.3.	PLANNING BALANCE AND THE CASE FOR DEVELOPMENT CONSENT	351
22.	COMPULSORY ACQUISITION AND RELATED MATTERS	354
22.1.	INTRODUCTION	354
22.2.	APPROACH TO EXAMINATION OF THE CA AND TP CASE	354
22.3.	LEGISLATIVE REQUIREMENTS	355
22.4.	THE REQUEST FOR CA AND TP POWERS IN THE APPLICATION	357
22.5.	THE PURPOSES FOR WHICH LAND IS REQUIRED	357
22.6.	THE APPLICANT'S STRATEGIC CASE FOR CA AND TP	359
22.7.	INDIVIDUAL OBJECTIONS.....	360
22.8.	OTHER MATTERS	386
22.9.	PROPOSED CHANGES TO THE PROVISIONS IN THE dDCO	397
22.10.	CONCLUSIONS	402
23.	DRAFT DEVELOPMENT CONSENT ORDER AND RELATED MATTERS.....	406
23.1.	INTRODUCTION	406
23.2.	THE dDCO AS APPLIED FOR	406
23.3.	THE EXAMINATION OF THE dDCO AND ITS REVISIONS	407
23.4.	CONCLUSIONS	438
24.	SUMMARY OF FINDINGS AND CONCLUSIONS.....	440
24.1.	INTRODUCTION	440
24.2.	CONSIDERATION OF FINDINGS AND CONCLUSIONS.....	440
24.3.	RECOMMENDATION	442

List of Appendices (provided in a separate document)

APPENDIX A:	THE EXAMINATION
APPENDIX B:	EXAMINATION LIBRARY
APPENDIX C:	LIST OF ABBREVIATIONS
APPENDIX D:	THE RECOMMENDED DCO

List of Figures

Figure 1: The Proposed Development [APP-002]	1
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List of Tables

Table 1 Issue Specific Hearings	8
Table 2 Compulsory Acquisition Hearings.....	9
Table 3 Environmental management documents	31
Table 4: Environmental management documents introduced during the Examination	32
Table 5 European sites and features for which LSE was excluded	322
Table 6: Changes made to Applicant's dDCO and Comparison between Applicant's dDCO and ExA's rDCO.....	409



The Planning Inspectorate

ERRATA SHEET – A428 Black Cat to Caxton Gibbet Road Improvement Scheme - Ref. TR010044

Examining Authority's Report of Findings and Conclusions and Recommendation to the Secretary of State for Transport, dated 18 May 2022

Corrections agreed by the Examining Authority prior to a decision being made

Page No.	Paragraph	Error	Correction
7	2.3.3	on the the project	on the project
13	2.3.35	Matters relating to the Chamberlains has been reported	Matters relating to the Chamberlains have been reported
32	4.5.30	4.5.30	4.5.13
32	4.5.31	4.5.31	4.5.14
32	4.5.31	Development.The	Development. The
33	4.6.2	the Applicant must comply with the EIA Directive (Regulation 14 and Schedule 4)	the Applicant must comply with the EIA Directive through Regulation 14 and Schedule 4 of the EIA Regulations 2017,
35	4.6.16	complies with the requirements of the EIA Directive (Regulation 14 and Schedule 4).	complies with the requirements of the EIA Directive through Regulation 14 and Schedule 4 of the EIA Regulations 2017.
40	5.1.15	Other key national policy include	The other key national policy includes
40	5.2.1	[APP-257] Whilst	[APP-257]. Whilst
47	5.4.17	Caxton Gibbet, was included in RIS1, this commitment was carried	Caxton Gibbet was included in RIS1, and this commitment was carried
52	5.4.40	reliable sources such DfT	reliable sources such as DfT

Page No.	Paragraph	Error	Correction
52	5.5.1	housing and employment growth. The case for which	housing and employment growth, the case for which
53	5.5.3	the need for the Proposed Development	the need for the Proposed Development.
53	5.5.5	the effects of COVID-19 pandemic	the effects of the COVID-19 pandemic
57	6.2.13	Walking, Cycling, Horseriders Assessment Report	Walking, Cycling and Horse Riding Assessment and Review
58	6.2.17	during Phase Four. While the A1	during Phase Four, while the A1
62	6.4.16	Wybostan	Wyboston
62	6.4.19	The exception being Great North Road	The exception being the Great North Road
66	6.4.41	stated that adverse traffic effect on the LRN	stated that adverse traffic effects on the LRN
68	6.4.51	Unaccompanied	Unaccompanied
68	6.4.55	risk of being subject of dispute.	risks of being the subject of dispute.
69	6.4.57	many of the sites, in rural areas, would be the subject of routine monitoring	many of the sites, in rural areas, would not be the subject of routine monitoring
69	6.4.58	Similarly, to determine whether any subsequent intervention was necessary if discussed at the intended TMFs as secured in the OCTMP.	Similarly, this would assist the Applicant and LHAs in determining whether any subsequent interventions were necessary, including any discussed at the intended TMFs that are secured in the OCTMP
71	6.4.71	The ExA considers that OCTMP	The ExA considers that the OCTMP
76	6.4.95	[REP9-034] REP10-042, Appendix A]	[REP9-034] [REP10-042, Appendix A]
76	6.4.95	The thresholds being based	The thresholds are based
78	6.4.107	Alpha Road Marlborough Road	Alpha Drive/ Marlborough Road
82	6.4.132	would be forthcoming. Similarly, when future	would be forthcoming, or when future
83	6.4.136	The M1 Junction is a complex	The M1 Junction 13 is a complex
84	6.4.140	this is minor increase	this is a minor increase

Page No.	Paragraph	Error	Correction
88	6.4.168	The matters being raised	The matters were raised
89	6.4.176	Black cat junction	Black Cat junction
89	6.4.181	Nags Head Lane (x2)	Nagshead Lane
90	6.4.183	Laburnam	Laburnham
91	6.4.194	eastern side of A1	eastern side of the A1
91	6.4.194	Welcomebreak	Welcome Break
97	6.4.229	Welcomebreak	Welcome Break
98	6.4.233	Walking Cycling Horse-Riding Assessment and Review	Walking, Cycling and Horse Riding Assessment and Review
98	6.4.235	[REP1-055]and	[REP1-055] and
98	6.4.236	The only exception being	The only exception would be
99	6.4.238	in relation PRow	in relation to PRow
101	6.4.251	for which there is an evidence-based need for.	for which there is an evidence-based need.
104	6.4.265	agreement with LHA.	agreement with the LHA.
107	6.4.285	(some rephrasing needed here – hard to make sense of what’s being said)	The ExA is content for the two HAs to enter into a legal agreement; however, given this agreement is not before the ExA, it has not been given any weight in the ExA’s considerations.
107	6.4.286	on all matter that	on all matters that
109	6.4.301	and therefore support both the Applicant and the LHAs	and would therefore support both the Applicant and the LHAs
109	6.4.302	the existing roundabout junctions are over capacity. Also, that as a result	the existing roundabout junctions are over capacity, and that as a result
112	6.5.7	limited weight should be apportioned against it	limited weight should be apportioned against the making of the Order

Page No.	Paragraph	Error	Correction
115	6.5.29	Notwithstanding legal agreements are being discussed	Although legal agreements are being discussed
116-117	7.1.4	3) appropriate weight is attached to designated sites of international, 4) national and local importance, protected species, habitats and other 5) species of principal importance for the conservation of biodiversity	3) appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity (and renumbering of (6) to (4))
117	7.1.6	in the (ES)	in the ES
121	7.3.6	Borrow pitss	borrow pits
139	8.1.4	5) any harmful impact on the significance of a designated heritage asset 6) is weighed against the public benefit of development	5) any harmful impact on the significance of a designated heritage asset is weighed against the public benefit of development
152	8.4.53	is not addressed in the option comparison table and are said to be addressed	is not addressed in the option comparison table and is said to be addressed
159	8.4.88	the ExA cannot be sure that the Applicant could have delivered	the ExA cannot be sure that the Applicant could not have delivered
168	9.2.7	For GHG impact assessment a range of scenarios were considered by the Applicant, notably	The Applicant's ES states that for GHG impact assessment a range of scenarios were considered, notably
177	9.4.44	Whilst the ExA cannot argue that the Applicant's approach is consistent with the NPSNN, the ExA has concerns that comparing the Proposed Development against national carbon budgets is not a like-for-like comparison. It is not clear to the ExA what the effects of the Proposed Development on local or regional carbon budgets would be.	The ExA considers that the Applicant's approach is consistent with the NPSNN. However, the ExA has concerns that comparing the Proposed Development against national carbon budgets is not a like-for-like comparison. Additionally, it is not clear to the ExA what the effects of the Proposed Development on local or regional carbon budgets would be.
178	9.4.47	the GHG emissions from the Proposed Development would in fact increase GHG emissions	the Proposed Development would in fact increase GHG emissions
178	9.4.49	the ExA must accept the Applicant's cumulative	the ExA must accept the Applicant's cumulative

Page No.	Paragraph	Error	Correction
		assessment of GHG emissions from the Proposed Development would not be significant.	assessment of GHG emissions from the Proposed Development does not show a significant level of GHG emissions.
182	9.4.74	the Applicant's stated figures. [REP1-051 Q1.4.1.1e].	the Applicant's stated figures [REP1-051 Q1.4.1.1e].
192	10.4.20	The Applicant clarified that detailed design stage	The Applicant clarified that the detailed design stage
194	10.4.28	ExA is not convinced	The ExA is not convinced
195	10.5.1	the application of this design principles	the application of the design principles
196	11.1.3	The Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 requires an EIA development	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 require an Environmental Impact Assessment (EIA) development (confusing to define an acronym inside a proper name)
198	11.2.5	the the Applicant	the Applicant
205	11.4.17	specific measure.	specific measures.
205	11.4.20	It also maintained it objection	It also maintained its objection
206	11.4.23	Borrow pitss	borrow pits
207	11.4.30	the Applicant to Provide example(s)	the Applicant to provide example(s)
211	11.5.5	Exa	ExA
212	12.1.1	to the ExA).	to the ExA.
212	12.1.3	and, or	and/or
215	12.3.4	would not have significant effect	would not have a significant effect
215	12.3.4	with regard the modelling	with regard to the modelling
216	12.4.3	had it have, it would be likely lower levels of NO2 concentrations would have been predicted to be less.	if it had, it would be likely lower levels of NO2 concentrations would have been predicted.
216	12.4.7	This view being based on	This view was based on

Page No.	Paragraph	Error	Correction
219	12.4.20	Borrow pitss Management Plan	Borrow Pits Management Plan
222	13.1.1	Consideration of Noise and Vibration effects of the Proposed Development were identified	Noise and Vibration effects of the Proposed Development was identified
228	13.4.14	In drawing this conclusion, the ExA also relies on the evidence provided by the Applicant about other made DCOs for highway projects, including but not limited to A1 Birtley to Coal House and A1 Morpeth to Ellingham, where this approach to operational noise mitigation from road traffic has been accepted.	In drawing this conclusion, the ExA also relies on the evidence provided by the Applicant about other made DCOs for highway projects, where this approach to operational noise mitigation from road traffic has been accepted.
232	13.4.37	for all properties a 3m high	for all properties, including a 3m high
235	13.5.3	detailed design, that the Applicant	detailed design, the Applicant
247	14.4.41	REP-021	REP10-021
248	14.4.50-14.4.51	Sequential and Exceptions Tests (in title)	Sequential and Exception Tests
251	14.4.70	noted that document reference number	noted that the document reference number
251	14.4.70	documents at Schedule 10 of the dDCO was inaccurate	documents at Schedule 10 of the dDCO were inaccurate
253	14.4.81	the Water Management Plan contained in the First Iteration EMP [REP10-018, Annex F] manages construction site run-off and accidental spillages amongst other things, one of the identified mitigation measures that is relevant to water quality.	the Water Management Plan contained in the First Iteration EMP [REP10-018, Annex F] manages construction site run-off and accidental spillages amongst other things, and is one of the identified mitigation measures that is relevant to water quality.
253	14.4.82	The Cambridgeshire Councils stated that it preferred	The Cambridgeshire Councils stated that they preferred
263	15.4.21	The Cambridgeshire Councils suggested that additional screening for the Toseland Road Bridge	The Cambridgeshire Councils suggested additional screening for the Toseland Road bridge
269	16.4.2	Borrow pitss	borrow pits

Page No.	Paragraph	Error	Correction
273	17.1.6	The other legislation that are relevant	The other legislation that is relevant
274	17.2.2	agricultural land holding, community land and assets development land and businesses and walkers, cyclists and horse riders	agricultural land holding, community land and assets, development land and businesses, and walkers, cyclists and horse riders
274	17.2.5	A1 Keen Screens	Keen Screen Services
275	17.2.9	A1 Keen Screens	Keen Screen Services
276	17.2.13	Closure of River Great Ouse	Closure of the River Great Ouse
276	17.2.14	give rise to permanent slight beneficial effect in most areas	give rise to a permanent slight beneficial effect in most areas
277	17.2.16	closure of River Great Ouse	closure of the River Great Ouse
278	17.3.4	any impacts of the impacts on human health.	any effects on human health.
284	17.2.9	A1 Keen Screens	Keen Screen Services
286	17.4.36	To aide understanding	To aid understanding
292	17.5.1	the Chamberlain)	the Chamberlains
293	17.5.9	weighs substantially in favour	weigh substantially in favour
294	18.1.3	s20(3)(b)	s20
295	18.2.3	s20(3)(b)	s20
299	18.4.11	did not effect	did not affect
301	18.5.2	would likely to	would be likely to
306	19.4.4	Vibration. Landscape and Visual Effects.	Vibration, and Landscape and Visual Effects
306	19.4.7	the construction of NSIPs inevitably lead to	the construction of NSIPs inevitably leads to
308	19.4.13	EWR and Applicant,	EWR and the Applicant
314	20.2.8	no likely significant effect	no likely significant effects
320	20.3.30	Paragraph 1.3.29	Paragraph 20.3.29

Page No.	Paragraph	Error	Correction
334	21.2.15	and, or	and/or
337	21.2.33	Walking Cycling Horeseriding Assessment Report	Walking, Cycling and Horse Riding Assessment and Review
342	21.2.66	The ExA welcomes the Scheme Design Approach and Design Principles (The ExA welcomes the SDADP submitted	The ExA welcomes the Scheme Design Approach and Design Principles (SDADP) submitted
343	21.2.70	Applicoant's	Applicant's
343	21.2.72	would adequate	would be adequate
344	21.2.77	R3 First Iteration EMP and R4 Second Iteration EMP	R3 Second Iteration EMP and R4 Third Iteration EMP
348	21.2.105	weighs substantially in favour	weigh substantially in favour
350	21.2.115	Filed 44	Field 44
354	22.2.2	Cpecial category Land	Special Category Land
356	22.3.7	proposed to acquired	proposed to be acquired
356	22.3.7	Applicants has	the Applicant has
360	22.6.4	Keenscreen	Keen Screen Services
365	22.7.20	wide. And would	wide, and would
372	22.7.49	effects the AP's farming operations	effects on the AP's farming operations
374	22.7.61	The Applicant summarised that the non-statutory	The Applicant summarised the non-statutory
375	22.7.66	The Application also explained	The Applicant also explained
375	22.7.66	Nags Head Lane	Nagshead Lane
375	22.7.67	the asked the Buchanans	the ExA asked the Buchanans
376	22.7.72	affecting greater number of land owners	affecting a greater number of landowners
376	22.7.75	The APs own the property Dove House Farm at Wyboston, surrounded by gardens, paddocks, and farmland.	(delete; repetition of 22.7.64)

Page No.	Paragraph	Error	Correction
376	22.7.76	The AP had plans to modernise and redevelop this facility and that the property has been blighted	The AP had plans to modernise and redevelop this facility and had concerns that the property has been blighted
382	22.7.107-22.7.108	Woodthorpe Hall Garden Centre Limited, (in title)	Woodthorpe Hall Garden Centre Limited
382	22.7.108	Woodthorpe Hall Garden Centres Limited	Woodthorpe Hall Garden Centre Limited (per Book of Reference)
382	22.7.108	operational at all time	operational at all times
383	22.7.114	Applicnt	Applicant
383	22.7.115	access arrangement	access arrangements
384	22.7.117	include justification for the large extent of permanent land acquisition, in particular with regard to plot 14/6e, justification for the large extent of land proposed for TP,	include justification for the large extent of permanent land acquisition, in particular with regard to land required for a borrow pit, justification for the large extent of land proposed for TP,
384	22.7.117	Matters relating to the notice period for TP has been reported	Matters relating to the notice period for TP have been reported
384	22.7.118	The Applicant responded that the extent of land required for CA in plot 14/6e was for a borrow pit.	The Applicant responded that the extent of land required for CA was for a borrow pit.
384	22.7.121	As such, the ExA accepts the Applicant's justification for the extent of land needed for borrow pits to facilitate its restoration to agricultural land is justifiable, and also accepts the justification for the extent of land needed for TP for safe construction of works.	As such, the ExA accepts the Applicant's justification for the extent of land needed for borrow pits to facilitate its restoration to agricultural land, and also accepts the justification for the extent of land needed for TP for safe construction of works.
385	22.7.123	A1 Keen Screens	Keen Screen Services
385	22.7.124	2010,and	2010, and
392	22.8.41	be able to able reach	be able to reach
394	22.8.53	A1 Keenscreen	Keen Screen Services

Page No.	Paragraph	Error	Correction
394	22.8.53	Keenscreen	Keen Screen Services
395	22.8.58	Keenscreen	Keen Screen Services
396	22.8.63	Keenscreen	Keen Screen Services
396	22.8.63	Eltiseley	Eltisley
402	22.9.23	The Applicant responded that there would be risks to delays, have potential impacts to the construction programme and would reduce the Applicant's ability to accommodate any changes requested by stakeholders	The Applicant responded that there would be risks of delays, which could impact upon the construction programme, and also reduce the Applicant's ability to accommodate any changes requested by stakeholders
402	22.9.25	their members businesses	their members' businesses
403	22.10.3	Keenservices	Keen Screen Services
403	22.10.4	Applicnat's	Applicant's
404	22.10.11	several APs and regarding	several APs regarding
409	23.3.4	to Chapter in	to Chapters in
409	23.3.5	DDCO	dDCO
409	Table 6	Table Error! No text of specified style in document.6	Table 6
413	Table 6, row 17	the ExA' rDCO	the ExA's rDCO
430	Table 6, row 108	form	from
439	23.4.1	ad	to
442	24.2.14	resulution	resolution
442	24.2.14	this general observations	these general observations

1. THE PROPOSAL AND THE SITE

1.1. BACKGROUND AND LOCATION

- 1.1.1. The application (reference number TR010044) for the A428 Black Cat to Caxton Gibbet Road Improvement Scheme (the Proposed Development) was submitted by National Highways, formerly Highways England (the Applicant) to the Planning Inspectorate on 26 February 2021 under section (s) 31 of the Planning Act 2008 (PA2008) and accepted for Examination under s55 of the PA2008 on 23 March 2021 [PD-001].
- 1.1.2. The Applicant is appointed and licenced by the Secretary of State (SoS) for Transport as the strategic highways company for England, with responsibility for the operation, maintenance and improvement of the Strategic Road Network (SRN).
- 1.1.3. The Proposed Development would lie within the administrative boundaries of Bedford Borough Council (BBC), Central Bedfordshire Council (CBC) and Cambridgeshire County Council (CCC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC). The location of the Proposed Development is shown in Figure 1.0 below.



Figure 1: The Proposed Development [APP-002]

- 1.1.4. The Proposed Development would extend from the existing Black Cat roundabout, where the A421 meets the A1 (approximately 2.7 kilometres (km) south of St Neots), to Caxton Gibbet, between Eltisley and Cambourne.
- 1.1.5. The Proposed Development would pass through a predominantly rural setting, characterised by a pattern of agricultural fields and pockets of plantation woodland framed by a network of hedgerows and farm access tracks.

- 1.1.6. Land use is typified by a contrast of urban development within St Neots, Eynesbury and Eaton Socon on the western extents of the Proposed Development against the more open landscapes and smaller settlements and farms along and surrounding the eastern extents. There are a number of villages in the vicinity of the Proposed Development including Roxton, Abbotsley, Croxton, Eltisley and Caxton to the south, and the village of Yelling and the settlement of Papworth Everard to the north.

1.2. THE APPLICATION AS MADE

- 1.2.1. In accordance with the legislative tests under s14 and s22 of PA2008, the SoS for the Ministry for Housing, Communities and Local Government (now Department of Levelling Up, Housing and Communities (DLUHC)) considered the Proposed Development to be a Highway related Nationally Significant Infrastructure Project (NSIP). The application was accepted for Examination on the 23 March 2021, in accordance with s55 of PA2008 [PD-001].
- 1.2.2. The Proposed Development would require the diversion of a high-pressure gas pipeline (pipeline diversion) currently operated by Cadent Gas Limited (Cadent). During this Examination and for this Recommendation Report the pipeline diversion has been treated as a NSIP in its own right under the thresholds in S20 of the PA2008.
- 1.2.3. The letter issued jointly by the Department for Transport (DfT) and Business, Energy and Industrial Strategy (BEIS) on 30 July 2021, confirmed that it has been agreed that the SoS for Transport would be the sole decision maker for the Proposed Development and that the SoS for BEIS would be consulted on the recommendations made by the ExA in relation to the energy NSIP. The comments made by SoS for BEIS would be taken into account when the SoS for Transport is making the decision.
- 1.2.4. Specific consideration of the high-pressure gas pipeline in terms of its status as an NSIP, or otherwise, is made in Chapter 18 of this Recommendation Report.
- 1.2.5. Table 2.1 of the Applicant's Guide to the Application [APP-006] details the certified documents submitted by the Applicant with the application. Certified documents included the draft Development Consent Order (dDCO) [APP-025], Explanatory Memorandum [APP-208], Book of Reference (BoR) [APP-032], the Environmental Statement (ES) and other reports supporting the application. Twelve sets of plans were also submitted with the application which provide further details of the Proposed Development [APP-006, Section 6]:
- Location Plan [APP-007]
 - Land Plans corresponding to the Book of Reference [APP-008]
 - Works Plans [APP-009 to APP-010]
 - General Arrangement Plans [APP-011]
 - De-trunking Plans [APP-012]
 - Streets, Rights of Way and Access Plans [APP-013]

- Traffic Regulation Measures Plans [APP-014]
 - Permanent Speed Limit Plans [APP-015]
 - Classification of Roads Plans [APP-016]
 - Engineering Sections Drawings [APP-017 to APP-022]
 - Crown Land Plans [APP-023]
 - Demolition Plans [APP-024]
- 1.2.6. The ES [APP-071] provides a full description of the Proposed Development.
- 1.2.7. The Proposed Development comprises a new 16km two lane dual carriageway between Black Cat and Caxton Gibbet. Schedule 1 of the draft Development Consent Order (dCO) [APP-025] lists 111 Work Numbers (Works Nos) as shown in the Works Plans [APP-009 to APP-010].
- 1.2.8. Starting from the western end of the Proposed Development, the proposal includes a new three-level grade separated junction at Black Cat roundabout, that would include the A1 at the lower level, the new dual carriageway on the upper level, and a roundabout between the two. In addition to slip roads, a new free flowing link between the A421 eastbound carriageway and the A1 northbound carriageway is proposed (Works Nos 1, 2, 4, 5, 10 to 14, 16, 17 and 21 to 24).
- 1.2.9. A new grade separated all movements junction to the east of the existing Cambridge Road roundabout would provide access to the new dual carriageway and maintain access to the existing A428 (Works Nos 80a, b, c and 83).
- 1.2.10. At the Caxton Gibbet roundabout, a new grade separated all movements junction would 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 would then tie-in to the existing A428 dual carriageway to the east of the new Caxton Gibbet junction (Works Nos 91, 106, 109 a to d and 111).
- 1.2.11. Changes are proposed to the local road network in the vicinity of the new Black Cat junction, including some local side roads and accesses to be closed and replaced with alternative routes. The existing Roxton Road bridge would be demolished and replaced with a new structure to the west to accommodate the realigned A421 (Works Nos 3, 4, 7, 15, 18, 22, 25, 26, 29, 30 and 33 to 37).
- 1.2.12. New crossings would be constructed to enable the new dual carriageway to cross the River Great Ouse (Works No 39), East Coast Main Line (ECML) railway (Works No 50), Barford Road (Works Nos 43, 46) the B1046/Potton Road (Works Nos 64, 68), Toseland Road (Works No 89) and the existing A428 at Eltisley (Works No 98).
- 1.2.13. The existing A428 between St Neots and Caxton Gibbet would be de-trunked and retained for local traffic and public transport with maintenance responsibility transferred to the Local Highway Authorities (LHAs).

1.2.14. Other aspects of the Proposed Development include:

- 1) alternative accesses to side roads at Chawston, Wyboston and Eltisley (Works Nos 37, 21, 22, 18, 29, 36, 37 and 98);
- 2) changes to the Public Rights Of Way network affected by and near to the Proposed Development (Works Nos 72, 77, 85, 85a and 92);
- 3) the main dual carriageway (Works Nos 40, 48, 53, 54, 57, 59, 70, 71, 73-79, 84, 86-88, 91, 93, 94, 101, 102 and 108);
- 4) diversions of electricity lines (Works Nos 6, 8, 27, 32, 47, 49, 52, 56, 58, 63, 67, 69, 69A, 69B, 82, 99 and 110);
- 5) diversions of water pipelines (Works Nos 19, 28, 44, 60, 61, 62, 66, 95, 100, 103 and 107);
- 6) diversion of communications and telecommunications (Works Nos 9, 20, 42, 45, 65, 81, 90, 96, 97 and 104); and
- 7) diversion of gas pipelines (Works Nos 38, 42 and 51)

Associated Development

1.2.15. There is no associated development separately listed in the dDCO. The high-pressure gas pipeline diversion is included within the listed works above (Works No 51). However, other associated works are listed at the end of Schedule 1 in Paragraphs (a) to (u) of the dDCO, which would enable the main works listed to be constructed efficiently and without impediment.

Ancillary Development

1.2.16. The dDCO also includes a list of ancillary works in Part 2 of Schedule 1 which are considered necessary to enable the Proposed Development to be constructed but are not defined as 'development' by s32 of the PA2008, therefore would not meet the definition of 'associated development' in s115 of the PA2008. These works include provision for moorings, navigation and protection of land and structures associated with use of waterways.

Ancillary Matters

1.2.17. Other ancillary matters described in the Explanatory Memorandum [APP-028] include the temporary and permanent stopping up of lengths of existing highway and private means of access in the vicinity of the Proposed Development, the classification of highways, the imposition of traffic regulation measures (including the application of speed limits), the creation of new private means of access, and the application and disapplication of legislation.

1.3. THE APPLICATION AS EXAMINED

1.3.1. When the application was submitted the Applicant included a Guide to the Application (the Guide) [APP-006]. There were nine revised versions of the Guide submitted up to the close of the Examination, the final version [AS-029] details the changes made and additional documents submitted.

- 1.3.2. The Guide to the Application included changes to the key application documents, including wording of the dDCO during the Examination. The changes sought to address points raised in Relevant Representations, Written Representations, other submissions by Interested Parties (IPs) and following the ExA's various written questions and requests under Rule 17 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR). Likewise following Actions agreed at Hearings throughout the Examination.

Changes to the Proposed Development

- 1.3.3. Following the submission of the application, during the Pre-examination and Examination period, no change requests to alter the Proposed Development were made by the Applicant. The changes made to the application documents, together with any additional information submitted and accepted by the ExA, have been considered in the context of Paragraphs 109 to 115 of the 'Planning Act 2008: Guidance for the examination of applications for development consent' (March 2015). The changes to the application documents did not significantly change the application to a point where it became a different application.

1.4. RELEVANT PLANNING HISTORY

- 1.4.1. A schedule of the main recent planning history is included in the Applicant's Case for the Scheme [APP-240, Appendix D].
- 1.4.2. There is an extant planning permission pursuant to the Town and Country Planning Act 1990, for the archaeological excavations near Sandy and Tempsford (Field 44), to mitigate the effects of the high-pressure pipeline diversion and facilitate the Proposed Development (CB/20/04083/FUL, CB/20/04185/FULL and CB/20/04391/FULL) [REP1-054] [REP1-055].
- 1.4.3. Two other extant planning permissions that are of particular relevance to the construction and operation of the Proposed Development are the permissions associated with Black Cat Quarry (15/02551/EIAWM), near to the existing Black Cat roundabout, undergoing restoration, and the mixed use Wintringham development to the southeast of St Neots (17/02308/OUT and 18/02719/REM) [APP-240, Section 3.3].

2. THE EXAMINATION

2.1. APPOINTMENT OF THE EXAMINING AUTHORITY

- 2.1.1. On 19 May 2021, Menaka Sahai (lead member of the Examining Authority (ExA)), along with panel members Andrew Parkin and Matthew Scriven were appointed as the ExA for the application under section (s) 61 and s65 of Planning Act 2008 (PA2008) [PD-003].

2.2. THE PERSONS INVOLVED IN THE EXAMINATION

- 2.2.1. The persons involved in the Examination were:

- Persons who were entitled to be Interested Parties (IPs) because they had made a Relevant Representation (RR) or were a Statutory Party who requested to become an IP;
- Affected Persons (APs) who were affected by a Compulsory Acquisition (CA) and / or Temporary Possession (TP) proposal made as part of the Application and objected to it at any stage in the Examination; and
- Other Persons, who were invited to participate in the Examination by the ExA because they were either affected by it in some other relevant way or because they had particular expertise or evidence that the ExA considered to be necessary to inform the Examination.

- 2.2.2. The Applicant invited RRs from parties on 28 April 2021 for a six-week period [OD-001], with registration closing on 10 June 2021. The Applicant identified errors in their records whereby persons with a legal interest in the land affected by the Proposed Development had not been notified about the application being accepted. Subsequently s56 notification was sent to those additional persons on a later date of 19 May 2021. The Deadline for registration was extended to 21 June 2021 for those persons only.

2.3. THE EXAMINATION AND PROCEDURAL DECISIONS

- 2.3.1. The Examination began on 18 August 2021 and concluded on 18 February 2022. The principal components of and events around the Examination are summarised below. A fuller description, timescales and dates can be found in Appendix A.

The Preliminary Meeting

- 2.3.2. On 9 July 2021, The ExA wrote to all IPs, Statutory Parties and Other Persons under Rule 6 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR) (Rule 6 Letter) inviting them to the Preliminary Meeting (PM) and notifying of early Hearings [PD-005], outlining:

- the arrangements and agenda for the PM;
- notification of hearings to be held in the early stage of the Examination, under Rule 13 of EPR;
- agenda(s) for the early Hearings;

- an Initial Assessment of the Principal Issues (IAPI);
- the draft Examination Timetable;
- availability of RRs and application documents; and
- the ExA's Procedural Decisions.

2.3.3. In response to the Government imposed restrictions due to the COVID-19 pandemic, the PM and all subsequent Hearings of the Examination were held in virtual format. The PM took place in two parts, on 10 August 2021 and 18 August 2021. Both parts of the meeting were held by virtual means via Microsoft Teams and live streamed via a link published on the project webpage of the National Infrastructure Planning website¹ (the project webpage). Video recordings [EV-003] [EV-008] and notes of the meeting [EV-002] [EV-009] were published on the the project webpage. The two-part approach enabled anyone watching the livestream or recording to make a representation without being in the virtual room.

2.3.4. The ExA's procedural decisions and the Examination Timetable took account of matters raised at the PM. They were provided in a letter issued under Rule 8 [PD-007] of the EPR (Rule 8 Letter), dated 20 August 2021.

Key Procedural Decisions

2.3.5. The procedural decisions set out in the Rule 8 Letter [PD-007] related to the procedure of the Examination and not the planning merits of the Proposed Development.

2.3.6. On 9 December 2021, under Rule 8(3) of the EPR, the ExA varied the Examination Timetable to include an additional Deadline, new D7 on 6 January 2022 [PD-011]. The reasons for the amendment are reported in Chapter 17 of this Recommendation Report.

Site Inspections

2.3.7. Site Inspections are held in PA2008 Examinations to ensure that the ExA has an adequate understanding of the Proposed Development within its site and surroundings and its physical and spatial effects.

2.3.8. Where the matters for inspection can be viewed from the public domain and there are no other considerations such as personal safety or the need for the identification of relevant features or processes, an Unaccompanied Site Inspection (USI) is held. Where an inspection must be made on land requiring consent to access, there are safety or other technical considerations and / or there are requests made to accompany an inspection, an Accompanied Site Inspection (ASI) is held.

2.3.9. Having regard to, and to better understand the application material, the matters raised in RRs, and issues emerging during the course of the Examination the ExA held the following USIs. A record of the time and

¹ <https://infrastructure.planninginspectorate.gov.uk/projects/eastern/a428-black-cat-to-caxton-gibbet-road-improvement-scheme/>

locations visited at each USI can be found in the Examination Library (EL) with the following references:

- USI1 held on 30 June 2021 and 1 July 2021, [EV-001];
- USI2 held on 20 September 2021, [EV-054]
- USI3 held on 2 February 2022 and 3 February 2022 [EV-095]

- 2.3.10. The timing of the three USIs enabled the ExA to observe the setting of the Proposed Development at different points of the year and to observe the traffic conditions at different stages of public health restrictions associated with COVID-19.
- 2.3.11. The ExA held an ASI on 21 September 2021, to enable the ExA to visit sites along the route of the Proposed Development that were best seen from Private Land [EV-022].
- 2.3.12. The ExA has had regard to the information and impressions obtained during its site inspections in all relevant sections of this Report.

Hearing Processes

- 2.3.13. Hearings are held in PA2008 Examinations to respond to specific requests from persons who have a right to be heard. This includes APs affected by CA and TP proposals who object and request to be heard at a CA Hearing (CAH) under s92 of the PA2008. IPs may request to be heard at an Open Floor Hearing (OFH) under s93 of the PA2008. The ExA may also hold an Issue Specific Hearing (ISH) under s91 of the PA2008 to address matters where the ExA considers that a Hearing is necessary to inquire orally into matters under examination, typically because they are complex, there is an element of contention or disagreement, or the application of relevant law or policy is not clear.
- 2.3.14. The ExA held six ISHs for the Proposed Development and all were held virtually and live streamed. ISHs were held on the subject matters listed below in Table 1 and each included relevant questions on the dDCO:

Table 1 Issue Specific Hearings

Hearing Title	Date	EL reference
ISH1 Early clarification on Strategic Matters	18 August 2021	Agenda [EV-007]
		Recording [EV-010 to EV-012]
		Transcript [EV-013 to EV-015]
ISH2 Highways and Transport Matters	23 September 2021	Agenda [EV-020]
		Recording [EV-033 to EV-037]

		Transcript[EV-038 to EV-042]
ISH3, Social, Economic and Environmental matters	24 September 2021	Agenda[EV-021]
		Recording[EV-044 to EV-048]
		Transcript[EV-049 to EV-053]
ISH4 Social, Economic and Environmental matters	30 November 2021	Agenda [EV-055]
		Recording [[EV-059 to EV-063]
		Transcript [EV-064 to EV-068]
ISH5, Highways Matters	1 December 2021	Agenda [EV-056]
		Recording[EV-069 to EV-073]
		Transcript[EV-074 to EV-078]
ISH6, dDCO only	2 December 2021	Agenda [EV-057]
		Recording[EV-079 to EV-081]
		Transcript[EV-082 to EV-084]

2.3.15. The ExA held two CAHs during the Examination. All parties affected by CA and TP proposals were provided with an opportunity to be heard. The ExA also used these Hearings to examine the Applicant's case for CA and TP in the round, as shown in Table 2:

Table 2 Compulsory Acquisition Hearings

Hearing Title	Date	EL reference
CAH1	22 September 2021	Agenda [EV-019]
		Recording[EV-024] to [EV-027]
		Transcript [EV-028] to [EV-031]
CAH2	2 December 2021	Agenda [EV-058]
		Recording [EV-085] to [EV-087]
		Transcript[EV-088] to [EV-090]

- 2.3.16. OFH1 was held on 19 August 2021 [EV-005]. All IPs were provided with an opportunity to be heard on any important and relevant matters that they wished to raise. The recording [EV-017] of OFH1 and associated transcript [EV-018] are available in the EL.
- 2.3.17. A second OFH had been scheduled for the afternoon of 19 August 2021. However, this was cancelled at the PM Part 2 [EV-002] as known attendees opted to speak at OFH1 earlier in the day.

Written Processes

- 2.3.18. Examination under PA2008 is primarily a written process, in which the ExA has regard to written material forming the application and arising from the Examination. All of this material is recorded in the EL (Appendix B of this Recommendation Report) and published online. Individual document references to the EL in this report are enclosed in square brackets []. For this reason, this Recommendation Report does not contain extensive summaries of all documents and representations, although the ExA has considered all important and relevant matters arising from them and given them full regard in the conclusions.
- 2.3.19. Key written sources are set out further below.

Relevant Representations

- 2.3.20. 124 RRs were received [RR-001 to RR-123]. All makers of RRs received the Rule 6 Letter and were provided with an opportunity to become involved in the Examination as IPs. All RRs have been fully considered by the ExA.
- 2.3.21. The ExA also exercised their discretion to accept Additional Submissions during the Examination, from several parties, including the Applicant [AS-001 to AS-031].

Written Representations and Other Examination Documents

- 2.3.22. The Applicant, IPs and Other Persons were provided with opportunities to:
- make Written Representations (WRs) (D1);
 - comment on WRs made by the Applicant and other IPs (D3);
 - summarise their oral submissions at Hearings in writing (D1, D3, D6);
 - make other written submissions requested or accepted by the ExA; and
 - comment on documents issued for consultation by the ExA including:
 - A Report on Implications for European Sites (RIES) [PD-013] published on 17 December 2021 by D8; and
 - A commentary on the draft Development Consent Order (dDCO) [PD-015] published on 14 January 2022 by D9.
- 2.3.23. All WRs and other examination documents have been fully considered by the ExA and reported in this Recommendation Report.

Local Impact Reports

- 2.3.24. A Local Impact Report (LIR) is a report made by a relevant Local Authority (LA) giving details of the likely effects of the Proposed Development on the authority's area (or any part of that area) that has been invited and submitted to the ExA under s60 PA2008.
- 2.3.25. LIRs were received by the ExA from the following relevant LAs at D2 on 08 September 2021:
- 1) Bedford Borough Council (BBC) [REP2-002];
 - 2) Central Bedfordshire Council (CBC) [REP2-04]; and
 - 3) Jointly from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) [REP2-003]
- 2.3.26. The LIRs have been taken fully into account by the ExA during the Examination and reported in relevant Chapters of this Recommendation Report.

Written Questions

- 2.3.27. The ExA asked three rounds of written questions:
- First Written Questions (WQ1) [PD-008] were set out in the Rule 8 letter [PD-007], dated 20 August 2021. The ExA also issued intended WQ1 [PD-008] on the 21 July 2021 to ensure Parties had advanced sight and additional time to prepare submissions.
 - Second Written Questions (WQ2) [PD-009] were issued on 15 October 2021.
 - Third Written Questions (WQ3) [PD-014] were issued on 22 December 2021.
- 2.3.28. The ExA invited comments on its proposed changes to the draft DCO (dDCO) [PD-015] on 14 January 2022.
- 2.3.29. The following requests for further information and comments under Rule 17 of the EPR (Rule 17 letter) were issued on:
- 1) 2 July 2021 [PD-004]; with regard to RRs, Statements of Common Ground (SoCG), LIRs, mapping and materials to facilitate virtual events.
 - 2) 9 December 2021 [PD-011]; with regard to the status of the Chamberlains in the Examination and matters relating to the ExA's Public Sector Equality Duty (PSED) and Human Rights Act considerations to BBC, the Applicant and the Chamberlains
 - 3) 9 December 2021 [PD-012]; with regard to Mr Baron, and matters relating to the ExA's PSED and Human Rights Act considerations to BBC, the Applicant and Mr Baron;
 - 4) 14 January 2022 [PD-016]; with regard to CA to the Applicant and the Chamberlains, cumulative effects of greenhouse gas emissions, land interests, Public Sector Equality Duty (PSED) considerations, other D7 submissions, Letters of no impediment (LONI), to the Applicant.

5) 17 January 2022 [PD-017]; with regard to Habitats Regulations Assessment, high-pressure pipeline diversion, noise effects of borrow pits, operational noise monitoring, SoCG, D10 submissions, Network Management Duty, flood risk and designated funds.

2.3.30. All responses to the ExA's written questions, proposed changes to the dDCO and Rule 17 letters have been considered and reported on in all relevant Chapters of this Recommendation Report.

Statements of Common Ground

2.3.31. A SoCG is a statement of agreed and disagreed matters between the Applicant and one or more IPs, recording matters that are agreed between them. By the end of the Examination, the following bodies had signed SoCGs with the Applicant:

- 1) Bedford Borough Council [REP10-025];
- 2) Cambridgeshire Councils [REP10-026];
- 3) Central Bedfordshire Council [REP10-024];
- 4) Natural England [REP10-023]
- 5) Historic England [REP10-022]
- 6) Environment Agency [REP10-021]
- 7) National Grid [REP10-076]
- 8) Cadent Gas Limited [REP10-030]
- 9) Anglian Water [AS-020]
- 10) South Staffordshire Water [REP10-029]
- 11) National Farmers Union [REP10-027] and
- 12) East West Rail Company Limited [REP10-028]

2.3.32. The signed SoCGs have been taken into account by the ExA in all relevant Chapters of this Recommendation Report.

UNDERTAKINGS, OBLIGATIONS AND AGREEMENTS

2.3.33. By the end of the Examination, no separate undertakings, obligations or agreements between the Applicant and IPs had been submitted to the Examination. The ExA understands that the Applicant is negotiating side agreement with LAs, Statutory Undertakers, and landowners on matters such as de-trunking agreements, wording of Protective Provisions and lease arrangements. However, these side agreements are not in the Examination and have not been given any weight in the ExA's considerations. Where relevant, the ExA has reported on the side agreements in this Recommendation Report.

Requests to Join and Leave the Examination

2.3.34. East West Rail (EWR) Company made a submission [AS-004] requesting that they should be treated as an IP on 30 June 2021, before the PM. The ExA invited them to the PM as an Other Person. At the PM, the ExA informed EWR that they did not meet any of the criteria to become an IP in sections 102A and 102B of the PA2008 and also that their submission was received after the close of the Relevant Representation period [EV-002]. Thereafter EWR participated in the Examination as an Other Person

[PD-007]. Matters relating to EWR have been reported in Chapters 5, 6 and 19 of this Recommendation Report.

- 2.3.35. Mr and Mrs Chamberlain (the Chamberlains) made a submission to the Examination on 29 November 2021, with an objection to the CA of their property near Black Cat roundabout [AS-018] [AS-019]. The ExA issued a Procedural Decision on 9 December 2021 [PD-011], under s89 (3) of PA2008 and Rule 17 of the EPR, stating that the ExA would treat the Chamberlains as an IP and as an AP. Matters relating to the Chamberlains has been reported in Chapters 17 and 22 of this Recommendation Report.
- 2.3.36. East Cambridgeshire District Council [AS-006] and North Hertfordshire District Council [AS-007] requested to leave the Examination prior to the PM.
- 2.3.37. There were no requests to join the Examination by persons who were not already IPs at or after the PM.
- 2.3.38. During the Examination, as a consequence of discussion at Hearings and discussions with the Applicant, the following persons informed the ExA that their issues were settled and their representations were withdrawn:
- 1) The Woodland Trust withdrew its objection [RR-111] to the Proposed Development and left the Examination [AS-012] further to the Applicant [REP1-021] explaining that a group of trees had incorrectly been referred to as veteran trees and confirming the intended root protection area buffer zone around veteran tree T311.
 - 2) Network Rail withdrew its representation [RR-078] stating that an agreement had been reached with the Applicant to resolve their concerns [AS-014] regarding their statutory undertaking.
 - 3) Bedfordshire and Rivel Ivel Internal Drainage Board withdrew their representation [REP1-092] stating consent to the disapplication of matters related to s66 and s23 of the Land Drainage Act 1991 [AS-031].

2.4. OTHER CONSENTS

- 2.4.1. The Applicant has identified the following consents that the Proposed Development has obtained or must obtain, in addition to Development Consent under PA2008. The latest position on these is recorded below and as described in the Applicant's Consent and Agreements Position Statement [REP10-011, Appendix A]:

Protected Species

- 1) **Natural England** – Licence would be required for Badgers under s10 of the Protection of Badgers Act 1992, for which a Letter of No Impediment (LONI) has been provided [REP10-011, Appendix B].
- 2) **Natural England** - European Protected Species Licence would be required for Bats under the Conservation of Habitats and Species Regulations 2017; Wildlife and Countryside Act 1981.

- 3) **Natural England** – European Protected Species Licence for Great Crested Newts would be required under the Conservation of Habitats and Species Regulations 2017; Wildlife and Countryside Act 1981, for which a LONI has been provided [REP10-011, Appendix C].
- 4) **NatureSpace Partnership** – The Applicant applied to join a District Level Licensing Scheme for Great Crested Newts, and a response in agreement was received [REP10-010, Appendix D].

Environmental/water/waste/drainage

- 5) **Environment Agency** - Full Water Abstraction Licence would be required under section 24 of the Water Resources Act 1991. Discussions are ongoing.
- 6) **Environment Agency** - Temporary Water Abstraction Licence would be required under section 24 of the Water Resources Act 1991. Discussions are ongoing.
- 7) **Environment Agency** - Water Transfer Licences would be required under s24 of the Water Resources Act 1991. Discussions are ongoing.
- 8) **Environment Agency** - Water Impoundment Licence would be required under Section 25 of the Water Resources Act 1991. Discussions are ongoing.
- 9) **Environment Agency** - An environmental permit would be required under the Environmental Permitting (England and Wales) Regulations 2016. Discussions are ongoing.
- 10) **Environment Agency** - Flood Risk Activity (Environmental) Permit would be required under the Environmental Permitting (England and Wales) Regulations 2016. Discussions are ongoing.
- 11) **The Bedfordshire and River Ivel Internal Drainage Board** – Approvals from the Bedfordshire and River Ivel Internal Drainage Board would be needed under the Bedfordshire and River Ivel Internal Drainage Board Byelaws 1985 (Land Drainage Byelaw consents). Discussions are ongoing.
- 12) **Central Bedfordshire Council Land Drainage Byelaws** Approvals from the Central Bedfordshire Council Drainage Board would be needed under the Central Bedfordshire Council Land Drainage Byelaws 2016 (Land Drainage Byelaw consents). Discussions are ongoing.
- 13) **Internal drainage board or Lead Local Flood Authorities** - Land drainage Consent would be required under s23 of the Land Drainage Act 1991. Discussions are ongoing.
- 14) **Local water undertaker** - Trade Effluent Consent would be required under the Water Industry Act 1991.

Noise and Vibration

- 15) **Local Authorities** - s61 consents would be required under the Control of Pollution Act (1974) if proposed by the contractor. Discussion to take place if required.

Minerals and Waste

- 16) **HSE** – Agreement would be required under the Control of Asbestos Regulations 2012. Discussions to take place if required

- 17) **Environment Agency** - Waste exemptions would be needed for waste operations such as U1 (use of waste in construction) and T15 (treating waste aerosol cans) (if exemption limits can be met) under Pollution Prevention and Control Act 1999, Environmental Permitting (England and Wales) Regulations 2016. Discussions to take place if required.
- 18) **Environment Agency** - Environmental Permit for waste operations would be required under Pollution Prevention and Control Act 1999, Environmental Permitting (England and Wales) Regulations 2016. To be discussed post consent (if consent is granted), if required.
- 19) **Environment Agency** - Consent would be required under the Pollution Prevention and Control Act 1999, Environmental Permitting (England and Wales) Regulations 2016. To be discussed post consent (if consent is granted).
- 20) **Environment Agency** - CL:AIRE Materials Management Plan. CL:AIRE (2011) Definition of Waste: Development Industry Code of Practice (v.2) (DoWCoP). To be discussed post consent (if consent is granted).

Building Demolition

- 21) **Local Authority Notice** - Local Authority s80 notice would be required under the Building Act 1984 and Building Regulation compliance – Notice of demolition would be given post DCO consent.

Consent/licence for the felling of trees

- 22) **Local Authority/Forestry Commission** - Felling Licence would be required under the Forestry Act 1967. Discussions to take place post consent (if consent is granted).

2.4.2. In relation to the outstanding consents recorded above, the ExA has considered the available information and, without prejudice to the exercise of discretion by future decision-makers, has concluded that there are no apparent impediments to the implementation of the Proposed Development, should the SoS grant consent.

Crown Land

2.4.3. The BoR [REP10-014] and the Crown Land Plans [REP4-004] show that Crown Land comprises of various plots. Article 57 of the dDCO, includes provision for the acquisition of Crown Land which is land being held by or on behalf of the Crown. In line with s135 of PA2008 the consent of the Crown Estate and other Crown Authorities to the CA of these land interests is required. At the close of the Examination Crown Consent had not been received. In the absence of requisite consents from relevant Crown Authorities, the ExA has concluded that the Order cannot authorise the CA of those plots of land and/ or interests which are Crown Land because s135(2) has not been met. The ExA has reported on this matter in Chapter 22 of this Recommendation Report.

2.5. STRUCTURE OF THIS REPORT

2.5.1. The structure of this report is as follows:

- **Chapter 1** describes the site and its surrounds, the Proposed Development and the application, its planning history and that of related projects.
- **Chapter 2** introduces the reader to the processes used to carry out the Examination and make this Report.
- **Chapter 3** records the legal and policy context for the SoS's decision.
- **Chapter 4** sets out the adequacy of the ES and associated information relating to the Proposed Development and planning issues that arose during the Examination.
- **Chapters 5 to 19** deal with findings and conclusions in relation to the main issues in the Examination.
- **Chapter 20** considers effects on European Sites and HRA.
- **Chapter 21** sets out the balance of planning considerations arising from Chapters 5 to 22, in the light of the factual, legal and policy information in Chapters 1 to 3.
- **Chapter 22** sets out the ExA's examination of CA and TP proposals.
- **Chapter 23** considers the implications of the matters arising from the preceding chapters for the DCO.
- **Chapter 24** summarises all relevant considerations and sets out the ExA's recommendation to the SoS.

2.5.2. This Recommendation Report is supported by the following Appendices:

- **Appendix A** – the Examination Events.
- **Appendix B** – the Examination Library.
- **Appendix C** – List of Abbreviations.
- **Appendix D** – the Recommended DCO.

3. LEGAL AND POLICY CONTEXT

3.1. INTRODUCTION

- 3.1.1. This Chapter sets out the main policy documents and principal international and domestic legislation of relevance to the Examination of the Proposed Development. The Examining Authority (ExA) has had regard to them during the Examination and in making its findings and recommendations to the Secretary of State (SoS).
- 3.1.2. The Applicant's Environmental Statement (ES) outlines the international, national, regional and local legislative and policy contexts to which the Applicant has had regard within its introductory and thematic Chapters [APP-070 to APP-083].

3.2. THE PLANNING ACT 2008

- 3.2.1. The Planning Act 2008 (PA2008) is the primary legislation for Nationally Significant Infrastructure Project (NSIP) applications. Where a relevant National Policy Statement (NPS) has been designated and has effect, as in this case, section(s)104 of PA2008 is engaged.
- 3.2.2. Under s104 the SoS must have regard to:
- any NPS which has effect in relation to development of the description to which the application relates;
 - any Local Impact Report (LIR) (within the meaning given by s60(3) of the PA2008) submitted to the SoS before the specified deadline for submission;
 - any matters prescribed in relation to development of the description to which the application relates; and
 - any other matters which the SoS thinks are both important and relevant to the decision.
- 3.2.3. Under s104(3) the SoS is required to decide the application in accordance with any relevant NPS, creating a presumption in favour of NPS compliant development except to the extent that one or more of the exceptions in subsections (4) to (8) apply. The exceptions are as follows and apply if the SoS is satisfied that:
- deciding the application in accordance with any relevant NPS would lead to the United Kingdom being in breach of any of its international obligations;
 - deciding the application in accordance with any relevant NPS would lead to the SoS being in breach of any duty imposed on them by or under any enactment;
 - deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment;
 - the adverse impact of the Proposed Development would outweigh its benefits; and/or
 - any condition prescribed for deciding an application otherwise than in accordance with a NPS is met.

3.3. NATIONAL POLICY STATEMENTS

- 3.3.1. The National Policy Statement for National Networks (NPSNN) sets out the need for and the Government policies to deliver NSIPs on the national road and rail networks in England. It is the relevant NPS for the Proposed Development.
- 3.3.2. For the purpose of this Examination and in this Recommendation Report the diversion of a high-pressure gas pipeline to facilitate the Proposed Development has been treated as an NSIP in its own right under s20 of PA2008. Therefore, the National Policy Statements for Overarching Energy (NPS EN-1) and Oil and Gas Supply and Storage (NPS EN-4) are also of relevance.

3.4. EUROPEAN LAW AND RELATED UK REGULATIONS

- 3.4.1. The United Kingdom (UK) left the European Union (EU) on 31 January 2020 and entered into a transition period which ended on 31 December 2020. The European Union (Withdrawal) Act (2018) as amended by the European Union (Withdrawal Agreement) Act (2020) provides that, subject to defined exceptions, European law which was extant up to exit day remains in force and was incorporated into UK law on exit day.
- 3.4.2. This Recommendation Report has been prepared on the basis of retained law and references in it to European terms, such as 'habitats', have also been retained for consistency with the Examination documents. It will be a matter for the SoS to satisfy themselves as to the position on retained law, obligations and equivalent terms at the point of their decision.

Environmental Impact Assessment (EIA) Directive

- 3.4.3. The EIA Directive (85/337/EEC) defines the procedure by which information about the environmental effects of a project is collected and considered by the relevant decision-making body before consent is granted for a development.
- 3.4.4. The EIA Directive is transcribed into the law of England and Wales under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations 2017), which came into force on 16 May 2017, and apply to the Proposed Development.
- 3.4.5. The Applicant's ES reports the findings of the EIA undertaken to identify the likely significant effects of the Proposed Development on the environment.

Habitats Directive

- 3.4.6. The Habitats Directive (92/43/EEC) is the European nature conservation legislative measure which provides for a network of protected sites and a system of species protection.
- 3.4.7. Habitat types requiring the designation of Special Areas of Conservation (SACs) are listed in Annex I of the Directive. Animal and plant species of interest whose conservation requires the designation of SACs are listed in

Annex II. SACs form part of the national site network of protected sites, in place of the Natura 2000 ecological network. Annex IV lists animal and plants species of interest in need of legal protection. All species listed in these annexes are identified as European Protected Species (EPS).

- 3.4.8. The Habitats Directive is transcribed into the law of England and Wales under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations), which are relevant to this application in matters relating to Biodiversity [APP-077] and the ExA has had regard to them as necessary, including in Chapters 7, 14, 15 and 20 of this Recommendation Report.

Birds Directive

- 3.4.9. The Birds Directive (2009/147/EC) is the European nature conservation legislative measure for all wild bird species naturally occurring in the EU. It requires classification of areas as Special Protection Areas (SPAs) comprising all the most suitable territories for these species. All SPAs form part of the national site network.

- 3.4.10. The Birds Directive is also transcribed into the law of England and Wales under the Habitats Regulations, which are relevant to this application in matters relating to Biodiversity [APP-077] and the ExA has had regard to them as necessary, including in Chapters 7, 14, 15 and 20 of this Recommendation Report.

Water Framework Directive

- 3.4.11. The Water Framework Directive (2000/60/EC) (WFD) sets objectives to prevent and reduce pollution, for environmental protection, to improve aquatic ecosystems and to mitigate the effects of floods. It establishes a legislative framework for the protection of surface waters and groundwater and provides for the production of River Basin Management Plans for the sustainable management of water bodies.

- 3.4.12. The WFD is transcribed into the law of England and Wales under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, which are relevant to this application in matters relating to Road Drainage and the Water Environment [APP-082] and Biodiversity [APP-077] and the ExA has had regard to them as necessary, including in Chapters 7, and 14 of this Recommendation Report.

Air Quality Directive

- 3.4.13. The Air Quality Directive (2008/50/EC) (AQD) on ambient air quality and cleaner air for Europe sets limit values for compliance and establishes control actions where the limit values are exceeded for ambient air quality with respect to sulphur dioxide, nitrogen dioxide (NO₂) and mono-nitrogen oxides, particulate matter (PM₁₀ and PM_{2.5}), lead, benzene and carbon monoxide.

- 3.4.14. The 4th Air Quality Daughter Directive (2004/107/EC) sets out similar provisions relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons limits in ambient air and may also be relevant.
- 3.4.15. Both the AQD and the Daughter Directive are transcribed into the law of England and Wales under the Air Quality Standards Regulations 2010, which are relevant to this application in matters relating to Air Quality [APP-074] and Population and Human Health [APP-081], and the ExA has had regard to them as necessary, including in Chapters 12 and 17 of this Recommendation Report.

Waste Framework Directive

- 3.4.16. The Waste Framework Directive (2008/98/EC) is the primary European waste management directive of relevance to the Proposed Development.
- 3.4.17. The Waste Framework Directive is transcribed into the law of England and Wales under the Waste (England and Wales) Regulations 2011 which are relevant to this application in matters relating to Geology and Soils [APP-078] and Material Assets and Waste [APP-079], and the ExA has had regard to them as necessary, including in Chapters 11, 15, 16 and 18 of this Recommendation Report.

3.5. OTHER LEGAL PROVISIONS

The Highways Act 1980

- 3.5.1. The Highways Act 1980 is the primary legislation which deals with the management, maintenance and safe operation of the highway network in England and Wales.
- 3.5.2. The Act is relevant to this application in relation to statutory responsibilities of Highway Authorities, de-trunking arrangements and future maintenance of local highway infrastructure (Chapters 6, 22 and 23 of this Recommendation Report).

The Traffic Management Act 2004

- 3.5.3. The Traffic Management Act 2004 is the primary legislation in place that, amongst other things, places a Network Management Duty on local traffic authorities (typically LHAs) and the strategic highway company (the Applicant) to ensure the expeditious movement of traffic on their road network and those of surrounding authorities.
- 3.5.4. The Act is relevant to this application in relation to the likely traffic effects of the Proposed Development on the Strategic Road Network (SRN) and the Local Road Network (LRN) (Chapter 6 of this Recommendation Report).

Convention on Wetlands of International Importance 1971 - Ramsar Convention

- 3.5.5. The UK ratified the Ramsar Convention and designated its first Ramsar Sites in 1976. The Ramsar Convention provides the only international

mechanism for protecting wetland sites of global importance and is thus of key conservation significance.

- 3.5.6. The Ramsar Convention is relevant to this application in relation to Biodiversity [APP-077] and Road Drainage and Water Quality [APP-082] and the ExA has had regard to it as necessary, including in Chapters 7, and 14 of this Recommendation Report.

United Nations Environmental Programme Convention on Biological Diversity 1992

- 3.5.7. The UK Government ratified the Convention in June 1994. It was the first global treaty to provide a legal framework for biodiversity conservation. Responsibility for the UK contribution to the Convention lies with the Department for Environment, Food and Rural Affairs which promotes the integration of biodiversity into policies, projects and programmes within Government and beyond.
- 3.5.8. The Convention is relevant to this application in relation to Biodiversity [APP-077] and Road Drainage and Water Quality [APP-082] and the ExA has had regard to it as necessary, including in Chapters 7, and 14 of this Recommendation Report.

Wildlife and Countryside Act 1981

- 3.5.9. The Wildlife and Countryside Act 1981 is the primary legislation which protects animals, plants, and certain habitats and physiographical or geological locations in England and Wales.
- 3.5.10. The Act is relevant to this application in relation to Landscape and Visual Effects [APP-076] Biodiversity [APP-077] Geology and Soils [APP-078] and Road Drainage and Water Quality [APP-082] and the ExA has had regard to it as necessary, including in Chapters 7, 14, 15, and 16 of this Recommendation Report.

Hedgerow Regulations 1997

- 3.5.11. The Hedgerow Regulations 1997 set out the criteria for identifying important hedgerows and are the main regulations used for protecting hedgerows.
- 3.5.12. The Regulations are relevant to this application in relation to Landscape and Visual Effects [APP-076] and Biodiversity [APP-077] and the ExA has had regard to it as necessary, including in Chapters 7 and 15 of this Recommendation Report.

Environment Act 1995

- 3.5.13. The Environment Act 1995 requires the Government, amongst other things, to produce a national air quality strategy. Local Authorities (LAs) are required to review air quality in their areas and designate Air Quality Management Areas (AQMA) if improvements are considered necessary.

- 3.5.14. The Act is relevant to this application in relation to Air Quality [APP-074] Population and Human Health [APP-081] and the ExA has had regard to it as necessary, including in Chapter 12 of this Recommendation Report.

Environment Act 2021

- 3.5.15. The Environment Act 2021 was passed into law in November 2021, during the Examination. It sets statutory targets for environmental improvement in four priority areas: air quality, biodiversity, water and waste and establishes the Office for Environmental Protection (OEP), with oversight and enforcement powers. Many of these requirements, including in relation to biodiversity, are yet to commence. The ExA considered the relevance of the Environment Act 2021 in Chapters 7, 11, 12, 14, 15, 16 and 17 of this Recommendation Report.

United Nations Framework Convention on Climate Change - Paris Agreement 2015

- 3.5.16. The 21st Conference of the Parties to the United Nations Framework Convention on Climate Change Paris Agreement was ratified in November 2016 in the UK. The agreement is a legal instrument that provides a framework for governments as well as business and investors to keep global warming well below 2°C, pursuing efforts to limit the temperature increase to 1.5°C.
- 3.5.17. The Convention is relevant to this application in relation to Climate [APP-083], and the ExA has had regard to it as necessary, including in Chapter 9 of this Recommendation Report.

Climate Change Act 2008

- 3.5.18. The Climate Change Act 2008 (as amended by the Climate Change Act 2008 (2050 Target Amendment) Order 2019) establishes a long-term framework to tackle climate change. A key provision is the setting of legally binding targets for Greenhouse Gas (GHG) emission reductions in the UK of at least 100% by 2050 against a 1990 baseline, through five-yearly carbon budgets.
- 3.5.19. The Climate Change Act is relevant to this application in relation to Climate [APP-083], and the ExA has had regard to it as necessary, including in Chapter 9 of this Recommendation Report.

Flood and Water Management Act 2010

- 3.5.20. The Flood and Water Management Act 2010 provides a framework to effectively manage water supplies and flood risk, including through the establishment of roles and responsibilities and with regard to future climate change.
- 3.5.21. The Act is relevant to this application in relation to Road Drainage and Water Quality [APP-082] and Climate [APP-083], and the ExA has had regard to it as necessary, including in Chapters 9 and 14 of this Recommendation Report.

Planning (Listed Buildings and Conservation Areas) Act 1990

- 3.5.22. The Planning (Listed Building and Conservation Areas) Act 1990 as amended, sets out what a listed building is and is the principal legislation which must be considered in the determination of any application affecting a listed building.
- 3.5.23. This Act is relevant to this application in relation to Cultural Heritage [APP-075], and Landscape and Visual Effects [APP-076] and the ExA has had regard to it as necessary, including in Chapters 8 and 15 of this Recommendation Report.

Infrastructure Planning (Decisions) Regulation 2010

- 3.5.24. Regulation 3 of the Infrastructure Planning (Decisions) Regulation 2010 sets out the obligations on the decision maker when deciding applications for development consent affecting listed buildings (or their settings), conservation areas or scheduled monuments (or their settings).
- 3.5.25. Regulation 7 of the Infrastructure Planning (Decisions) Regulations 2010 sets out the obligation on the decision maker when deciding applications for development consent to have regard to the United Nations Environmental Programme Convention on Biological Diversity 1992, in its consideration of the likely impacts of the Proposed Development and appropriate objectives and mechanisms for mitigation and compensation.
- 3.5.26. The Regulations are relevant to this application in relation to Cultural Heritage [APP-075], Landscape and Visual Effects [APP-076] and Biodiversity [APP-077] and the ExA has had regard to it as necessary, including in Chapters 7, 8, and 15 of this Recommendation Report.

Human Rights Act 1998

- 3.5.27. The Human Rights Act 1998 transposes the rights set out in the European Convention on Human Rights (ECHR) into UK law. The UK ratified the ECHR many years prior to joining the EU and this ratification is not affected by the UK's withdrawal from the EU in 2020.
- 3.5.28. Article 1 of the First Protocol and Article 8, and Article 6 are amongst the ECHR Articles that are engaged by aspects of the Proposed Development. This Act is of general relevance to this application and the ExA has had regard to it throughout this report, in particular in Chapters 17 and 22 of this Recommendation Report.

Equality Act 2010

- 3.5.29. The Equality Act 2010 established the Public Sector Equality Duty (PSED) to eliminate discrimination, advance equality of opportunity and to foster good relations between persons who share a protected characteristic, listed under Part 2 of the Act, and those persons that do not. The PSED is applicable to the ExA in the conduct of this Examination and reporting and to the SoS in decision-making.

- 3.5.30. This Act is also of general relevance to this application and the ExA has had regard to it throughout this report, in particular in Chapters 17 and 22 of this Recommendation Report.

Dis-applications

- 3.5.31. The Applicant is seeking to disapply elements of the following legislation in the draft Development Consent Orders (dDCO) for the Proposed Development [REP10-011]
- Water Resources Act 1991
 - Land Drainage Act 1991
 - Environmental Permitting (England and Wales) Regulations 2016

3.6. MADE DEVELOPMENT CONSENT ORDERS

- 3.6.1. In the Explanatory Memorandum (EM) [REP10-008] submitted at Deadline 10, the Applicant outlined the made Development Consent Orders (DCO) it had regard to; these are:

- M42 Junction 6 DCO 2020
- M20 Junction 10a DCO 2017
- A19/A1058 Coast Road (Junction Improvement) DCO 2016
- A14 Cambridge to Huntingdon Improvement Scheme DCO 2016

- 3.6.2. One of the DCOs that the Applicant had regard to was the A303 (Amesbury to Berwick Down) DCO 2020. However, this DCO has been quashed by Order of the High Court and so carries no weight in the Examination.

3.7. THE NATIONAL PLANNING POLICY FRAMEWORK

- 3.7.1. The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied, it is supported by Planning Practice Guidance. Paragraph 5 of the NPPF states that it does not contain specific policies for NSIPs, for which particular considerations apply. It explains that NSIPs are determined in accordance with the decision-making framework set out in PA2008, and relevant NPSs for major infrastructure, as well as any other matters considered both important and relevant (which may include the NPPF).

- 3.7.2. There are specific provisions in the NPPF which are relevant to the Proposed Development, such as Paragraph 113 on travel plans and Paragraphs 126 to 136 on good design. The ExA has had regard to relevant policy provisions in the NPPF in chapters of this Recommendation Report.

3.8. OTHER RELEVANT POLICY STATEMENTS

- 3.8.1. There are other policy documents and Government strategies that are of relevance to the Proposed Development, which are summarised here.

Road Investment Strategy (RIS)1 (2015-20) and RIS2 (2020-25)

- 3.8.2. The RIS sets a vision and objectives for the SRN and includes a funded investment plan covering operations, maintenance, renewal and enhancement of roads through which the RIS will be delivered. The Proposed Development was announced as a committed scheme in RIS and confirmed in RIS2. This is of general relevance to this application and the ExA has had regard to it throughout this report.

Decarbonising transport: a better, greener Britain (2021)

- 3.8.3. In July 2021, a month before the start of the Examination, the Department for Transport published the transport decarbonisation plan (TDP) setting out the Government's commitments and the actions needed to decarbonise the entire transport system in the UK, including the pathway to net zero. The ExA explored the applicability and relevance of the TDP to the Examination of the Proposed Development. This is relevant to this application in relation to Climate [APP-083] and the ExA has had regard to it as necessary, including in Chapters 5 and 9 of this Recommendation Report.

Net Zero Strategy: Build Back Greener (2021)

- 3.8.4. This document sets out the Government's approach to delivering net zero carbon emissions by 2050 across all sectors of the economy, including transport. This is relevant to this application in relation to Climate [APP-083] and the ExA has had regard to it as necessary, including in Chapter 9 of this Recommendation Report.

Net Zero Highways: our 2030/2040/2050 plan

- 3.8.5. This document sets out National Highways' approach to delivering net zero carbon emissions as an organisation by 2030, for construction and maintenance by 2040 and for road users by 2050. This is relevant to this application in relation to Climate [APP-083] and the ExA has had regard to it as necessary, including in Chapter 9 of this Recommendation Report.

Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007

- 3.8.6. The Air Quality Strategy is required by the Environment Act 1995 and sets out objectives for key air pollutants to help LAs manage local air quality improvements.

Clean Air Strategy 2019

- 3.8.7. The Clean Air Strategy covers all forms of air pollution, including from road transport, and contains actions for reducing harmful pollutants.
- 3.8.8. These two Air strategies are relevant to this application in relation to Air Quality [APP-074] and the ExA has had regard to them as necessary, including in Chapters 12 and 17 of this Recommendation Report.

Noise Policy Statement for England 2010

- 3.8.9. This document sets out a vision and aims for the effective management of noise in the interests of good health and quality of life. It is relevant to

this application in relation to Noise and Vibration [APP-080] and the ExA has had regard to it as necessary, including in Chapters 13 and 17 of this Recommendation Report.

Biodiversity 2020: A Strategy for England's wildlife and ecosystem services

- 3.8.10. This document sets out the Government's ambition to halt overall loss of biodiversity in England, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.

A Green Future: Our 25 Year Plan to Improve the Environment 2018

- 3.8.11. This document sets out the Government's approach to protect and enhance the environment, including with regard to conservation, climate change, land use and waste. This is of general relevance to this application and the ExA has had regard to it as necessary throughout this report.

3.9. LOCAL IMPACT REPORTS

- 3.9.1. LIRs have been received from the following relevant LAs:

- 1) Bedford Borough Council (BBC) [REP2-002]
- 2) Central Bedfordshire Council (CBC) [REP2-004]
- 3) Cambridgeshire County Council (CCC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC) [REP2-003]

- 3.9.2. Points raised in the three LIRs have been addressed within the relevant chapters of this Recommendation Report by the ExA.

3.10. THE DEVELOPMENT PLAN

- 3.10.1. The Proposed Development would traverse parts of two Unitary Authorities, Bedford Borough and Central Bedfordshire. It would also traverse parts of a two-tier area, with CCC the upper-tier authority and HDC and SCDC the lower-tier authorities. The development plans that are relevant to the Proposed Development are listed here:

- 1) BBC is a Unitary Authority and adopted its Local Plan in January 2020 (Local Plan 2030).
- 2) CBC is also a Unitary Authority and adopted its Local Plan (Local Plan 2015-2035) during the examination, in July 2021.
- 3) The joint Minerals and Waste Local Plan: Strategic Sites and Policies covering Bedford Borough, Central Bedfordshire and Luton was adopted by the three Councils in January 2014 and remains extant.
- 4) CCC is the upper tier Council for the county and together with Peterborough City Council, adopted a Minerals and Waste Local Plan during the examination, in July 2021.

- 5) For HDC, the Huntingdonshire Local Plan to 2036 was adopted in May 2019, whilst for SCDC, the South Cambridgeshire Local Plan to 2031 was adopted in September 2018.

3.11. LOCAL TRANSPORT PLANS

- 3.11.1. The proposed development would interface with the local highway network, reported in Chapter 6 of this Recommendation Report. Each of the Local Highway Authorities have adopted Local Transport Plans (LTPs) [APP-240]. The BBC LTP was adopted in 2011, the CBC LTP was also adopted in 2011, the Cambridge and Peterborough LTP was adopted in 2019.

4. ISSUES RAISED AND ASSESSMENT OF EFFECTS

4.1. INTRODUCTION

- 4.1.1. This Chapter sets the Examining Authority's (ExA) Initial Assessment of Principal Issues (IAPI) that informed the Examination, as well as the issues that emerged through written submissions during Examination. The ExA has reported on the Environmental Impact Assessment (EIA) and correspondingly on the adequacy of the Environmental Statement (ES), assessment of alternatives, and the Cumulative Effects Assessment (CEA). An overview of the Habitats Regulations Assessment (HRA) relevant to this application has also been provided.

4.2. PRINCIPAL ISSUES IN THE EXAMINATION

- 4.2.1. The ExA made its IAPI as required under Section (s) 88 of the Planning Act 2008 (as amended) (PA2008) and Rule 5 of The Infrastructure Planning (Examination Procedure) Rules (EPR) 2010. In making its IAPI, the ExA had regard to the application documents, relevant National Policy Statements (NPSs), the relevant guidance from the former Department for Communities and Local Government (now Department for Levelling Up, Housing & Communities (DLUHC)) together with Relevant Representations (RRs) submitted by Interested Parties (IPs) [RR-001 to RR-123].
- 4.2.2. The ExA's IAPI was published in a letter issued to all parties under Rule 6 of the EPR (Rule 6 letter) [PD-005, Annex C], and discussed at the Preliminary Meeting Part 1 (PM1) on 10 August 2021 [EV-003] [EV-004]. The Principal issues identified were:
- 1) Air Quality;
 - 2) Biodiversity and Ecological Conservation;
 - 3) Climate Change and Carbon Emissions;
 - 4) Compulsory Acquisition (CA) and Temporary Possession (TP);
 - 5) Development Consent Order;
 - 6) Diversion of high-pressure pipeline;
 - 7) Flood Risk;
 - 8) Good Design;
 - 9) Highways – Network and Structures;
 - 10) Historic Environment;
 - 11) Landscape and Visual Effects;
 - 12) Land use including open space, green infrastructure and Green Belt;
 - 13) Need for Development and Consideration of Alternatives;
 - 14) Noise and Vibration;
 - 15) Significant Cumulative Effects;
 - 16) Socio-economic effects; and
 - 17) Water quality and resources.
- 4.2.3. At Procedural Deadline A (PDA) and PM1, representations were made that the IAPI did not include effects of the proposed borrow pits, matters

relating to protecting main river navigation and groundwater protection, and interfaces with other projects, and in particular East West Railway (EWR) Company's proposals [EV-003] [EV-004].

- 4.2.4. The ExA explained at PM1 and subsequently at PM Part 2 (PM2) on 18 August 2021 [EV-008] [EV-009], that the IAPI was broadly defined and that the list was not intended to be exhaustive or definitive. Nor would the IAPI constrain the Examination of other important and relevant matters. Regarding borrow pits, specifically, the ExA explained that it would consider construction methods and effects in the Examination and this would include approach to construction, the construction programme, construction compounds, borrow pits, waste management, and the environmental management plan. The ExA confirmed that the IAPI would not be updated, but construction methods and effects will be included as a separate section in Written Questions (WQ).
- 4.2.5. Through the Examination, the ExA's WQs broadly followed the structure of the IAPI, including a section on construction methods and effects. Likewise, this Recommendation Report reflects that structure, with each IAPI topic and construction methods and effects forming individual chapters on Planning Issues; however, Flood Risk, and Water Quality and Resources, have been combined into a single chapter.

4.3. ISSUES ARISING IN WRITTEN SUBMISSIONS

- 4.3.1. The Examination received 124 RRs, further submissions that were received after the close of the RR period, Written Representations (WRs), two Local Impact Report (LIR) from Bedford Borough Council (BBC) and Central Bedfordshire Council (CBC) and one joint LIR from Cambridgeshire County Council (CCC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC) (Cambridgeshire Councils), 12 Statements of Common Ground (SoCG) and a number of other written submissions at the ten deadlines within the Examination timetable.
- 4.3.2. All of the issues raised fell within the ExA's IAPI. Issues raised in the LIRs have been set out in the individual Chapters on Planning Issues and reported on as the matters were addressed through the Examination. In addition, several submissions from Affected Persons (AP) relating to the CA and TP of their land were received and these have been reported in Chapter 22 of this Recommendation Report. Issues arose during the Examination relating to compliance with the Equality Act 2010 and interference with human rights and these have been reported in Chapters 17 and 22 of this Recommendation Report.

4.4. LOCAL DEVELOPMENT PLANS

- 4.4.1. The relevant Local Plans, Transport Strategies and Local Transport Plans for the host Local Authorities (LA) and other LAs are listed in Appendix 5.1 Local Planning Policy [APP-159], referred to in the LIRs, and also listed in Chapter 3 of this Recommendation Report. LAs highlighted their assessment of the Proposed Development against their local plan policies

and other local policies, in their LIRs and other submissions through the Examination. The ExA has had regard to them and has reported on them in the individual chapters on Planning Issues.

4.5. ENVIRONMENTAL IMPACT ASSESSMENT

- 4.5.1. The Proposed Development is development for which an EIA is required (EIA development).
- 4.5.2. On 02 April 2019, the Applicant submitted a Scoping Report to the Secretary of State (SoS) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 572), Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) in order to request an opinion about the scope of the Environmental Statement (ES) to be prepared (a Scoping Opinion). The Applicant notified the SoS under Regulation 8(1)(b) of the EIA Regulations that it proposed to provide an ES in respect of the Project.
- 4.5.3. On 13 May 2019 the Planning Inspectorate (the Inspectorate) provided a Scoping Opinion [APP-231]. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development was determined to be EIA development, and the application was accompanied by an ES and included a Non-Technical Summary, submitted on 26 February 2021 [APP-070 to APP-239].
- 4.5.4. On 21 June 2021 the Applicant provided the Inspectorate with certificates confirming that s56 and s59 of PA2008 and Regulation 16 of the EIA Regulations had been complied with [OD-002] [OD-004].
- 4.5.5. Aside from the pre-application requirements discussed here, the ExA has considered the following further requirements of the EIA process:
- 1) the adequacy of the ES under Regulations 5 and 14, and Schedule 4;
 - 2) the assessment of alternatives under Regulation 14 and Schedule 4; and
 - 3) the CEA under Regulation 14 and Schedule 4.

Adequacy of the Environmental Statement

- 4.5.6. The full list of documents included in the application submitted is listed in the guide to the application [APP-006]. This was updated regularly during the Examination to identify the documents that were reviewed. The final version was submitted just before the close of the Examination [AS-029].
- 4.5.7. The ES submitted with the application, can be summarised as follows:
- ES Chapters 1 to 17 [APP-070 to APP-086];
 - ES Figures [APP-087 to APP-154];
 - ES Appendices [APP-155 to APP-229]; and
 - ES Non-Technical Summary [APP-230].
- 4.5.8. In addition to the ES appendices, the ES also relied on the assessment, modelling and analysis presented in the following documents:

- Transport Assessment [APP-241 to APP-243];
- Combined Modelling and Appraisal Report [APP-249 to APP-256];
- Habitats Regulations Assessment: No Significant Effects Report [APP-233];
- Statutory and Non-Statutory Nature Conservation Plans [APP-236];
- Statutory and Non-Statutory Historic Sites and Features [APP-237];
- Borrow Pits Optioneering Report [APP-246];
- Black Cat Junction Design Options [APP-247];
- Equality Impact Assessment [APP-245]; and
- Strategy for Dealing with the Uncertain Outcomes Arising from COVID-19 [APP-257].

4.5.9. The assessment, modelling and analysis introduced during the Examination that the Applicant has relied on in the assessment and findings in the ES have been discussed in individual Chapters.

4.5.10. The documents within the ES that have been amended during the Examination are:

- Environmental Masterplan [REP9-037];
- Screening Assessment of proposed gas pipeline works for the purposes of section 20 of the PA2008 [REP10-016]; and
- Appendix 7.5 - Arboricultural Assessment Parts 2 to 5 [REP3-002 to REP3-005].

4.5.11. The ES is supported by the following environmental management documents, which were reviewed several times during the Examination, and the final versions are included in Schedule 10 Certified Documents of the draft Development Consent Order (dDCO) [AS-026].

Table 3 Environmental management documents

Document Name	Submitted version	Final version
The Outline Construction Traffic Management Plan (OCTMP) has been reported in Chapter 6 of this Recommendation Report.	APP-244	REP10-019
The First Iteration Environmental Management Plan (EMP) has been reported in various Chapters, notably Chapters 7, 8, 11, 12, 13, 14, 15, 16, 21 and 24 of this Recommendation Report.	APP-234	REP10-018
The Archaeological Mitigation Strategy (AMS) has been reported in Chapters 8 and 18 of this Recommendation Report.	APP-238	REP10-036a
The Biodiversity Pre-Commencement Plan has been discussed in Chapter 7 of this Recommendation Report.	APP-239	REP8-004

- 4.5.12. During the Examination in response to concerns raised by the ExA, statutory bodies and other IPs, the Applicant introduced the following environmental management documents, and these have been included as Certified Documents in Schedule 10 of the dDCO [AS-026].

Table 4: Environmental management documents introduced during the Examination

Document Name	Submitted version	Final version
The Pre-Commencement Plan has been reported in Chapters 7 and 11 of this Recommendation Report.	REP4-038	REP10-037
The Tree Constraints Plan were re-submitted to correct errors regarding the location of protected trees and woodland, in response to ExA's WQs.	[REP3-015] [REP3-002] to [REP3-005]	N.A.
The Scheme Design Approach and Design Principles (SDADP) document has been reported in Chapter 10 of this Recommendation Report.	REP3-014	REP9-015
The Flood Risk Assessment (FRA) has been reported in Chapter 14 of this Recommendation Report.	REP6-042	REP10-038
Brook Cottages heritage strategy has been reported in Chapter 8 of this Recommendation Report.	REP8-021	N.A.

- 4.5.30. Two other environmental management documents were introduced during the Examination, which have been incorporated into the first Iteration EMP [REP10-018] they are:

- The Travel Plan, reported in Chapter 6 of this Recommendation Report; and
- The Borrow Pits Management Plan, reported in Chapter 11 of this Recommendation Report.

ExA's reasoning

- 4.5.31. The ExA is content that the ES and associated information submitted by the Applicant at the time of making the application and subsequently during the Examination, have provided an adequate assessment of the environmental effects of the Proposed Development. The ExA has taken account of the ES and associated information in the IAPI, while

conducting the Examination of the application, and in this Recommendation Report to the SoS.

4.6. ASSESSMENT OF ALTERNATIVES

Background and policy context

- 4.6.1. Assessment of alternatives was identified as a principal issue in the ExA's IAPI [PD-005, Annex C], under the broader area of Need for Development and Consideration of Alternatives. This concerns the consideration of alternative modal solutions, alternative route and junction options and selection process.
- 4.6.2. The National Policy Statement for National Networks (NPSNN) (Paragraphs 2.26 and 4.27) requires the Applicants to comply with all legal and policy requirements. In particular, the Applicant must comply with the EIA Directive (Regulation 14 and Schedule 4) which required the ES to include an outline of the main alternatives studied by the Applicant and the main reasons for the Applicant's preferred choice, taking into account the environmental effects. There are other specific legal requirements under the Habitats and Water Framework Directives and flood risk sequential and exception test.
- 4.6.3. At the project wide level, the NPSNN requires all projects to be subject to an options appraisal, including consideration of viable modal alternatives and may also consider other options. For national road schemes, proportionate option consideration of alternatives would have been undertaken as part of the investment decision making process and it would not be necessary for the ExA and the SoS to reconsider this process, but they should be satisfied that this assessment has been undertaken.

Application, scope and methodology

- 4.6.4. In the application, the Applicant has set out its case on the assessment of alternatives in the ES Chapter 3 [APP-072] and corresponding figure [APP-093].
- 4.6.5. The Applicant's assessment of alternatives is closely linked to the identification of problems and need for improvements with this part of the Strategic Road Network (SRN).
- 4.6.6. At first the Applicant identified problems with the existing A428, A421 and A1, near the two roundabouts, Black Cat and Caxton Gibbet, relating to capacity issues, safety and maintenance issues, low peak hour speeds and link delays, least reliable journey time sections nationally, safety problems at Black Cat roundabout, top 25% of highway links nationally for casualties per billion vehicle miles and flooding issues.
- 4.6.7. Subsequently the Applicant produced an Options Appraisal Report (OAR) comprising a route-based study and analysis of a total of 50 possible options for addressing the identified problems. A total of 16 options were taken forward for further evaluation on the basis of strategic, economic,

management, financial and commercial cases of each. These were further sifted down to eight options, and those eight options were then assessed against criteria relating to strategic fit, value for money, financial and delivery. Alongside these route options, separate options were considered for the Black Cat junction design.

- 4.6.8. Based on the analyses so far, the Applicant took forward three route options, renamed Orange, Purple and Pink, and compared them on the basis of their environmental effects relating to traffic, air quality, cultural heritage, visual impact, ecology and nature conservation, geology and soils, noise and vibration, rights of way, water, climate change, and sustainable travel. Likewise, three Black Cat Junction options, A, B, and C, were compared on the basis of their environmental effects relating to the same criteria.
- 4.6.9. The Applicant explained that based on the feedback obtained from the non-statutory consultation its justification for the chosen Orange route option and Option C for the Black Cat junction, was based on several factors including, proximity to the existing road, connectivity to St Neots, improved traffic, congestion, free-flowing movement, least environmental impact on ecology, designated sites, the visual environment, agriculture, heritage sites and the local community, creation of free-flowing traffic at the junction and least land take. This was followed by the announcement of the preferred route option and the statutory consultation on the preferred route.
- 4.6.10. The Applicant states that some alternatives were considered during the design development of the Proposed Development relating to the design of the footbridge at Wintringham Brook, road design options and mitigation considered for the Grade II listed Brook Cottages, location of borrow pits, floodplain compensation areas and construction compounds, options for bat mitigation, and inclusion of noise bunds at Roxton and Potton Road.

The Examination

- 4.6.11. The ExA has examined, considered, and concluded on the following issues:
- 1) the EIA process;
 - 2) modal alternatives;
 - 3) to make a clear and convincing justification for the demolition of Grade II listed Brook Cottages;
 - 4) for the sequential approach to flood risk;
 - 5) highway design and layout of key components of key components of the Proposed Development; and
 - 6) Compulsory Acquisition (CA) of land.
- 4.6.12. No IPs raised concerns about the Applicant's approach to the assessment of alternatives to meet the requirements of NPSNN and the EIA Regulations. The ExA has considered the matters relating to the need for the Proposed Development and the adequacy of the investment decision making process in Chapter 5 of this Recommendation Report.

- 4.6.13. The ExA queried the Applicant's approach to alternatives in relation to the EWR scheme, and this has been reported in Chapters 5 and 19 of this Recommendation Report.
- 4.6.14. The ExA queried if all alternatives to the Black Cat Junction had been explored to avoid the demolition of Grade II listed Brook Cottages, and this has been reported in Chapter 8 of this Recommendation Report.
- 4.6.15. Some APs raised questions about the justification for the CA of their land or the interest in their land, and this has been reported in Chapter 22 of this Recommendation Report.

ExA's reasoning

- 4.6.16. The ExA finds that the Applicant's approach to assessment of alternatives as described in the ES is comprehensive and complies with the requirements of the EIA Directive (Regulation 14 and Schedule 4).
- 4.6.17. The ExA is also satisfied that during Examination the Proposed Development has been through sufficient scrutiny in terms of its design in various planning areas. The ExA highlights that the Applicant's approach to alternative design option has been given weight in planning chapters, notably Chapter 8 of this Recommendation Report. However, in relation to the adequacy of the Applicant's approach and methodology used the ExA can conclude that the Proposed Development meets the requirements of NPSNN Paragraphs 4.26 and 4.27.

4.7. CUMULATIVE EFFECTS ASSESSMENT

- 4.7.1. Significant Cumulative Effects was identified as a principal issue in the ExA's IAPI [PD-005, Annex C] and the ExA has reported on these matters in Chapter 19 of this Recommendation Report. Here the ExA is considering and concluding if the Applicant's CEA is adequate in the context of the EIA, given the requirements in NPSNN and EIA Regulations, and the guidance in the Inspectorate's Advice Note (AN) 17.
- 4.7.2. NPSNN requires the Applicant to assess the cumulative effects of a scheme in line with the EIA Regulations. The ExA is required to consider how significant cumulative effects and the interrelationship between effects might as a whole affect the environment, even though they may be acceptable when considered on an individual basis with mitigation measures in place (Paragraphs 4.15 to 4.21).
- 4.7.3. Schedule 4, Paragraph 5 of the EIA Regulations sets out the information that should be included in the ES including a description of the likely significant effects of the proposed project on the environment, covering the cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project, and also the measures envisaged for avoiding or mitigating significant adverse effects.
- 4.7.4. The Applicant's approach, assessment and findings relating to Cumulative Effects are in the ES Chapter 15 [APP-084]. The ExA has reported on the adequacy of the Applicant's CEA in Chapter 19 of this Recommendation

Report and found it to be adequate. CEA has also been reported on cumulative effects of carbon emissions in Chapter 9 of this Recommendation Report. While IPs queried if the CEA of Greenhouse Gas (GHG) emissions of the Proposed Development would be de minimis, and not have a significant effect, the ExA remains satisfied that the Applicant's approach to CEA meets the requirements of NPSNN and EIA regulations, and is in line with the Inspectorate's Advice Note 17.

4.8. TRANSBOUNDARY EFFECTS

- 4.8.1. Regulation 32 of the EIA Regulations 2017 concerns the likely significant effects of a development on the environment of a European Economic Area (EEA) state.
- 4.8.2. The Applicant concluded that the Proposed Development was not likely to have significant effects on the environment of an EEA state and that the ES would not, therefore, need to consider transboundary effects in March 2019 [APP-231] [APP-258]. Under Regulation 10 of the EIA Regulations 2017, the Applicant requested a scoping opinion that included their approach to transboundary effects.
- 4.8.3. The Scoping Opinion issued in May 2019 on behalf of the SoS stated that the ES should detail and justify the Applicant's approach to transboundary effects. The Applicant conducted a Screening Exercise for transboundary effects within the ES [APP-155], which concluded that the Proposed Development was not likely to have significant effects on the environment of an EEA state.
- 4.8.4. The Regulation 32 duty is an ongoing duty, and on that basis, the ExA has considered whether any facts have emerged to change this conclusion during the Examination, including with regard to Climate Change and Carbon Emissions, and has concluded that they have not.

4.9. HABITATS REGULATIONS ASSESSMENT

- 4.9.1. The Proposed Development requires a HRA because of its proximity to Internationally Designated Sites, specifically:
- Ouse Washes Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site;
 - Portholme SAC; and
 - Eversden and Wimpole Woods SAC.
- 4.9.1. The precautionary principle embedded in the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) means that an HRA is required to assess whether the Proposed Development would have a likely significant effect on these sites, either alone or in combination with other plans or projects, and if so, whether this would adversely affect their integrity.
- 4.9.2. Consideration is given to the adequacy of the HRA Report, associated information and evidence and the matters arising from it in Chapter 20 of this Report.

4.10. CONCLUSIONS

- 4.10.1. The ExA is content that all matters identified in the ExA's IAPI, matters raised by IPs in written and oral submissions, matters raised in LIRs have been considered in the Chapters 5 to 20 on Planning Issues, and Chapter 22 covering CA and TP matters.
- 4.10.2. The ExA is content that the EIA process, including consideration of alternatives, has been satisfactory and meets the requirements of the EIA regulations. Equally, the ExA is content that the HRA is in line with the Habitats Regulations. In that regard the ExA has also concluded that the ES and associated information submitted by the Applicant at the time of making the application and subsequently during the Examination, have provided an adequate assessment of the environmental effects of the Proposed Development.
- 4.10.3. The ExA's overall conclusion is that this Recommendation Report to the SoS is based on the full consideration of all relevant issues that were raised in the Examination and on the basis of an adequate assessment of effects of the Proposed Development presented in the ES.

5. THE NEED FOR DEVELOPMENT

5.1. BACKGROUND AND POLICY CONTEXT

- 5.1.1. The Examining Authority (ExA) acknowledge that the Need for highway infrastructure has been established in the National Policy Statement for National Networks (NPSNN). However, for the Proposed Development, the ExA has, as a matter of exception, examined the Applicant's assessment of need because of the indications of change to the relevant policy context, including the NPSNN itself, the effects of COVID-19 and the Government's Transport Decarbonisation Plan (TDP). Therefore, the ExA's Rule 6 letter [PD-005] identified the Need for the Proposed Development as a principal issue of consideration to the ExA.
- 5.1.2. This Chapter considers matters related to the Need for the Proposed Development, specifically in relation to the emerging policy context; the economic and transport case for the Proposed Development; whether the intended East West Rail (EWR) scheme would affect the likely benefits of the Proposed Development; and the effects of COVID-19 on demand for travel.

National Policy Statement

- 5.1.3. The NPSNN sets out the need for, and Government's policies to deliver, development of the national road and rail networks in England (Paragraph 1.1). The Government's vision and strategic objectives for the national networks is established at the outset which is to deliver national networks that meet the country's long term needs; supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system. This means networks that support national and local economic growth, improve journey quality and safety, support the delivery of environmental goals and the move to a low carbon economy, and join up our communities.
- 5.1.4. The key drivers of the need for development of the national road network are: to address road congestion and crowding, meet the increasing demand to travel in light of substantially increasing GDP and population, rebalance the economy, to improve resilience on the networks to adapt to climate change and extreme weather events, to improve the integration between the transport modes, and to enhance the environment and accessibility for Non-Motorised Users (NMUs) (Paragraphs 2.1 to 2.11).
- 5.1.5. The Government has concluded that at a strategic level there is a compelling need for development of the national networks – both as individual networks and as an integrated system. The ExA and the Secretary of State (SoS) should therefore start their assessment of applications for infrastructure covered by this NPS on that basis (Paragraph 2.10).
- 5.1.6. The NPSNN states the importance of the national road network which provides critical links between cities, joins up communities, connects

major ports, airports and rail terminals. It provides a vital role in people's journeys, and drives prosperity by supporting new and existing development, encouraging trade and attracting investment (Paragraph 2.13).

- 5.1.7. The NPSNN goes on to explain that, whilst there are a range of options for meeting the identified need, including maintenance and management, demand management and modal shift (Table 1), relying solely on these alternatives is not viable or desirable (Paragraph 2.21).
- 5.1.8. Improvements to the road network will help to support further economic development, employment and housing. As such, the Government concludes that, at a strategic level, there is a compelling need for development of the national road network (Paragraph 2.22). The Government's policy is to bring forward enhancement to the existing road network, including junction improvements, new slip roads and upgraded technology to address congestion and improve performance and resilience at junctions, which are a major source of congestion (Paragraph 2.23).
- 5.1.9. The NPSNN states that all projects should consider viable modal alternatives and may consider other options (Paragraph 4.27). It also makes numerous references to modal shifts from road to rail (Paragraphs 2.37 and 2.40).
- 5.1.10. Subject to the detailed policies and protections in the NPSNN, and the legal constraints set out in the Planning Act, there is a presumption in favour of granting development consent for national networks Nationally Significant Infrastructure Projects (NSIPs) that fall within the need for infrastructure established in NPSNN (Paragraph 4.2). The Applicant's economic case is important for the ExA and the SoS's consideration of the adverse impacts and benefits of a Proposed Development (Paragraph 4.5). The ExA and the SoS do not need to be concerned with the national methodology and national assumptions around the key drivers of transport demand (Paragraph 4.6).
- 5.1.11. The NPSNN states that applicants would normally be expected to:
 - 1) prepare a business case in accordance with Treasury Green Book principles, on the basis of Department of Transport's (DfT) Transport Business Case guidance and WebTAG guidance (Paragraph 4.5);
 - 2) provide an economic case assessing the economic, environmental and social impacts of a development (Paragraph 4.5); and
 - 3) provide a local transport model to include national level factors around the key drivers of transport demand such as economic growth, demographic change, travel costs and labour market participation, as well as local factors. (Paragraph 4.6).
- 5.1.12. In considering applications for linear infrastructure, decision-makers will need to bear in mind the specific conditions under which such developments must be designed (Paragraph 4.12).

- 5.1.13. Should the SoS decide to grant development consent for an application where details are still to be finalised, this will need to be reflected in appropriate development consent requirements in the Development Consent Order (DCO) (Paragraph 4.20).
- 5.1.14. Where projects have been subject to full options appraisal in achieving their status within Road Investment Strategies (RIS) or other appropriate policies or investment plans, option testing need not be considered by the ExA or the SoS. It is not necessary for the ExA and the SoS to reconsider this process, but they should be satisfied that this assessment has been undertaken (Paragraph 4.27).

Other legislation and policies

- 5.1.15. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The national, regional and local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1] and Transport Assessment Report [APP-241, Chapter 2]. Other key national policy include the National Planning Policy Framework, 2021 (NPPF). In July 2021, the DfT published a plan setting out the Government's commitments and the actions needed to decarbonise the entire transport system in the UK, including the pathway to net zero transport in the UK. The ExA explored the applicability and relevance of the plan to the Examination of the Proposed Development. This has also been reported on in Chapters 3 and 9 of this Recommendation Report.

5.2. THE APPLICATION

Environmental Statement and Other Application Documents

- 5.2.1. Chapters related to the Need for the Proposed Development in the ES include: Statement of Reasons [APP-030], Chapter 2 The Scheme [APP-071], Chapter 3 Assessment of Alternatives [APP-072], Case for the Scheme [APP-240], Transport Assessment Report – Part 1 [APP-242] Transport Assessment – Part 2 [APP-241], Transport Assessment Annex [APP-243], Combined Modelling and Appraisal Report [APP-250 to APP-256], Strategy for Dealing with the Uncertain Outcomes Arising from COVID-19 [APP-257] Whilst the strategic transport case is discussed here, more detailed highway and traffic matters of the Examination are contained within Chapter 6 of this Recommendation Report.

Scope, methodology and effects

Methodology and business case

- 5.2.2. The Proposed Development is identified in the RIS2: 2020- 2025 and a business case has been prepared for the Proposed Development in line with the Treasury Green Book - Appraisal and Evaluation in Central Government and Department for Transport WebTAG guidance. This is

presented in The Economic Assessment Report (EAR) [APP-254, Appendix D], which describes the methodology and presents the results of the economic appraisal of the Proposed Development. The Applicant states that the appraisal included economic, environmental and social impacts of the Proposed Development. In conclusion the EAR states, taking account of the wider impacts of the Proposed Development and journey time reliability benefits, the Proposed Development will deliver an adjusted Benefit Cost Ratio (BCR) of 1.9 [APP-254, Paragraph 5.2.4]. This means that for every £1 spent on the Scheme there will be £1.90 returned to society in benefits.

- 5.2.3. A local transport model has been developed and informs the Transport Assessment (TA) [APP-241]. Details of the modelling and assessment findings are contained in the TA and the Applicant considers that the model has been developed so that it is proportionate to the scale of the Proposed Development. Fifteen local planning authorities and associated highway authorities were consulted to inform the development of the strategic forecast model and identify proposed and planned developments to be taken account of in the model. The Applicant explains that the transport model for the Proposed Development has taken into account key drivers of transport demand including both local and generic nationwide factors, considering a core growth scenario with sensitivity tests for low and high growth scenarios.

Issues identified

- 5.2.4. The Applicant explains that an Options Appraisal Report (OAR) was commissioned in 2016 to include a review and description of the performance of the A428 between Black Cat and Caxton Gibbet. The report identified several sections of the route were close to a volume capacity (v/c) ratio of 0.85 during peak times, particularly in the morning. For context a v/c of more than 1 would represent a road or junction operating at maximum capacity and at 0.85 this indicates significant delays and queuing can be expected [APP-240].
- 5.2.5. The performance of the route has been considered by the Applicant in relation to traffic volumes, journey times and safety in future years. Without the Proposed Development, the Applicant sets out that between 2015 and 2040 the already extended journey times on the current A428 Black Cat to Caxton Gibbet route are forecast to increase by up to 36%. Whilst on the A1 increased journey times of around 20% to 25% between Letchworth and Huntingdon have been identified [APP-250] [APP-253].
- 5.2.6. The Applicant also explains that the increased future delays, on top of the existing 2015 base year delays, result from a forecast increase in daily traffic volumes on the major routes in the vicinity of the Proposed Development of 20% to 30% between 2015 and 2040. In addition, increases on minor roads in the area are forecast to be even higher at 80% to 100% additional traffic on top of 2015 base figures. This the Applicant explains, reflects an increase in rat running as traffic seeks to avoid the more congested A428 in this scenario [APP-240].

Expected benefits

- 5.2.7. The Applicant states the Proposed Development would lead to improved journey times and road safety benefits on the Strategic Road Network (SRN) and local road network. In addition, the Applicant predicts fewer vehicle movements on the existing A428 and nearby local road network as drivers switch to using the Proposed Development.
- 5.2.8. The Applicant states that the Proposed Development would result in forecast 2040 journey times along the A421/A428, between Renhold and the Cambourne Junction, to reduce from around 26 to 30 minutes to around 14 to 16 minutes depending on the direction of travel and time of day. This would represent a journey time saving of up to approximately 14 minutes and between approximately 43% to 48% [APP-240]. Journey time savings are also predicted in 2040 on the wider strategic network as a result of Proposed Development of up to 23% on the A421/A428 from M1 J13 to M11 J4, 9% on the A1 from Letchworth to A1307 junction, 6% on the A603/B1042 from Cardington Junction to M11 Junction 14, and 2% on the A1198 from Royston A505/A1198 to A14 J24.
- 5.2.9. The Applicant also states that the Proposed Development would result in an average reduction of 27,900 daily vehicle movements on the existing A428 between St Neots and Cambridge, and substantial reductions in traffic on other local routes as a result of the extra capacity provided by the new dual carriageway reducing the motivation for rat running [APP-240].
- 5.2.10. The Applicant states that the Proposed Development is forecast to save 8 fatal, 116 serious and 805 slight casualties over a 60 year period, compared with the without scheme scenario [APP-240]. The Applicant sets out that most of these benefits are attributable to the significant reductions in traffic volumes on the existing A428 as a result of traffic moving on to the new dual carriageway.
- 5.2.11. The ES sets out the main alternatives considered by the Applicant and how the preferred option was determined through consideration of environmental effects at different stages in the design development process [APP-072].
- 5.2.12. The Applicant sets out how it would approach uncertainty at the time of the Application, specifically relating to COVID-19, the revised economic and fiscal outlook and the aim to achieve net zero carbon [APP-257]. Although the Applicant undertook a sensitivity test using the interim carbon values, the Applicant committed to completing fuller sensitivity testing during the Examination in light of these matters, as it explained it had not been possible to complete a sensitivity test to assess the impact of the latest projections of economic growth in advance of the submission of the DCO application.

5.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 5.3.1. Bedford Borough Council (BBC) [REP2-002] considers the Proposed Development would be a vital component of the SRN and one which would alleviate the poor performance of the current route. Furthermore, it considers that the Proposed Development would provide an essential link which would enhance opportunities for economic growth and housing delivery. BBC identify that the Proposed Development would reduce travel time between Bedford (and all points west) and Cambridge, would support the potential for economic growth, and the ambitions of the Oxford to Cambridge Arc and improve the overall strategic connectivity between Oxford/Milton Keynes and Bedford to Cambridge.
- 5.3.2. The Proposed Development is supported by BBC as a means to reduce what it considers to be significant congestion and delay at the Black Cat roundabout, and to improve conditions for local residents, particularly those in villages west of the A1 where 'rat running' is stated to be a common problem. BBC also consider that Proposed Development would bring safety improvements to all road users by closing multiple direct accesses to the A1 and replacing them with a dedicated access road, and by improving the access to Kelpie Marina.
- 5.3.3. BBC go on to state that previous projects such as the Great Barford Bypass, 2006 and improvements to Black Cat in 2015 were welcomed, however these were only seen as a temporary solution to issues at Black Cat, whereas the Proposed Development would be a more permanent solution.
- 5.3.4. BBC consider that from a highway perspective, the impact of the Proposed Development on local communities is expected to be positive overall. BBC state that local communities in Wyboston, Chawston, Roxton, Little Barford and Great Barford are adversely affected by increased traffic on the A1 and A428. Closure of direct access points to the west of the A1 in Wyboston, and improved access onto the new junction at Black Cat would encourage traffic to stay on the main road and not divert through local communities.

Central Bedfordshire Council

- 5.3.5. Central Bedfordshire Council (CBC) [REP2-004] broadly supports the Proposed Development, and highlights that the modelling for the Proposed Development identifies scope to reduce the amount of traffic forecast to route through villages within their administrative area on parallel east – west routes to the A428, as well as reducing the potential for rat-running trips between the A428 and A1 south of the current Black Cat junction

Cambridgeshire Councils

- 5.3.6. The joint Local Impact Report (LIR) from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) [REP2-003] states that there would be economic, social and traffic benefits associated with the Proposed Development.

- 5.3.7. Cambridgeshire Councils state that during construction there would be direct and indirect benefits to employment linked to the Proposed Development. There would be employment opportunities for local residents and additional economic benefits such as local spending from the construction workforce involved in the project on elements such as food and accommodation particularly for those who may not live locally to the scheme. Cambridgeshire Councils consider that construction companies in the local area would have the opportunity to obtain work from the appointed main contractor and the Applicant has developed a process to upskill construction businesses who may be interested in joining their supply chain.
- 5.3.8. Cambridgeshire Councils also state that the intended route of the Proposed Development is likely to disrupt or displace fewer businesses as the construction is planned in a rural area in the Huntingdonshire and South Cambridgeshire districts.
- 5.3.9. Once completed, Cambridgeshire Councils consider that the Proposed Development, would enable accessible local movement in and around St Neots and Cambourne, linking existing and future railway stations and employment sites. Likewise, they consider that the Proposed Development would facilitate long-term sustainable economic growth, improving journey times for freight and port traffic as well as other business users. Cambridgeshire Councils explain that St Neots would be a key beneficiary, sitting upon an improved north, south, east, west axis providing links to the Midlands, the ports and to London. For both Huntingdonshire and South Cambridgeshire Districts there would be more reliable travel time between Cambridge, Bedford and Milton Keynes (M11, A1, M1). The Cambridgeshire Councils consider that the Proposed Development, alongside East-West Rail, is a key component and would help Huntingdonshire and South Cambridgeshire contribute further to the development and success of the Oxford to Cambridge Arc.

5.4. THE EXAMINATION

- 5.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) The emerging policy context;
 - 2) The economic and transport case for the Proposed Development;
 - 3) Whether the intended East West Rail (EWR) scheme would affect the likely benefits of the Proposed Development; and
 - 4) Effects of COVID-19 on demand for travel.

The emerging policy context

- 5.4.2. The ExA noted objections to the Proposed Development on grounds of its likely carbon emissions during construction and operation [RR-002] [RR-003] [RR-006] [RR-026] [RR-029] [RR-049] [RR-065] [RR-071] [RR-081] [RR-084] [RR-116].
- 5.4.3. In response the Applicant explained that it had undertaken an assessment of the Proposed Development against the UK Government's

current carbon budgets as required by NPSNN Paragraph 5.17 and pointed out that NPSNN Paragraph 5.18 states that any increase in carbon emissions is not a reason to refuse development consent alone but rather if it has a material impact on the ability of Government to meet its carbon reduction targets [REP1-021].

- 5.4.4. The ExA sought clarification from the Applicant whether the Transport Decarbonisation Plan, 'Decarbonising Transport: A better, greener Britain' (TDP) issued in July 2021, had bearing on the information the ExA required to assess the need for the Proposed Development [EV-010] [EV-013].
- 5.4.5. The Applicant explained that it considers the focus of the TDP to be a more blended transport mix, utilising less carbon intensive transportation. The Applicant asserted that the commitments presented in the TDP do not have any implications for the Proposed Development or the conclusions on significance presented in the ES, because the policy directions of the TDP did not affect the Need for the Proposed Development. The Applicant explained that the anticipated reduction in carbon emissions arising from the transport network are considered acceptable even as a highly conservative worst case [REP1-022, Q1.1.1.1]. The Applicant stressed that the TDP recognises the importance of road improvements as part of the solution to reduce congestion and that continued high investment in roads would remain necessary. The Applicant also explained that road user Greenhouse Gas (GHG) emissions from the Proposed Development would be anticipated to reduce in line with the TDP as usage of the Proposed Development would be typical of the wider SRN [REP1-022, Q1.1.1.1].
- 5.4.6. The Applicant also explained that a further aim of the TDP was to tackle road congestion, particularly in urban areas, and a number of solutions are presented including increasing the share of trips taken by public transport, cycling and walking, increasing car occupancy and shifting more freight transportation from road to rail. The Applicant explained that options for improving public transport, cycling and walking were considered and assessed as part of the option identification and option selection stages of the Proposed Development. This demonstrated that an alternative mode solution would not contribute to solving the problems experienced on the A428 between the A1 and Caxton Gibbet and at the Black Cat junction. The alternatives would not alleviate the identified traffic problems in this area and therefore not meet the objectives of the Proposed Development.
- 5.4.7. Cambridgeshire Councils supported the position of the Applicant in that they did not consider the TDP to signal a move away from the Proposed Development or the approach taken in the ES by the Applicant [REP1-051, Q1.1.1.1]. However, the Cambridgeshire Councils did request clarity on the provision of ultra-rapid charging point infrastructure. In response the Applicant confirmed its position that the inclusion of ultra-rapid charging point infrastructure had not been considered within the design of this Proposed Development as no appropriate locations to provide such facilities were available [REP3-007, Q1.1.1.1].

ExA's reasoning

- 5.4.8. Climate Change and Carbon Emissions matters are reported in full in Chapter 9 of this Recommendation Report. The ExA accepts that NPSNN Paragraphs 5.17 and 5.18 allow for development consent if the carbon emissions of the Proposed Development do not have a material impact on the ability of UK Government to meet its carbon reduction targets.
- 5.4.9. The ExA considers that the TDP is consistent with the NPSNN in that alternative transport modes should be considered in dealing with congestion, however there is an expectation that road improvements will continue to be needed, where there is an evidenced need. In that regards the ExA agrees with the Cambridgeshire Councils and the Applicant that the TDP does not undermine the need for roads in general to be built. It follows that the need for the Proposed Development can be assessed on the basis of the relevant policies in the NPSNN without conflicting with the key themes and commitment in the TDP.
- 5.4.10. The ExA recognises that there are themes in the TDP such as a transport mix that utilises less carbon in its function, which in its implementation could require a different approach to assessment of need, making a business case, design and operation; however Government's approach on implementation of that strategy is not before the ExA, the Applicant, and other parties, and therefore outside the scope of this Examination.
- 5.4.11. The ExA is satisfied that the publication of the TDP does not require additional information or justification from the Applicant to enable the ExA to consider the case for the need for the Proposed Development.

The transport and economic case for the Proposed Development

- 5.4.12. During the Examination, Local Authorities (LAs) have reiterated their support for the Proposed Development in terms of transport need and that it would facilitate economic development. Cambridgeshire Councils [REP1-048] state their strong support for the principle of the Proposed Development, considering it to be critical to the delivery of the ambitious growth agenda for the Councils' areas. BBC [REP2-002] consider the Proposed Development to be a vital component of the SRN and one which would alleviate the poor performance of the current route. Furthermore, it considers that the Proposed Development would provide an essential link which would enhance opportunities for economic growth and housing delivery. CBC also stated its overall support for the proposal in principle [REP1-054].
- 5.4.13. Several Interested Parties (IPs) [RR-058] [RR-059] [RR-080] [RR-102] also support the need for the Proposed Development in transport and economic terms. However, some IPs raised concern that there was not an identified need for the Proposed Development [RR-087] [RR-097], notably Transport Action Network (TAN) [RR-116] and Campaign for Protection of Rural England (CPRE) [REP1-056] raised concerns regarding the adequacy of the Applicant's economic modelling undertaken. The

CPRE and TAN did not consider that road building schemes such as the Proposed Development were providing the wider economic and transport benefits that were promised.

- 5.4.14. The Applicant disagreed with the CPRE and TAN, explaining that modelling had followed nationally agreed guidance, and explained that there were two over-arching factors in driving the need for the Proposed Development. Firstly, existing capacity issues and delays at the existing Black Cat Roundabout and along the A428. Secondly, the wider need for the route to be dualled to meet with existing and forecast traffic demand by improving east-west connectivity and improving north-south flow. The Applicant also stated that additional capacity is required to support local and regional economic growth by improving route connectivity and traffic flows [EV-033] [EV-038].
- 5.4.15. The ExA sought further clarification regarding the rationale for the Proposed Development and asked as to the effects of the Proposed Development on journeys between Milton Keynes and Cambridge given the role of the SRN in facilitating longer distance journeys for the public and the transport of goods and freight. The Applicant confirmed in response [REP1-022, Q1.15.1.1c] that journey times from Milton Keynes would increase by approximately 10 minutes without the Proposed Development and decrease by 10 minutes with the Proposed Development. The Applicant also explained that by 2040 the Proposed Development would lead to journey time savings on the wider strategic network of up to 23% on the A421/A428 from M1 J13 to M11 J4, 9% on the A1 from Letchworth to A1307 junction, 6% on the A603/B1042 from Cardington Junction to M11 Junction 14, and 2% on the A1198 from Royston A505/A1198 to A14 J24 [APP-240].
- 5.4.16. Given the IPs had raised doubts about the need for the RIS2 projects, the ExA decided to explore that further with the Applicant, and examine any other justification that might have been used to underpin the business case and economic case for the Proposed Development. The ExA asked the Applicant if any additional evidence that had been given for the inclusion of the Proposed Development in RIS2 could also be provided in the Examination. The ExA also noted that the forecast BCR had reduced from 1.9 to 1.55 [REP1-027] and requested explanation from the Applicant as to whether this effected its merit in inclusion in RIS2.
- 5.4.17. The Applicant explained that a commitment to investing in a scheme to improve the A428 between Black Cat and Caxton Gibbet, was included in RIS1, this commitment was carried forward to RIS2, published in March 2020. The Applicant confirmed that there was no additional material presented for the Proposed Development's inclusion in RIS2 that was not before the ExA.
- 5.4.18. Regarding the reduction in the BCR, the Applicant explained that the BCR of the Proposed Development had been revised downward further to sensitivity testing in light of revised projections of economic growth forecasts issued by the Office for Budget Responsibility in March 2020

and the revised economic impacts as a result of COVID-19 [REP1-027]. The Applicant also stated that the likely construction costs of the Proposed Development had not changed from the original assessment and the sensitivity tests results were driven by time and vehicle operating costs. However, in the view of the Applicant a score of around 1.5 still represented a strong BCR and the reduction was typical of other RIS2 schemes for similar reasons.

- 5.4.19. Toward the end of the Examination, the Applicant further revised the anticipated BCR of the Proposed Development down to 1.52, explaining this was due to an update to the DfT's Transport Analysis Guidance (TAG) in November 2021 that changed the transport economic efficiency benefits and carbon costs [REP9-033].
- 5.4.20. As an issue highlighted by the CPRE, the ExA asked if the cancellation of the Oxford to Cambridge Expressway (OtCE) had any bearing on the Need for the Proposed Development [REP1-056]. The Applicant confirmed that as the OtCE was not considered to have been either near certain or more than likely to be built at the time of modelling, in accordance with DfT TAG Unit M4, it was not included in its assessment of need in the first instance [REP3-007]. As such, the cancellation of the OtCE did not affect the Need for the Proposed Development [REP8-014].
- 5.4.21. Notwithstanding the support of LAs in terms of the Proposed Development's role in facilitating future housing and economic development, the ExA sought clarity from the Applicant to describe other development projects that would be enabled by the Proposed Development. The Applicant explained that the Proposed Development would likely benefit a number of planned significant development schemes in the administrative areas that would be served by the Proposed Development including around 10,000 homes and 6000 jobs [REP1-022 Q1.15.1.1, Q1.18.2.1]. The Applicant explained that it was unaware of future development that had been granted planning permission subject to the approval or construction of the Proposed Development but rather that the Proposed Development would assist in facilitating development.
- 5.4.22. No further evidence such as alternative modelling was received from TAN and CPRE to support their objections regarding the need for the Proposed Development in this regard. TAN made further objections relating to climate change matters and their associated economic cost which have been reported in Chapter 9 of this Recommendation Report.

ExA's reasoning

- 5.4.23. The NPSNN (Paragraph 4.27) requires the ExA to ensure that the business case for the Government investment on the road scheme has been made and does not require examination of that justification. However, in light of the concerns raised by IPs and the ExA, regarding economic uncertainty and changing policy context, the ExA considers that the examination of the Applicant's case for the Need for the Proposed Development was required. The ExA is satisfied that the evidence in the

Examination is sufficient to assess the need and benefits of the Proposed Development.

- 5.4.24. The ExA is mindful that it is not its role to unpack nationally agreed guidance in place for modelling of BCRs for NSIP road schemes. However, and whilst noting comments made by IPs including the CPRE, the ExA is satisfied that the Applicant has followed national adopted guidance in the modelling of the forecast BCR for the Proposed Development. Furthermore, the ExA consider that the Applicant has transparently updated the BCR throughout the course of the Examination. Whilst noting the BCR has reduced from 1.9 to 1.52, the ExA is persuaded by the Applicant that similar reductions have been witnessed across other RIS2 projects due to national fiscal forecasts and changes to WebTAG guidance rather than any specific matter related to the Proposed Development, such as the likely construction cost. The ExA is therefore satisfied that the modelled BCR is an accurate assessment of the likely wider benefits and costs to wider society, and demonstrates that the Proposed Development would deliver an economic benefit that is comparable to other similar road improvement schemes.
- 5.4.25. The ExA notes the Applicant's case for the need for Proposed Development in light of the identified traffic and safety issues that currently exist on the A428 and A1 and local roads. In addition, the ExA notes the Applicant's case for the benefits of the Proposed Development in terms of both traffic improvements and to support housing and employment growth. Given there is little substantive evidence to challenge the Applicant's case, and more importantly in light of the representations from the LAs to support the Applicant's case, the ExA concludes that the case for the Proposed Development to alleviate traffic and safety issues and support economic growth has been made.
- 5.4.26. In addition to the policy support in the NPSNN, the ExA has taken into account the evidence and representations provided, and concludes that there is an evidenced need for the Proposed Development.

East West Rail

- 5.4.27. The Applicant refers to the potential for the East West Rail (EWR) scheme in the TA [APP-242, Section 2.5], potential alignments are shown in Appendix F. The EWR Company made a submission [AS-004] requesting that they should be treated as an IP on 30 June 2021, before the Preliminary Meeting (PM). The ExA invited them to the PM as an Other Person. At the PM, the ExA informed EWR that they did not meet any of the criteria to become an IP in sections 102A and 102B of the PA2008 and also that their submission was received after the close of the Relevant Representation period. Thereafter EWR participated in the Examination as an Other Person [EV-002 to EV-004].
- 5.4.28. Various Relevant Representations (RRs) including TAN [RR-116] and CPRE [RR-023] as well as individuals such as Mr Tebboth [RR-053] and Yelling Parish Council [RR-123] questioned why the effects of the potential EWR scheme had not been taken into account in determining

the need for the Proposed Development and whether the Proposed Development was necessary if the EWR scheme was taken forward.

- 5.4.29. BBC and CBC also considered that the likely environmental effects of the EWR scheme should have been taken into account alongside and in addition to the Proposed Development [REP1-045] [REP1-055]. This was a question relating to the Applicant's approach to Cumulative Effects Assessment and has been reported in Chapter 19 of this Recommendation Report.
- 5.4.30. The ExA considered it necessary to explore the implications of the potential EWR scheme on the assessment of need for the Proposed Development given the EWR scheme was similar in potential route alignment to the Proposed Development. The ExA queried whether the Applicant has had regard to the proposed EWR scheme on the assessment of need for the Proposed Development and if there was a need for both proposals to be taken forward. The Applicant explained the EWR scheme had not been included in the strategic modelling undertaken or related traffic modelling, on the basis that WebTAG guidance states schemes lacking certainty of delivery should be excluded from such appraisal, albeit separate high-level analysis had occurred [REP1-121, Q1.15.4.1, Q1.15.4.2]. In this regard the Applicant confirmed that as part of the needs case, a high-level assessment of EWR was carried out as part of the option identification and selection stage utilising information provided by EWR.
- 5.4.31. Notwithstanding the early stage of the EWR scheme's development the Applicant did undertake assessment of the likely usage of the Proposed Development in the event a rail scheme followed a similar alignment once operational. Based on this, the Applicant has determined that there could be a transfer of between 900 and 1,500 car trips per day from the A428 corridor onto EWR. This daily transfer is small compared to the number of daily vehicles forecast to use the A428 Scheme in 2040 (29,000 between Black Cat and Cambridge Road; and 46,000 between Cambridge Road and Caxton Gibbet). The Applicant's findings showed that the EWR scheme would only provide a very partial solution to solving problems on the A428. EWR would provide a fraction of the traffic relief of the A428 compared to what was needed and would be delivered by the Proposed Development [EV-010] [EV-013]. It was therefore concluded by the Applicant [REP1-022] and agreed by the EWR Company [REP1-074] that the Proposed Development and the EWR scheme would complement each other, and more importantly, one would not undermine the need for the other [EV-010] [EV-013].

ExA's reasoning

- 5.4.32. On the basis of WebTAG guidance and the Applicant's explanation, the ExA agrees with the Applicant's decision to not include the potential EWR scheme in the modelling for the Need case of the Proposed Development because the project is at an early stage of development, and at the close of the Examination no preferred route alignment had been announced.

- 5.4.33. In light of the Applicant's evidence which demonstrates that EWR scheme would only provide a fraction of the traffic relief on the A428 compared to what was needed, and the agreement between the Applicant and the EWR company on this matter, the ExA is satisfied that the proposed EWR scheme does not have a bearing on the assessment of need for the Proposed Development. Indeed the ExA concludes that the EWR scheme would not affect the need for the Proposed Development in any significant way.
- 5.4.34. The ExA acknowledges representations from several IPs as well as LAs about the lack of coordination between the Proposed Development and the EWR project, given the potential geographical proximity and engineering interfaces between the two. However, the Proposed Development and the EWR project are two separate projects, brought forward by two different promoters. Given the difference between the timescales and stages of development, the coordination between the two projects or lack thereof is beyond the scope of this Examination.

Effects of COVID-19 on demand for travel

- 5.4.35. IPs, notably CPRE [REP1-056] questioned the need for the Proposed Development hypothesising that the long term effect of COVID-19 pandemic could reduce demand for travel, in part due to increased remote working. In light of these concerns, and ExA's own observation of limited traffic during its Unaccompanied Site Inspection (USI) [EV-095], 30 June to 1 July 2021, the ExA asked the Applicant if the likely long-term effects of COVID-19 on travel demand had been considered in the TA and the wider assessment of need [APP-250].
- 5.4.36. The Applicant conducted further sensitivity testing to understand the potential impacts of COVID-19 on the projections of economic growth and the conclusions as reported in the TA [APP-257]. Subsequently, the Applicant undertook a review of available evidence including a review of the DfT national traffic information by mode and destination type, and the Office of National Statistics trends in working from home by sector and by region. This analysis found that while travel on the highway network reduced significantly due to the lockdown measures, the reductions have been less than those for rail and bus [REP1-029].
- 5.4.37. Equally, since the gradual lifting of restrictions, the recovery in highway travel had been stronger than that for public transport [REP1-029]. The Applicant presented survey data [REP1-029, Q1.11.1.5] from May 2021 which showed that nationally, highway travel had returned to broadly pre-COVID levels, whereas travel by public transport remained suppressed at round 30% to 50% below pre-COVID levels. Data from sites at four locations on the SRN, in the vicinity of the Proposed Development (two locations on the A428 and one on the A1 and the A421), were also assessed between 1st January 2020 to June 2021. This showed a similar pattern to the results from the DfT's national monitoring survey [REP1-029, Q1.11.1.5 and Q1.15.1.1].

- 5.4.38. The CPRE [REP1-056] reiterated that they considered there to be a developing modal shift toward home-working, both nationally and regionally. In light of this modal shift, CPRE asserted that the Applicant's modelling, especially regarding likely usage of the existing A428 and the Proposed Development, required further examination. In response the Applicant explained that there was no consensus on the impact that home-working could have on travel behaviour; while on the one hand commuting trips may decrease but on the other that there could be an increase in trips for leisure and recreation [REP3-007], highlighting the findings of the surveys undertaken and DfT's national monitoring [REP1-029].

ExA's reasoning

- 5.4.39. The ExA can see a point in CPRE's predictions regarding a modal shift towards home working, which potentially could have an impact on the road usage. But there is no substantive evidence of a long term shift in demand for travel having occurred at the present time, or indeed any evidence to definitively forecast this shift in the future. Moreover, if long term effects do result in a reduction in demand for travel those effects would need to be planned for, and reflected in Government policy. As such, the ExA finds that a modal shift in travel patterns relating to changing working patterns are outside of the scope of this Examination and the ExA must approach its recommendation on the basis of evidence and extant policy.
- 5.4.40. Although the ExA cannot be certain about the impacts of the COVID-19 pandemic on the demand for travel over the longer term, the ExA is persuaded by the latest data provided by the Applicant which is from reliable sources such as DfT, and from local traffic monitoring, that the demand for road-based travel appears to have been returning to pre-pandemic levels. This apparent recovery in usage was also observed by the ExA at each subsequent USI, from the first visit 30 June and 1 July 2021, compared to 20 September 2021 and finally 2 and 3 February 2022, shortly before the close of the Examination [EV-095], where anecdotally both the local road network (LRN) and SRN appeared to be being more readily used than at earlier visits.
- 5.4.41. On the basis of the above reasons, the ExA can conclude that for the purpose of this Examination, the effects of the COVID-19 pandemic do not have a bearing on the need for the Proposed Development, any more than has already been assessed in the sensitivity testing and revisions to the BCR.

5.5. CONCLUSIONS

- 5.5.1. The ExA accepts the Applicant's case for the need for Proposed Development in light of the identified traffic and safety issues that currently exist on the A428 and A1 and local roads. In addition, the ExA accepts the Applicant's case for the benefits of the Proposed Development in terms of both traffic improvements and to support housing and employment growth. The case for which is supported by LAs. The ExA concludes that the case for the Proposed Development to

alleviate traffic and safety issues and support economic growth has been made.

- 5.5.2. The ExA is satisfied that the Applicant has followed national adopted guidance in the modelling of the forecast BCR for the Proposed Development. Furthermore, the ExA consider that the Applicant has transparently updated the BCR throughout the course of the Examination. Whilst the BCR has reduced from 1.9 to 1.52, the ExA accepts that this reduction is not due to the overall construction cost of the Proposed Development, but rather changes to the nationally agreed modelling, with similar reductions in BCR being witnessed on other RIS2 schemes.
- 5.5.3. The ExA accepts that NPSNN Paragraphs 5.17 and 5.18 allow for development consent if the carbon emissions of the Proposed Development do not have a material impact on the ability of UK Government to meet its carbon reduction targets. The ExA is satisfied that the publication of the TDP does not require additional information or justification from the Applicant to enable the ExA to consider the case for the need for the Proposed Development
- 5.5.4. The ExA accepts the case put forward by the Applicant and supported by EWR that only a small proportion of traffic that would use the Proposed Development would reassign to the potential EWR scheme. As such, the ExA is convinced that irrespective of whether the proposed EWR scheme is delivered, there will remain a need for the Proposed Development.
- 5.5.5. Likewise, the ExA is satisfied that the Applicant has undertaken appropriate sensitivity testing to account for COVID-19 on the demand for travel, and is content that for the purpose of this Examination, the effects of COVID-19 pandemic do not have a bearing on the need for the Proposed Development.
- 5.5.6. Overall, therefore, the ExA concludes that the Need for the Proposed Development has been established in accordance with the requirements of the NPSNN Paragraph 4.6, that the Proposed Development accords with NPSNN Paragraphs 2.13, 2.21, 2.23 and 4.27, and that the presumption in favour of development is engaged. Taking all the matters reported above, the ExA apports the Need for the Proposed Development substantial weight in favour of making of the Order.

6. HIGHWAYS AND TRAFFIC MATTERS

6.1. BACKGROUND AND POLICY CONTEXT

- 6.1.1. The ExA's Rule 6 letter [PD-005] identified the design, construction and operation of the Proposed Development, and its effects on the functioning of the surrounding highway network as principal issues. This Chapter considers the effect of the Proposed Development on the functionality and operation of the highway network and associated traffic, including Non-Motorised Users (NMUs) both during construction and operation. Matters related to de-trunking, service station provision, ditches and the Network Management Duty are also reported. Other matters relating to design are discussed in the relevant Chapters of this Recommendation Report, including Chapter 7 Biodiversity, Chapter 10 Good Design, Chapter 13 Noise, Chapter 14 Flood Risk, Water Quality and Resources and Chapter 15 Landscape and Visual Effects.

National Policy Statement

- 6.1.2. Paragraphs 2.12 to 2.14 of the National Policy Statement for National Networks (NPSNN) highlight the importance of the Strategic Road Network (SRN) which provides critical links between areas enabling safe and reliable journeys and the movement of goods in support of national and regional economies. Paragraph 2.23 identifies the policy support for enhancements to the SRN to meet growth in travel demand, including junction improvements and improvements to trunk roads to increase capacity, improve performance and resilience.
- 6.1.3. The assessment for Highways and Traffic Matters as set out in NPSNN, requires from the Applicant:
- 1) That regard should be made to the policies set out in local plans;
 - 2) That the Applicant should consult the relevant Local Highway Authority (LHA) and Local Planning Authority (LPA), as appropriate, on the assessment of transport impacts (NPSNN, Paragraph 5.204)
 - 3) Applicants should consider reasonable opportunities to support other transport modes in developing infrastructure, including reasonable endeavours to address any existing severance issues that act as a barrier to NMUs, (NPSNN, Paragraph 5.205; and
 - 4) That mitigation should focus on promoting sustainable development and that where development would worsen accessibility, such impacts should be mitigated as far as reasonably possible. In particular, there is a strong expectation that impacts on accessibility for NMUs should be mitigated. (NPSNN, Paragraphs 5.215 to 5.216).
- 6.1.4. In reaching a decision the Secretary of State (SoS) should be satisfied that consideration is made to impacts on the local transport network and local transport policies, including those in local plans, and that account should be taken of local models. However, the NPSNN is intended to prevail unless a legislated exception arising from Section (s) 104(4) to s104(8) of the Planning Act 2008 (PA2008) applies. (NPSNN, Paragraphs 5.211 and 5.212);

Other legislation and policies

- 6.1.5. Other key national policies and legislation include the National Planning Policy Framework 2021 (NPPF), the Highways Act (HA) 1980 and the Traffic Management Act (TMA) 2004. The nationally adopted Design Manual for Roads and Bridges (DMRB) guidance is also relevant to the design of the Proposed Development.
- 6.1.6. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The national, regional and local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1] and Transport Assessment Report [APP-241, Chapter 2].

6.2. THE APPLICATION

Environmental Statement and Other Application Documents

- 6.2.1. The main sections of the application relevant to Highways and Traffic matters considered here are; 7.1 Case for the Scheme [APP-240], 7.2 Transport Assessment Report Part 1 [APP-241], 7.2 Transport Assessment Report Part 2 [APP-242], 7.2 Transport Assessment Annex [APP-243], 7.4 Outline Construction Traffic Management Plan [APP-244], 7.7 Black Cat Junction Design Options [APP-247], 7.9 Sensitivity Test Using 2020 Uncertainty log data [APP-249], 7.10 Combined Modelling and Appraisal Report [APP-250], 7.10 Combined Modelling and Appraisal Report Appendices [APP-251 to APP-256] and Chapter 16 Summary of Significant Effects [APP-085].

Scope and methodology

- 6.2.2. The Applicant has undertaken traffic modelling and assessment [APP-241] [APP-242] [APP-243], to determine the likely traffic effects of the Proposed Development, both within and outside of the Order limits on the Local Road Network (LRN) and SRN. Furthermore, the modelling has been used to test and inform the intended design layouts of the Proposed Development.
- 6.2.3. The junctions that form part of the Proposed Development are discussed in its Transport Assessment (TA) [APP-241] [APP-242]. The Applicant's modelling to understand the likely effects at existing junctions is provided in its Transport Assessment Annex (TAA) [APP-243].
- 6.2.4. The A428 Strategic Model was developed from the Highways England South East Regional Traffic Model using the SATURN modelling package. The Strategic Model expanded the area that the previous traffic model covered and was supplemented by a number of newly developed operational models. The Applicant explains the primary use of the Strategic Model is to assess the traffic impacts of the A428 Black Cat to Caxton Gibbet Improvements scheme and to provide inputs into

economic and environmental appraisals, as well as informing the buildability (construction traffic management) of the Proposed Development and operation and design of its junctions [APP-250].

- 6.2.5. The Applicant explains the 23 locations considered in the TAA [APP-243, Figure 1-3] span Cambridgeshire, Bedford Borough and Central Bedfordshire and extend from M1 Junction 13 in the west to M11 Junction 13 and Junction 14 in the east, and from Buckden in the north to Biggleswade in the south. The locations were selected for assessment based on their proximity to the Proposed Development, predicted scale of traffic flow increase, current congestion and engagement with stakeholders.
- 6.2.6. The forecast years assessed in the TA and TAA include the 2025 opening year and 2040 design year (15 years after opening). For each year, Do Minimum (DM) and Do Something (DS) model runs were carried out for the AM Peak and PM Peak. The DM is the scenario without the Proposed Development built and the DS is the scenario with the Proposed Development.
- 6.2.7. In the context of the TAA, the A428 Strategic Traffic Model was used to extract traffic flows at the relevant non-scheme junctions. The A428 Strategic Traffic Model produces hourly traffic flows representing the average over a three-hour peak period, covering the following time periods: AM peak (07:00 – 10:00); Interpeak (10:00 – 16:00); and PM peak (16:00 – 19:00). The initial analysis of traffic flow changes tabulated in the TAA are based on these peak period flows, as provided by the model, rather than observed data.
- 6.2.8. Where traffic flow increases were considered to warrant more detailed analysis, the Applicant decided whether to model these using conventional junction capacity models (for example, ARCADY, PICADY or LinSig); or to use microsimulation models. The most appropriate software was selected on the basis of the scale and complexity of each of the junctions.
- 6.2.9. The Applicant considers that the models have been coded in line with best practice techniques: for the VISSIM models, utilising default parameters from VISSIM and Transport for London's guidance; the Junctions 9 user guide (for ARCADY and PICADY); and LinSig user guide, where relevant. The average peak period flows from the A428 Strategic Traffic Model were converted to peak hour flows for the AM and PM peak periods.
- 6.2.10. In the case of grade-separated junctions, the associated slip roads and the merge and diverge layouts have been assessed using the traffic flow ranges prescribed in DMRB design standard CD 122 for each type of merge or diverge layout, together with the number of lanes provided on the slip roads and on the main carriageway.
- 6.2.11. The results of the modelling in the TAA are grouped by the respective administrative areas of Bedford Borough Council (BBC), Central

Bedfordshire Council (CBC) and Cambridgeshire County Council (CCC). A summary, in tabular form is provided in the TAA explaining what type of assessment was undertaken at each junction by LHA area [APP-243, Table 1-1, Table 1-2, Table 1-3].

6.2.12. The TA [APP-241] takes account of the likely construction traffic effects of the Proposed Development, based on the Strategic Model, and has been used to inform the shaping of an Outline Construction Traffic Management Plan (OCTMP) [REP10-049], that amongst other things includes detail relating to designated and restricted routes for construction vehicles to adhere to.

6.2.13. The Applicant has undertaken usage surveys of existing NMU infrastructure to assist in the development of a Walking, Cycling, Horseriders Assessment Report (WCHAR) and inform the proposed NMU provision [APP-242] forming part of the Proposed Development.

Applicant's assessment of effects and mitigation proposed

6.2.14. The Applicant's stated benefits and effects of the Proposed Development in relation to highways and traffic matters are presented in Chapter 5 of this Recommendation Report. In summary these benefits, as described in the TA [APP-240] include:

- journey time savings between Renhold and the Cambourne junction of approximately 14 minutes;
- journey time savings on the A421/A428 SRN between M1 Junction (J) 13 and M11 J4 of up 23%;
- an average reduction of 27,900 vehicle movements on the existing A428 between St Neots and Cambridge and substantial reductions in traffic on other local routes as a result of the extra capacity provided by the new dual carriageway, reducing the motivation for rat running; and
- avoidance of 8 fatal, 116 serious and 805 slight casualties over a 60-year period, compared to without the Proposed Development being built.

6.2.15. Embedded mitigation that is common across the Proposed Development is set out in the ES [APP-071, Table 2.1]. Embedded mitigation specific to Highways and Traffic matters includes:

- 1) the provision of Public Rights of Way (PROW) to replace and where feasible improve various footpaths and bridleways (FPA10, FP7, FP8, FP1/9, FP1/16, FP 1/17, FP 1/20, FP 59/1 to FP278/7, BW1/8, BW74/6) [APP-011];
- 2) the redesignation of School Lane to bridleway; and
- 3) the provision of new footways within the verges of the following roads and junctions [APP-011]:
 - Roxton Road link (north)
 - Roxton Road link (south)
 - BP filling station service road

- Kelpie Marina access road
- Cambridge Road junction (including sections of the realigned A428)
- Realigned Toseland Road
- Eltisley link (including sections of the realigned A428)
- Caxton Gibbet junction

- 6.2.16. Essential mitigation has been proposed for Highways and Traffic effects during construction in the form of the OCTMP [REP10-019], secured in outline through Requirement (R) 11 of the draft Development Consent Order (dDCO) [AS-026]. The Applicant describes the intended phasing and associated locations of construction works as being between three and four years. No significant traffic and transport effects are identified by the Applicant in the Transport Assessment [APP-241].
- 6.2.17. Overall, the Applicant identifies that there would be increases in journey times during the construction of the Proposed Development. The modelling indicates that the largest increase would occur in the interpeak period across most of the construction phases. The A421/A428 is forecast to have a maximum increase of just over four minutes in the interpeak period during Phase Four. While the A1 route is predicted to experience a maximum journey time increase of two minutes thirty-seven seconds in the interpeak period during Phase Two of construction [APP-241].
- 6.2.18. The Applicant explains that the introduction of temporary speed restrictions, the presence of construction traffic and temporary layouts may make the affected roads less attractive as journey times increase during the construction period. However, the Applicant considers these increases to be of an acceptable level due to the significant journey time benefits which will be provided by the Proposed Development when it is operational and because it is a temporary adverse effect.
- 6.2.19. Post consent the Principal Contractor would finalise the OCTMP in consultation with LAs to form the Traffic Management Plan. Specific points include:
- 1) the Principal Contractor would implement the traffic management measures, carriageway restrictions, carriageway closures and diversions described in the OCTMP [REP10-019], secured through R11; and
 - 2) the Principal Contractor would implement temporary public rights of way (PROW) diversion routes and works crossings based on the principles in the OCTMP [REP10-019], secured through R11.

6.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 6.3.1. BBC [REP2-002] agreed with the methodology and findings of the traffic modelling undertaken and proposed highway layouts. BBC's concerns relate to the likely effects of traffic re-routing, particularly during construction phases on inappropriate routes across their administrative area. BBC also considered there to be a lack of enhancement to NMU

provision but accepted the rationale put forward in the Application for what had been proposed and where.

Central Bedfordshire Council

- 6.3.2. CBC [REP2-004] was content with the traffic modelling undertaken subject to clarifications on specific operational and construction effects at junctions and links across their administrative area. A key concern included the designated construction routes proposed by the Applicant at Station Road, Tempsford and the potential for inappropriate traffic re-routing during construction phases, also the layout of the proposed Barford Bridge. Concern was also raised regarding how customer contact would be dealt with during construction, how traffic would be monitored and managed during construction.

Cambridgeshire Councils

- 6.3.3. The joint Local Impact Report (LIR) from CCC, Huntingdonshire District Council and South Cambridgeshire Council (Cambridgeshire Councils) [REP2-003] expressed concerns regarding the modelling of traffic at all modelled proposed and existing junctions because they considered that further validation using observed traffic surveys was necessary to provide a more accurate picture of likely traffic effects. The Cambridgeshire Councils also had specific concerns relating to various proposed highway layouts, particularly those intended to be added to the local highway network. Concern was also raised regarding the proposed departures from standard (DfS), with the request that DMRB be the adopted design standard. Other concerns included traffic re-routing during construction, designated construction routes, the extent of monitoring and management of traffic and the detail associated with the Monitor and Manage approach proposed by the Applicant. Concern was also raised with regard to how any damage to existing local highway, as a result of construction traffic use, would be dealt with.
- 6.3.4. The Cambridgeshire Councils were not convinced that residual Cumulative Effects on the existing public rights of way network were correctly assessed because the Proposed Development had not maximised opportunity for use of sustainable modes with provision of additional public routes, and because the design of routes could deter some users from using the routes provided. The Cambridgeshire Councils also considered that the Applicant's proposed NMU infrastructure was inadequate and contrary to the NPSNN Paragraph 5.205, particularly the absence of a new NMU corridor along the A428 which is to be de-trunked as part of the Proposed Development.

6.4. THE EXAMINATION

- 6.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) Traffic modelling methodology;
 - 2) Construction phase traffic effects;
 - 3) Monitoring of operational traffic effects;

- 4) Operational phase traffic effects at existing junctions on the local network;
- 5) Operational phase traffic effects at existing junctions on the strategic road network;
- 6) Operational phase traffic effects at proposed junctions and links
- 7) Provision for NMUs; and
- 8) Other Matters

Traffic modelling methodology

- 6.4.2. This section of Highways and Traffic Matters reports on the concerns raised by LHAs regarding the reliability of the Applicant's traffic modelling methodology to assess the likely traffic effects of the Proposed Development, particularly on the Local Road Network (LRN).
- 6.4.3. The traffic modelling methodology adopted by the Applicant is provided in TA Part 1 [APP-241], TA Part 2 [APP-242] and Combined Modelling and Appraisal Report [APP-250].
- 6.4.4. LHAs were satisfied and in agreement with the methodology adopted by the Applicant relating to strategic level modelling informing the wider, high-level analysis of the Proposed Development [REP1-045] [REP1-048] [REP1-055]. However, from the start and throughout the Examination, CCC and CBC raised concerns in terms of whether the modelling presented a reliable picture of the likely effects of the Proposed Development at specific junctions and sections of road. The concerns were that base year models had not been created at certain junctions, both within and outside of the Order limits and why observed survey data, including turning movements, had not been used in the process of deriving forecast demand and effects of usage, but rather traffic flows extracted from the Strategic Model with little local validation undertaken [REP1-051] [REP1-055] [REP4-055] [REP4-062] [RE8-035] [REP8-038] [EV-033] [EV-038] [EV-069] [EV-074].
- 6.4.5. The Campaign for the Protection Rural England (CPRE) [REP1-056] also raised queries with regard to the adequacy of traffic modelling given the perceived increase in remote working. This matter is reported in Chapter 5 of this Recommendation Report.
- 6.4.6. In response to the concerns of CCC, CBC and the ExA's, the Applicant provided a Junction Modelling Technical Note [REP1-030] where the Applicant explained its approach to modelling differed depending on how it considered the Proposed Development to affect the relevant junction [REP1-030, Figure 6-1], the modelled junctions were separated in to three main categories:
 - 1) Scheme Junctions, described as those which do not exist in the base year or for which there would be fundamental changes in layout;
 - 2) Existing Junctions with no calibrated or validated base models, described as junctions that exist in the base year and are not significantly changed by the Proposed Development, but where no base models were developed; and

3) Existing Junctions with calibrated or validated base models, described as junctions that do exist in the base year, but where observed data was available and base models were developed.

- 6.4.7. The Applicant explained that Base Year models were not developed for those junctions described as Scheme Junctions as the layout and operation of the junction would change so significantly as a result of the Proposed Development. Therefore, the Applicant explained that the junctions were tested with flows extracted from the Strategic Model rather than observed survey data.
- 6.4.8. The Applicant explained that Junction modelling included base year models using ARCADY, PICADY or LinSIG packages to assess the impacts of the Proposed Development where junctions were not proposed to change [APP-241] [APP-242] [APP-243]. However, the flows used were extracted from the Strategic Model. The Applicant explained the rationale for this being that it was not considered necessary to obtain and use survey data to calibrate or validate these junctions as the junctions would either see a significant improvement in capacity or the junctions were predicted to operate well below capacity as a result of the Proposed Development [EV-033] [EV-038].
- 6.4.9. VISSIM models were developed for two junctions in the wider area, M11 Junction 13 and Buckden where the strategic model flow changes indicated further assessment was necessary, as such observed survey data was used in the modelling assessments [REP1-030].
- 6.4.10. The Applicant also explained that the results of any further surveys would likely be unreliable given the uncertain effects of COVID-19 on demand for travel being experienced at the time of the Examination. Moreover, undertaking additional surveys at that stage would be impracticable to deliver within the Examination period.
- 6.4.11. The ExA requested the Applicant and LHAs submit a joint position statement on modelling methodology and on the scope for sensitivity testing to occur in locations identified in LIRs, using observed data that was readily available to the Applicant or LHAs. The ExA identified three locations given their importance to the functioning of the local road network and their existing capacity issues: Wyboston Roundabout, St Neots, Caxton Gibbet Roundabout and the A1/A603 Roundabout, Sandy [EV-032].
- 6.4.12. CCC developed an options report, [REP3-043], [REP10-057, Appendix 1] detailing how the matter could be taken forward, proposing two options. Option 1 would have required the collection of new data and new base models being created. Option 2 would not involve the creation of new base models, but rather validation where locally held recently observed data would be used to derive future years flows, rather than direct use of strategic model flows in the models.
- 6.4.13. The Applicant submitted a scope based on CCC's Option 2 for the requested junction model sensitivity testing [REP3-029], explaining what sensitivity testing work it intended to undertake and rationale for not

undertaking further work at specific locations. The joint position statement [REP3-024] was also provided as requested and subsequently updated by the Applicant [REP5-005]. The Applicant explained that whilst the results of the sensitivity modelling [REP5-018] did show a difference in the results between the two approaches, LHAs agreed that it generally showed a marginal worsening in queuing compared with the original modelling rather than a fundamental difference in results [EV-069] [EV-074].

- 6.4.14. The LHAs agreed that subsequent to the sensitivity modelling being undertaken, the findings were adequate to provide a reliable and accurate picture of the Proposed Development's likely traffic effects. The exception to this being the Great North Road approach to the Wyboston Roundabout where the Applicant did not undertake modelling of the likely effects on side roads accessing the link.
- 6.4.15. Discussion of the outputs of the modelling at specific junctions are reported later in this Chapter of this Recommendation Report.
- 6.4.16. In addition to the wider concerns regarding the methodology underpinning the modelling described above the Applicant also undertook additional modelling work and testing in response to issues raised by CCC at specific locations where, errors and anomalies had been identified in that previously provided or further information was considered necessary, including at Coton, [REP3-008], Girton [REP4-040] and at School Lane, Cambourne [REP4-041]. In addition, the Applicant provided further analysis of A428 Eltisley junction, A428 Toseland Road Abbotsley Road junction, B1046 Pottton Road Junction and A428 Wyboston and Barford Road Junctions [REP8-022].
- 6.4.17. Additional VISSIM modelling was provided relating to M11 Junction 13 [REP8-019] further to the concerns of CCC relating to the traffic loading of the North West Cambridge development, specifically that the development zone was modelled in the incorrect location. The modelling was updated to reflect the development zone being accessed via Eddington Avenue.
- 6.4.18. Further to the apparent errors and anomalies identified by CCC, the ExA queried the level of confidence that should be given to the Applicant's overall modelling of likely traffic effects. The Applicant explained [REP4-037] that irrespective of the issues identified that a high level of confidence should be placed on the Strategic Model in relation to the supporting analysis as presented in the Case for the Scheme [APP-240]. The Applicant was also clear [REP4-037, Q2.11.1.1a] that strategic models are typically less suited to modelling flows on local minor roads, since they are primarily designed to assess and capture area-wide impacts on the more major and strategic routes.
- 6.4.19. Further to the additional sensitivity testing and modelling work undertaken throughout the course of the Examination, agreement has been largely reached with the LHAs on the likely operational traffic effects of the Proposed Development. The exception being Great North

Road, St Neots leading to the Wyboston roundabout, this disagreement being based on the absence of additional sensitivity testing being undertaken as opposed to the results of such testing, this matter is reported later in this Chapter of the Recommendation Report.

ExA's reasoning

- 6.4.20. The ExA considers that the likely traffic effects of the Proposed Development should be considered at both the strategic level and the local level. LHAs have a statutory responsibility under the TMA 2004 to ensure that their network operates expeditiously and neighbouring Highway Authorities (HAs), such as the Applicant have a duty to not compromise the ability of another HA to fulfil their duty.
- 6.4.21. Whilst the ExA notes that BBC was content that the modelling presented a likely picture of the traffic effects in their Borough, the ExA considers the request of LHAs for more detailed modelling, based on observed flow data at key locations identified in LIRs was wholly appropriate for them to be able to better gauge the likely traffic effects of the Proposed Development.
- 6.4.22. The need for additional traffic modelling to assess the effects on the local highway network is supported by the fact that the Applicant explained that the use of traffic flows extracted from the strategic model was less accurate than utilising observed survey data.
- 6.4.23. The ExA considers it would have been reasonably expected for the Applicant to have undertaken collaborative working with the LHAs and sensitivity testing far earlier in the application process, particularly as it would appear that concerns were raised previously by CCC at the pre-application stage. The ExA considers that the Applicant should have involved LHAs earlier in the sharing and validation of the traffic modelling, as significant time would have been saved during the Examination.
- 6.4.24. The ExA agrees with the LHAs that local intelligence is valuable in understanding likely traffic effects. The ExA also welcomes the input of LHAs to ensure that the further testing was vital for the Applicant, relevant LHA and the ExA to understand existing traffic behaviour at key points on the surrounding road network both within, and beyond the Order limits of the Proposed Development.
- 6.4.25. Notwithstanding the above, the ExA is satisfied that the Applicant has responded to the need for better local validation, through sensitivity testing, incorporating data held by LHAs in that exercise where appropriate, as the use of observed traffic count data could have had an impact on the modelled traffic flows.
- 6.4.26. The ExA is satisfied that the need for sensitivity testing, proposed by CCC, was a proportionate response to undertaking the necessary testing of the modelling because the LHAs had not provided substantive evidence to consider that the modelling undertaken was fundamentally flawed, albeit local anomalies and errors had been identified.

- 6.4.27. The ExA considers that the sensitivity testing undertaken throughout the course of the Examination has provided a more accurate picture of likely traffic effects of the Proposed Development as it has been based on observed data rather than flows taken from the Strategic Model. Moreover, the ExA is satisfied that the results of the sensitivity testing do not constitute a fundamental divergence from that originally provided and more importantly the ExA is satisfied that the Applicant's methodology remains adequate and sound.
- 6.4.28. As such the ExA is persuaded that the modelling provided by the close of the Examination adequately demonstrates the likely construction and operational traffic effects of the Proposed Development on the local network and is therefore sufficient for the purposes of the Examination.

Construction phase traffic effects

- 6.4.29. This section deals with construction phase traffic effects, both in terms of the effect of traffic serving the Proposed Development and traffic diverting to avoid network disruption associated with its construction. The Examination of construction traffic effects was covered under the following areas:
- 1) effects of traffic re-routing on the local road network during construction;
 - 2) construction vehicle routes; and
 - 3) workers travel plan.
- 6.4.30. The OCTMP [APP-244] was updated throughout the Examination further to comments from IPs and the final version [REP10-019] is secured through R11 of the dDCO [AS-026]. In accordance with R11, the referred to Traffic Management Plan (TMP) for the Proposed Development would be substantially based upon the OCTMP. The Applicant's approach to dealing with construction phase traffic effects is split between the likely effects of construction traffic itself, defined as the traffic moving to or from the construction compounds and worksites for each works section and, the effects of existing traffic re-routing as a result of the construction of the Proposed Development seeking to avoid delays associated with roadworks.

Effects of traffic re-routing on the local road network during construction

- 6.4.31. Given the OCTMP [APP-244] and given it forms the substantive mitigation for construction traffic effects, the ExA sought confirmation from LHAs that they were content with the scope and content of the document. The ExA also sought confirmation of likely access arrangements for residents, businesses and emergency services during road closures.
- 6.4.32. CBC raised concerns regarding the need to monitor traffic re-routing during the construction period and had particular concern regarding the use of Station Road, Tempsford as a construction route for the Proposed Development [REP1-054, Q1.11.7.2]. CBC also requested that temporary

or permanent works be considered on diversions using the A603 Vinegar Hill [EV-017] [EV-018].

- 6.4.33. CCC's concerns included the routing of construction traffic in St Neots, the need for monitoring of displaced traffic on the local road network, and intervention measures if considered necessary further to monitoring. CCC also raised concerns relating to the booking of road space for roadworks and the cost of administration of Temporary Traffic Regulation Orders (TTRs) on the local road network. CCC consider that s59 of the HA 1980 is applicable to the level and type of traffic that would be using the local highway network during construction [REP1-048].
- 6.4.34. BBC stated that they were satisfied with scope and content of the OCTMP [REP1-043, Q1.11.7.2]. However, during the Examination BBC agreed with the positions of CCC and CBC on their considered need for monitoring of traffic flows on the local network during construction.
- 6.4.35. All the LHAs had concerns with regard the likelihood of traffic rerouting from the SRN to and across the LRN during construction as drivers would seek to avoid road works and associated delays of construction [REP1-043, Q1.11.7.2] [REP1-054, Q1.11.7.2] [REP1-048]. These concerns related to the use of the LRN as a whole but particularly around the key junctions of the Proposed Development, including Black Cat, Cambridge Road and Caxton Gibbet where the LRN consists of narrow country lanes that would be inappropriate for increased usage, particularly by Heavy Goods Vehicles (HGVs).
- 6.4.36. In light of these concerns the ExA asked the Applicant to explain how it would minimise disruption and damage on the LRN during the construction period.
- 6.4.37. The Applicant stated that although modelling demonstrated that traffic would seek to divert from the SRN, no significant traffic effects were predicted during construction. The Applicant also explained that it does not have powers to force traffic to use specific routes and that traffic is entitled to move as it wishes between the LRN and the SRN. The Applicant added that it would take various steps to keep the traffic on the SRN through the use of road signage, a dedicated customer team and real time journey planning and would speak to the LHAs in terms of what they were seeking; but were not anticipating implementing traffic calming on the LRN to discourage such behaviour [EV-035] [EV-040].
- 6.4.38. LHAs disagreed with the Applicant's rationale, stating that it would be the Applicant's responsibility to provide mitigation and the resources for interventions that would be necessary to alleviate adverse traffic effects on the LRN caused by the Proposed Development [EV-035] [EV-040].
- 6.4.39. Subsequently the Applicant confirmed that should any LHA find a significant increase in self diverting traffic on the LRN during construction, the Applicant would review this information against performance on the SRN. Should a relationship be established the Applicant would work with the LHA to determine suitable temporary

traffic management measures. However, the Applicant maintained its position that construction traffic management measures should be focussed on the SRN to avoid traffic re-routing off the SRN on to the LRN. The Applicant submitted a revised OCTMP [REP4-012] incorporating changes including the creation of local Traffic Management Forums (TMFs) to discuss such matters. The Applicant also committed to undertaking condition surveys of the proposed strategic diversion routes that would incorporate LHA roads.

- 6.4.40. The ExA queried how the effects of traffic re-routing would be quantified so as to inform discussion at the TMFs and how that was secured in the dDCO. The Applicant stated that it did not intend to monitor traffic flows on the LRN before or during construction, because it was for LHAs to monitor their own network as a matter of routine so as to manage their networks effectively. The Applicant committed to its duty to keep the traffic on the SRN moving, which would avoid self-diversion onto local roads and that use of communication with drivers regarding performance of the SRN would be an important part of this [EV-071] [EV-076] [REP6-041] [REP8-010] [REP8-014].
- 6.4.41. The LHAs remained unconvinced by the Applicant and stated that adverse traffic effect on the LRN could at least in part be attributed to the effects of construction of the Proposed Development. To ensure that such monitoring was part of the Applicant's construction traffic management, the LHAs submitted wording for a Requirement to secure monitoring of baseline traffic on the local road network before construction at 36 locations on the LRN and where the Proposed Development interfaces with the SRN [REP6-074]. Additionally, the Requirement would secure ongoing monitoring during construction at the same locations. The Requirement also included that the Applicant would fund any traffic management measures that were considered justified by LHAs as a result of monitoring. The suggested Requirement would be secured separate to the OCTMP in the dDCO.
- 6.4.42. The Applicant accepted the proposal in part. It submitted a Position Statement [REP9-036] [REP10-043], further to discussion with LHAs, proposing baseline monitoring at 24 locations on the LRN, to be included and secured within the OCTMP [REP10-043, Appendix B].
- 6.4.43. The Applicant's rationale for the 24 locations was based on the thresholds for the selection of sites driven by Rules 1 and 2 of national guidance, Guidelines for the Environmental Assessment of Road Traffic, specifically:
- 1) Rule 1: include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%); and
 - 2) Rule 2: include any other specifically sensitive areas where traffic flows have increased by 10% or more.
- 6.4.44. The reduction from 36 locations proposed by the LHAs to 24 by the Applicant was in part due to some of the sites proposed by the LHAs not meeting the set threshold explained above and by selecting monitoring sites between proposed locations so as to effectively monitor traffic

between them rather than at them, thereby saving resource [REP10-043, Appendix A].

- 6.4.45. The Applicant made a specific case that it would not undertake any ongoing monitoring on the LRN during construction because it considered the monitoring of traffic on the local network to be the role of a LHA. The Applicant did not consider it appropriate to specify what, if any, mitigation measures may be necessary at this stage, and when they might become necessary or triggered. Instead, this would be determined by the results of construction phase traffic monitoring, would be specific to the circumstances presented and would need to take into account any potential implications on traffic flows of delivering those mitigation measures. Any resulting actions would be agreed at TMFs referred to and secured in the OCTMP [REP10-043].
- 6.4.46. The LHAs agreed with the locations proposed but consider ongoing monitoring during construction by the Applicant would be essential, for any monitoring to be meaningful. They reiterated their rationale, that the traffic reassigning from the SRN to the LRN would, at least in part, be due to the construction of the Proposed Development, likewise any subsequent interventions considered necessary should be funded by the Applicant [REP10-024] [REP10-025] [REP10-026].
- 6.4.47. With regard the scope for damage to the LRN as a result of traffic diverting, the Applicant explained that the OCTMP includes provision for condition surveys to occur to ascertain whether damage occurs as a result of re-routing and that this would be further detailed in the TMP. The Applicant also confirmed that where road space of the LHA is required, that the process for booking road space would follow national guidance, including any locally set administration fees such as, but not limited to, the cost of TTRO drafting and advertising of road closures.
- 6.4.48. The ExA also sought clarity from the Applicant regarding intended access to properties and businesses for local traffic during road closures and for emergency vehicles. The Applicant confirmed that where possible this would be maintained and that consultation would occur with local stakeholders as part of any road closure planning, as referred to in the OCTMP [REP1-022, Q1.11.7.8].

ExA's reasoning on the effects of traffic re-routing on the local road network during construction

- 6.4.49. The ExA notes the Applicant's modelling which demonstrates that there would be no significant effects associated with traffic re-routing during the construction period of the Proposed Development. However, the same modelling also demonstrates that traffic re-routing would in fact occur. Additionally, the Applicant has acknowledged that despite efforts to contain traffic on the SRN it cannot all-together prevent traffic re-routing on to the LRN.
- 6.4.50. The ExA equally appreciates the concerns of LHAs that drivers would, in reality, likely seek to avoid roadworks and circuitous diversions

associated with the construction of the Proposed Development and utilise the LRN wherever it was possible to do so.

- 6.4.51. The ExA during its Unaccompanied Site Inspections (USIs) and Accompanied Site Inspection (ASI), observed that the LRN surrounding the key junctions likely to be affected by construction including Black Cat, Cambridge Road and Caxton Gibbet consists of many narrow lanes with limited passing places which the ExA considers to be inappropriate for any marked increased usage, particularly by HGVs.
- 6.4.52. The ExA has considered the locations, and observed many of those locations put forward for construction traffic monitoring during the USIs and ASI visits. The ExA found that several routes appeared sensible alternatives to those likely to be affected by the construction of the Proposed Development on mapping and when using satellite navigation, even if when driven they are clearly not and are wholly inappropriate. As such, the ExA agrees with the LHAs that it would be reasonable to expect that many of the locations would experience an increase in traffic flow despite efforts of the Applicant to contain such traffic on the SRN.
- 6.4.53. The ExA considers that without monitoring of traffic flows across the LRN during the construction of the Proposed Development, it would not be possible to robustly determine what interventions may be necessary to discourage such behaviour, even if those measures are taken solely on the SRN in the shape of information provision. It would also be logical that data should underpin discussion at TMFs regarding the effects of the Proposed Development on the LRN during construction.
- 6.4.54. The ExA notes there is not disagreement on the need for monitoring of traffic on the LRN during construction but rather who should be responsible for what and how any subsequent interventions are taken forward.
- 6.4.55. Whilst the ExA accepts that LHAs should have a sound understanding of traffic behaviour on their own network at any one time, the ExA is of the view that given the scale and duration of the Proposed Development's construction, monitoring of traffic prior to commencement of construction should be integral to the OCTMP. Without an agreed and accepted baseline position any subsequent comparison by either LHAs or the Applicant carries risk of being subject of dispute.
- 6.4.56. The Applicant has provided a sound rationale for the selection of appropriate sites for baseline monitoring prior to construction, based on national guidelines which is now agreed with the LHAs. The ExA is satisfied with the Applicant's proposed rationale for selection and that the proposed 24 locations for baseline monitoring is sound.
- 6.4.57. However, without subsequent formal monitoring during construction phases, the relevant LHAs and Applicant would rely on anecdotal evidence or ad-hoc surveys to inform the TMFs. The ExA has no certainty that formal monitoring, following the same methodology to baseline monitoring would occur. The ExA has considered the position of the

Applicant with regard to who should be responsible for ongoing traffic monitoring during construction. The ExA does not accept that LHAs should have to, or may have the capacity, to absorb the additional monitoring as part of their business-as-usual activities. The ExA is of this view because there are several sites, 24 to be precise, that are now agreed could be affected by the traffic re-routing. Moreover, many of the sites, in rural areas, would be the subject of routine monitoring by the respective LHA and as such, monitoring at these locations would likely be additional to the LHAs business-as-usual activities.

6.4.58. By undertaking monitoring throughout the construction period, consistent with the proposed baseline monitoring, the Applicant and LHAs would have certainty of the methodology followed and be able to deal with queries received by local communities and stakeholders with robust evidence in a timely manner. Similarly, to determine whether any subsequent intervention was necessary if discussed at the intended TMFs as secured in the OCTMP. Likewise, the Applicant would have immediate access to the data to be able to compare with observed effects at specific times on the SRN.

6.4.59. The ExA therefore propose a new R22 to ensure that the Applicant undertakes traffic monitoring during the construction period, to identify any adverse effects on the traffic on the LRN. The wording proposed by the ExA in the recommended DCO (rDCO) is:

"(1) No part of the authorised development is to commence until a construction phase local traffic monitoring scheme for the locations identified in the outline construction traffic management plan has been submitted to, and, following consultation with the relevant local highway authority, approved by the Secretary of State.

(2) The construction phase local traffic monitoring scheme must include –

(a) a survey to assess baseline traffic at the locations identified in the outline construction traffic management plan;

(b) the methodology to be used to collect the required data;

(c) the periods over which construction phase traffic is to be monitored;

(d) proposals for the submission of the survey data collected and an interpretative report to be provided to the relevant local highway authority; and

(e) surveys as agreed in sub-paragraphs (b) to (d) at the locations in (a).

(3) The scheme approved under sub-paragraph (1) must be implemented by the undertaker unless otherwise agreed in writing with the Secretary of State following consultation with the relevant local highway authority."

6.4.60. The ExA has not proposed including in the Requirement, any intervention that might be deemed necessary subsequent to the monitoring. Here the ExA accepts the Applicant's argument, that to detail Requirements in relation to how any subsequent intervention should be taken forward on the local network, would lack sufficient clarity and preciseness as

interventions could range from information sharing to potentially larger engineering projects funded from national funding sources. Likewise, it would be difficult to conclude that any required intervention was solely needed as a result of the Proposed Development given other factors affect demand for travel. The ExA is satisfied that such proposals should be discussed between the Applicant and the LHAs through the TMFs detailed in the OCTMP.

- 6.4.61. The ExA is satisfied that the OCTMP explains in sufficient detail for this stage to expect condition surveys to occur to ascertain whether damage occurs as a result of re-routing and that this will be further detailed in the TMP. The ExA considers that in the context of re-routing traffic, such surveys do not need to occur across the entire highway network but rather be limited to those routes which incorporate the formal strategic diversions of the Applicant given the Applicant has little control on drivers seeking to self-select alternative routes.
- 6.4.62. The ExA is satisfied that on the basis of the OCTMP and responses made during the Examination that the Applicant will, where practicable, maintain local access for residents, businesses and emergency services during road closures. Likewise, where road space of the LHA is required, that the process for booking road space would follow national guidance, including any locally set administration fees such as, but not limited to, the cost of TTRO drafting and advertising road closures.

Construction vehicle routes

- 6.4.63. Further to queries by the ExA, the Applicant explained that unless impractical to do so, construction traffic would be routed via the SRN with only the final leg of the journey occurring on the LRN where necessary [EV-035] [EV-040]. The Applicant explained that the OCTMP [APP-244, Appendix C] included plans of route restrictions for construction traffic leading to the Proposed Development. Road traffic signs would be erected at every restricted route, and communicated through site inductions, daily briefings, noticeboards, signs and information supplied to suppliers. The green routes and amber dashed routes shown on the plans in the OCTMP would be used in developing logistics and construction plans. The amber dashed routes would be used by construction traffic for early access at specific locations or when working on specific aspects of the Proposed Development
- 6.4.64. The ExA requested confirmation of how such restrictions would be enforced in the event of contravention. The Applicant explained [REP1-022] that any enforcement of such routes would take the form of internal disciplinary processes and awareness raising rather than through any enforcement body such as the Police, as the Applicant confirmed that the routes would not be subject to a formal TTRO relating to their usage.
- 6.4.65. CBC was particularly concerned with the proposed use of Station Road, Tempsford by construction HGVs because of the proximity of homes fronting the road and the existing informal on-street parking arrangements [EV-017] [EV-018] [EV-035] [EV-040] [EV-071] [EV-076], requesting a Requirement that the route be used only by vehicles under

7.5tonnes. The ExA asked the Applicant for the rationale for using this section of road and the likely number of HGVs that would do so. The Applicant explained that the route would be needed to access construction sites for specific works, including the East Coast Mainline (ECML) eastern crossing abutment and gas main diversion as there was no other realistic alternative access [EV-035] [EV-040].

- 6.4.66. The Applicant also confirmed that likely HGV usage would be approximately 30 vehicles per week for 8-12 months [REP5-014] whilst the construction activities referred to above were occurring, albeit this could be up to 25 per day when bulk materials such as stone and concrete were required [REP3-019] and using vehicles over 7.5 tonnes. Likewise, that the use of an alternative route or creation of a temporary haul route bypassing the village had not been appraised in environmental terms. The ExA observed the location at the USI3 [EV-095] and ASI1 [EV-022]. At the close of the Examination CBC remained of the view the route should be avoided and alternative access be provided, whereas the Applicant considered it appropriate for the construction activities referred to.
- 6.4.67. Throughout the Examination, the ExA repeatedly sought clarity from the Applicant on approximate likely HGV movements associated with the construction of the entire Proposed Development, to supplement that presented in TA Part 1 [APP-241, Appendix 9.1]. This information was not forthcoming until near the end of the Examination, when only schematic information was provided [REP9-035].
- 6.4.68. Further to comment from LHAs and other IPs, including Hilton Parish Council [EV-071] [EV-076] the routes proposed for construction traffic were updated during the Examination, including the B1040 through Hilton being subject to restricted use and various routes in and around St Neots.
- 6.4.69. The Applicant highlighted that routes proposed for construction traffic may be amended further as the OCTMP is refined in to the TMP for the Proposed Development. LHAs are in agreement with the proposed construction routes with the exception of CBC regarding Station Road, Tempsford.

ExA's reasoning on construction vehicle routes

- 6.4.70. At the USI [EV-095] and ASI1 [EV-022], the ExA observed that the surrounding network is rural in nature, incorporating narrow lanes with limited passing places, particularly for the passing of HGVs. There are also more densely populated areas, including in St Neots where homes and businesses front the local highway network. Therefore, a robust approach is needed to deal with construction traffic routing.
- 6.4.71. The ExA considers that OCTMP sufficiently details how the Applicant would ensure its own contractors would be made aware of the appropriate routes to follow when accessing construction sites, and is satisfied that internal processes would satisfactorily deal with any inappropriate routing. As such the ExA does not consider the routes

detailed should be the subject of any TTRO requiring the assistance of the Police to enforce.

- 6.4.72. The ExA considers that the information relating to likely HGV movements should have been provided by the Applicant earlier in the Examination. Such information would have assisted the ExA and IPs in understanding and testing the likely reality of construction HGV flows and associated affect across the network and at specific locations, as well as enabling more public scrutiny of the information. However, the ExA has reviewed the forecast HGV numbers submitted by the Applicant, and the ExA is content that the proposed designated construction routes would be appropriate for the short-term routing of construction traffic by virtue of the existing carriageway widths and ability to accommodate HGVs. The ExA considers that this would require traffic management measures, like the measures that are already included the OCTMP, such as signage.
- 6.4.73. The ExA notes the view of CBC in relation to the proposed use of Station Road, Tempsford. However, the ExA considers the limited use of the route in relation to specific works to construct the gas pipeline diversion and the east abutment of the ECML bridge for 8 to 12 months is proportionate as there is no realistic alternative route before the ExA. The ExA notes that parked cars currently limit the available forward visibility along the road and opportunities for vehicles to pass side by side. However, it would be feasible to control this in a more formal way for temporary periods, such as described in the OCTMP in relation to temporary traffic management measures, with disruption likely to be short-lived given the required forecast HGV usage.
- 6.4.74. The ExA does not consider a Requirement relating to Station Road, Tempsford is appropriate or necessary given the Applicant has confirmed that such matters would be discussed as part of the traffic management liaison meetings, contained and secured in the OCTMP [REP10-019]. If the route was restricted to usage of vehicles under 7.5 tonnes there could be an increase in usage and over a longer period, given the construction activities that would be served by the route the ExA also has no certainty that it would be practicable to utilise vehicles under 7.5tonnes for those activities.
- 6.4.75. The ExA considers such matters of detail, including any temporary parking restrictions and other forms of traffic management, should be dealt with once the Applicant is in a position to discuss the precise detail of works and timings with the LHA prior to consultation with the public

Workers Travel Plan

- 6.4.76. The ExA requested confirmation of the likely number of workers to be employed at any one time during construction. The Applicant confirmed that around 900 workers were forecast to be employed [REP3-019]. Therefore, the ExA sought clarity from the Applicant to understand whether construction traffic included workers accessing the construction sites and compounds or solely vehicles involved in the construction of the Proposed Development itself bringing materials and plant to site. The

Applicant confirmed in response that construction workers were not included in the definition as detailed in the TAR [APP-241].

- 6.4.77. Mindful of the NPPF, 2021 (Paragraph 113), relating to the provision of Travel Plans the ExA requested rationale as to why no workers travel plan had been proposed given the Proposed Development would effectively be a large employer, albeit for a temporary period, that would likely create a significant amount of movement in terms of employees travelling to work. Additionally, the ExA sought views from LPAs as to whether they considered a Workers Travel Plan should be provided. Each LPA confirmed that a Workers Travel Plan should be prepared as the construction works would have the effect of creating a large, even if temporary employer. CCC also suggested a dedicated Travel Plan Champion should be provided by the Applicant to lead its delivery and be a point of contact for both employees and LPAs on travel planning matters.
- 6.4.78. The Applicant was unaware of a Travel Plan being required on other NSIP highways projects [REP3-019]. However, the Applicant submitted an outline Workers Travel Plan [REP5-016] to the Examination. The Applicant explained that the Workers Travel Plan would be updated and refined and is secured through the First Iteration Environmental Management Plan (EMP) [REP10-018] also including provision for a Travel Plan Champion. LHAs agreed the content was of sufficient detail at this stage of the Proposed Development's design [EV-071] [EV-076].

ExA's reasoning on Workers Travel Plan

- 6.4.79. The ExA is in agreement with LHAs, that given that 900 workers are forecast to be employed in delivering the Proposed Development, this would indeed have the effect of new a large, local employer. This coupled with the wide geographic extent of the site has the potential to create a significant amount of traffic movement on the surrounding network as workers seek to access the construction sites and compounds. As such the ExA finds that the need for workers travel plan is justified and in line with the NPPF.
- 6.4.80. The ExA shares the view of the LAs that the submitted Outline Workers Travel Plan is adequate for this stage of the Proposed Development's preparation and note that LAs would have further opportunity to comment on the content of the proposed measures and initiatives during its finalisation as part of the Second Iteration EMP, secured by R3 of the dDCO.

ExA's summary of reasoning on construction phase traffic effects

- 6.4.81. The ExA, LHAs and the Applicant agree that traffic diverting on the LRN should be monitored during the construction period. The ExA considers an agreed baseline position at selected sites across the LRN is vital to inform any subsequent discussion on effects of traffic diverting. Without it, robust comparisons cannot be made. Moreover, the ExA considers it is necessary that such monitoring takes place both prior to construction to establish a baseline, as well as during construction to monitor changes.

The ExA also finds that this monitoring should be provided by the Applicant because without the Proposed Development, the LHAs would have far less need to monitor traffic at all the locations put forward, particularly on rural routes. The ExA has therefore proposed a new R22 to ensure that the described monitoring occurs, both before and during construction.

- 6.4.82. However, the ExA does not agree that the full responsibility for any subsequent intervention can justifiably be placed on the Applicant alone. This is because the likely results of monitoring at this stage are unknown and whilst monitoring would provide a picture of effects, other matters may affect traffic flows on the LRN including the actions of LHAs themselves. Moreover, given the variety of influences that could drive the need for intervention, it would be difficult for parties to predict how the responsibility for such intervention can be fairly shared in a generic way at this stage. This would need to be considered on a case by case basis with specific information to hand. As such, the ExA agrees with the Applicant's approach here that such matters, if they arise, should be discussed and agreed at the proposed TMFs or between existing operational teams of the LHAs and the Applicant.
- 6.4.83. The ExA considers that the proposed route restrictions for construction related vehicles accessing the Proposed Development is acceptable at this stage of the planning of construction phases. The Applicant has taken on-board suggestions where practicable to do so, seeking to ensure the SRN is used wherever possible for the majority of the journey, using the LRN for the last leg. The ExA recognises CBC's concerns that there would be disruption to villages such as Tempsford during construction, however there is no other realistic alternative for access for the proposed works to the gas line and eastern ECML bridge abutments. The ExA considers that through careful project planning and liaison between the Applicant and LHA, as described in the communications plan in the OCTMP, this can be minimised.
- 6.4.84. The ExA considers that the forecast of 900 workers to be employed in the construction of the Proposed Development is not an insignificant number and would have the effect of creating a relatively large employment site in a predominantly rural area. Therefore, the ExA considers that given the duration of the works, the number of employees involved and the locations of main construction compounds, it would be appropriate for the Applicant to incorporate a workers travel plan. The matter has been agreed with LHAs and the Applicant.
- 6.4.85. On the basis of the above the ExA considers that while the construction of the Proposed Development would inevitably cause disruption to the local road network, this disruption would be temporary, and the adverse effects would be managed and minimised by the OCTMP. In that regard, the ExA concludes that the OCTMP is fit for purpose.

Monitoring of operational traffic effects

- 6.4.86. The Applicant explained it intends to apply a 'Monitor and Manage' approach at various junctions on the SRN listed in the TAA [APP-243] where the Applicant's modelling predicted increases in traffic flow and worsening junction performance as a result of the Proposed Development. The Applicant's monitor and manage approach means that at junctions with worsening traffic flows, the Applicant would monitor traffic flows and behaviour and subsequently manage effects if required through intervention. There is little detail of what means would be used for such monitoring, nor any details of the criteria used to determine when intervention, or management would be required. There is also no detail of any monitoring in relation to the LRN provided in the Application or justification as to why it was not considered necessary as part of the operation of the Proposed Development.
- 6.4.87. The ExA sought clarification at various points of the Examination on all these points: what operational traffic monitoring was proposed by the Applicant on the SRN as well as the LRN and how this would be secured. The ExA also asked whether LHAs were clear on the matter [PD-008] [EV-020] [PD-009] [EV-056] [PD-014].
- 6.4.88. In response, LHAs sought clarity on the extent of monitoring of operational traffic effects, primarily on the LRN but also at specific points of interaction with the SRN, in order to enable them to operate their network effectively. LHAs specifically asked what monitoring the Applicant was intending, at which locations, how the results of any monitoring would translate into intervention and how such measures would be secured and delivered [EV-069] [EV-074].
- 6.4.89. Regarding monitoring the operation traffic effects on the LRN, the Applicant stated that the predominant effect of the Proposed Development would be beneficial traffic effects, and the Applicant only expected minor worsening of traffic flows at some locations. The Applicant stated that the Monitor and Manage approach would also apply to the LRN, but it did not constitute a form of mitigation in relation to the likely effects of the Proposed Development [REP6-041]. Finally, the Applicant did not consider it was its responsibility to monitor the effects of the Proposed Development on the local highway network.
- 6.4.90. The Applicant further explained that the monitoring of traffic effects on the LRN would be the responsibility of LHAs and it would expect LHAs to use their own resources to monitor and mitigate any adverse effects. However, there was provision for matters to be discussed at existing regular liaison meetings on traffic matters, held between the Applicant and LHAs. The points raised were reiterated in a technical note provided by the Applicant [EV-069] [EV-074] [REP6-041].
- 6.4.91. The Applicant explained that projects such as the Proposed Development would typically be subject to a Post Opening Project Evaluation (POPE) to understand the effects of the Proposed Development once in operation. Where appropriate the POPE may inform further network interventions from a range of budget sources available to the Applicant. However, the Applicant explained the detail of this was yet to be developed and has

not been secured in any way as part of the dDCO, likewise no funding is assured for any subsequent interventions recommended in the POPE.

- 6.4.92. The LHAs stated that they required from the Applicant, a method for monitoring operational traffic flows and the security of unlimited funding for any corresponding interventions on the LRN that they considered necessary. The LHAs considered that whilst it was their role to manage their own network effectively, the adverse effects of any new development should be the responsibility of the relevant works promoter, typically this would be a developer, in this case the Applicant for the Proposed Development [EV-069] [EV-074]. The LHAs also provided wording for a Requirement for the dDCO which would secure the monitoring of operational traffic and any subsequent remedial measures considered necessary on the LRN [REP6-074].
- 6.4.93. The Applicant maintained its position, and stated that while monitoring of traffic flows on the LRN need to and should occur, this would be a matter of routine for the HAs given the statutory responsibilities to effectively discharge their Network Management Duty (NMD) detailed in the s16 of the TMA 2004, with or without the Proposed Development [EV-056] [REP6-041] [REP8-010] [REP8-041].
- 6.4.94. The ExA sought a view and appropriate wording from the Applicant should it be minded to recommend a Requirement relating to operational traffic monitoring and, subsequent intervention [PD-015, Q4.8.1.7]
- 6.4.95. The Applicant submitted a Position Statement [REP9-034] REP10-042, Appendix A], further to discussion with LHAs proposing monitoring at five locations on the LRN, selected on the basis of where modelled traffic flows were likely to increase above set thresholds [REP10-042, Appendix A]. The thresholds being based on Rules 1 and 2 of national guidance Guidelines for the Environmental Assessment of Road Traffic, specifically:
- 1) Rule 1: include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%).
 - 2) Rule 2: include any other specifically sensitive areas where traffic flows have increased by 10% or more
- 6.4.96. While the Applicant still did not think that monitoring the operational traffic effects should be its responsibility, it put forward wording for R22 in the dDCO.
- 6.4.97. In relation to any subsequent interventions further to monitoring, that may be considered appropriate by the LHAs, the Applicant reiterated that it would be for LHAs to fund any subsequent proposed intervention measures on the LRN rather than from funding associated with the Proposed Development [REP6-041].
- 6.4.98. The final position of the LHAs is that they are broadly satisfied with the locations of proposed operational monitoring, albeit their proposed Requirement was not amended [REP10-025] [REP10-026] [REP10-064].

However, LHAs consider that any necessary subsequent intervention should be funded by the Applicant.

ExA's reasoning

- 6.4.99. The ExA accepts that the Applicant, as Strategic Highway Authority for the SRN, is required under its Operating Licence, to monitor its own network in order to appropriately manage it. Therefore, the ExA do not consider it necessary to propose a Requirement in relation to the Applicant's intended Monitor and Manage approach on the SRN because it would simply repeat a statutory duty that is already imposed on the Applicant by the SoS.
- 6.4.100. The ExA agrees with the LHAs that the absence of monitoring of traffic effects during operation, would lead to a void in the LHAs' understanding of the Proposed Development's effects on traffic on the LRN and how it should be managed. Whilst the ExA notes that the Proposed Development would likely be subject of a POPE and LHAs may have some form of input into its parameters in future, this is not secured in the dDCO and the ExA cannot give it any weight in its considerations.
- 6.4.101. The ExA does not accept that such monitoring, where the Applicant's modelling anticipates worsening of traffic flow should be absorbed within the day to day duties and existing budgets of the LHAs because it is needed, at least in part, due to the Proposed Development. As such the ExA considers that monitoring of operational traffic effects on the LRN and at key points of interface with the SRN is required and would be the responsibility of the Applicant as the promoter of the development that at least in part would have caused the adverse traffic effect.
- 6.4.102. The ExA has considered the appropriateness of the suggested Requirement originally submitted by the LHAs. However, the ExA agrees with the Applicant that the locations did not appear fully justified in terms of a robust selection criteria based on flow related thresholds or local highway characteristics. The ExA is satisfied with the Requirement wording proposed by the Applicant and the selection of five locations. In making this conclusion the ExA also relies on the consensus between the Applicant and the LHAs on the five selected locations at the close of the Examination. The ExA has proposed minor amendment to the wording for consistency with other relevant Requirements in the dDCO. The ExA is satisfied that necessary operational traffic monitoring is secured through the proposed R23 in the rDCO.
- 6.4.103. The ExA notes the request of LHAs to require the Applicant to fund any interventions considered necessary on the LRN further to the proposed traffic monitoring. However, at this point there is little evidence to suggest what, if any intervention would be necessary as the results of monitoring are unknown at this point. Therefore, precise intervention measures cannot be detailed and the ExA has no realistic picture of any likely cost of such measures so as to consider whether they would be reasonable. Furthermore, the ExA accepts that it would be very difficult to demonstrate that traffic flow changes on the LRN over five years were solely as result of Proposed Development and not other factors such as

wider demand for travel, nearby new development or changes in the way the LRN was managed.

- 6.4.104. Therefore, the ExA does not consider it appropriate to require the Applicant to provide surety of funding for any subsequent, undefined intervention, considered necessary as a result of the proposed traffic monitoring.

Operational phase traffic effects at existing junctions on the local network

- 6.4.105. Although, as discussed above, the ExA is satisfied that the modelling work undertaken by the end of the Examination presents a likely picture of the traffic effects of the Proposed Development, the acceptability of those likely effects at specific junctions and links was tested at specific locations throughout the Examination, in response to queries of IPs, particularly CCC and CBC, [PD-008] [PD-009] [PD-014] [PD-017] [EV-020] [EV-056].

Wyboston Roundabout

- 6.4.106. The Wyboston roundabout is a five-arm at-grade roundabout on the A428 and lies to the east of the A1 mainline carriageway; it connects with the grade separated slip roads of the A1 and with the B1428 into Eaton Socon [APP-010, Sheet 7, Continuation 7a] [APP-243, Figure 3-40]. The Applicant forecasts a substantial overall decrease in flows at this junction because of the Proposed Development, due to reductions in A428 traffic on the eastern and southern arms.
- 6.4.107. Further to the original modelling undertaken [APP-243] and subsequent sensitivity modelling presented during the Examination [REP5-018] CCC raised concerns regarding the effect of the Proposed Development on the functioning of the Wyboston Roundabout, specific concerns included the predicted effects on traffic using the northern approach to the junction along the Great North Road and the knock on effect on side roads accessing the Great North Road if congestion was to occur. Whilst the Applicant evidenced that queuing was likely be contained between the roundabout and Alpha Road Marlborough Road junction [REP5-018], the Applicant and LHA agreed to investigate creating additional capacity at the roundabout within the space available.
- 6.4.108. The Applicant provided a desktop assessment of the options [REP8-022], without the use of traffic modelling, which found that negligible or marginal benefits would be felt by adjusting lane markings, but more substantive engineering works could bring some likely benefits. CCC agree that engineering works would be required [REP10-057] confirming a dedicated left turn lane would be the most viable option. However, the Applicant is of the view such engineering works would be beyond the scope of the Proposed Development and is unnecessary for the reasons below.
- 6.4.109. The modelling undertaken by the Applicant [APP-243] [REP5-018] indicates that the junction would be over capacity in both 2025 and 2040

without the Proposed Development and states that the Proposed Development would result in an overall improvement of the roundabout. The Applicant also highlighted that the 2025 modelling showed an improvement in the operation of the arm in question, reducing queuing in the PM peak from 32 vehicles to 16 vehicles. In the AM peak the queue increases from 9 to 10 vehicles. However, the Great North Road approach to the roundabout would experience increased queuing from 9 vehicles to 33 in the AM peak and from 50 to 55 in the PM peak in 2040.

- 6.4.110. Whilst the ExA has visited the location during the USI [EV-095] to better appreciate the available road space it is unaware of any meaningful consultation having previously been undertaken on the proposal to create a dedicated left turn lane at the junction. This was not tested in Examination given the timing of the submission at D10. The Applicant has committed to undertake traffic monitoring at the location as part of R22 of the dDCO to enable the LHA to consider whether future works are necessary. However, the Applicant does not agree that works are required as part of the Proposed Development as it explained that there would be an overall improvement to the function of the roundabout.

ExA's reasoning on Wyboston Roundabout

- 6.4.111. Given the overall performance of the junction as a whole is forecast to improve compared to the do-nothing scenario and the predicted queue lengths would not appear to back up beyond the Alpha Drive and Marlborough Road junction, the ExA is unconvinced that the suggested engineering work is necessary mitigation for the Proposed Development itself, albeit monitoring would assist the LHA to decide whether to bring forward a scheme if it considered necessary and viable in future.

Barford Road Roundabout

- 6.4.112. The Barford Road roundabout, St Neots, is an at-grade four arm roundabout and is the first junction encountered eastbound on the A428 from the Wyboston roundabout [APP-010, Sheet 7] [APP-243, Figure 3-41].
- 6.4.113. As a result of the original modelling undertaken [APP-243] and subsequent sensitivity modelling [REP5-018] CCC had concerns regarding the effect of the Proposed Development on the functioning of the Barford Road Roundabout, specifically the northern arm and the potential for subsequent congestion at and beyond the Tesco roundabout to the north. The Applicant and LHA agreed to discuss investigating whether additional capacity was needed at the northern entry to the junction. The Applicant provided an assessment of the options [REP8-022] albeit this was desktop exercise without the use of traffic modelling, CCC's response being provided at D10 to the ExA [REP10-057].
- 6.4.114. The modelling and subsequent sensitivity testing undertaken by the Applicant [REP5-018] demonstrated the junction would be over capacity in both 2025 and 2040 without the Proposed Development and that the Proposed Development would result in an overall improvement in the performance of traffic flow at the junction. The Applicant explained that

the Proposed Development would increase queuing on the northern approach during the PM Peak, from 8 vehicles to 14 and in the AM peak the queuing would decrease from 10 to 6 vehicles. However, the Applicant considered that such a queue would be accommodated within the link from the Tesco junction without compromising the functioning of that roundabout [REP10-046].

- 6.4.115. The Applicant would not intend to monitor traffic flows at the location as the likely effects on the nearby LRN are forecast to be minimal. The LHA consider the site should be monitored to ascertain whether further intervention is necessary in future.

ExA's reasoning on Barford Road Roundabout

- 6.4.116. Whilst noting that queue would likely almost double, the ExA has little substantive evidence to consider that the Proposed Development would likely result in any detrimental effect to the LRN because the increase would comfortably be accommodated within the space between the roundabout and the Tesco junction. The ExA also accepts the position of the Applicant, that overall the function of the roundabout would improve as a result of the Proposed Development.
- 6.4.117. Should the LHA consider that monitoring is necessary at this location, the ExA considers that in this instance it should be provided by the LHA given the Proposed Development would improve the overall functioning of the roundabout
- 6.4.118. As such, the ExA is convinced by the argument submitted by the Applicant that further measures to increase capacity are not required as part of the Proposed Development and that operational monitoring, provided by the Applicant is unnecessary at this location.

Cambourne junction

- 6.4.119. The Cambourne junction is a grade-separated dumbbell junction on the A428 with St Neots Road to the north and Cambourne Road to the south. It is the first A428 junction east of the Proposed Development [APP-010, Sheet 15] [APP-243, Figure 3-21].
- 6.4.120. CCC had concerns with the LinSig modelling undertaken by the Applicant, because the modelled flows and geometric assumptions made, including road widths and turning radii which could result in an over-estimation of the proposed junction's capacity, and therefore an under reporting of matters that may require mitigation.
- 6.4.121. Subsequent to further sensitivity testing to evaluate how the junction performs in the 2040 Do-Something scenario, incorporating traffic flows based on data collected by the developer of the land at West Cambourne, the Applicant demonstrated that the junction would operate within capacity in future years as a result of the Proposed Development [REP8-022]. The matter was agreed by CCC in the final SOCG [REP10-026].

- 6.4.122. The Applicant highlighted that the Proposed Development would result in an increase in traffic using the two roundabouts. However, all arms of each of the roundabouts operates within 80% capacity. The A428 off-slip road roundabout entry experiences an increase in queueing in both peak periods, with an increase in 1 vehicle in the AM and an increase of 2 in the PM. However, the total queue on this arm would still remain within the capacity of the slip road to accommodate it.

ExA's reasoning on Cambourne junction

- 6.4.123. Having reviewed the material submitted, the ExA is satisfied with the conclusion of the Applicant and CCC that the junction would operate well within capacity with operation of the Proposed Development.

A428 Madingley Mulch Junction - A1303 West of Cambridge - M11 Junction 13 Corridor

- 6.4.124. The Madingley Mulch roundabout (east of the Proposed Development and west of the M11) is a roundabout to the south of the A428 that forms a junction with the A1303 Madingley Road, St Neots Road and Church Lane. It is connected to the A428 (west) via slip roads. Madingley Mulch is the location at which some traffic using the Proposed Development would leave the A428 to travel via the A1303 to reach Cambridge city centre and the M11 south towards London [REP10-049, Figure 2-1].
- 6.4.125. Although Junction 13 of the M11 forms part of the SRN its functioning affects the LRN, particularly the A1303 corridor. The Applicant developed VISSIM models at M11 Junction 13 which include the A1303 corridor [APP-243]. The VISSIM 'Do Something' (with Proposed Development) model predicted significant A1303 eastbound queues extending back to the Madingley Mulch roundabout at the A428 slip road approach. The matter was of concern to CCC because of the potential to affect the LRN at the location. To assess the extent of the queues and the impact on the A428 eastbound, the VISSIM models were extended to include the A428 eastbound carriageway, up to the Scotland Road/St Neots Road junction merge [REP8-019].
- 6.4.126. The AM peak hour results for the 2025 scenario with the Proposed Development show that the eastbound congestion on the A1303 is not expected to extend back and impact the A428. However, by the AM peak in 2040, traffic growth is expected to result in queues extending back and impacting the A428 eastbound. The PM peak results show that there is no impact to the A428 eastbound in 2025 in either scenario and no impact in the 2040 if the Proposed Development was not constructed. However, in the 2040 Proposed Development scenario, the additional traffic resulting from the Proposed Development results in queues extending back onto the A428 eastbound carriageway, with some eastbound queueing during a proportion of the peak hour.
- 6.4.127. The queues forming on the A428 off-slip to Madingley Mulch roundabout, due to eastbound congestion on the A1303, are predicted to block back to the A428 eastbound carriageway by 2040 even in the event of the Proposed Development not being constructed. CCC consider this to be a

potential safety risk for vehicles travelling eastbound along the A428 carriageway. The additional traffic resulting from the Proposed Development is expected to extend these queues, which the model predicts will impact the A428 eastbound in the 2025 opening year, with queues forming for a proportion of the AM peak hour. In 2040, the additional traffic is predicted to result in extensive queues along the A428 eastbound.

- 6.4.128. The Applicant explained that this matter would likely be resolved because it considered that a RIS3 scheme would be forthcoming for the improvement of the M11 Junction 13 in future [APP-243]. The Applicant proposed a 'Monitor and Manage' approach at Junction 13 [REP6-041].
- 6.4.129. The Applicant also explained the picture presented would likely be an extreme worst-case scenario as the likely effect of the Council's Cambridge to Cambourne Better Public Transport Project, providing an off-road bus route from Cambourne to Grange Road Park & Ride facility at Scotland Farm near the A428 Scotland Road, Hardwick junction, and new high quality cycling and walking facilities by 2026 has not been incorporated into the modelling as it did not have sufficient certainty associated with it.
- 6.4.130. At D10 the Applicant submitted a Madingley Mulch Roundabout and A1303 Study [REP10-049] further outlining the future pressures on the corridor and the effect of the Proposed Development, building on that described above. The Applicant also provided an indication of potential future mitigation proposals for the corridor but not specific to the Proposed Development. Based on the findings of the study and noting the high level of uncertainty with regards to predictions of future conditions within the A1303 corridor, the Applicant proposes that traffic conditions on the A428 off-slip and A1303 east of Madingley Mulch roundabout would be monitored as part of the POPE of the Proposed Development and also that the A428 off slip be added to the Monitor and Manage approach previously described for J13.
- 6.4.131. At the close of the Examination, there remains disagreement on the matter, CCC consider that the Applicant should undertake additional work at this junction so as to understand the mitigation proposed by the Applicant to address the impact of the Proposed Development [REP10-026].

ExA's reasoning on the A428 Madingley Mulch Junction - A1303 West of Cambridge - M11 Junction 13 Corridor

- 6.4.132. The ExA notes that there is significant uncertainty on the likelihood or timing of any improvements to the corridor, including whether a RIS3 scheme would be forthcoming. Similarly, when future development may occur that would further affect the corridor, both positively and negatively. As such the ExA considers that the Applicant has correctly adopted a precautionary approach to the modelling whereby the Applicant has not relied on other improvements coming forward before the opening of the Proposed Development.

- 6.4.133. Whilst the ExA notes that the Applicant considers the modelling to represent a worse case it nonetheless does show queues backing up on the eastbound exit slip road and interfering with flow on the A428. Therefore, the ExA shares the concern of the LHA that this could, without other improvements coming forward in similar timescales, result in an adverse road safety issue. Further to the uncertainty surrounding the corridor the ExA considers that this should at the very least be monitored.
- 6.4.134. The Applicant's proposal to include the location in the POPE is noted. However as previously explained the POPE is not secured in the dDCO and therefore carries little weight in the ExA's consideration. During the Examination the Applicant has though explained that a Monitor and Manage approach would now be extended to the A428 eastbound off-slip as part of its Operating Licence, this the ExA considers is wholly necessary.
- 6.4.135. The ExA does consider that this potential road safety issue is a disbenefit of the Proposed Development. However, the ExA accepts that the issue is at least in part due to pre-existing highway layouts and the Applicant has statutory duties to ensure the SRN's safe operation.

Operational phase traffic effects at existing junctions on the strategic network

M1 Junction 13

- 6.4.136. The M1 Junction is a complex junction to the south west of Bedford, including signalised and non- signalised, at grade and grade separated junctions. The M1 Junction 13 links the M1 and A421, together with a number of local roads [APP-243, Figure 3-66].
- 6.4.137. The Applicant explained that the Proposed Development is forecast to result in a minor increase in overall traffic levels at M1 Junction 13 and changes in routing patterns through the junction [APP-243]. The flow changes from the Proposed Development are explained to mainly impact the A421 roundabout, resulting in some slight increases to queue lengths. In 2025, the Proposed Development would result in an increase in delay of three seconds per vehicle in the AM peak and ten seconds in the PM peak. In 2040, the Proposed Development would also result in an increase in delay of sixteen seconds per vehicle in the AM peak and ten seconds in the PM peak.
- 6.4.138. Whilst referring to the location as a point sensitive to changes in flows on the A1, CBC have not provided substantive reasoning as to why or whether the changes in flow as a result of the Proposed Development at the M1 Junction 13 require mitigation. No reference is made to the location in the SOCG [REP10-024]. However, the junction is included in the list of locations that the LHAs have requested be subject to monitoring [REP6-074].

- 6.4.139. The Applicant does not include the junction in the list of locations it intends to be the subject of a Monitor and Manage approach and has not explained why.

ExA's reasoning on M1 Junction 13

- 6.4.140. The ExA has considered the likely effects of the Proposed Development at the junction in terms of predicted flows and delay. Although there is some marginal increase in traffic flow, the ExA finds that the modelled results suggest an increase in the overall delay at the junction of sixteen seconds per vehicle in the AM peak and ten seconds in the PM peak in 2040 with the Proposed Development in place. The ExA is satisfied that this is minor increase in delay and the operational adverse effect of the Proposed Development is only minor and would not warrant mitigation measures.
- 6.4.141. The ExA notes that this junction has not been proposed for the Applicant's Monitor and Manage approach. The ExA is content that monitoring of this junction would be included as part of the Applicant's duty as the Strategic Highway Authority, under its Operating Licence to effectively manage the SRN at this location.

Biggleswade Roundabouts

- 6.4.142. Biggleswade is served by two roundabouts on the A1 to the north-west and south-east of the town. Both are at-grade four-arm roundabouts, connecting the B658 and A6001 Hill Lane (north roundabout) and London Road (south roundabout) to the A1. Biggleswade South roundabout has a minor arm (west) which has been excluded from the traffic flow analysis and modelling as it forms the access to farmland [APP-243, Figure 3-63, Figure 3-64].
- 6.4.143. The Applicant's modelling [APP-243] showed that the A1 arms and the B658 arm of the Biggleswade North Roundabout are anticipated to be over capacity by 2025 without the Proposed Development. The Applicant explains that the Proposed Development is anticipated to result in a minor worsening of the functioning of the roundabout.
- 6.4.144. Further to the request of CBC, the Applicant undertook additional sensitivity modelling at the location [REP5-018] utilising more up to date observed survey information from CBC. Further to the additional modelling the Applicant acknowledged that results showed a further worsening compared to the original findings.
- 6.4.145. Regardless of this finding, the Applicant considers that the overall effect of the Proposed Development on the junction is only a minor worsening [REP5-018].
- 6.4.146. CBC expressed concerns that any worsening of traffic flow at these locations should warrant mitigation. However, the final SOCG [REP10-024] does not refer to the final position of CBC in relation to either of the two locations beyond it receiving updated information in December 2021.

ExA's reasoning on Biggleswade Roundabouts

- 6.4.147. The ExA accepts that with, or without the Proposed Development, the roundabouts are likely to be over capacity by 2025. The effect of the Proposed Development on the roundabouts are both predicted to experience relatively small changes overall. There are also some increases in north-south movements at the Biggleswade North roundabout that are balanced by decreases east-west in terms of the overall throughput of vehicles using the roundabout.
- 6.4.148. The ExA is satisfied that the Applicant, under their Operating Licence, has a duty to ensure the safe and expeditious movement of traffic on their network and as such operational monitoring on the SRN is not considered necessary to form a Requirement of the Proposed Development. Therefore, the ExA agrees that the Applicant's intended approach to Monitor and Manage at this location is proportionate.

Sandy A1 A603 Junction and surrounding network

- 6.4.149. The main A1/A603 junction at Sandy is a four-arm at-grade roundabout connecting the A1 to the A603 to the west and B1042 to the east [APP-243 Figure 3-47]. The Applicant explained that the Bedford Road/High Street junction in the town centre was included in the assessment because of the potential of traffic re-assigning via the town centre to avoid congestion at the A1/A603 roundabout.
- 6.4.150. The Applicant developed a base year VISSIM model for the Sandy highway network that was calibrated and validated to observed turning counts and delay data. The Applicant considered that the creation of such a model was more reliable than relying on the strategic A428 traffic model as the strategic model is not designated for local assessment where capacity and route choice may be influenced by network details such as pedestrian crossing and local traffic behaviour [APP-243].
- 6.4.151. CBC expressed concern about the difference between the strategic model outputs and the VISSIM model outputs, explaining that the VISSIM model outputs demonstrated a better picture of likely traffic effects than the strategic model [REP1-54] [REP1-55] [EV-033] [EV-038], thereby questioning the reliability of modelling undertaken at the location.
- 6.4.152. The ExA asked the Applicant to consider what if any further testing should be undertaken at the location. The Applicant responded [REP3-029] that the VISSIM modelling was robust and demonstrated that the Proposed Development would not induce more trips to use the St Neots and New Road to bypass the A1. However, it predicted some increases in flow on the A1 and decreases in the A603-B1042, the predicted operational impact being a marginal increase in delay in 2025 but with a more significant reduction in delay in 2040. The Applicant did not propose to undertake any additional modelling at the location as it had already developed a base model for the location, that was calibrated and validated using observed turning data.

- 6.4.153. The Applicant proposes to take a monitor and manage approach at the junction under the terms of its Operating Licence. In addition, the Applicant has included St Neots Road, Sandy in the list of locations that would be subject to operational monitoring, secured in R23 in the ExA's rDCO and R22 in the Applicant's dDCO [AS-026].
- 6.4.154. CBC considers that given the difference between the two models the location should be monitored and any subsequent interventions considered necessary should be taken forward by the Applicant through the Monitor and Manage requirement submitted by the LHAs [REP6-074] [REP10-024].

ExA's reasoning on Sandy A1 A603 Junction and surrounding network

- 6.4.155. The ExA agrees that the creation of a VISSIM model was appropriate to understand the likely traffic effects in Sandy, including the A1 A603 roundabout as by the Applicant's own admission the Strategic model is less reliable at forecasting likely traffic effects at individual locations than a bespoke VISSIM model. As can be seen in the mapping provided [APP-243, Figure 3-47] the Sandy highway network offers opportunity for drivers to select various routes to avoid delays on both the local and strategic network and this would not have been adequately reflected in the strategic model.
- 6.4.156. The ExA notes the request of CBC to undertake operational monitoring at the location and for it to be secured in the DCO. In this instance given the likely traffic effects of the Proposed Development at the A1 A603 roundabout are predicted to be marginal the ExA is satisfied that the Applicant, under its Operating Licence, has a duty to ensure the safe and expeditious movement of traffic on their network.
- 6.4.157. The ExA does though appreciate the concerns of CBC in relation to the need to monitor the LRN in Sandy and agrees that operational monitoring should occur on the St Neots Road, as proposed by the Applicant, secured in R23 in the ExA's rDCO and R22 of the Applicant's dDCO.
- 6.4.158. However, for the reasons set out previously the ExA does not consider it appropriate to require that the Applicant provide any interventions subsequent to monitoring, as there is no certainty as to what this may form and whether any changes in traffic could be demonstrated to be solely as a result of the Proposed Development.

M11 Junction 14 Girton Interchange

- 6.4.159. The M11 Junction 14 Interchange forms a grade-separated junction at Girton [APP-243, Figure 3-39] [REP4-040, Figure 1-1]. The junction has recently been upgraded to a new layout as part of the A14 Cambridge to Huntingdon improvement scheme. The works included a reduction from dual to a single lane on the A428 in the eastbound direction prior to the merge with the M11 off-slip.

- 6.4.160. CCC had concerns [REP1-048] that the modelling undertaken by the Applicant for M11 Junction 14, Girton had not fully reflected the recent works and were also concerned that the modelling of the Proposed Development may incorrectly represent westbound traffic diverges. The Applicant provided an initial response [REP1-022] and a technical note [REP4-040] detailing the sensitivity testing undertaken with the issues identified by CCC resolved. Further to the additional modelling, the Applicant has forecast that traffic flows at the junction would generally increase on the strategic roads and reduce on the local roads.
- 6.4.161. The Applicant reported that on the SRN there would be an increase in Annual Average Daily Traffic (AADT) flows of 1,169 vehicles on the A14 westbound at the diverge of A14/A428 which is approximately a 2.4% increase on the link compared to the previous modelling. Traffic would also increase by approximately 2.4% on the A14 link road and 2.6% on the A428 westbound after the diverge [REP4-040].
- 6.4.162. On the local roads the Applicant reported that there would be a decrease in AADT of 327 vehicles on the A1307 which is approximately a 2.5% reduction of traffic on this link. There would also be a reduction of 2.1% on The Avenue, north of Madingley [REP4-040].
- 6.4.163. The Applicant has proposed to adopt a monitor and manage approach at the location as part of the Operating Licence [REP6-041]. CCC is satisfied with the additional modelling undertaken and accept the Monitor and Manage approach proposed by the Applicant [REP10-026].

ExA's reasoning on M11 Junction 14 Girton Interchange

- 6.4.164. The ExA accepts that the sensitivity testing, as proposed by CCC, was required because the Applicant's modelling at the location had not fully accounted for the recent changes to the junction. The ExA notes that whilst additional modelling work has provided a more accurate picture of likely traffic effects, the reality is that the increases of less than 3% Annual Average Daily Traffic Flow are very modest when compared to that previously modelled.
- 6.4.165. The ExA therefore agrees with the Applicant and CCC that monitoring of the situation is sufficient for the purposes of the Proposed Development's effect on traffic flows and accepts that this would follow the Monitor and Manage approach under the terms of the Applicant's Operating Licence.

Operational phase traffic effects of proposed highways layouts

- 6.4.166. The Applicant's proposed layouts for new and amended highway infrastructure are shown in General Arrangement drawings [APP-011] and Works Plan drawings [APP-009] [APP-010]. The Applicant has used the DMRB as the principal design guidance for highway layouts and structures and has provided a list of intended Departures from Standard (DfS) where it considers there to be merit in departing from DMRB [REP6-045]. The Proposed Development has been subject of a Road

Safety Audit (Stage 1) and 'Designer' responses provided by the Applicant's design teams [APP-241, Appendix 7.1].

- 6.4.167. This section reports on specific locations in relation to the Proposed Development where the Applicant proposes to create new links and junctions, which the ExA considers to be key to the decision-making process.
- 6.4.168. The strategic approach to design and intended DfS were also raised by IPs, including LHAs (CBC and CCC). The matters being raised in LIRs and WRs and in response to Written Questions (WQ) 1[REP1-051] [REP1-055], WQ2 [REP4-055] [REP4-062], WQ3 [REP8-035] [REP8-038], ISH1[EV-007], ISH2 [EV-020] and ISH5 [EV-056].
- 6.4.169. The discussion below focuses on the operation and safety of that proposed as opposed to wider design considerations. The overarching design approach and design development process has been discussed in Chapter 10 of this Recommendation Report

Black Cat Junction

- 6.4.170. The Applicant proposes to create 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 would also be provided [APP-009, Sheet 1].
- 6.4.171. The explanation and reasoning of the Applicant regarding the different design options considered for Black Cat [APP-247] [REP4-032] [REP4-033] [REP4-034] in terms of its positioning is discussed in Chapter 8 of this Recommendation report relating to heritage matters and Chapter 14 of this Recommendation Report relating to flood plain compensation. The ExA asked LHAs if they considered the proposed layout of the Black Cat Junction to be the best design and route option overall. None of the LHAs disputed that proposed or presented an alternative solution.
- 6.4.172. BBC raised concern regarding how land to the east of the proposed Black Cat junction would be accessed, specifically as it had aspirations for future development of the land in its ownership adjacent to the Proposed Development [RR-008a].
- 6.4.173. The ExA sought confirmation of the status of the future development described by BBC and how it would be accessed. BBC confirmed further discussion would occur on the matter with the Applicant [REP4-050]. The Applicant pointed out there were currently no firm proposals for the development of land at the location and would not seek to make non-material amendments to the proposed layout of the Black Cat Junction [REP5-015] as land to the east would be served by the proposed quarry link. However, the Applicant confirmed that an access would likely be achievable as and when any Planning Application came forward.

- 6.4.174. Matters related to access to the potential development site are understood to remain under discussion [REP10-025].
- 6.4.175. The ExA raised concerns about the significant adverse effect on Grade II listed Brook Cottages, and examined extensively the Applicant's approach to the design of Black Cat Junction. This matter has been reported in Chapter 8 of this Recommendation Report.

ExA's reasoning on Black Cat Junction

- 6.4.176. The ExA is satisfied on the basis of all submissions made that the proposed operational layout of the intended Black cat junction would deliver the intended benefits of the Proposed Development.
- 6.4.177. The ExA considers that had detail related to the future development aspirations of BBC to the east of the proposed Black Cat Junction been clearer prior to the application, or during the Examination, it would have been beneficial to accommodate access within the proposed design so as to minimise the need for further works and disruption to the network in future. However, as pointed out by the Applicant, access would already be provided to the east utilising the quarry link, the highway would abut the land of BBC and there is no certainty regarding the detail of the development of the site or the likely acceptability of any future development [REP8-010].
- 6.4.178. The ExA does not consider it necessary for the design of the proposed junction to be amended at the current time to accommodate BBC's development aspirations to the east of the junction.
- 6.4.179. In order to accommodate the Black Cat Junction, the Applicant has proposed various changes to the LRN as discussed below.

Roxton Road Link and realigned Roxton Road Bridge

- 6.4.180. Local landowner representation was received from the Buchanans [REP1-061 to REP1-072], regarding the proposed Roxton Road link alignment [APP-009, Sheet 1] [APP-009, Sheet 2], particularly in relation to areas of their land required by the Applicant and how the preferred route option of the link had been determined. The Buchanans also raised concerns relating to engagement with the Applicant so far which had been slow and not resulted in any agreement on matters raised.
- 6.4.181. The Buchanans submitted an alternative to the proposed Roxton Road link between The Lane, Wyboston and Chawston Lane, starting at a point approximately 100m east of Top Farm (on Wyboston Lane) at the north end and opposite College Farmhouse on Chawston Lane at the south end. A separate link for Nags Head Lane was proposed from the west end of Nags Head Lane to Chawston via residential gardens and a field to the south [REP1-061, Appendix B] [REP3-046].
- 6.4.182. The ExA sought clarity from the Applicant and BBC, as LHA, regarding how the preferred option had been selected and whether the proposal of the Buchanans presented any benefits to the LHA from a network

management perspective. The ExA also met the Buchanans at the ASI [EV-022] where they were able to point out on maps where their concerns and alternative proposal related to.

- 6.4.183. The Applicant explained the rationale for the need for the link, as primarily being to serve properties currently served by accesses to the A1 which would be stopped up at Chawston Lane, Nagshead Lane and The Lane [REP4-043]. The Applicant also explained the options and selection process followed in relation to the Nagshead Lane alternatives and why the proposed option had been taken forward. Furthermore, the Applicant explained the likely extent and environmental effects of widening and upgrading existing highway as an alternative would be greater than the current proposal. The Applicant also explained that along the affected section of The Lane there is a Scheduled Monument (a moated enclosure and associated building platforms) and a Grade II listed building (Heddings Farmhouse) and on Chawston Lane there are four Grade II listed buildings (Holly Cottage, Chawston Lodge, Laburnam Cottage and Claygates) that the Applicant's proposal avoids.
- 6.4.184. The Applicant responded to the Buchanan's alternative road to the west, the Applicant considered that the Proposed Development provided the most optimum option in terms of lowest need for land take, avoidance of a scheduled monument to the west of Dove Farm and being too remote to serve accesses catered for by the Applicant's proposed link road.
- 6.4.185. The LHA stated that the benefits of the alternative proposal would be limited to the landowner and may lead to greater environmental effects including additional HGVs accessing Paynes Yard via residential sections of The Lane. BBC further explained that it could not identify any benefits of the alternative proposed by the Buchanans that presented a better proposition in terms of highway functionality [REP4-049].
- 6.4.186. Further submissions were received from the Buchanans [REP4-053] [REP10-072 to REP10-075] reiterating their position that an alternative solution should be pursued.

ExA's reasoning

- 6.4.187. The ExA acknowledges the effect of the Proposed Development on the Buchanans' property. However, the ExA finds that the Applicant's proposed Roxton Road link has wider overall benefits, such as it would avoid the environmental constraints of historic assets and be more optimal in terms of overall land take.
- 6.4.188. The ExA also relies on the representation from BBC, the LHA who would be responsible for the new local highway infrastructure, who state that the Applicant's proposed layout is distinctively preferable from a network management and safety perspective. The ExA are also concerned that the Buchanans' proposal could likely lead to an increase in HGVs passing residential sections of The Lane. Similarly, the alternative proposal would create a more circuitous route to the properties whose access to the A1 would be severed by the Proposed Development.

- 6.4.189. The ExA is therefore satisfied with the Applicant's proposed layout of the Roxton Road link.

Roxton Road Bridge junction with Bedford Road

- 6.4.190. Roxton Parish Council (PC) [RR-093] requested that proposed point at which the realigned Roxton Road Bridge meets the C44 Bedford Road [APP-009, Sheet 1] be a roundabout rather than a T-Junction arrangement as Roxton PC considered it to be a more suitable in terms of road safety and traffic flow, particularly for vehicles turning out of the proposed Roxton Road.
- 6.4.191. The Applicant did not agree that its proposed layout presented a fundamental safety issue. The Applicant further explained that the proposed alternative of a roundabout would increase the footprint of the junction in comparison to the priority junction (T-junction) and would require additional land acquisition which would result in increased vegetation removal and impacts on biodiversity. Also, Roxton PC's proposed layout would require the siting of the roundabout closer to the A421/new dual carriageway to avoid acquisition on the Roxton Garden Centre and surrounding land. This in the Applicant's view would shorten the Roxton Road over the new dual carriageway and impact on the vertical alignment, resulting in a roundabout which needs to be elevated. This would also increase the extent of required earthworks and may further result in increased noise and visual impacts [REP1-022, Q1.11.2.5].
- 6.4.192. In addition, the Applicant stated that if a roundabout was provided, the Bedford Road would require realignment on the approach to this elevated roundabout with further impacts on the Rockham ditch watercourse, the associated culvert and vegetation. The provision of a roundabout would increase the impermeable area and require additional land acquisition for attenuation before discharge into the watercourse.

ExA's reasoning on Roxton Road Bridge junction with Bedford Road

- 6.4.193. The ExA is persuaded that the Applicant's proposed layout presents a superior outcome on many accounts, including minimising environmental effects

Service station access/slip road

- 6.4.194. The Proposed Development would create a new route of access and egress for the existing service station on the eastern side of A1, also facilitating access to the new Black Cat Junction for properties on the existing Great North Road that runs parallel to the A1 [APP-009, Sheet 1] [APP-009, Sheet 2]. An alternative route option had been proposed by Welcomebreak [RR-118] [REP1-099] that the IP considered to be more commodious to visiting members of the public and easier to access the SRN.
- 6.4.195. The ExA sought clarity from the Applicant as to why the IP's proposal had been discounted. The Applicant explained [REP1-022, Q1.11.2.3] that the

alternative proposed involved traffic merges directly onto the A1, creating a high risk of conflict between merging traffic and A1 southbound users wishing to exit for the Black Cat junction. The Applicant explained that the proposals did not present a safe alternative to the Proposed Development and would require a DfS as any proposals that consider a merge onto the A1 would be within close proximity to the A1 southbound off-slip road to Black Cat junction circulatory. The Applicant stated that the Proposed Development would facilitate a considerable number of vehicles using the slip road to head west towards Bedford, Milton Keynes and the M1, therefore at peak times, the available gaps for merging traffic would be sparse and may lead to dangerous manoeuvres

6.4.196. No further responses were received from the IP on this matter.

ExA's reasoning on the service station access/slip road

6.4.197. Whilst noting the IP's comments regarding access and egress to and from the service station, if the link proposed by the Applicant was not provided, it would likely result in movement conflicts between those vehicles leaving the service station and those seeking to leave the A1 at Black Cat via the southbound off slip. The ExA accepts the view of the Applicant that such conflict would be an unacceptable road safety risk given the likely use of the off slip, particularly in peak hours as drivers seek to travel westward from the A1 southbound.

6.4.198. Therefore, the ExA accepts the position of the Applicant that the proposed service station access road is necessary for the safe functioning of the Proposed Development.

Potton Road B1046 Junction and cross sections of the two roads

6.4.199. Further to the provision of traffic flow data, CCC agree that the proposed Potton Road junction [APP-010, Sheet 6] would likely operate below capacity in 2040. However, the LHA had concern with regard to the appropriateness of the design of the junction and carriageway width leading to it. CCC considered that the design should conform with DMRB and that a ghost island priority junction was required given the predicted flows, rather than the proposed conventional priority junction. CCC requested conformance with DMRB to ensure that HGVs could pass side by side with sufficient space to ensure that overriding of the carriageway would not occur. CCC also explained that a DfS would be required if the design did not conform with DMRB.

6.4.200. The Applicant explained that the Proposed Development had been the subject of a Road Safety Audit (RSA) Stage 1 and concerns had not been raised by the Auditor [REP3-008]. The ExA asked whether the layout proposed by CCC would be contiguous with the existing road widths leading to it. The Applicant explained that the Proposed Development would effectively form a continuation of existing effective widths whereas the CCC proposal would result in a short section of wider carriageway, which could affect route continuity in terms of road safety. The Applicant was of the view that a wider carriageway may encourage excessive

speed and drivers to not expect the road to narrow once passed through it.

- 6.4.201. The ExA asked the LHA to undertake their own independent RSA or review of the junction and layout. However, CCC explained that their own Officer views would suffice in determining their position.
- 6.4.202. At the close of the Examination, dialogue between the LHA and the Applicant was to continue in relation to DfS at the location and both the Applicant and CCC were confident that agreement was likely [REP10-026]. However, at the close of the Examination the matters are not agreed.

ExAs reasoning on Potton Road B1046 Junction and cross sections of the two roads

- 6.4.203. The ExA finds that if agreement between the parties cannot be reached on the matters relating to DfS, the ExA would recommend that the carriageway widths as proposed by the Applicant are appropriate from a road safety perspective as they would tie in with that which already exists and provide route continuity for drivers.
- 6.4.204. On the basis of the RSA of the Proposed Development, the ExA sees no road safety or network management reason to consider that a ghost island priority junction is required at the location and the modelling does not demonstrate adverse traffic effects of that proposed.
- 6.4.205. Therefore, whilst noting the concerns of CCC, the ExA agrees with the Applicant that a DfS at the location would be appropriate because full compliance with DMRB has not been demonstrated to be necessary in this instance.

Eltisley Link Junction

- 6.4.206. Eltisley PC [RR-033] sought clarity as to why an alternative of a roundabout directly serving the B1040 was not feasible to avoid the scope for vehicles travelling through the village seeking a shorter route [APP-010, Sheet 12, Sheet 13].
- 6.4.207. The Applicant explained [REP1-022, Q1.11.2.4] that the relocation of the southern roundabout away from the eastern entrance to the village would include requiring a more elevated link between the roundabouts. To accommodate this change greater earthworks would be required and it may result in increased visual and noise effects. Also, a wider carriageway would be required to accommodate sight stopping lines, which would likely have effects on surrounding land. For these reasons, while the Applicant did not consider Eltisley PC's alternative to be considered necessary or appropriate, the Applicant said that it had engaged further with Eltisley PC, on a different alternative to the proposed southern roundabout of the Eltisley Link – adjusting the location a short distance to the west, within the current limits of deviation and that the proposal was being taken forward. The Applicant explains that this was received favourably by the PC and the change

would be developed during detailed design and in consultation with CCC. However, this discussion with CCC is yet to take place [REP3-042].

- 6.4.208. CCC raised a different concern, stating that the proposed Eltisley Link junction may be too big, would operate with significant spare capacity and that a smaller junction could be provided for the predicted level of traffic. The LHA also explained that observed turning movements had not been used in the modelling undertaken meaning they did not have confidence in the modelling undertaken which had informed the proposed layout.
- 6.4.209. Subsequent to additional review [REP8-022] [EV-069] [EV-074], the Applicant and the LHA agreed to compare observed data and base model strategic flows as there was insufficient observed turning count data available to carry out a full sensitivity test. The results showed more vehicles travelling through both the A428/B1040 Eltisley East and West in the strategic model in the AM peak and fewer in the PM peak. The Applicant considers that the Proposed Development would fundamentally change the layout of the junction and the changes proposed would remove existing rat running as congestion would be removed so that there would be little incentive to re-route via the village.
- 6.4.210. At the close of Examination, the Applicant is of the view that the proposed junction is appropriate in size whereas CCC consider it may be too big for that required. The LHA have not proposed an alternative solution or layout for consideration.

ExA's reasoning on Eltisley Link Junction

- 6.4.211. The ExA note the concern of Eltisley PC. However, the ExA accept the position that the Applicant's modelling does not support the likelihood of rat-running through the village. In the absence of any other evidence from Eltisley PC and the LHA to support Eltisley PC's case, the ExA is persuaded by the Applicant's case that significantly moving the roundabout in line with Eltisley PC's suggestion would likely result in an increased height to the link which would have adverse environmental effects, including noise disturbance and potentially require more land.
- 6.4.212. With regard the size of the proposed junction, the ExA considers that the Applicant has undertaken appropriate modelling, including sensitivity testing agreed with the LHA. The modelling demonstrates that the proposed layout would operate well within capacity. The ExA does not consider this in itself provides evidence that the proposed junction is too big because to infer that would mean any junction should be designed with no spare capacity for future growth.
- 6.4.213. The ExA has not been presented with any substantive alternative layout by CCC. As such on balance the ExA finds that there is insufficient information before it to justify the provision of a smaller junction at this location.

- 6.4.214. The location would also be subject to monitoring as secured in R22 of the Applicant's dDCO and R23 of the ExA's recommend dDCO to inform the need for any future intervention or testing that proposed is appropriate.

Caxton Gibbet Junction

- 6.4.215. At the Caxton Gibbet roundabout, a new grade separated all movements junction would 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 would then tie-in to the existing A428 dual carriageway to the east of the proposed Caxton Gibbet junction [APP-010, Sheet 14].
- 6.4.216. CCC raised concern regarding the modelling undertaken for the Cambridge Road junction because observed data had not informed the development of the model but rather flows from the strategic model. CCC requested that the junction be tested with observed flow data so as to provide more confidence in the results of the modelling that showed the junction operating within capacity [REP1-048]. The Applicant explained that the additional sensitivity testing demonstrated little difference between the two sets of modelling, albeit with a slightly worse queue on the eastbound off slip approach to the roundabout. The Applicant also explained that queues would not be excessive and could be stacked easily within the space available on the slip roads, without compromising the functioning of the A428 [REP5-018].
- 6.4.217. The likely traffic effects of the proposed Caxton Gibbet junction are agreed between the LHA and the Applicant, subsequent to the junction model sensitivity testing undertaken by the Applicant [REP5-018] [REP10-026].
- 6.4.218. Specific queries were raised by Abbey Developments and McDonalds in relation to signage to the services and why the layout had not incorporated the existing dedicated right turn markings on the northbound approach to the service area [RR-001], [RR-070].
- 6.4.219. The Applicant explained that signage would be a matter covered at detailed design stage. The Applicant also confirmed that the existing righthand turn markings would be provided to allow dedicated right turn access in to the service area from the northbound approach to the roundabout [REP1-021].

ExA's reasoning on Caxton Gibbet Junction

- 6.4.220. Further to the additional sensitivity testing undertaken by the Applicant, the ExA agrees that the proposed junction would function effectively and with sufficient capacity so as not to affect the operation of the LRN or the SRN.
- 6.4.221. The ExA agrees with the Applicant that detail of intended signage and lane markings would form part of the detailed stage of the Proposed Development.

Private accesses and service roads

- 6.4.222. Throughout the Examination various landowners [RR-011] [RR-037] [RR-079] [RR-050] [RR-056] [RR-060] [RR-068] [RR-106] [RR-110] raised concern about the level of detail available to IPs in relation to proposed accesses, specifically in relation to locations, materials, widths and the design of gates. The ExA sought clarity from the Applicant relating to whether such information would be available during the Examination and if not how such matters would be dealt with and secured.
- 6.4.223. The Applicant [REP1-022, Q1.11.2.6] stated that replacement accesses to businesses and properties required as result of the Proposed Development would be provided. The Applicant explained that this approach would maintain the current access provisions to reduce the impact on the landowner as far as practicably possible. The Applicant also stated that detailed design would occur post consent and at that stage it would consider each access on a case-by-case basis. At that point the Applicant would consult with the landowners on the final details, for example pavement construction widths, fencing, gate details and security details. The Applicant did not intend to provide any further details on the dimensions and materials during the Examination other than what has been shown on the Plans.
- 6.4.224. The ExA requested information from the Applicant regarding who would be responsible for future maintenance of new accesses or improvements to existing accesses that would interface with the LRN, where it was set out and how it would be secured. The Applicant responded [REP4-037, Q2.11.2.3] that maintenance responsibility for new and improved accesses within the limits of the highway boundary would be the responsibility of the LHA in whose area the highway lies, where accesses fall outside those limits it would be the responsibility of the relevant landowner. The Applicant explained that such matters would be included in the legal agreements with LHAs.
- 6.4.225. The Applicant reiterated its position that the detail of access provision would be subject to consultation with landowners and requested landowners to specify the detailed design of accesses they required in land negotiations. At hearings the National Farmers Union (NFU) and affected landowners considered that dealing with such matters at detailed design stage was too late because the Applicant had not adequately detailed the consultation process that would be followed. The Applicant also explained that the matters would be dealt with in line with the Scheme Design Approach and Design Principles (SDADP) and design development process post consent has been reported in Chapter 10 of this Recommendation Report.
- 6.4.226. The Applicant considered that it had adequately shown the proposed points of access to land on the works and general arrangements plans provided.

ExA's reasoning on private accesses and service roads

- 6.4.227. The ExA is satisfied that the locations of specific proposed access points are adequately shown on the works plans, secured in Schedule 10 of the dDCO. The ExA also considers that such matters should be dealt with on a case by case basis rather than through a standard uniform approach across the extent of the Order limits because different landowners would likely have differing needs. Therefore, the ExA accepts Applicant's position that such matters are most appropriately dealt with at the detailed design stage, which would occur post consent of the proposed Development, should consent be granted.
- 6.4.228. The ExA has however, taken note of the concerns about the detailed design process, in particular the engagement that would take place post consent. This has been reported in Chapter 10 of this Recommendation Report.

ExA's summary reasoning on operational phase traffic effects of proposed highway layouts

- 6.4.229. The ExA agrees with the Applicant and the LHA that the Black Cat junction has been designed to function adequately to deliver the predicted operational traffic benefits. The ExA considers that the future development aspirations of BBC regarding land to the east of Black Cat currently lack certainty sufficient for the Applicant to be required to enable direct access from the junction. However, if the development comes forward, access would likely be achievable in future, either via the quarry link or directly on to the junction itself. The ExA is persuaded by the view of the LHA and Applicant that alternative proposals submitted by the Buchanans would not be suitable given the likely environmental effects and need for more land take. The ExA considers that the proposal of Welcomebreak would likely result in unacceptable movement conflicts, affecting the safe functioning of the SRN, as such the ExA considers the proposed services station access to be acceptable.
- 6.4.230. Subsequent to the additional modelling undertaken by the Applicant for new and amended junctions, the ExA agrees that the proposed junction arrangements would function effectively, within capacity and safely. The ExA notes that issues relating to DfS remain unresolved at the end of the Examination. However, subsequent to the RSA provided, the ExA is satisfied that the Proposed Development would function effectively and safely. As the RSA process takes place in stages, the ExA is satisfied that such matters would be reviewed further at the detailed design stage and the Applicant would need to respond to any matters raised at that stage.
- 6.4.231. The ExA notes that intended points of landowner access are shown on the works plans provided and consider that detail regarding accesses should be dealt with on a case by case in negotiation between the Applicant and relevant landowner.
- 6.4.232. On the basis of the above, the ExA considers that the junction arrangements and road layouts in the Proposed Development are suitable and functionally sound to secure the modelled benefits in terms improved network operation and connectivity.

Provision for Non-Motorised Users

- 6.4.233. The basis for the Applicant's approach to provision for NMUs, defined as walkers, cyclists and horse riders, is described in the Walking Cycling Horse-riding Assessment and Review (WCHAR) [APP-242]. The ES presents the existing PRow network [APP-106] and addresses the severed PRow for which the Applicant considers a diversion is required, or a new route be created [APP-011]. The Applicant explained that the objective behind that proposed in relation to NMUs is to ensure continued connectivity is provided between communities and routes within the wider network [APP-071].
- 6.4.234. Further to initial LIRs, WRs and RRs from IPs including LAs, individuals and User Groups, concerns raised relating to NMUs included:
- 1) the strategic approach taken by the Applicant in determining the extent of NMu provision included in the Proposed Development;
 - 2) specific proposals for additional NMu links or infrastructure beyond that proposed by the Applicant; and
 - 3) the design standards adopted by the Applicant.

Applicant's approach to determine the extent of NMu provision

- 6.4.235. The ExA requested the Applicant explain how it had determined what provision was included within the Proposed Development for NMUs and whether the data underpinning that proposed in the WCHAR was suitable given it was collected in 2016. The Applicant explained that provision for any particular user group was not by default but rather on an identified basis of need. The Applicant confirmed that 2020 data was also collected and compared to the 2016 data, providing a similar picture of usage [REP1-022] [APP-216]. Both CBC [REP1-054] [REP1-055] and BBC [REP1-043] considered the data to be appropriate for use, albeit CCC stated there had been an anecdotal increase in usage during the COVID-19 pandemic [REP1-051]. The Applicant also stated that relevant national and local policies and strategies, as well as collision history, trip generators and other transport services had been considered in the determination of the proposed provision.
- 6.4.236. The Applicant explained that where existing PRow would be severed by the Proposed Development they would be diverted and where appropriate reconnected via new infrastructure including bridges and underpasses [EV-034] [EV-039]. The only exception being Footpath 36 that spurs off Footpath 8 and passes behind the Black Cat service area to join the existing shared footway cycleway along the A1 as it would be lost to the proposed Black Cat junction. The shared footway/cycleway along the A1 would be re-provided by the shared provision along the Roxton Road link for which Footpath 8 connects [APP-242].
- 6.4.237. The Applicant pointed out that it considered the intended NMu provision of the Proposed Development would be betterment in comparison with the existing situation. The Applicant also explained that any provision above that determined through the WCHAR was considered outside the scope of the Proposed Development [EV-034] [EV-039] [EV-070] [EV-

075] [REP3-007]. However, CBC and CCC, and IPs, including the British Horse Society (BHS) and CamCycle [EV-070] [EV-075] [REP3-007] identified the issue of latent demand as being of importance. Additionally, they felt the existing environment was likely to discourage usage, particularly for less confident users. In their view further provision and enhancement to the existing network was considered necessary to deal with pre-existing severance and barriers to usage.

- 6.4.238. CCC raised concern that the Applicant's proposed limits of deviation could result in PRoW being inadvertently severed or route continuity being affected at the edge of the Order limits. The Applicant subsequently updated the Streets, Rights of Way and Access Plans (SRoWAP) to reflect its proposed limits of deviation in relation PRoW [REP10-002] and explained that the amendment would ensure route continuity, similarly making minor amendment to the dDCO to provide clarity about interaction between Article 18 and Article 29 of the dDCO. In addition, the Applicant proposed an approval role be included in Article 9 of the dDCO for the relevant LHA in relation to any works that may occur outside of the limits of deviation, to reflect that such deviation may have an impact on local highway assets [REP10-032, Table 1-2, 3].
- 6.4.239. As proposed pedestrian crossing facilities were not shown on Works Plans or detailed in the works descriptions the ExA asked the Applicant to confirm the locations of such proposed infrastructure, albeit understanding such matters would be finalised at detailed design. A list of all proposed signalised crossing points was provided by the Applicant [REP3-019].

ExA's reasoning on Applicant's approach to determine the extent of NMU provision

- 6.4.240. The ExA considers that in determining the use of public funds on infrastructure provision there should be an evidence-based approach to determining what components are included within the Proposed Development and their likely benefit, in addition to any legal or policy requirements. Without such an approach it would be difficult to justify why any particular route provision has or has not been taken forward, likewise funding is not infinite so as to provide for every request.
- 6.4.241. The ExA is of the view that where any existing PRoW would be severed by the Proposed Development, be that temporarily during construction or permanently it should be diverted or reinstated on alignment with works. On the basis of the WCHAR and works plans the ExA considers that the Applicant has made adequate provision for such matters.
- 6.4.242. The ExA is satisfied that the amendments relating to limits of deviation and Article 9 and Article 29 of the dDCO would satisfactorily deal with any scope for PRoW beyond the Order limits being adversely affected in terms of route continuity or severance and has accordingly included them in its rDCO.
- 6.4.243. In terms of improving existing provision the ExA accepts the Applicant's view that the basis for this needs to follow a robust approach. The

Applicant has undertaken usage surveys to inform the WCHAR and discussed proposals with LA's and user groups through working groups and public consultation. The ExA considers it unrealistic to expect that every request for improvement, or additional provision, could be taken forward, similarly a blanket approach providing for all NMUs at every location. However, the ExA does consider it realistic that such discussion should be used in addition to usage data to determine NMU provision in the Proposed Development. The ExA finds that the Applicant, has followed such an approach, albeit the ExA did query, as discussed below, why specific locations or proposals had not been taken forward.

Specific proposals for additional NMU links or infrastructure beyond that proposed by the Applicant

- 6.4.244. Throughout the Examination the Applicant reiterated enhancements to the existing NMU network should be objectively justified and identified in the WCHAR, as such the Applicant did not consider further provision for NMUs to be necessary for inclusion in the Proposed Development.
- 6.4.245. The Applicant proposed various suggestions of IPs be taken forward via the Designated Funds route. However, the Applicant explained that Designated Funds are wholly separate to the budget for the Proposed Development and are not in any way secured in the dDCO. Therefore, although the ExA sought confirmation of all projects and initiatives to be taken forward via the Designated Funds route for the reference of IPs and the SoS they are not considered to form part of the Proposed Development. The Applicant provided a list of those projects and initiatives it intended to take forward via designated funds [REP10-46] but confirmed that they would not form benefits or mitigation associated with the Proposed Development.
- 6.4.246. Further to representation from IPs including CCC and CamCycle, the ExA specifically enquired why the opportunity was not being taken to improve NMU provision along the existing A428 corridor which would be de-trunked as part of the Proposed Development. CCC also explained that if the existing A428 was to be newly constructed road it would incorporate NMU provision [EV-034] [EV-039] [EV-070] [EV-075]. The Applicant explained that the existing A428 was not a new road but rather an existing route that would be de-trunked with responsibility for it transferring to the LHA. The Applicant also explained that on the basis of the WCHAR and available survey data such provision was not justified and would also likely require additional land acquisition [EV-075] [EV-070].
- 6.4.247. The ExA asked the Applicant and CCC what feasibility studies had been undertaken to demonstrate the need for such a route, as CCC stated NMU provision improvements between St Neots and Cambourne were needed [EV-070] [EV-075]. In the absence of such studies, the ExA asked for a high-level appraisal to be submitted which CCC subsequently provided [REP6-065]. In response, the Applicant maintained its position that such a link was not justified further to a lack of evidence associated with likely usage, although as with other requests for improvements to existing infrastructure such matters could be taken forward by the LHAs

in future if considered appropriate. Subsequently, without prejudice to their position, the Applicant proposed to take the project forward for further feasibility work as part of the Designated Funds programme [REP8-014]. CCC do not accept that NMU infrastructure along the existing A428 to be de-trunked should fall outside the scope of the Proposed Development because it considered there to be a latent demand for it, and if built would likely be well used.

6.4.248. CBC requested that the proposed Barford Road Bridge design be amended to enable NMU provision within the parapet deck space in future, requesting a requirement be included for such an amendment [REP6-091]. The Applicant stated that as no such provision was currently made on the route, or proposed in terms of future development, there was little justification for it to be incorporated in the Proposed Development. Instead, the Applicant suggested that such provision, if required, could be provided in future either from a bolt-on structure or separate structure nearby [EV-070] [EV-075]. CBC considered this to be a missed opportunity to assist in creating increased NMU provision in future.

6.4.249. CCC has, among other locations, requested that NMU provision be made to fill missing links between the Eltisley Link and Caxton Gibbet North Junction [REP1-048], [REP4-059] [REP6-065]. Likewise, CCC were concerned with the lack of NMU provision at the proposed Potton Road Overbridge. With regard the Eltisley link, the Applicant considers that such a proposal would require improvement works to the existing A428 which it considers to be beyond the scope of the Proposed Development. The Applicant maintains that with regard the Potton Overbridge, NMU provision is not necessary or justified as there is no associated existing infrastructure or evidence-based need that it would be used in future.

ExA's reasoning on specific proposals for additional NMU links or infrastructure beyond that proposed by the Applicant

6.4.250. The ExA notes the proposals for improved and additional NMU provision submitted by IPs and LAs. The ExA accepts that there are locations, including those described above, where apparent gaps in NMU provision appear based upon available mapping. However, the ExA also accepts that that in order for the Applicant to justify the extent of proposed NMU provision a robust methodology and approach was necessary to be formulated.

6.4.251. As the Applicant explained, the WCHAR focusses on providing for that which is lost as result of the Proposed Development and that for which there is an evidence-based need for. In the view of the ExA this approach accords with NPSNN Paragraphs 5.215 to 5.216. Therefore, the ExA considers that the WCHAR provides a robust methodology to justify that which is proposed. Further to the size of the area affected by the Proposed Development, there would be a multitude of potential schemes that could be taken forward. However, the ExA considers it unrealistic to expect that all such requests should be taken forward from public funds if there is not an evidence based need to do so.

- 6.4.252. The ExA does not agree with the Applicant that it is not required to consider NMU provision on the A428 as it would be de-trunked and become the responsibility of the LHA. Given de-trunking forms part of the Proposed Development, NMU provision as part of the overall de-trunking package, could have justifiably been considered. However, the ExA has not seen evidence of current or future need for the requested NMU provision on the A428 and has therefore not been able to explore its inclusion in the Proposed Development any further in that principle.
- 6.4.253. The ExA notes the views of CBC and CCC that space should be provided within the Barford Road bridge and Potton Road overbridge to accommodate dedicated NMU usage. The ExA considers that it would appear eminently sensible of the Applicant to at least provide adequate space for such works in future if connecting schemes were to come forward. However, at this stage there is no certainty that future improvements nearby would come forward such as to require the Applicant to make such provision at this point in time.
- 6.4.254. Having considered the Applicant's and IPs' submissions, the ExA concedes that additional NMU provision beyond that already included in the application is not strictly required by the Applicant. However, the ExA considers that the Applicant could have gone further to accommodate the LHAs' and IPs' requests to encourage and facilitate future usage by NMUs.
- 6.4.255. Given the WCHAR provides a rationale to underpin the provision of NMU infrastructure, based upon the NPSNN, the ExA cannot disagree with the Applicant's conclusion that there is an overall improvement compared to that which currently exists, and as such the Proposed Development is in line with policy requirements in the NPSNN (Paragraphs 5.215 to 5.216).

Design standards for NMU provision

- 6.4.256. The ExA's sought clarification related to the Applicant's design standards in relation to NMUs [EV-071] [EV-076]. CCC considered that Local Transport Note (LTN) 1/20 should be followed for new local highway infrastructure, including the A428 to be de-trunked. Camcycle also raised concern regarding the design approach being followed, particularly that LTN 1/20 was not being followed and that DMRB CD195, relating to cycling infrastructure provision was most appropriate for the design of cycle infrastructure [REP6-077]. The BHS [REP6-101 to REP6-103] and local riders also stated that they considered horseriders should be catered for by default throughout the Proposed Development on all NMU routes and paths, citing various examples including between Papworth and Caxton Gibbet and the A14 scheme as both good and bad practice.
- 6.4.257. The Applicant explained that the requirements of DMRB had been followed, incorporating CD143 Designing for Walking Cycling and Horse-Riding where shared use facilities were proposed, as followed on other similar projects [REP8-020] rather than other standards specific to individual user groups such as CD195. The Applicant stated that LTNs were guidance for LAs to follow. The Applicant also explained in its response to the BHS [REP8-011] that it was not aware of the intention of

CCC to create shared use facilities incorporating equestrian provision between Papworth and Caxton Gibbet and would not consider it safe for horseriders to attempt to negotiate the proposed Caxton Gibbet junction given the predicted traffic flows.

- 6.4.258. CCC considered all roadside NMU infrastructure should accommodate horseriders as default. However, the Applicant disagreed with such an approach because in its view NMU provision should be based on an identified need and whether such provision would be safe at any given location [REP10-026].

ExA's reasoning on design standards for NMU provision

- 6.4.259. Whilst noting the points raised by IPs, the ExA is unconvinced that a uniform design approach to NMU provision should be made as default across the Proposed Development but instead where it is considered appropriate and likely to be used. The ExA considers that where shared use facilities are proposed the use of CD143 is appropriate as it is extant guidance and has been widely adopted on other similar NSIP highway schemes.
- 6.4.260. Where the Applicant has evidenced need for NMU provision in the WCHAR the ExA consider that the Applicant has suitably designed that infrastructure to cater for its likely usage by specific NMUs.

ExA's summary of reasoning on provision for NMUs

- 6.4.261. There are various potential schemes in the area that could improve NMU provision. However, the ExA is satisfied that in order for the Applicant to justify the extent of NMU provision forming part of the Proposed Development, a robust methodology and approach was necessary to be formulated. The WCHAR forms the basis of this.
- 6.4.262. The ExA is of the view that where existing NMU provision interacts with the Proposed Development the Applicant has sought to adequately mitigate the effects through the use of diversions and new infrastructure that would not compromise likely future usage. Measures which would enhance existing NMU provision have also been provided.
- 6.4.263. The ExA does consider that far more could have been done by the Applicant to enhance the local NMU network, albeit recognising that determining a robust methodology would have been challenging to set as it would largely have relied on some form of quantification of latent demand. The particular opportunities missed include; locking in the benefits of de-trunking of the A428 corridor with the intention of it becoming a dedicated NMU corridor through the provision of NMU infrastructure; as well as incorporating space for future NMU provision in the deck space of bridges and increasing bridge parapet heights for future equestrian usage. Such measures would likely be difficult to retro-fit and increase disruption to traffic in future by their introduction separate from the proposed works, if works required carriageway encroachment.

- 6.4.264. Having considered the submissions of the Applicant and IPs, the ExA does not consider there to be robust justification for the provision of additional NMU infrastructure, although the ExA appreciate that further provision would be desirable to IPs.

De-trunking arrangements and the handover of new local highway infrastructure

- 6.4.265. There are two related matters reported in this section: the de-trunking of highways and handing over to the LHA which is secured through Article 13 of the dDCO, and the handover of some of the newly built assets to the LHAs, which is secured through Article 14 of the dDCO. In both these Articles, the Applicant had not specified certain details regarding the details of handover and agreement with LHA.
- 6.4.266. CCC raised concerns regarding the Applicant's intended approach to the handover of highway assets to be de-trunked and new local highway infrastructure, as detailed in Articles 13 and 14 of the dDCO [REP1-051, Q1.7.3.10]. CCC explained that it required a formal, agreed process of handover covering any new assets, or de-trunked assets, including the agreement in writing of any design where the LHA would be adopting a new asset, an agreed process for adoption, detail of inspections, road safety audits, and handover on a date agreed with the Applicant. CCC stated it required certain amendments to the dDCO to ensure that new roads and de-trunked roads would not be vested in the Council as a matter of law until it as the LHA had certified that it is satisfied with the construction and condition of the new road / de-trunked road [REP1-048].
- 6.4.267. CCC also had concerns that Article 14(8) of the dDCO would enable the Applicant to handover highway assets without notice or agreement with the LHA and potentially different sections of asset on different dates [REP1-051, Q1.7.3.10] [REP1-048].
- 6.4.268. CBC requested clarity from the Applicant as to the meaning of 'completion' in the dDCO and that 'completion' should follow twelve months after the works had been finalised in order for any defects to be dealt with and this should be extended by an additional twelve months if remedial works are necessary [REP1-054] [REP1-055].
- 6.4.269. BBC confirmed that it was satisfied that the handover of assets was suitable for a side agreement. BBC also requested that the dates for handover be agreed for the same date with each LHA so as to ensure any cross-boundary issues would be dealt with effectively [REP4-049].
- 6.4.270. The Applicant agreed that whilst there was a need for a clear handover process, it considered that no further protection was required in the dDCO as there would be a separate legal agreement with each LHA setting out the handover process referred to including notice periods, condition surveys and commuted maintenance [REP3-008, REP1-048z]. The Applicant also reiterated its view that the terms of the legal

agreement, when completed, would be sufficient to govern the relationship between the two parties and the handover of assets.

- 6.4.271. In response to BBC, the Applicant stated that it did not consider there to be a need for all assets to be handed over at the same date as it should not matter who the LHA was as they would have the same maintenance obligations upon them [REP5-015].
- 6.4.272. The ExA requested the Applicant provide details of the handover plan and the status of the referred to legal agreements. The ExA asked to see the legal agreement and if any weight could be given to it in the ExA's considerations. Subsequently the Applicant submitted an overview of the handover process for de-trunked assets and local highways [REP4-039]. The Applicant explained that within three months of the date of handover the Applicant would provide detail of existing maintenance records to the relevant LHA and submit a Handover Plan to the LHA for approval. The detail of the Handover Plan would be agreed between the parties, but with sufficient information for the LHA to be able to understand the intended extent of asset, the type of asset and its condition at that point in time. The Applicant also explained that the Handover Plan would also include details and timings of any repairs required to bring the asset up to the standard of an agreed set of De-Trunked Road Standards, which would form part of the legal agreement.
- 6.4.273. The Applicant further explained that the de-trunking date would not occur until the LHA had confirmed that the Handover Plan had been complied with, in accordance with a process to be agreed including reasonable timeframes which would be captured in the legal agreement, also containing a defect period after handover.
- 6.4.274. Where new or improved local highways would be handed over to LHAs the Applicant explained that the legal agreement would contain an agreed set of standards to which local highways (and PRoW, where applicable) would be designed and constructed. This would be in accordance with Local Highways Standards to be shared with LHAs. Once completed the Applicant would notify the LHA and the LHA would confirm if the section of highway that was being handed over would be acceptable. The Applicant also stated that an undefined defect period would also apply.
- 6.4.275. CCC maintained its position that the matter should be the subject of amendment to Article 13 of the dDCO to include a Requirement for certification of all highways, including PROW.
- 6.4.276. The ExA sought confirmation of the likely implications of legal agreements not being reached. The Applicant stated that while completing the legal agreement was the priority, the current drafting of the dDCO was sufficient and provided sufficient controls on the handover of local highway and de-trunked assets [EV-080] [EV-083].
- 6.4.277. CCC proposed amendment to Article 13 of the dDCO whereby the LHA would confirm its 'reasonable satisfaction' by the issue of certification to

that effect [REP8-028]. Subsequently the Applicant made amendment to the dDCO [REP9-004] to include such a certification process and other changes. The Applicant explained that the dDCO would allow the Applicant to propose a de-trunking date on which de-trunked assets would transfer to the LHA. The Applicant made amendments to both Article 13 and 14 in response as described below.

- 6.4.278. Changes made to Article 13 to address concerns raised during Examination included a process for certification in relation to the adoption of new roads by LHAs, and for the certification to include the completion to LHA's reasonable satisfaction, the timing for adoption, the boundary of the assets to be adopted by the LHA and transfer of responsibility to the LHA for its maintenance from the issue of the LHA's certificate [REP10-032, Table 40-4, 6]. The original Paragraph (3) has been deleted to recognise that the PRoW would be highways for the purpose of Article 13, and therefore follow the same certification process [REP10-032, Table 40-4, 7].
- 6.4.279. A new Paragraph (9) has been added to Article 14 to ensure that the undertaker would only be able to determine if a highway can be de-trunked once the undertaker has agreed this with the SoS, who must consult the relevant LHA on the date of de-trunking and whether the highway to be de-trunked is of a reasonably satisfactory standard for use as a local highway before deciding whether to give that consent [REP10-032, Table 1-3, 11]. Minor changes were also made to Article 14 Paragraphs (1) to (5), to make clear that the de-trunking of each road or restriction can be treated individually [REP10-032, Table 1-2, 4].
- 6.4.280. The Applicant outlined that these proposed amendments would restrict the handover of de-trunked assets to between the LHA and the Applicant. The Applicant explained that the SoS referral should provide comfort that the Applicant could not hand over a de-trunked asset, which was not at an acceptable standard. The Applicant also noted that it was trying to replicate powers under s10 of the HA 1980 which allows the SoS to de-trunk and hand assets over to the LHA and that the dDCO should therefore reflect this approach. The Applicant subsequently updated the dDCO [REP6-003] to reflect this.
- 6.4.281. The agreed SoCG between the Applicant and CCC [REP10-026, 1.8, 1.14] explains that at the close of the Examination the matters are agreed subject to the conclusion of the legal agreement.
- 6.4.282. The agreed SoCG between the Applicant and CBC [REP10-024] is silent on the matters above albeit CBC has requested that a commuted sum for the future maintenance of assets to be handed over is made. However, no further detail in relation to that request has been submitted to the Examination.
- 6.4.283. The agreed SoCG between the Applicant and BBC [REP10-025] explains that at the close of the Examination the matters are agreed subject to the conclusion of the legal agreement, which would reflect that being negotiated with CCC.

ExA's reasoning

- 6.4.284. The ExA does not agree with the Applicant that the handover of assets to LHAs, need not be scrutinised by the ExA. While a legal agreement regarding a de-trunking and handover of assets process, would most inevitably be necessary, it would be over and above a process agreed with LHAs in Examination and secured through the dDCO. Relying solely on the legal agreement outside of the Examination process, the LHAs would be at risk that the DCO (if consented) could authorise the hand over of assets to the LHA without reasonable say on timing and condition.
- 6.4.285. While the ExA is content for the legal agreement to be agreed between the two HAs and given this agreement is not before the ExA, it has not been given any weight in its considerations.
- 6.4.286. The ExA notes and is content with the distinction between the handover processes in Article 13 and in Article 14. While Article 13 now includes a process for certification to be issued by the relevant LHA, in relation to the adoption of new roads by that LHA. Article 14 does not make reference to the process for certification, because the determination for de-trunking of a highway would come from the SoS, in consultation with the LHA on all matter that would be covered by the process of certification in Article 13.

Provision of service stations

- 6.4.287. Shell UK raised objection with regard to the loss of the existing service station at Black Cat, explaining that it was a key facility occupying a nodal location serving the A1 and A421 strategic routes. The IP explained that the existing service station and adjacent hotel provides comprehensive facilities for motorists [AS-001].
- 6.4.288. The ExA sought clarity from the Applicant as to what alternative facilities were nearby for the use of the travelling public in order to understand the likely effect of the loss of the facilities. In response [REP1-022, Q1.11.27] the Applicant explained that the A1 Services Link would provide access to the Welcome Break services 1 kilometres (km) north of Black Cat as an alternative to that which would be lost, also that it would be accessible to HGVs.
- 6.4.289. The Applicant also stated that it was for the private sector to promote and operate service areas that meet the needs of the travelling public and are subject to the provisions of relevant planning legislation and regulation. The Applicant explained that guidance from both DfT and the Applicant suggest that service areas should be spaced no more than 45km apart or a 30-minute drive. The Applicant also explained that guidance identifies no mandatory requirements for accommodation provision at service areas and the removal of the Black Cat junction service area, would not contravene this guidance.

ExA's reasoning

- 6.4.290. The ExA notes the view of Shell UK and understand that the loss of the service station would require the travelling public to seek alternative facilities. However, the ExA notes that contained within adopted guidance regarding appropriate distances between service stations on the SRN and accepts the position of the Applicant in that the proposed Services Link Road, forming part of the Proposed Development, would readily enable access to the services close-by to the north.

Ditches

- 6.4.291. CCC raised concerns regarding the future responsibility of field edge ditches and culverts that would run alongside proposed sections of highway for which it would be the LHA. Specific locations of concern included; the B1046, Potton Road; Cambridge Road; Toseland Road; Eltisley Link; and Caxton Gibbet junction. CCC was of the view that where those ditches replace existing field edge ditches and culverts, the responsibility for maintenance should be passed to the adjacent landowner who benefits from them, through a form of bi-partisan agreement [REP10-026].
- 6.4.292. The Applicant is clear that where such instances occur the responsibility of such ditches would be the responsibility of the LHA at the point of handover of the highway asset [REP10-026].

ExA's reasoning

- 6.4.293. Whilst the ExA considers that there may be merit in local landowners being responsible for the future maintenance of ditches that replace existing field edge systems, where land is to be compulsorily acquired it would need to become the responsibility of either the Applicant, or the LHA further to handover of the asset.
- 6.4.294. The ExA considers that to enter in to bi-partisan agreements would likely lead to a protracted process and has no certainty that any landowner would want to accept responsibility for such an asset. However, if subsequent to the ditches and culverts becoming the responsibility of the LHA, it would be able to enter in to separate formal or informal agreements with landowners on its own accord.

Network Management Duty

- 6.4.295. Although each of the LIRs stated their support for the Proposed Development, various concerns were raised regarding the effect of the Proposed Development on the operation of the LRN, particularly from CCC and CBC, both during construction and operation phases, as detailed in the sections above in response to LIRs, RRs, WRs and Hearings submissions.
- 6.4.296. The TMA 2004, places a NMD on local traffic authorities, or a strategic highways company (the network management authority), so far as is reasonably practicable, to ensure the expeditious movement of traffic on the authority's road network and facilitate the expeditious movement of

traffic on road networks for which another authority is the traffic authority.

- 6.4.297. The ExA asked the LHAs whether the concerns raised regarding highways and traffic matters associated with the Proposed Development would amount to the Applicant failing to discharge its NMD or the ability of any LHA to meet its own duties. Likewise, the ExA sought the view of the Applicant on its position.
- 6.4.298. BBC was content that the Proposed Development would not affect it, or the Applicant's, ability to discharge the NMD [EV-033] [EV-038]. However, CCC and CBC did not feel able to comment until such point as responses had been provided to their wider concerns regarding the effect of the Proposed Development on the operation of the LRN and traffic modelling.
- 6.4.299. At the close of the Examination the LHAs submitted a joint position statement between each other on the matter [REP10-063]. The LHAs stated that whilst they would continue to discharge their NMD as required, the approach proposed by the Applicant in relation to traffic monitoring would place a potentially significant further burden upon the LHAs when discharging that duty, which they considered they were neither resourced nor funded to accommodate. The ExA has covered issues relating to monitoring the effects of the Proposed Development during construction and operation, in detail previously in this Chapter
- 6.4.300. CCC also stated that the approach proposed by the Applicant would mean that where instances of less expeditious movement of traffic on the LHAs' networks may arise as a result of the Proposed Development, there would be no ready swift measures in place for that to be corrected, as such (and to that extent) the expeditious movement of traffic on the LHAs' networks is not facilitated.
- 6.4.301. The Applicant's closing view [REP10-046] is that the LHAs' NMD would be significantly more challenging to meet without the Proposed Development than with it. Likewise, that a view should be taken at the network wide level rather than at specific locations. The Applicant explained that without the Proposed Development there was forecast to be an increase of 80-100% in traffic along minor east-west routes from 2015 to 2040, resulting from an increase in the use of alternative routes to the SRN [APP-241, Paragraph 6.2.5]. The Applicant considered that the Proposed Development would be effective in mitigating this increase and therefore support both the Applicant and the LHAs in discharging their NMD.
- 6.4.302. The Applicant stated that it was bringing the Proposed Development forward principally because the existing A428 is congested, providing unreliable journey times and noting that the existing roundabout junctions are over capacity. Also, that as a result, traffic joining from the LRN experienced frequent delays. The Applicant considered that all of these factors encourage self-diverting traffic to the detriment of communities near to the Proposed Development and impact the LHAs' ability to effectively discharge their NMD. The Applicant explained that

the Proposed Development would resolve these issues by increasing capacity and improving flow and would assist the LHAs to discharge their NMD.

6.4.303. The Applicant is of the view that the results from the Strategic Model show that the Proposed Development would achieve its aims and support itself in discharging its NMD by:

- Removing queues at all SRN junctions;
- Upgrading the existing roundabouts to grade separated junctions;
- Allowing the SRN and the LRN to interact more efficiently; and
- Provide a new dual carriageway.

6.4.304. The Applicant also stated that the Proposed Development would support the LHAs to discharge their NMD by attracting traffic to the SRN, reducing traffic volumes on local roads and that self-diverting traffic would be reduced, alleviating congestion in villages and less suitable roads. In addition, the Applicant provided a summary narrative table (REP10-046, Table 1) of the likely traffic effects at various junctions both within and outside the Order limits.

ExA's reasoning

6.4.305. The ExA notes the closing positions of the LHAs and the Applicant. As reported throughout this Chapter of this Recommendation Report, the ExA agrees with LHAs to some extent with regard to their outstanding concerns relating to monitoring of traffic effects of the Proposed Development both during construction and operation. That aside the ExA considers that it is the nature of a linear highway NSIP that whilst some existing individual arms of junctions may witness increased traffic flows, the overall effect would be to the benefit of both the LRN and SRN. It would be, unrealistic to expect every arm of every junction to benefit from the Proposed Development, albeit it is realistic to expect that the majority of junctions affected by the Proposed Development would see benefit overall.

6.4.306. The summary table provided by the Applicant illustrates at the high level how the balance of likely effects falls to an overall position of improvement [REP10-046, Table 1] and this is shown in greater detail through the modelling undertaken by the Applicant in the TA and subsequent sensitivity modelling. As such, the ExA is convinced that the Applicant has demonstrated, in a robust way, through traffic modelling and additional sensitivity testing the beneficial traffic effects of the Proposed Development.

6.4.307. The ExA agrees with the Applicant that the overall position is clear; without the Proposed Development, the ability of LHAs to effectively manage their network and fulfill their NMD would be more difficult because traffic on the LRN is anticipated to worsen significantly in future without the Proposed Development. The ExA also accepts that the Proposed Development would draw traffic off the LRN to the benefit of communities close to the existing A428 between Black Cat and Caxton Gibbet.

- 6.4.308. Therefore, the ExA finds in favour of the Applicant that the Proposed Development would assist both the LHAs and the Applicant in meeting their NMD.
- 6.4.309. However, on a related matter the ExA does in fact agree with the LHAs regarding their concerns about the absence of monitoring of traffic effects of the Proposed Development both during construction and operation. This matter has been reported extensively previously in this Chapter and the ExA highlights the related monitoring secured in the Applicant's dDCO and the ExA's rDCO.

6.5. CONCLUSIONS

Traffic Modelling

- 6.5.1. The ExA is persuaded that the modelling provided by the close of the Examination adequately demonstrates the likely construction and operational traffic effects of the Proposed Development on the LRN and the SRN and is therefore sufficient for the purposes of the Examination. However, the ExA finds that much of this work should have been agreed with LHAs prior to the Examination.
- 6.5.2. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.204 and 5.212.

Construction Phase Traffic Effects

- 6.5.3. The ExA is satisfied that the OCTMP would substantially mitigate the modelled likely effects of construction related traffic across the road network. However, it is apparent that disruption would inevitably occur at specific locations, including Tempsford. The ExA considers that this disruption would be minimised through careful project planning and discussion at TMFs as secured in the OCTMP in R11 of the dDCO, in addition to that which would typically be expected of any project affecting the LRN in terms of network occupancy.
- 6.5.4. However, the ExA considers that traffic diverting on to the LRN during construction should be monitored because all HAs should have an accurate picture of traffic behaviour on their own network, likewise if they are affecting the movement of traffic on another HA's network. Therefore, the ExA considers that the Applicant should provide monitoring both before construction commences and during the construction phases, as detailed in R22 of the rDCO. Without the Proposed Development the likely need for such data would be less for a LHA given much of the existing network is rural in nature and less likely to be used to such a degree as during the construction period.
- 6.5.5. The ExA does not consider it necessary or reasonable to expect the Applicant to fund and, deliver undefined interventions at unlimited cost on the LRN during construction as part of the dDCO. Instead, the ExA considers that such matters should be considered and dealt with jointly, following traffic monitoring, between LHAs and the Applicant at the TMFs referred to in the OCTMP.

- 6.5.6. The ExA shares the view of LAs that a Workers Travel Plan is necessary given 900 workers would be involved in the construction of the Proposed Development. The ExA considers that the Outline Workers Travel Plan is adequate for this stage of the Proposed Development's preparation and note that LAs would have further opportunity to comment on the content of the proposed measures and initiatives during its finalisation as part of the Second Iteration EMP, secured by R3 of the dDCO
- 6.5.7. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.204, 5.211 and 5.215. Whilst the OCTMP and R22 would enable traffic effects to be monitored and mitigated, the ExA considers that limited weight should be apportioned against it in the making of the Order because there will inevitably be disruption caused as result of the construction of the Proposed Development.

Monitoring of operational traffic effects

- 6.5.8. The ExA accepts that the Applicant, as Strategic Highway Authority for the SRN, is required under its Operating Licence, to monitor its own network in order to effectively manage it. The ExA also notes that where the Applicant proposes to adopt a Monitor and Manage approach on the SRN it has not relied on such an approach as any form of formal mitigation in relation to the Proposed Development. Therefore, the ExA is satisfied that appropriate monitoring would occur on the SRN and if necessary subsequent intervention would take place.
- 6.5.9. The ExA agrees with the LHAs that the absence of monitoring of traffic effects during operation, would lead to a void in the LHAs' understanding of the Proposed Development's effects on traffic on the LRN and how it should be managed. The ExA does not accept that such monitoring, where the Applicant's modelling anticipates worsening of traffic flow should be absorbed within the day to day duties and existing budgets of the LHAs because it would at least in part be due to the Proposed Development. Therefore, the ExA considers that operational traffic monitoring should be undertaken by the Applicant, as proposed in R23 of the rDCO to ensure that evidence is available for the Applicant and LHAs to consider whether any subsequent intervention is required.
- 6.5.10. However, at this point there is little evidence to suggest what, if any intervention would be necessary as the results of monitoring are unknown. Therefore, precise intervention measures cannot be detailed and the ExA has no realistic picture of any likely cost of such measures so as to consider whether they would be reasonable. Furthermore, the ExA accepts that it would be very difficult to demonstrate that traffic flow changes on the LRN were solely as result of Proposed Development and not other factors such as wider demand for travel, nearby new development or changes in the way the LRN was managed.
- 6.5.11. In this regard the ExA considers that subject to monitoring the effects on operation of the Proposed Development secured in R22 of the dDCO and R23 of the rDCO, it would accord with NPSNN Paragraph 5.215.

Operational phase traffic effects at existing junctions on the local road network

- 6.5.12. The ExA notes the concerns of the LHAs with regard to specific locations on the LRN where it is modelled that traffic flows would worsen. However, although some worsening is likely to be experienced at specific arms of junctions, the ExA is mindful that the overall picture at LRN junctions shows an improved functioning compared to without the Proposed Development in future years. The ExA also notes that many of the local junctions are already either approaching capacity or at capacity. The ExA considers that operational traffic monitoring, as secured in R23 of the rDCO, would assist in demonstrating any subsequent need for intervention on the LRN in conjunction with monitoring that any LHA would typically be expected to routinely undertake at key junctions and links on their own network.
- 6.5.13. The obvious exception to the above reasoning, which is of concern to the ExA, is the A1303 corridor between the A428 and the M11 junction 13. At this location the ExA notes there is uncertainty with regard the likely timing and likelihood of new development coming forward and other transport improvement projects. However, the Applicant as HA for the SRN would under its Operating Licence be responsible for ensuring any effects on the SRN were appropriately managed, including the potential for queuing back on to the A428 from the eastbound off-slip.
- 6.5.14. Therefore, in this regard the Proposed Development would accord with NPSNN Paragraphs 5.204 and 5.211.
- 6.5.15. Further to the benefits described, the ExA considers the likely operational traffic effects of the Proposed Development on the LRN to weigh greatly in favour of the making of the Order.

Operational phase traffic effects at existing junctions on the SRN

- 6.5.16. The ExA notes that the Proposed Development would likely have minor adverse effects on nearby junctions on the SRN. The ExA therefore agrees with the Applicant that monitoring of the situation is sufficient for the purposes of the Proposed Development's effect on traffic flows and accepts that this would follow the Monitor and Manage approach under the terms of the Applicant's Operating Licence.
- 6.5.17. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.215 and 5.216.
- 6.5.18. In the view of the ExA, given the only minor worsening of traffic flows predicted and the surety that the Applicant is required to effectively manage the SRN, the ExA does not consider further monitoring is necessary.

Operational phase traffic effects of proposed highways layouts

- 6.5.19. The ExA is satisfied that the intended highway layouts of the Proposed Development would deliver the predicted traffic benefits, as described in

the Chapter 5 of this Recommendation Report and would operate safely, within capacity and effectively.

- 6.5.20. Alternative proposals and suggested amendments to road layouts have been appropriately considered by the Applicant including in response to the Buchanans and Roxton PC, Welcome Break Services and Eltisley PC. However, in the view of the ExA, those proposals would likely have worse environmental effects and, require additional CA.
- 6.5.21. The ExA notes that matters relating DfS were unresolved at the end of the Examination between CCC and the Applicant. However, on the basis that the Proposed Development has been the subject of a formal RSA, the ExA agrees that which is proposed to be safe and appropriate for DfS to be agreed.
- 6.5.22. The ExA appreciates that Landowners have requested greater detail regarding proposed accesses. However, the ExA notes that intended points of access are shown on the works plans provided and consider that detail regarding accesses should be dealt with on a case by case basis, in negotiation between the Applicant and relevant landowner at the detailed design stage, post consent, subject to the making of the Order.
- 6.5.23. The ExA concludes that the Proposed Development would therefore accord with NPSNN Paragraphs 2.12 to 2.14, 2.23 and 5.211.
- 6.5.24. Further to the identified traffic benefits that the Proposed Development would deliver, in combination with the operational traffic effects on the existing highway network described above, the ExA considers substantial weight in favour of the making of the Order should be applied in this regard.

Provision for Non-Motorised Users

- 6.5.25. The ExA is of the view that where existing NMU provision interacts with the Proposed Development the Applicant has sought to adequately mitigate effects through the use of diversions and new infrastructure that would not compromise likely future usage. Measures which would enhance existing NMU provision have also been provided.
- 6.5.26. The ExA acknowledges that given the wider geographic area surrounding the Proposed Development there is scope to improve various existing NMU links as well as to fill missing links in the PROW network. However, the ExA is satisfied that the Applicant has justified the extent of the proposed NMU infrastructure forming part of the Proposed Development, as a robust methodology and approach was formulated. The WCHAR forms the basis of this. Having considered the submissions of the Applicant and IPs, the ExA do not consider there to be robust justification for the provision of additional NMU infrastructure to be necessary, albeit it would be desirable to IPs.
- 6.5.27. In accordance with NPSNN Paragraphs 5.205 and 5.215 to 5.217 the ExA therefore considers that the Proposed Development includes adequate

NMU infrastructure. For the reasoning above, the ExA apportions neutral weight in relation to the matter to the making of the Order.

Other matters

- 6.5.28. The ExA has considered other issues as raised by IPs and the ExA itself with regard to highways and traffic matters.
- 6.5.29. Notwithstanding legal agreements are being discussed between the Applicant and the LHAs, these are not before the ExA. However, the ExA is satisfied that appropriate handover mechanisms would be in place for the de-trunking of the existing A428 and the transfer of new local highway infrastructure subject to Articles 13 and 14 of the dDCO being in place.
- 6.5.30. With regard to the proposed loss of the existing services at the Black Cat roundabout, the ExA notes that alternative existing provision would be made available from the Proposed Development a short distance to the north of the Black Cat junction via the proposed services link road.
- 6.5.31. The ExA does not consider it would be appropriate for the maintenance responsibilities for field ditches and culverts that would run along-side proposed new highway infrastructure to be the responsibility of adjacent landowners by default but rather the LHA. However, there would be nothing to preclude LHAs and landowners entering into agreements following handover if this was desirable.
- 6.5.32. The ExA is satisfied that the Proposed Development would assist LHAs and the Applicant in discharging their NMD in future by tackling existing known congestion and safety issues on both the existing A428 and the nearby local road network. The provision of traffic monitoring both during construction and operational phases by the Applicant, as detailed in R22 and R23 of the ExA's rDCO would further assist LHAs and the Applicant in discharging their NMD.
- 6.5.33. The ExA considers these other matters to weigh neutrally in the planning balance because the benefits described regarding the NMD would be realised in the operational effects described above.

7. BIODIVERSITY

7.1. BACKGROUND AND POLICY CONTEXT

- 7.1.1. Biodiversity and Ecological Conservation effects of the Proposed Development was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. This concerned the effects on statutory and non-statutory designated sites; the effects on protected species and species of conservation concern; quantitative and qualitative effects on terrestrial and aquatic habitats, including fragmentation effects; the adequacy of proposed mitigation for terrestrial and aquatic habitats and species; monitoring and management measures and their likely effectiveness; and, issues relating to Biodiversity Net Gain (BNG) and No Net Loss (NNL) of biodiversity.
- 7.1.2. A separate Habitat Regulations Assessment (HRA), under the Conservation of Habitats and Species Regulations 2017, is required to be undertaken by the Competent Authority, in this case the Secretary of State (SoS). This matter is dealt with in Chapter 20 of this Recommendation Report and is not duplicated here. Nevertheless, the findings of the HRA are relevant to the overall assessment of biodiversity.

National Policy Statement

- 7.1.3. The consideration of biodiversity in the National Policy Statement for National Networks (NPSNN), requires the Applicant to:
- 1) identify in their Environmental Statement (ES) any likely significant effects (LSE) on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England); on protected species; and, on habitats and other species identified as being of principal importance for the conservation of biodiversity (NPSNN Paragraph 5.22).
 - 2) consider the full range of potential impacts on ecosystems (NPSNN Paragraph 5.22); and
 - 3) show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests (NPSNN Paragraph 5.23).
- 7.1.4. In reaching a decision the SoS should be satisfied that:
- 1) regard has been had to Biodiversity 2020: A Strategy for England's wildlife and ecosystem services, which seeks to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people, within the context of the challenge of climate change (NPSNN Paragraph 5.24).
 - 2) the development avoids significant harm to biodiversity and geological conservation interests, and where harm cannot be avoided considers mitigation, reasonable alternatives, biodiversity offsetting, and appropriate compensation measures (NPSNN Paragraph 5.25).
 - 3) appropriate weight is attached to designated sites of international,
 - 4) national and local importance, protected species, habitats and other

- 5) species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment (NPSNN Paragraphs 5.26 to 5.29 and 5.31 to 5.35).
- 6) appropriate mitigation measures have been identified and suitably secured as an integral part of the proposed development during construction and operation (NPSNN Paragraphs 5.36 to 5.38)

Other legislation and policies

- 7.1.5. Other legislation and guidance relevant to Biodiversity includes:
 - 1) the Wildlife and Countryside Act 1981;
 - 2) the Infrastructure Planning (Decisions) Regulations 2010; and
 - 3) the Environment Act 2021.
- 7.1.6. Other legislation and guidance relevant to the Proposed Development are set out in the (ES) [APP-070, Section 1.3] [APP-077, Section 8.2] and in Chapter 3 of this Recommendation Report.
- 7.1.7. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration for Nationally Significant Infrastructure Projects (NSIPs) development proposals in respect of Biodiversity, in particular Chapter 15 – Conserving and enhancing the natural environment.

7.2. THE APPLICATION

Environmental Statement

- 7.2.1. The Applicant's assessment of Biodiversity is set out in Chapter 8 Biodiversity of the ES [APP-077], related appendices [APP-183] to [APP-207] and other application documents such as the HRA No Significant Effects Report (NSER) [APP-233], Statutory Nature Conservation Plans [APP-236] and Biodiversity Pre-commencement Plan [APP-239].

Scope and Methodology

- 7.2.2. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. The Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) LA 108: Biodiversity, the guidance contained within the Guidelines for Ecological Impact Assessment in the UK and Ireland published by the Chartered Institute of Ecology and Environmental Management (CIEEM) in 2019.
- 7.2.3. The Applicant established the baseline environment with reference to existing data sources and in consultation with statutory bodies and other organisations, and fieldwork surveys. The scope of the desk study was defined using a combination of published guidance and professional judgement over the Study Area, which varies in size according to the spatial characteristics of the site, habitat or species under consideration. For example, sites designated statutorily for their international biodiversity value within 30km of the Proposed Development, and sites designated statutorily for their national biodiversity value within 2km of

the Proposed Development, were scoped in for assessment [APP-077, Table 8-2].

- 7.2.4. Organisations from which information and views concerning the Proposed Development were obtained included: Natural England (NE), the Environment Agency (EA), Bedfordshire and Luton Biodiversity Recording and Monitoring Centre, and Cambridgeshire and Peterborough Environmental Records Centre [APP-077, Section 8.3].
- 7.2.5. Field surveys were undertaken by qualified and experienced ecologists in the period 2016 to 2020 (ending in November 2020). The purpose of the field surveys was to identify, record and map vegetation, habitats, protected species and scheduled invasive non-native species within the Survey Area as defined for a given field survey. The Applicant has provided a summary of habitat and species surveys [APP-077, Table 8.3].
- 7.2.6. The Applicant assessed the value of biodiversity features (comprising designated sites, habitats, species assemblages and populations of species) with reference to their: biodiversity status, conservation value, legal status, habitat diversity, whether the species population size is notable in a wider context, rich assemblages of plants and animals, and species on the edge of their range (particularly where their distribution is changing as a result of global trends such as climate change).
- 7.2.7. The Applicant has set out its criteria for assessing features of importance at different geographical scales: International, National (England), Regional (East Anglia), all the way to parish scale or smaller [APP-077, Table 8.1].
- 7.2.8. The Applicant also sets out the process for identifying the effects and the complexity of effects on biodiversity features. The Applicant explains that the identification of the likely significant effects on biodiversity features has involved combining the value of a given ecological feature with the predicted magnitude of impact, using recognised standards and professional judgement, guided by the CIEEM guidelines.

Applicant's assessment of effects and mitigation proposed

- 7.2.9. The Applicant's assessment [APP-085, Table 16-1, Chapter 8] is that the construction and operation of the Proposed Development would result in no significant effects on Biodiversity.
- 7.2.10. The Applicant's proposed embedded mitigation that is common across the Proposed Development is summarised in the ES [APP-071, Table 2-1]. Embedded mitigation specific to Biodiversity has been secured through Works Plans [APP-009] and [APP-010], Schedule of Mitigation [APP-235], Environmental Masterplan [REP9-037], the First Iteration Environmental Management Plan (EMP) [REP10-018], and draft Development Consent Order (dDCO) [AS-026], and includes:

- 1) limiting the total area of land within the Order limits to what would be required to construct, operate and maintain the Proposed Development;
- 2) optimisation of the horizontal alignment of the new dual carriageway during the design-development process;
- 3) the retention of existing habitats within the Order limits where practicable;
- 4) the planting of woodland and woodland edge species, shrubs and scrub and hedgerows along sections of the new dual carriageway;
- 5) the creation of grassland habitats on earthwork cutting and embankment slopes, and on road verges;
- 6) the creation of new wet ponds within the Order limits (with associated marginal and wetland planting) that would allow native vegetation cover to develop around the pond edge;
- 7) the installation of mammal ledges in specific structures within the design of the Proposed Development;
- 8) the installation of bat boxes sited on retained trees within the Order limits;
- 9) the creation of a network of wetland habitats, including ephemeral wetland habitat, reedbeds and wet grassland;
- 10) confining road lighting introduced as part of the Proposed Development to new and improved sections of road where road safety is a priority;
- 11) provision of planting within the planting strategy of the Proposed Development at known bat activity hotspots and flyways;
- 12) installation of mammal fencing;
- 13) the creation of replacement artificial badger setts at confidential locations within the Order limits;
- 14) the consideration of existing bat flight paths during the development of the preliminary designs of specified structures incorporated into the Proposed Development;
- 15) provision of a dedicated bat tunnel (underpass) within the design of the Proposed Development which would join Sir John's Wood, Alington Hill and Boys Wood. No permanent lighting would be installed within the underpass, or in proximity to its entrances and adjacent habitat features.

7.2.11. Essential mitigation specific to Biodiversity has been secured through the dDCO [AS-026], and includes:

- 1) the Principal Contractor would develop and implement a Biodiversity Management Plan (BMP) based upon the outline BMP in the First Iteration EMP; and
- 2) the Principal Contractor would develop and implement the Biodiversity Pre-Commencement Plan.

7.2.12. Further mitigation measures are identified with regard to Barn Owl and Hobby nest boxes outside the Order limits [APP-235, ENH-B1] [APP-235, ENH-B2]. These measures would benefit these species but are subject to agreement and so not secured.

7.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 7.3.1. The Local Impact Report (LIR) of Bedford Borough Council (BBC) addresses Biodiversity at C – Ecology [REP2-002, C]. The LIR identifies a local wildlife site, significant wildlife commuting and foraging corridors and main ecological features within the borough, including:
- the Black Cat Quarry is to be restored; wildlife protection measures will be needed during construction, and it will be important to maintain connectivity through the area for wildlife;
 - the River Great Ouse is an important commuting and foraging corridor for wildlife that should be maintained;
 - the East Coast Mainline Railway (ECML) is in Central Bedfordshire close to BBC. It is an important wildlife movement corridor whose function should be maintained during construction by wildlife protection measures;
 - Sir Johns Wood County Wildlife Site (CWS) and surrounding woodland spans the border with Central Bedfordshire and has the greatest potential for ecological issues. The Proposed Development would sever routes between woodland, including the hedgerows to the north which are important commuting and foraging routes for Badgers and bats, including the Barbastelle bat. The presence of Barn Owls, Red Kite, Hobby and farmland birds would also be affected; and
 - areas of arable farmland and hedgerows would be permanently lost, including a net loss of hedgerows, adversely affecting breeding farmland birds such as Skylarks.
- 7.3.2. The LIR states that the Proposed Development would affect a number of species and the following mitigation is proposed:
- early roadside planting, and artificial nests for Barn Owl, Red Kite and Hobby;
 - new woodland, hedgerow and grassland habitats for breeding birds;
 - a bat tunnel and associated planting beneath the proposed road and new bat roosts, which would require monitoring to measure their effectiveness;
 - Badgers could also use the bat tunnel, whilst hedgerows remain important commuting routes for them;
 - additional ponds are to be provided as habitats for Great Crested Newts (GCNs);
 - reptiles at the Black Cat Quarry would need protection during construction;
 - existing and proposed habitats should be mapped by local authority (LA); the provision of wildflower grasslands would be welcome; and
 - the control of non-native invasive species will be needed particularly during construction.

Cambridgeshire Councils

- 7.3.3. The Joint LIR of Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) addresses Biodiversity, including relevant Development Plan policies [REP2-003, Table 4, Sections 6.3 and 8.3 and Appendix A].

- 7.3.4. The Cambridgeshire Councils Joint LIR states that the benefits of the Proposed Development would include a reduction in traffic on the existing A428, reducing the number of collisions between animals and vehicles; reduced indirect impacts such as from noise, air pollution and vibrations; new habitats would provide more biodiversity than the existing monoculture arable fields; the design of the route minimises the loss of woodland and the creation of over 60 hectares (ha) of broad-leaved and mixed plantation results in a net gain in tree cover; and a net increase in grassland habitat.
- 7.3.5. The Joint LIR states that adverse effects of the Proposed Development include the loss / disturbance of bat habitats around Eversden and Wimpole Woods Special Area of Conservation (SAC), particularly affecting Barbastelle bats; disturbance to all bat species through increased lighting, affecting foraging and roosting. The Joint LIR highlights other adverse effects of the Proposed Development including the loss of GCN breeding ponds and direct mortality to the protected species; loss of priority habitats including arable field margins, hedgerows, lowland meadow/lowland calcareous grassland, ponds and waterways. The net increase in hard surfaces of more than 59 ha would have no biodiversity or ecological value and result in the loss of field margins and hedges negatively impacting farmland birds (priority species) and wintering birds. The loss of standing deadwood and elm in hedgerows and field margins would also negatively impact upon deadwood and other specialist invertebrates.
- 7.3.6. Potential adverse effects, such as the potential loss of a veteran English Elm tree, or potential harm to Protected Road Verge S8 Brockley Road and temporary adverse effects to species through noise, vibration, increased air pollution and temporary habitat removal/destruction are also identified in the Joint LIR. Missed opportunities identified in the Joint LIR include not using the Department for the Environment, Food and Rural Affairs (DEFRA) metric to assess BNG; the absence of a mitigation strategy for arable field margins which are a priority habitat and wildlife corridor for farmland birds (priority species); no restoration scheme for Borrow pits or construction and storage areas to benefit biodiversity; and not creating wildlife ponds which would greatly enhance biodiversity. The high number of missed opportunities shows the Proposed Development has not been adequately designed to implement the mitigation hierarchy – avoid, minimise, compensate.

7.4. THE EXAMINATION

- 7.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) Environment Act 2021;
 - 2) Surveys;
 - 3) Designated Sites;
 - 4) Biodiversity Net Gain; and
 - 5) Biodiversity Effects.

Environment Act 2021

- 7.4.2. The Environment Act 2021 received Royal Assent during the Examination, in November 2021. It sets statutory targets for environmental improvement in four priority areas, one of which is biodiversity. Section 99 and Schedule 15 of the Environment Act 2021 concern biodiversity gain for NSIPs and will require certain NSIPs to achieve a net gain in biodiversity of at least 10%. However, this part of the Act has not yet commenced.
- 7.4.3. The ExA asked the parties for their views on whether the Environment Act 2021 had any implications for the Proposed Development [PD-014, Q3.1.2.1]. It is common ground between the Applicant and NE that there would not be any significant effects for the Proposed Development due to the Environment Act 2021 receiving Royal Assent [REP8-014, Q3.1.2.1] [REP8-049, Q3.1.2.1].

ExA's reasoning

- 7.4.4. In light of the consensus between the Applicant and NE, the absence of any substantive disagreement with regard to biodiversity from the Local Authorities (LAs), and with regard to the Act itself specifying that provisions relating to biodiversity have not yet commenced, the ExA considers that the Environment Act 2021 does not raise significant effects in relation to the Proposed Development.
- 7.4.5. However, given the Act includes provision for future NSIPs to achieve BNG and based on this Examination as detailed below, the ExA considers that a clear policy direction is needed to assist future Examinations. This should address the preferred type, the interpretation of guidance and how the use of BNG metrics fits within the wider Environmental Impact Assessment (EIA) process.

Surveys

- 7.4.6. The EA [RR-036] and NE [RR-076] questioned whether further ecological surveys would be undertaken to ensure an up-to-date baseline was available. The Cambridgeshire Councils also raised concerns with some of the baseline survey data, including in relation to aquatic habitats, grassland road verges and field margins and invertebrates [REP1-048, Paragraph 7.1.1].
- 7.4.7. The Applicant responded that it was undertaking a suite of terrestrial and aquatic habitat and species surveys during 2021 and 2022 to ensure that baseline information is up-to-date and fit-for-purpose [REP1-022, Q1.3.1.3]. The Applicant consequently submitted a number of Technical Notes to Surveys for Aquatic Habitats [REP5-008], Barn Owls [REP5-009], Bats [REP5-010], GCNs [REP5-011], Reptiles [REP5-012], Terrestrial Habitats [REP5-013].
- 7.4.8. The Applicant confirmed that further updated surveys would be undertaken in accordance with the Biodiversity Pre-Commencement Plan [REP8-008] and the BMP contained within the First Iteration EMP [REP10-

018] [REP8-014, Q3.3.6.1a1]. The EA noted that pre-construction surveys were proposed in Table 3-1 of its Statement of Common Ground (SoCG) with the Applicant [REP8-046].

- 7.4.9. A Technical Note for Surveys and Mitigation of Barbastelle Bats was submitted by the Applicant at Deadline (D)8 [REP8-009] and Complete Bat Survey results for the Proposed Development were submitted at D9 [REP9-030] to [REP9-032].
- 7.4.10. The Applicant submitted a document that listed corrections to the submitted Arboricultural Impact Assessment Plans and related first written question responses [REP3-015], and the corrected Arboricultural Impact Assessment plans (Parts 2 to 5) themselves [REP3-002] to [REP3-005].
- 7.4.11. The Applicant also reviewed the background information on the biodiversity of the Proposed Development and surrounding landscape [APP-188]. No significant records of protected species were found during the update data search of the flora and fauna within the Study Area, and the review did not alter the Applicant's understanding of the biodiversity of the Study Area or the assessment conclusions and associated mitigation [REP5-007, Chapter 7].
- 7.4.12. NE confirmed that it was satisfied with the biodiversity surveys undertaken by the Applicant, including in relation to Bats, following discussions and the further submission of information, in its SoCG with the Applicant [REP10-023, Pages 31 to 33].

ExA's reasoning

- 7.4.13. The ExA notes the concerns that were raised by various parties regarding the baseline survey information, the further surveys undertaken, technical notes submitted to Examination, and the commitments to further surveys at pre-commencement stage.
- 7.4.14. The ExA considers the updated surveys submitted into Examination to have been helpful in understanding the biodiversity of the area. The ExA also takes into account the Applicant's secured commitments for updated surveys post consent. The ExA notes the Applicant's views that on the basis of the updated surveys the assessment and conclusions in the ES remain unchanged. There is no substantive evidence that would cause the ExA to reach a different conclusion in this regard. As such, the ExA is satisfied that the surveys that underpin the ES assessment and findings are robust.

Designated Sites

- 7.4.15. The route of the Proposed Development avoids internationally and nationally designated sites. The effects on internationally designated sites are contained within Chapter 20 of this Recommendation Report. The Applicant has assessed that any effects on nationally designated sites would be negligible during construction and operation stages [APP-077, Tables 8-9 and 8-10].

- 7.4.16. The route of the Proposed Development sought to avoid non-statutory sites of local biodiversity importance as far as possible. Nevertheless, some of these sites are crossed by or are adjacent to the Order limits. The Applicant notes that connectivity between the Sir Johns Wood CWS and the nearby Boys Wood and Alington Hill Wood would be disrupted during construction [APP-077, Paragraphs 8.9.22 to 8.9.23].
- 7.4.17. The Proposed Development would include a mammal tunnel, designed for bats and ground-based mammals to use, to restore connection between the CWS to the south of the route and Boys Wood and Alington Hill Wood to the north. However, even with this mitigation the ES records a minor adverse effect caused by the operation of the Proposed Development [APP-077, Paragraphs 8.9.108].
- 7.4.18. Furthermore, the Madingley Slip Road Roadside Verge CWS would also experience a minor adverse effect caused by increases in nitrogen from the operation of the Proposed Development. The Applicant considers that the effect is minor in part because of the relative nitrogen resilience of the flora at this location [APP-077, Paragraphs 8.9.109].
- 7.4.19. The Cambridgeshire Council's noted that no evidence was provided to support the Applicant's Statement in this regard and that the flora of many roadside verges in Cambridgeshire have declined over the past 50 years, with nitrogen deposition a likely contributor [REP1-048, Paragraph 7.15f]. The Applicant stated that the Air Quality Assessment showed that for all designated biodiversity sites there were no impact pathways including from nitrogen emissions from traffic on roads close to any such sites [REP3-008, REP1-048bi f].

ExA's reasoning

- 7.4.20. The ExA notes that the Applicant's assessment in the ES states that two CWSs, including the Madingley Slip Road Verge CWS would be at increased risk of nitrogen pollution from the Proposed Development. The ExA finds the Applicant's statement in response to the Cambridgeshire Councils, that no impact pathways exist for nitrogen emissions to any CWSs, to conflict with the ES in this regard [APP-077, Table 8-10 and Paragraph 8.9.109]. The ExA is not, therefore, satisfied that there would be no adverse effects on these CWSs from nitrogen pollution.
- 7.4.21. The ExA considers that other measures, such as the provision of a mammal tunnel beneath the Proposed Development and associated planting, to be reasonable mitigation.
- 7.4.22. However, on the basis of the aforementioned factors, the ExA concludes that even after mitigation, the Proposed Development would adversely affect some locally designated sites. However, the overall effect of the Proposed Development on Designated Sites is not considered to be significantly harmful.

Biodiversity Net Gain

- 7.4.23. Based on the baseline habitat data the Applicant made an assessment as to whether the Proposed Development would achieve a net loss, a neutral effect or a net gain in biodiversity, using a metric that was developed by the Applicant (previously Highways England (HE)) in 2018 [APP-077, Paragraph 8.10.1]. The result of the assessment was a BNG of some 20.5% as a result of the Proposed Development, primarily as a result of significant increases in woodland and grassland [APP-077, Paragraph 8.10.2].
- 7.4.24. This assessment does not include all aspects of biodiversity, for example, some aquatic habitat creation and restoration works were not included [APP-077, Paragraph 8.10.3]. The Applicant has provided a more detailed explanation of the Highways England metric (HEM) and a summary of the principal differences with an alternative metric developed by DEFRA, the DEFRA 2.0 metric (D2M) [APP-206].
- 7.4.25. The Cambridgeshire Councils and NE raised concerns with the Applicant's approach to BNG, regarding the integrity of the methodology and suggested that the D2M or DEFRA 3.0 metric (D3M) were used instead to ensure that habitat condition and other key criteria were considered [REP1-048, Paragraph 7.1.2] [RR-076, Paragraph 2.12.9].
- 7.4.26. At the ExA's behest, the Applicant set out the differences between the three metrics; the Applicant confirmed it was undertaking an assessment of BNG using the D2M [REP1-022, Q1.3.2.1]. NE recognised that D2M may be more appropriate for the Proposed Development even though D3M was a more up-to-date metric. NE declined to comment on the differences between D2M/D3M and the HEM, because it was not privy to the details of the HEM [REP1-088, Q1.3.2.1] [REP4-070, Q2.3.2.1]. The Cambridgeshire Councils commented that the D2M would be more accurate than the HEM [REP1-051, Q1.3.2.1].
- 7.4.27. The Applicant submitted its assessment of BNG using the D2M, which, with certain assumptions and qualifications, showed that the Proposed Development would result in a net gain of Habitat units (16.5%) and River units (10%), but a net loss of Hedgerow units (-31.5%) [REP3-012] and [REP3-013] and concluded that there would be an overall positive effect of the Proposed Development on Biodiversity.
- 7.4.28. The Applicant noted that the D2M Habitat units score was similar to the HEM score, which did not include a separate assessment of River Units or Hedgerow Units. The Applicant considered the positive River Units score to be the result of the generally poor condition of watercourses at present. In terms of the large negative score for Hedgerow units – despite a net increase in hedgerow length as a result of the Proposed Development – the Applicant considered that this was in part due to an overestimation of the length of hedgerows lost in land that needed to be temporarily possessed [REP4-037, Q2.3.2.1f].
- 7.4.29. NE welcomed the submission of the D2M BNG assessment and asked that the findings be used to inform a revised assessment of the effects of the Proposed Development on Biodiversity [REP4-070, Q2.3.2.1]. The

Cambridgeshire Councils also welcomed the submission of the D2M assessment of BNG but noted that the assessment did not include the updated 2021 habitat surveys that were to be submitted by the Applicant, and that the assessment should be updated to accommodate these. The Cambridgeshire Councils also raised concerns with some of the Applicant's assumptions, including not compensating for the loss of High and Medium distinctiveness habitats [REP4-059, Q2.3.2.1e]. Furthermore, the Cambridgeshire Councils considered that this would have an effect on the ES conclusions which are based on different results in relation to hedgerows, ponds and other wetlands and woodland [APP-077, Table 8-10] and [REP3-013, Page 7].

- 7.4.30. To be sure that the different BNG metrics and results presented by the Applicant were properly understood, including with regard to any differences in findings, the ExA sought the views of the parties in relation to the HEM and the D2M [EV-055, 3e].
- 7.4.31. The Applicant stated that the data for the D2M assessment was based on data that was collected for different purposes within the Environmental Assessment, and so a highly precautionary approach to its use was adopted. The Applicant asserted that if a different approach to data entry had been used there may have been a slight positive score for hedgerows. The Applicant also advised that the D2M assessment did not use the 2021 field surveys because they did not produce a significantly different picture in terms of habitat area or condition [EV-060] [EV-065].
- 7.4.32. The Applicant also stated that it was not appropriate to aggregate the scores for the three D2M components to reach a conclusion, something that both BBC and the Cambridgeshire Councils agreed with, and highlighted as being in the DEFRA User Guide Rules. BBC and the Cambridgeshire Councils both stated that for the D2M to show a positive outcome for BNG, then each of the components must show a positive score. NE stated that they could not comment on the differences between the different metrics but still considered the D2M findings to show an overall positive score for BNG [EV-060] [EV-065].
- 7.4.33. The Cambridgeshire Councils stated another concern, that the High and Medium distinctiveness habitats had not been adequately compensated for as part of the Proposed Development and were shown in red in the Applicant's BNG calculation document [REP3-013, Page 7]. The DEFRA rules were also said to prohibit Trading Down – replacing lost habitat with a greater quantity of lower quality habitat [EV-60] [EV-65].
- 7.4.34. The assessment of BNG is something that the Applicant has developed as part of its application and shows the effects of the Proposed Development on the biodiversity of the receiving environment. In light of concerns raised by parties and evidence in the examination, the ExA sought clarification from the parties on the use of the D2M in other NSIPs, and the policy basis for the use of BNG metrics.
- 7.4.35. The Applicant provided a list of six road NSIPs that had been assessed using the D2M [REP6-030, 9]. The Applicant also stated that it had a

target to achieve no net loss of biodiversity at an organisational level by 2025 and that performance to this target is measured using D2M [REP6-030, 10].

- 7.4.36. The Cambridgeshire Councils submitted the D2M User Guide [REP6-068] and a BNG Technical Note they had prepared to support their BNG position [REP6-062]. The Cambridgeshire Councils noted that in addition to the uncompensated losses of High and Medium distinctiveness habitats from the Proposed Development [REP3-013, Page 7], the net gain of 16.5% in Habitat units claimed by the Applicant relied on Trading Down [REP6-062, Section 4], which is not allowed by the D2M [REP6-068, Rule 3]. The Cambridgeshire Councils noted that the Proposed Development conflicted with Rule 3 (Trading Down) and Rule 5 (Biodiversity Units instead of Area) in terms of losses of High and Medium distinctiveness habitats, including hedgerows [REP8-035 Q3.3.2.1e].
- 7.4.37. The Applicant stated that the results of the D2M superseded the results of the HEM for the Proposed Development and reaffirmed its position that the calculation of BNG and the assessment of effects on biodiversity were, in the Applicant's view, two separate processes. There are no substantive changes to Biodiversity mitigation or enhancement measures, meaning the ES conclusion on Biodiversity would not be affected by the change of metric. The Applicant also stated that as there is no current policy requirement to undertake an assessment of BNG for NSIPs, the initial assessment of BNG was for the purpose of monitoring and reporting progress towards its own biodiversity targets. The Applicant has always sought to maximise opportunities to achieve positive outcomes for biodiversity, and that enhancement of biodiversity is demonstrated by the positive results of the D2M BNG calculations for Habitat units and River units [REP4-037, Q2.3.2.1g] [REP8-014, Q3.3.2.1c, d + f]. The Applicant also commented directly on the Cambridgeshire Council's BNG Technical Note, explained why it did not consider there to be a net loss of priority habitat and made reference to undertaking an updated BNG assessment at detailed design stage [REP8-012, Chapters 4 and 6].
- 7.4.38. In relation to Trading Down, the Applicant referred to Paragraph 4.22 of the D2M User Guide [REP6-068] which it stated provides indicative advice on compensation and the Trading Rules. The Applicant went on to state that in certain instances it may not be feasible to follow the Trading Rules or there may be good ecological reasons for doing otherwise. The Applicant also stated that due to its precautionary approach to the use of data gathered for a different purpose in the D2M, the move from HEM to D2M had meant an overestimation of the loss of biodiversity units and so there is no Trading Down of habitats. The Applicant also commented upon Rule 5 of the User Guide in terms of the calculation of risks with creating or restoring habitats associated with the Proposed Development; the effect of risk multipliers within the methodology is to reduce the unit value of the proposed habitats [REP8-014, Q3.3.2.1e].
- 7.4.39. NE commented that it was not within its remit to comment on BNG calculations, but in this case NE's BNG specialists had reviewed the

submissions and the Applicant's BNG calculation using D2M seemed to have incorrectly applied the Trading Down rules for habitat distinctiveness. NE stated the Applicant's BNG calculation for Habitat units may be incorrect and a revised calculation should be undertaken. If the revised calculation confirmed that the Proposed Development would deliver significantly lower BNG, the Applicant should identify opportunities for biodiversity off-setting, for example through enhancement of existing woodlands and parkland etc. NE also stated that it agreed with the Applicant that the BNG calculation and the assessment of biodiversity impacts are separate processes and was satisfied that the calculation does not affect the conclusions of the ES [REP8-049, Q3.3.2.1].

- 7.4.40. The Cambridgeshire Councils re-affirmed their previously stated position that the BNG calculations do in fact have a bearing on the ES assessment of biodiversity [REP9-044, Q3.3.2.1c]; that while BNG is not a policy requirement, it is a common and an accepted part of NSIP applications, is helpful to the assessment process and that D2M shows an uncompensated loss of priority habitats [REP9-044, Q3.3.2.1d]. The Cambridgeshire Councils did not agree the Applicant's over-estimation of the loss of biodiversity in the D2M, noting that further habitat surveys had been undertaken to inform the D2M assessment [REP9-044, Q3.3.2.1e]; and that the Applicant's interpretation of the Trading Rules as suggested actions was also rejected - the User Guide rules were considered to underpin the D2M and so were fundamental to the correct application of the metric [REP9-044, Q3.3.2.1e]; and that with reference to NE's response to the ExA's third written questions, the loss of habitats should be compensated and that there was currently no mechanism for this in the dDCO. A BNG strategy to show how NNL would be achieved, consistent with the NPSNN, should be provided.
- 7.4.41. The Cambridgeshire Councils provided wording for a Requirement in the dDCO to address any offsetting, if offsetting were required [REP9-044, Q3.3.2.1f]. The Cambridgeshire Councils also submitted the UK Biodiversity Action Plan priority habitats Description documents to the Examination [REP10-061].
- 7.4.42. The Applicant responded to these comments from the Cambridgeshire Councils, referring to some of its previous submissions concerning BNG. The Applicant raised concerns as to how the D2M results, which it stated were submitted voluntarily and for information only, were being interpreted by stakeholders as the BNG methodology and score against which the Proposed Development is assessed, which has led to requests for offsetting and additional mitigation. The Applicant reiterated its statements that the NPSNN does not require an assessment of BNG, does not specify a metric to be used and that the ES biodiversity conclusions do not rely on and will not change as a result of the D2M, a position said to be supported by NE. The Applicant did not accept that there would be a net loss of priority habitat and so there was no need for an Offsetting Requirement suggested by the Cambridgeshire Councils at D9 [REP10-044, Pages 12 to 15].

- 7.4.43. The Applicant stated that Paragraph 5.25 of the NPSNN is not engaged by the Proposed Development because there will be no significant harm to Biodiversity and all significant effects have been avoided or mitigated [REP10-044, Page 15].

ExA's reasoning

- 7.4.44. The ExA recognises that the calculation of BNG is a distinct process and is not required for the purpose of preparing an ES. However, where undertaken it can be a helpful means of assessing the likely effects of a development on different aspects of Biodiversity, particularly in qualitative terms.
- 7.4.45. The ExA also recognises that there is no requirement for an assessment of BNG to be made for an NSIP at the present time. Nevertheless, such assessments have been undertaken for a number of recent road NSIPs, and has been undertaken for the Proposed Development. The ExA notes the complexity of this issue and that there is no universally agreed metric or method governing this at present.
- 7.4.46. From the evidence, the ExA considers that the D2M provides a more robust assessment than the HEM, including by considering linear features such as hedgerows and rivers separately to area-based habitats, and by considering the condition of habitats in more detail than the HEM. The ExA notes the Applicant's comments questioning the robustness of the survey data, which was considered suitable for the HEM but not necessarily for the D2M. However, the surveys have been accepted by the Cambridgeshire Councils and NE and no doubts have been raised on that basis. As such, the ExA is content that the Applicant's survey results are suitable for use in the calculations for BNG in D2M and that the score is reliable.
- 7.4.47. D2M has been used for other road NSIPs and the ExA also notes the preference amongst parties for the D2M. The Applicant's comment that the D2M results supersede the HEM results for the Proposed Development is also significant to the ExA.
- 7.4.48. The ExA notes that the results of the Applicant's D2M assessment were different to the results of the HEM assessment. However, the ExA accepts that under Rule 4 of the D2M User Guide, the results are not comparable.
- 7.4.49. The ExA is satisfied from Rule 4 of the User Guide that for the D2M to show an overall positive effect on biodiversity, each of the three components would have to show a positive score. Consequently, the ExA agrees with the Cambridgeshire Councils and concludes that the Proposed Development would not result in BNG.
- 7.4.50. The ExA appreciates the constraints with the D2M calculation process for the Applicant and notes that if a different approach had been used then a different outcome may have been shown with regard to Hedgerow units, which is a priority habitat [REP10-061]. Nevertheless, the ExA finds, in agreement with the Cambridgeshire Councils, that the Applicant's D2M submission shows a substantial net loss of Hedgerow units as a result of

the Proposed Development. Additionally, the Applicant's D2M calculations also show a loss of High and Medium distinctiveness habitats. Whilst a greater amount of lower value habitat would be provided, this would be Trading Down, and contrary to Rule 3 of the D2M User Guide. The ExA does not find the Applicant's reference to the indicative advice at Paragraph 4.22 of the User Guide to be compelling, and whilst in certain instances there may be good ecological reasons for not following the Trading Rules, in this case this has not been satisfactorily demonstrated. Notwithstanding the uncertainties with the data used and the Applicant's precautionary approach, this is a significant effect.

- 7.4.51. The NPSNN requires as a general principle that significant loss of Biodiversity should be avoided. However, there is no prescribed need to undertake off-setting to mitigate such loss (NPSNN, Paragraph 5.25). The NPSNN also states that where harm to priority habitats or species would result, consent should be withheld unless the benefits of the development (including need) clearly outweigh that harm (NPSNN Paragraph 5.35).
- 7.4.52. Despite resistance from the Applicant, the ExA finds that the results of D2M are manifestly relevant to the ES conclusions on Biodiversity, in particular the loss of High and Medium distinctiveness habitats and what this means for overall Biodiversity. As such, the ExA also concludes that from the D2M there is no certainty there would not be an uncompensated loss of priority habitats which would significantly and adversely affect Biodiversity and so should be reflected in the ES.
- 7.4.53. The ExA notes that a further assessment of BNG is to be undertaken by the Applicant at detailed design stage. The ExA agrees that such an assessment is necessary, but it is not detailed in the First Iteration EMP [REP10-018] or secured in the dDCO [AS-026].
- 7.4.54. The ExA also notes that NE and the Cambridgeshire Councils have suggested that an off-setting Requirement of the dDCO may be necessary, something which the Applicant has rejected, but which the ExA considers would be prudent, to ensure that there is NNL of priority habitats.
- 7.4.55. Therefore, the ExA proposes a Requirement be included in the recommended DCO (rDCO), to ensure that an updated BNG assessment is undertaken. Additionally, should this BNG assessment show an uncompensated loss of priority habitats, including hedgerows, then the ExA also proposes that the Applicant should be required to deliver a Biodiversity Offsetting Scheme for priority habitats, to avoid conflict with Paragraph 5.25 of the NPSNN.
- 7.4.56. The ExA has had regard to Paragraph 4.9 of the NPSNN and to the wording provided by the Cambridgeshire Councils at D9 in drafting the following Requirement.
- 7.4.57. The ExA's proposed wording for the new R24 is as follows:

"24.—(1) No part of the authorised development is to commence until an updated biodiversity net gain assessment has been submitted to, and,

following consultation with Natural England and the relevant local planning authorities, approved by the Secretary of State.

(2) The biodiversity net gain assessment must include—

(a) the scope of the assessment, which shall include priority habitats such as lowland mixed deciduous woodland, wood-pasture and parkland, and hedgerows;

(b) the methodology to be used to collect the required data based on a metric that has been agreed with Natural England and the relevant local planning authorities;

(c) the timing of the assessment; and

(d) the assessment findings and conclusions.

(3) If the assessment findings and conclusions demonstrate a loss of priority habitats, no part of the authorised development is to commence until a biodiversity offsetting scheme has been submitted to, and, following consultation with Natural England and the relevant local planning authorities, approved by the Secretary of State.

(4) The biodiversity offsetting scheme must include—

(a) details of how any priority habitat losses incurred as a result of the authorised development will be offset and the target condition for each habitat; and

(b) a programme for the implementation, monitoring and management of the biodiversity offset proposals.

(5) The biodiversity offsetting scheme must provide for its implementation before any part of the authorised development is open to traffic.”

Biodiversity Effects

Hedgerows

7.4.58. The ExA asked the Applicant to explain why Table 8-9 in the Biodiversity Chapter of the ES [APP-077] showed a net loss of hedgerows as a result of the proposed Development, whereas Table 8-10 showed a net gain, and provide clarification for any related inconsistencies in the evidence [PD-08, Q1.3.3.1].

7.4.59. The Applicant acknowledged that the hedgerow data in Table 8-9 was incorrect and provided the correct figures for hedgerows before and after construction. The corrected figures showed a net increase of 4.3 kilometres (km) in the length of hedgerows, which is consistent with Table 8-10. [REP1-022, Q1.3.3.1a]. The Applicant also advised that following a review of various documents that a number of tables in section 3 of Appendix 8.19 Biodiversity Net Gain [APP-206] also contain

incorrect information relating to hedgerow losses and creation. The Applicant proposed to address these inconsistencies as part of the assessment of BNG using the D2M [REP1-022, Q1.3.3.1b].

- 7.4.60. However, the increase in hedgerow length changed again at D4, with the latest figures showing a net increase of 3.4km in hedgerow length [REP4-037, Q2.3.2.1]. The ExA asked the Applicant to explain the different hedgerow lengths in the evidence [PD-014, Q3.3.3.1]. The Applicant responded that the actual length of new hedgerow was a net increase of 3.4km and this was based upon the approach for calculating BNG using the D2M rather than the HEM and the Applicant's precautionary use of the data. As the D2M superseded the HEM, the 3.4km net increase should be relied on as the minimum increase in hedgerow length [REP8-014, Q3.3.3.1].
- 7.4.61. NE identified UK priority habitats that would be affected by the Proposed Development included hedgerows [RR-076 Paragraph 2.7]. BBC noted that hedgerows were characteristic of the landscape in its area, linking existing areas of woodland and wildflower-rich grasslands would be beneficial to the biodiversity of the area, particularly as proposed to the north of Sir John's Wood [REP1-040, Q1.3.5.1]. The Cambridgeshire Councils also identified the importance of hedgerows and woodland in the predominantly agricultural landscape and the importance of linking new and existing woodland. Concern was raised that whilst there were to be net increases in hedgerows, woodland and grassland, the quality of replacements including mix of species was inferior, and that arable field margins were not assessed. [REP1-051 Q1.3.5.1].
- 7.4.62. As a further action from ISH3 the Applicant was asked to provide details of specific locations where trees would be included within proposed hedgerows [EV-043, 11]. In response the Applicant advised that trees within hedgerows were proposed where they were considered appropriate to the local character and could be accommodated within the constraints of the Proposed Development as shown on the Environmental Masterplan [REP9-037], such as on Sheets 11, 12 and 13 [REP3-018, 11].
- 7.4.63. NE was generally satisfied that mitigation and monitoring arrangements in the BMP/EMP would address the generally minor adverse effects on these priority habitats as a result of the Proposed Development [REP10-018].

ExA's reasoning on Hedgerows

- 7.4.64. The ExA notes the difficulties that the Applicant has experienced in accurately calculating the length of hedgerows in the study area. Based on the clarification from the Applicant, the ExA is satisfied that there would be a net increase in hedgerow length. However, as previously concluded upon, the D2M shows that a negative effect in terms of the biodiversity value of this priority habitat cannot be excluded.

Aquatic habitats and species

- 7.4.65. The Cambridgeshire Councils raised concerns with the robustness of some of the evidence used to inform the effects on certain habitats, including aquatic habitats, in their Written Representation. At the same time, similar concerns regarding the effects on certain species including GCNs were also raised by the Cambridgeshire Councils [REP1-048, Paragraph 7.1.5].
- 7.4.66. NE identified that European protected species may be affected including GCNs and Otters, and that ponds and other aquatic features would also be affected by the Proposed Development [RR-076, Paragraphs 2.4 and 2.7].
- 7.4.67. The EA suggested measures in the design and construction of culverts and drainage ponds that would support Biodiversity. The EA also suggested that consideration should be given to the timings of works within watercourses, so as to avoid sensitive times around fish spawning [RR-036, Page 9].
- 7.4.68. The ExA asked about the biodiversity value of the proposed drainage ponds and channels that would be part of the drainage infrastructure of the Proposed Development [EV-021, 3h]. NE said that if well designed and managed then they would be valuable for Biodiversity. However, the Cambridgeshire Councils were concerned at the lack of detail for how Biodiversity would be promoted in the Road Drainage and Water Environment Chapter of the ES [APP-182] [EV-044].
- 7.4.69. As an action from ISH3, the Applicant, NE and the LAs were asked to produce a Joint Position Statement on the details of the proposed drainage ponds, including intended design principles and planting arrangements [EV-043, 2]. The first version was submitted at D3 [REP3-026], with updates at D4 [REP4-034] and a final version at D9 [REP9-016].
- 7.4.70. The EA identified various measures, including the design of ponds and culverts and the timings of works within watercourses, that could mitigate harm from the Proposed Development [RR-036], and which they considered could be addressed within iterations of the EMP [REP4-068, Q2.3.6.1]. At D8 the EA noted the progress with these matters and did not raise objections to them [REP8-046, Q3.3.6.1].
- 7.4.71. The SOCG between the Applicant and the EA states that with regard to Biodiversity all outstanding matters have been addressed and the position is agreed [REP10-021, Pages 21 to 25].
- 7.4.72. NE was generally satisfied that mitigation and monitoring arrangements in the BMP/EMP would address the generally minor adverse effects on aquatic habitats [REP10-018].
- 7.4.73. BBC and CBC are in agreement with the Applicant regarding the effects of the Proposed Development on the aquatic environment and species, and how these will be mitigated [REP10-025] [REP10-024].

- 7.4.74. Some concerns raised by the Cambridgeshire Councils have been resolved, including GCN mitigation [REP10-060, Page 15]. The Joint Position Statement with NE regarding Drainage Ponds is also an accurate representation of the Cambridgeshire Council's position [REP10-060, Pages 16 and 17].

ExA's reasoning on Aquatic habitats and species

- 7.4.75. The ExA notes the discussions that have taken place during the Examination and the additional evidence that has been submitted in relation to aquatic habitats and species, which has led to general agreement amongst the parties in this regard. The ExA also agrees that there would not be significant residual harm to Aquatic habitats and species as a result of the Proposed Development.

Underpasses and other mitigation measures

- 7.4.76. NE identified that European protected species may be affected by the proposed project, including bats (various species), GCNs and Otters. Nationally protected species may also be affected by the proposed project, including Badgers. [RR-076, Paragraphs 2.4 and 2.5].
- 7.4.77. The Cambridgeshire Councils raised concerns with the robustness of some of the evidence used to inform the effects on certain species including bats and terrestrial invertebrates. The effects on certain habitats, including protected roadside verges, woodland, hedgerows and arable field margins were also raised [REP1-048, Paragraph 7.1.5].
- 7.4.78. BBC raised some concerns regarding the design of the entrance to the proposed bat tunnel beneath the Proposed Development and in terms of monitoring of the effectiveness of this and other mitigation measures. BBC noted that planting measures to limit collisions between wildlife, particularly Barn Owls, and traffic on the new road would only become effective once the species matured; early planting would therefore be beneficial [RR-008a, Section 9]. BBC also noted that Badgers, Otters and bats were to be found within the area and measures to protect wildlife during construction and to maintain connectivity during the operation of the Proposed Development would be needed [REP1-040, Q1.3.5.1].
- 7.4.79. The ExA raised the adequacy of the proposed Biodiversity mitigation measures, including in terms of the importance of certain types of habitats, whether there would be a net loss or gain of such habitats, whether mitigation measures such as underpasses and culverts were sufficient to prevent habitat fragmentation, and would proposed habitats be of sufficient size and located appropriately to connect to existing functional habitats [PD-008, Q1.3.5.1] [PD-009, Q2.3.5.1].
- 7.4.80. NE noted that the key species to which this related were bats, Otters, GCNs and Badgers. The ongoing surveys in relation to bats, including the Eversden and Wimpole Woods SAC Barbastelle bats, would inform updated mitigation measures once completed. NE also confirmed that it was satisfied in principle with the proposed mitigation measures for farmland birds and Otters contained in the BMP within the First Iteration

EMP [REP10-018, Annex D] and that the approach to GCNs and Badgers was not expected to cause any difficulties [REP4-070, Q2.3.5.1].

- 7.4.81. At Issue Specific Hearing (ISH) 4 a discussion about the crossing points for the Proposed Development took place, including whether there was a conflict between the use of underpasses by bats and other users, such as pedestrians; and, whether the underpasses were located on bat flight paths [EV-055, 3d]. The Applicant responded that there was evidence to show that bats used multi-functional underpasses, and that crossing points had been designed with regard to known flight paths; planting and fencing measures would help guide bats to these features [EV-060].
- 7.4.82. The Cambridgeshire Councils and BBC spoke to this matter, including the effects of lighting the underpasses for pedestrians and other Non-Motorised Users (NMUs), and how bats were intended to be guided towards the underpasses by landscape features, and whether there would be monitoring of the effectiveness of these measures; the detail of these matters would be addressed through the EMP [EV-060]. A post Hearing Action was for the Applicant to involve the LAs and NE in the ongoing design of the underpasses and how they fitted within the landscape [EV-091, 7].
- 7.4.83. In response to their comments at ISH4 regarding evidence that bats would use multi-purpose underpasses, the ExA asked the Applicant for details of such evidence. The Applicant noted that multi-purpose underpasses should be carefully designed, including in terms of minimal lighting, and provided there were few humans using the underpasses at night they would be used by bats. A number of studies were referenced by the Applicant to support this and their use by other animal species [REP8-014, Q3.3.5.1c + d]. The Cambridgeshire Councils also provided document references in this regard [REP8-035, Q3.3.5.1].
- 7.4.84. The ExA also asked the Applicant to identify the landscape features that would guide bats and other animals to the identified crossing points of the Proposed Development [PD-014, Q3.3.5.1]. The Applicant's response referred to fencing and planting to be included in the Environmental Masterplan [REP9-037] and referenced the River Great Ouse, the proposed bat tunnel by Sir Johns Wood, the ECML railway bridge, the Hen Brook underpass and the West Brook (Pillar Plantation) underpass [REP8-014, Q3.3.5.1a + b]. BBC identified a further crossing point that may be of some biodiversity value to mammals, the Alington Top Farm Accommodation Bridge [REP8-025, 4].
- 7.4.85. NE commented that detailed mitigation measures, including construction mitigation and a sympathetic lighting strategy, would be agreed at the detailed design stage, through relevant plans including the BMP [REP8-049, Q3.3.5.1]. NE identified minor adverse impacts on badgers and was generally satisfied with the mitigation and monitoring arrangements in the BMP, contained within the First Iteration EMP [REP10-018]. The SoCG between the Applicant and NE also shows agreement with regard to Biodiversity mitigation measures, including with regard to bats [REP10-023, Pages 31 to 38].

- 7.4.86. The SoCG between the Applicant and the EA states that with regard to Biodiversity mitigation measures all outstanding matters have been addressed and the position is agreed [REP10-021, Pages 21 to 25].
- 7.4.87. The SoCG between the Applicant and BBC states that there is agreement with regard to Biodiversity surveys and the design of the proposed bat tunnel, but that disagreement regarding some of the construction and operational effects and mitigation measures for Biodiversity remain outstanding, primarily in relation to early planting mitigation measures [REP10-025, Pages 86 to 90].
- 7.4.88. CBC were satisfied with the proposed mitigation measures in Central Bedfordshire [REP1-055, Q1.3.5.1]. At the close of the examination the position of the parties was agreement with regard to Biodiversity surveys, the construction and operational effects and mitigation measures [REP10-024, Pages 91 to 94].
- 7.4.89. Some concerns raised by the Cambridgeshire Councils have been resolved, including Protected Road Verge mitigation [REP10-060, Page 15]. However, at the close of the Examination the position of the parties remained as disagreement with regard to mitigation measures for Biodiversity. These included mitigation measures for scarce arable flora; the effects on bats and light sensitive invertebrates; and Elm tree specialist invertebrates. The Cambridgeshire Councils also noted that consideration of the effects of other disciplines would also be needed [REP10-026, Pages 127 to 138] [REP10-062, Pages 127 to 138].

ExA's reasoning on Underpasses and other mitigation measures

- 7.4.90. With regard to early roadside planting to limit collisions between wildlife and traffic raised by BBC, the ExA recognises that this is a complex issue. Whilst the Applicant has included reference to early planting in relation to bats, a similar approach is not used for birds, including Barn Owls. The ExA expects that the Applicant's approach to early roadside planting intended to benefit bats would also benefit other species, such as birds. This mitigation should be undertaken as soon as practicable relative to construction works and considered further at the detailed design stage.
- 7.4.91. The ExA also notes the monitoring arrangements for species contained in the First Iteration EMP, including the Outline Bat Monitoring Plan. The ExA is satisfied that sufficient monitoring arrangements are suitably secured.
- 7.4.92. The Applicant has considered the lighting of the Proposed Development in relation to bats and some bird species during the construction and operational phases and has adopted measures to limit adverse effects. It is not clear to the ExA that the effects on terrestrial invertebrates of artificial lighting have been directly considered by the Applicant. However, the ExA notes the Applicant's comments in relation to existing and proposed lighting levels and the measures proposed to mitigate light impacts for other species. The ExA considers that artificial lighting would adversely affect terrestrial invertebrates although is content that the detail currently secured in the First Iteration EMP [REP10-018], is

adequate for this stage and is also content with the matters that are left for the detailed design stage.

7.5. CONCLUSIONS

- 7.5.1. The ExA is satisfied that the Environment Act 2021 does not raise any significant issues in relation to the Proposed Development at the present time.
- 7.5.2. The ExA considers the updated surveys submitted into Examination have been helpful in understanding the biodiversity of the area. The ExA notes the Applicant's views that on the basis of the updated surveys the assessment and conclusions in the ES remain unchanged. The ExA is satisfied that the surveys that underpin the ES assessment are robust. The ExA also takes into account the Applicant's secured commitments for updated surveys post-consent.
- 7.5.3. The effects of the Proposed Development on internationally designated sites, including the Eversden and Wimpole Woods SAC, are addressed in Chapter 20 of this Recommendation Report. The ExA notes the HRA conclusion of no likely significant effects on internationally designated sites and the neutral effect this would have in terms of Biodiversity.
- 7.5.4. The ExA also accepts the effects of the Proposed Development on nationally designated sites would be negligible and there would be only minor effects on protected species. The ExA considers that residual adverse effects on some locally designated sites as a result of the Proposed Development cannot be excluded. However, the overall effect of the Proposed Development on Designated Sites is not considered to be significantly harmful.
- 7.5.5. The ExA recognises that there is no requirement for an assessment of BNG to be made for an NSIP at the present time. Nevertheless, such assessments have been undertaken for a number of recent road NSIPs, and has been undertaken for the Proposed Development. D2M has also been used for other road NSIPs and the ExA notes the preference amongst parties for the D2M. From the evidence, the ExA considers that the D2M provides a more robust assessment than the HEM. The ExA is also satisfied that the Applicant's survey data would be suitable to underpin the D2M assessment, and that the Applicant's resulting BNG score is reliable. The Applicant's comment that the D2M results supersede the initial HEM results for the Proposed Development is also significant to the ExA.
- 7.5.6. Consequently, the ExA finds that the results of D2M are manifestly relevant to the ES conclusions on Biodiversity, in particular the loss of High and Medium distinctiveness habitats and what this means for overall Biodiversity. As such, the ExA concludes that there is no certainty from the D2M that there would not be an uncompensated loss of priority habitats which would significantly and adversely affect Biodiversity.
- 7.5.7. Therefore, as suggested by NE and the Cambridgeshire Councils, the ExA proposes a Requirement be included in the rDCO, to ensure that an

updated BNG assessment is undertaken. Additionally, should this BNG assessment show an uncompensated loss of priority habitats, including hedgerows, then the ExA also proposes, in line with the suggested requirement from the Cambridgeshire Councils, that the Applicant should be required to deliver a Biodiversity Offsetting Scheme for priority habitats, to avoid conflict with Paragraph 5.25 of the NPSNN. This would be a new R24 in the dDCO.

- 7.5.8. The ExA is satisfied opportunities for promoting biodiversity have been identified through the Proposed Development. The ExA notes that with appropriate mitigation there would be positive effects on certain habitats and species, whilst there would be adverse effects on other types of habitat and species. However, taking all the matters reported above into account, the ExA ascribes limited weight against making the Order to Biodiversity.

8. HISTORIC ENVIRONMENT

8.1. BACKGROUND AND POLICY CONTEXT

- 8.1.1. The Historic Environment was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. This concerned the effects of the Proposed Development on Designated Heritage Assets (DHAs), including Brook Cottages; on non-designated heritage assets; on archaeological remains; and, the adequacy of mitigation.
- 8.1.2. In addition, the consideration of another of the ExA's principal issues from the Rule 6 letter, the Need for the Development and Consideration of Alternatives, is directly relevant to the consideration of the Historic Environment, in particular the alternative route and junction options and the process for their selection.

National Policy Statement

- 8.1.3. The consideration of the Historic Environment in the National Policy Statement for National Networks (NPSNN), requires the Applicant to describe the significance of heritage assets and how their significance would be affected by the Proposed Development, including their setting. The level of detail should be proportionate to their importance and should be assessed using appropriate expertise (NPSNN Paragraph 5.127).
- 8.1.4. In reaching a decision the Secretary of State (SoS) should be satisfied that:
- 1) the particular significance of any heritage asset that may be affected by the Proposed Development has been identified and assessed, taking account of the available evidence and any necessary expertise (NPSNN Paragraph 5.128);
 - 2) the nature of the significance and the value it holds for current and future generations has also been considered (NPSNN Paragraph 5.129);
 - 3) the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets has been taken into account, as well as the new development making a positive contribution to the character and local distinctiveness of the historic environment (NPSNN Paragraph 5.130);
 - 4) "*great weight*" is given to the conservation of heritage assets, commensurate with their significance, and harm or loss affecting any designated heritage asset has a "*clear and convincing justification*"; as such, substantial harm to or loss of a Grade II Listed Building or a Grade II Registered Park or Garden should be "*exceptional*" (NPSNN Paragraph 5.131);
 - 5) any harmful impact on the significance of a designated heritage asset
 - 6) is weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset, the greater the justification provided for any loss (NPSNN Paragraph 5.132);

- 7) where there is substantial harm or total loss of a DHA, this is demonstrably necessary in order to deliver substantial public benefits that would outweigh that loss or harm (NPSNN Paragraph 5.133); and
- 8) where there is less than substantial harm to the significance of a DHA, this is weighed against the public benefits of the Proposed Development (NPSNN Paragraph 5.134).

Other legislation and policies

- 8.1.5. Other legislation, policies and guidance relevant to the Historic Environment includes:
 - 1) the Planning (Listed Building and Conservation Areas) Act 1990; and
 - 2) the Infrastructure Planning (Decisions) Regulation 2010.
- 8.1.6. Other legislation, policies and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3], [APP-075, Section 6.2] and in Chapter 3 of this Recommendation Report.
- 8.1.7. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration for Nationally Significant Infrastructure Project (NSIP) development proposals in respect of the Historic Environment, in particular Chapter 16 – Conserving and enhancing the historic environment.

8.2. THE APPLICATION

Environmental Statement

- 8.2.1. The Applicant's assessment of the Historic Environment is set out in the ES in Chapter 6 - Cultural Heritage [APP-075], Known Heritage Assets [APP-163] and [APP-164] to [APP-177], Heritage Appraisal of the Grade II listed building Brook Cottages [APP-178], and Figures [APP-099] to [APP-101]. Chapter 3 of the ES – Assessment of Alternatives [APP-072] and Figure 3.1 – Route Option Alternatives [APP-093] is also relevant.
- 8.2.2. Other application documents that are relevant include the Consultation Report [APP-033] and its Appendix B Options Consultation and PRA booklet [APP-035], Historic Sites and Features [APP-237], Archaeological Mitigation Strategy [APP-238], the Case for the Scheme [APP-240], and Black Cat Junction Design Options [APP-247].

Scope and Methodology

- 8.2.3. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. The Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) LA 106: Cultural Heritage and the good practice guidance from Historic England (HistE) and the Chartered Institute for Archaeologists (CIfA).
- 8.2.4. The Applicant established the baseline environment with reference to existing data sources, including the Historic Environment Records (HER) of Bedford Borough, Cambridgeshire, and Central Bedfordshire, the

National Heritage List for England, the Cambridgeshire, Bedfordshire and Huntingdonshire archives and the Portable Antiquities Scheme database. Fieldwork surveys were also used, including geophysical surveys and archaeological trenching and an assessment of DHAs. Organisations from which information and views concerning the Proposed Development were obtained included HistE, and the host Local Authorities (LAs) [APP-075, Paragraph 6.3.17 to 6.3.35].

- 8.2.5. The Assessment focused on the effects of the Proposed Development on three broad areas - Monuments, Groups of Buildings and Sites. The value of heritage assets, buildings, monuments, areas, sites, places or landscapes reflects their significance as historic assets and therefore their sensitivity to change [APP-075, Section 6.3.11].
- 8.2.6. Certain types of heritage asset have a level of significance that justifies official designation, such as scheduled monuments and listed buildings. However, the absence of designation does not necessarily mean heritage assets are of lower value or significance. Professional judgement has been used to identify the value and significance of assets guided by legislation, national planning policy, standards, and official designations. The magnitude of impacts has also been assessed, whilst the significance of effects has relied on reasoned argument, the professional judgement of competent experts, and consultation with stakeholders [APP-075, Paragraph 6.3.36 to 6.3.50].
- 8.2.7. In all cases, the determination of the level of harm to the significance of a DHA arising from construction or operation of the Proposed Development has been one led by professional judgement [APP-075, Paragraph 6.3.51 to 6.3.56].

Applicant's assessment of effects and mitigation proposed

- 8.2.8. The Applicant's assessment [APP-085, Table 16-1, Chapter 6] is that the construction of the Proposed Development would be likely to result in moderate adverse (permanent) effects on a number of designated and non-designated heritage assets and, in addition, would be likely to result in large adverse (permanent) effects on the Grade II listed Brook Cottages. No significant effects are identified for the operational stage.
- 8.2.9. The Applicant's proposed embedded mitigation that is common across the Proposed Development is summarised in the ES [APP-071, Table 2-1]. Embedded mitigation specific to the Historic Environment has been secured through Works Plans [APP-009] [APP-010], Schedule of Mitigation [APP-235], General Arrangement Plans [APP-011], the Archaeological Mitigation Strategy (AMS) [REP10-036a], Environmental Masterplan [REP9-037], the First Iteration Environmental Management Plan (EMP) [REP10-018], and draft Development Consent Order (dDCO) [AS-026], and includes:

- 1) the selection and position of construction compounds and construction areas (e.g. borrow pits) and their design/layout have taken account of known and potential archaeology;
- 2) archaeological sites and features of acknowledged value identified within construction compounds and construction areas would be fenced off, with notices prohibiting works in those areas attached to the fencing;
- 3) the total area of land within the Order limits has been limited to that required to construct, operate and maintain the Proposed Development; and
- 4) confining road lighting introduced as part of the Proposed Development to new and improved sections of road where road safety is a priority.

8.2.10. Essential mitigation specific to the Historic Environment has been secured through the AMS [REP10-036a], the First Iteration EMP [REP10-018], and the dDCO [AS-026], and includes:

- 1) the Principal Contractor will develop and implement an Archaeological Management Plan (AMP) based upon the measures and approaches detailed within the outline AMP contained in the First Iteration EMP;
- 2) programme of archaeological excavation, sampling, geoarchaeological assessment and recording;
- 3) methodology to deal with unexpected archaeological remains;
- 4) built heritage survey and recording of the Grade II listed Brook Cottages prior to demolition;
- 5) relocating the structural elements of Brook Cottages that are capable of being reconstructed, subject to a structural survey concluding that this is feasible, and agreement being reached with a willing receptor museum; and
- 6) three Grade II listed milestones and mileposts and one non-designated milestone would be impacted by the Proposed Development. These assets would be removed, stored and reinstated as close as possible to their original location in accordance with a Method Statement prepared by the Archaeological Contractor and agreed with the relevant LAs for the removal, safekeeping and reinstatement of historic milestones.

8.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 8.3.1. The Local Impact Report (LIR) of Bedford Borough Council (BBC) addresses the Historic Environment at D (Archaeology) and E (Conservation and Heritage) [REP2-002, D and E].
- 8.3.2. The LIR states the assessment on setting impacts on a number of scheduled monuments lacks a holistic approach taking into account visual impacts as well as increased noise or vibrations. However, the Council is satisfied that in no case will the harm be substantial.
- 8.3.3. The LIR states that the Council's Archaeological Team was consulted and is satisfied with the archaeological baseline but notes there is potential

for unknown remains to exist in the area. BBC is working with the Applicant to prepare an AMS informed by its Archaeological Design Brief to inform a programme of investigation of sites in accordance with Site Specific Written Schemes of Investigation (SSWSI) for each site.

- 8.3.4. The LIR states that until a detailed building survey or associated method statement is provided, there is no clear and convincing justification set out within the application that total loss or substantial harm is necessary to deliver the public benefits. The survey information is required before the SoS can be confident that relevant alternatives avoiding substantial harm have been considered by the applicant. Related to that, BBC expressed concern regarding the lack of information about Brook Cottages' potential relocation to the Museum of East Anglian Life, which according to BBC appeared to be the only alternative to total loss that was considered. BBC believes that should relocation be feasible, other locations would need to be explored, including its relocation within close proximity to its present position and retaining its residential use. This may, subject to details, be more appropriate in terms of preserving more elements of its significance. BBC considered that the way forward with Brook Cottages should be resolved as part of the Examination process rather than post-consent as proposed, where it would be secured through Requirement (R)16 in the dDCO that accompanied the application [APP-025, Schedule 2].

Central Bedfordshire Council

- 8.3.5. The Central Bedfordshire Council (CBC) LIR includes reference to three planning approvals connected with archaeological excavations in the area and lists development plan policies relevant to the Historic Environment [REP2-004, Section 4 and Paragraph 5.3].
- 8.3.6. The LIR includes a section on Archaeology and advises that there are sites within or immediately adjacent to the Order limits that are considered to be heritage assets with archaeological interest – but are not designated heritage assets. The Proposed Development would have an effect on sub-surface archaeological remains in Central Bedfordshire which cover the late Bronze Age to early Saxon periods.

Cambridgeshire Councils

- 8.3.7. The Joint LIR of Cambridgeshire County Council (CCC), Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) addresses the Historic Environment including relevant development plan policies [REP2-003, Table 3, Sections 6.2 and 8.2, and Appendix A].
- 8.3.8. The Cambridgeshire Councils Joint LIR states that the benefits of the Proposed Development include a Public Archaeology and Community Engagement strategy proposed in Appendix E of the AMS, local community involvement in the conservation of the listed mile markers and in-situ preservation of six areas of archaeological remains.

- 8.3.9. The Joint LIR states that adverse effects of the Proposed Development include an unrecorded loss of archaeological information for some archaeological sites owing to the delineation of restricted excavation areas and field excavation strategies, the risk of total loss of non-designated heritage assets at the deserted Medieval village of Wintringham, due to the location of a Multiple Purpose Construction Area on a geotextile membrane over vulnerable remains, and difficulties securing experienced and trainee field archaeologists mean that there are insufficient numbers available.
- 8.3.10. The Joint LIR also identifies missed opportunities, which include not identifying a specific field-based archaeology compound or a community space where volunteer community groups could safely engage with specified archaeological tasks; a lack of integrated engagement with the LA archaeologists, in the development of the archaeological mitigation design, or with the CCC Museums Liaison Officer to discuss integrated archaeological interpretation and displays of the scheme's evidence within local museums and galleries.

8.4. THE EXAMINATION

- 8.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) The assessment of substantial harm to a DHA caused by the loss of Brook Cottages;
 - 2) The Applicant's justification for substantial harm to a DHA, Brook Cottages; and
 - 3) Other Heritage Assets.

The assessment of substantial harm to a DHA caused by the loss of Brook Cottages

- 8.4.2. Brook Cottages is a Grade II listed building comprising two dwellings located to the north of the existing Black Cat roundabout on the western side of the A1. The removal of Brook Cottages would be required in order to construct the proposed grade-separated Black Cat junction [AS-026, Schedule 1, Work No 21].
- 8.4.3. From the statutory list entry in the Applicant's Heritage Appraisal [APP-178, Paragraph 3.2.4] Brook Cottages dates from the 18th Century and is a single storey plus attics, timber-framed building, with a half-hipped thatched roof and split into two dwellings. The building has had various additions and alterations made to it during the 20th century and was listed in 1983.
- 8.4.4. A Technical Note submitted by the Applicant contained historical maps and some photographs, indicating that the building was used as farm labourers' dwellings, connected with Bridge Farm to the northwest. Since its construction the building has been located close to the Great North Road, which has become, with some minor alterations to route, the A1 [AS-009].

- 8.4.5. During its first Unaccompanied Site Inspection (USI1), the ExA observed the proximity of Brook Cottages to the A1 and that to the north of the building is South Brook, after which the cottages are named, with agricultural land beyond [EV-001].
- 8.4.6. Brook Cottages is a DHA, and the Applicant has assessed that its removal would cause substantial harm and a total loss of significance [APP-075, Paragraph 6.9.190]. The Applicant considered whether the dismantling and reconstruction of Brook Cottages at a museum, or elsewhere as a residential use, if feasible, would reduce the level of harm, and has concluded that the level of harm would remain substantial [APP-240, Appendix E, Paragraph A5.1.5].
- 8.4.7. BBC states that the demolition of Brook Cottages would cause substantial harm. However, it considered that dismantling and reconstructing Brook Cottages may potentially reduce the level of harm to its significance, particularly given the contribution currently made by setting and the method of the building's construction [RR-008a, Paragraphs 4.7 and 4.8].
- 8.4.8. HistE also considers that a total loss of significance for Brook Cottages could potentially be avoided if it were to be dismantled and reconstructed elsewhere [REP1-077, Paragraph 3.34].
- 8.4.9. The ExA notes that an assessment of the significance of Brook Cottages was undertaken by the Applicant and was informed by desk-based research in 2017 and a site visit in 2018 [APP-178]. However, no intrusive survey of the building was undertaken.
- 8.4.10. The Applicant, BBC and HistE agreed that an intrusive survey of the building was necessary to inform the potential relocation of Brook Cottages [APP-240, Appendix E, Paragraph A5.4.1]. The Applicant also sets out the attempts made to undertake structural surveys of the building in 2020 and early 2021, but without success due to difficulties in gaining access [APP-240, Appendix E, Paragraph A5.4.4].
- 8.4.11. The level of harm that would result from the loss of Brook Cottages was raised by the ExA throughout the Examination given the differing positions of the Applicant and HistE / BBC in this regard. The Applicant stated that undertaking the survey of the building was essential to understanding whether it could be dismantled without a total loss of significance. The feasibility of a future residential use, or negotiations with the Museum of East Anglian Life as a potential future exhibit, had been unable to progress without the survey [REP1-022, Q1.12.2.1]. Consequently, the ExA sought to better understand the reasons for the difficulties in securing access to undertake the survey, the circumstances of the occupier of Brook Cottages, and, what the implications would be if access was not secured including in terms of the assessment of harm [PD-009, Q2.12.2.2 and Q2.12.2.3].
- 8.4.12. The Applicant confirmed that it would not be possible to undertake intrusive surveys without having vacant possession of the building [REP4-037 Q2.12.2.2d]. R16 in the dDCO [APP-025, Schedule 2]

concerned surveys, dismantling and the potential relocation and reconstruction of Brook Cottages. The Applicant confirmed that discussions about the wording of R16 were continuing with BBC and HistE, in order to secure these matters should access not be granted, enabling the potential relocation of Brook Cottages to be addressed, which may reduce the level of harm to its significance [REP4-037 Q2.12.2.2g]

- 8.4.13. The Applicant clarified the circumstances of the current occupier of Brook Cottages, and that concerns about the effects of an intrusive survey of their home were preventing access [EV-061] [EV-066] [REP4-037 Q2.12.2.3]. These matters were also addressed at Compulsory Acquisition Hearing (CAH) 2 [EV-086] [EV-089] and are considered more fully in Chapter 22 of this report.
- 8.4.14. At the behest of the ExA, the Applicant submitted a Joint Position Statement with BBC and HistE concerning Brook Cottages, which showed agreement between the parties over the survey methodology and the work practicalities [REP8-017, Table 1-1, 1 and 2] and the wording of R16 of the dDCO [REP8-017, Table 1-1, 5 and Annex A].
- 8.4.15. However, there remained disagreement between the parties, over the level of harm that would result from the dismantling and potential relocation of Brook Cottages, which stemmed from the lack of evidence to support such an approach [REP8-017, Table 1-1. 4]. There was also disagreement regarding whether a museum was the only suitable location for the building once dismantled, or whether it could continue as a residential building potentially close to the existing site and historical context [REP8-017, Table 1-1. 3].
- 8.4.16. At Deadline (D)8 the Applicant submitted the Brook Cottages Heritage Strategy [REP8-021], a certified document within the dDCO, to be seen in conjunction with R16 of the dDCO [REP8-017, Table 1-1, 5 and Annex A], and which set out an approach to the first stage of the work to recording, dismantling and potentially relocating the building. A limited survey was undertaken by the Applicant that established that Anthrax was not present in the building, although the 20th century rear extensions contained asbestos [REP8-014, Q3.12.2.2a]; these matters would be relevant to the development of a structural survey.

ExA's reasoning

- 8.4.17. The ExA considers the significance of Brook Cottages to be the result of its historic position next to South Brook, in a largely agricultural landscape, together with its associated function as dwellings for agricultural workers; and, its vernacular design and materials.
- 8.4.18. Even if a structural survey demonstrated that it would be feasible and valuable to dismantle and relocate Brook Cottages, and a suitable location were to be found, some aspects of the building's significance would almost inevitably be lost, including those relating to its location and associated function.

- 8.4.19. Without the results of a structural survey there is no substantive evidence to show that substantial harm and total loss of significance to a DHA would not be caused by the removal of Brook Cottages.
- 8.4.20. HistE and BBC both identified that dismantling and relocating Brook Cottages was a potentially important mitigation measure. Whilst recognising the difficulty and sensitivity of this matter, the ExA is not fully satisfied that the Applicant and BBC have addressed the issue of vacant possession of the building with sufficient urgency from the outset. The vacant possession of Brook Cottages relates to its current occupier and is discussed further in Chapters 17 and 22 of this Recommendation Report.
- 8.4.21. Nevertheless, the ExA is satisfied that with the revisions to R16 in the dDCO proposed by the Applicant, HistE and BBC [REP8-017, Annex A] the appropriate recording, dismantling and potential relocation of Brook Cottages would be secured.
- 8.4.22. However, on the basis of the aforementioned factors the ExA concludes that the Proposed Development would cause substantial harm and a total loss of significance to a DHA.

The Applicant's justification for substantial harm to a DHA, Brook Cottages

- 8.4.23. The ExA's examination centred around testing whether the Applicant had demonstrated that "*great weight*" had been given to the conservation of a DHA; had provided a "*clear and convincing justification*" for the substantial harm and loss of significance that would be caused to Brook Cottages; and had demonstrated that this harm was "*exceptional*" as per Paragraph 5.131 of the NPSNN.
- 8.4.24. The Applicant set out the consideration given to different options for routes and for the proposed Black Cat junction, and their appraisal and evaluation, before the preferred option was selected in its application [APP-072, Section 3.2] [APP-247].
- 8.4.25. The ExA raised the assessment of alternatives for the proposed Black Cat junction; the implications of the closure of the Black Cat Quarry on the assessment of alternatives; and, the process and reasoning for selecting the option that requires demolition of Brook Cottages [EV-011] [EV-014].
- 8.4.26. In response, the Applicant summarised their approach to option development and selection, which was through an iterative and staged process. The early-stage options were assessed at a high-level with more detail emerging at subsequent stages [EV-011] [EV-014].
- 8.4.27. The ExA subsequently asked the Applicant to provide a summary narrative of the criteria considered in the assessment of alternatives for the Black Cat junction, and the alignment of the A1 in the immediate and wider area [EV-016, 4], which was provided at D1 [REP1-034, Appendix B].

- 8.4.28. Repeated references were made by the Applicant in the evidence and during the Examination to the preferred option meeting the objectives for the Proposed Development, including [APP-240, Appendix E] [APP-247, Section 4] [REP4-032, Section 5] [REP6-040, Section 2.7]. The Applicant stated that the objectives were developed in light of identified problems with the existing A428 route, and wider environmental and customer satisfaction aspirations and included maintaining existing levels of biodiversity.
- 8.4.29. The ExA questioned why there was no reference to the Historic Environment in the objectives or the design principles for the Proposed Development. The Applicant stated that whilst cultural heritage was not a specific objective of the Proposed Development, minimising impacts on cultural heritage was recognised as a benefit of the improved environment scheme objective at non-statutory consultation [EV-045] [EV-050].
- 8.4.30. BBC, the Local Highway Authority (LHA) for this area, confirmed its support for the Proposed Development on strategic transport grounds only, based on the information that had been presented by the Applicant. BBC also confirmed that it had not considered alternatives to those presented, or the effects on Brook Cottages in reaching their support for Proposed Development [EV-011] [EV-014] [EV-045] [EV-050]. The ExA asked BBC to consider this matter further, in broad-brush terms, during the examination [EV-043, 5] and BBC confirmed it had been unable to identify a reasonable alternative to the Proposed Development that would retain Brook Cottages, based on the information submitted by the Applicant and local knowledge [EV-060] [EV-065].
- 8.4.31. HistE's Written Representation makes reference to Brooke Cottages and stated that HistE was unable to comment on highways issues or the conclusion that there was no other suitable design option for the Black Cat roundabout which would have enabled the retention of Brook Cottages at its current location. However, notwithstanding this position, HistE goes on to state that it accepts the requirement to demolish Brook Cottages but does not explain how it reached this conclusion [REP1-077, Paragraph 3.33]. HistE later confirmed it was unable to provide comments on highways matters because it did not have the technical expertise. Instead HistE had addressed the significance of Brook Cottages and potential mitigation of harm [EV-045] [EV-050] [REP4-069, Q2.12.1.1].
- 8.4.32. The ExA sought the views of the parties with regard to the relevant policies and legislation for the assessment of the effects on Brook Cottages. The Applicant set out the very close alignment between Paragraph 5.133 of the NPSNN and Paragraph 201 of the NPPF. The Applicant stated that these matters were considered at Paragraphs 5.5.33 to 5.5.65 of the Case for the Scheme [APP-240] [REP4-037, Q2.12.2.1].
- 8.4.33. The Applicant clarified that for NSIPs the relevant legislation is the Infrastructure Planning (Decisions) Regulations 2010. Regulation 3(1)

sets out that where relevant, a decision maker must have regard to the desirability of preserving a listed building or its setting, or any features of special architectural significance it possesses; this is similar to the general duty on local planning authorities with regard to listed buildings contained at s66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990. The Applicant also confirmed that these matters were considered in the ES [APP-240] [REP4-037, Q2.12.2.1].

- 8.4.34. The ExA referred to the Applicant's summary narrative submitted at D1 and the statements about moving the proposed Black Cat Junction to the east [REP1-034, Appendix B Paragraphs 1.1.4 to 1.1.5 and 1.1.16 to 1.1.17]. The ExA asked for further details, such as costs and metrics to support the statements made, and an explanation for how these statements were considered as part of the option development and selection process [PD-009, Q2.12.2.4a to d]. The ExA sought further detail regarding the overall Black Cat junction option selection process and evidence to show that reasonable alternatives that did not require demolition of Brook Cottages were appropriately considered [EV-045] [EV-050] [EV-043, 3 and 4].
- 8.4.35. In terms of the implications for flood risk of moving the junction east, the Environment Agency (EA) confirmed that this option had not been put to them and so had not been considered. However, the EA noted that such a move would increase flood risk to the junction and so would not be sequentially preferred. Compensatory floodplain storage would also be required, similar to that needed for the proposed viaduct that would carry the proposed road across the floodplain, in those circumstances [EV-045] [EV-050]. Matters relating to Flood Risk are addressed in Chapter 14 of this Recommendation Report.
- 8.4.36. In response the Applicant referred to the Overview of the Alternatives at Black Cat Junction [REP4-032], which was submitted in response to an action from Issue Specific Hearing (ISH)³ [EV-043, 3] and subsequently updated at D6 [REP6-040], and to Appendices G-K [REP4-033]. Appendix G is the Technical Appraisal Report (TecAR) dated November 2016; Appendix H is Annex to the TecAR dated May 2017; Appendix I is Stage 1 Environmental Assessment Report (EnvAR) dated December 2016; Appendix J is the Stage 2 EnvAR dated June 2017; and Appendix K is the Scheme Assessment Report (SAR) dated January 2018.
- 8.4.37. In addition, the Applicant referred to Chapter 3 Assessment of Alternatives [APP-072] and Chapter 6 Cultural Heritage [APP-075] of the ES, the Case for the Scheme [APP-240], the Black Cat Junction Design Options [APP-247], Appendix B Options Consultation and PRA (Preferred Route Announcement) of its Consultation Report [APP-035], and Appendix D Economic Assessment Report of its Combined Modelling and Appraisal Report [APP-254], in its application documents to support its position.
- 8.4.38. Chapter 4 of the Overview Report set out the progression of the Proposed Development through the Applicant's Project Control Framework (PCF) process. Stage 0 (in this case Stage 0 occurred between September 2014

– March 2016) is the Pre-project stage that determines the need for intervention, and should intervention be required, the geographical area for the project and its objectives. Stage 1 (March 2016 – December 2016) is for Option Identification and Stage 2 January 2017 – February 2019) is for Option Selection [REP4-032, Figure 4-1].

- 8.4.39. Following Stage 0 where the need for the Proposed Development was established, the Option Identification process at Stage 1 included:
- 50 options for the route were initially identified and assessed against specified high-level parameters [REP4-032 Paragraph 4.4.6];
 - 16 of these route options were taken for further assessment, where the effects on the local environment were considered at a high-level for the whole scheme [REP4-032, Paragraph 4.4.7];
 - 8 route options that were considered likely to be deliverable and feasible whilst addressing the identified problems and route objectives were then shortlisted for further technical and environmental assessment [REP4-032, Paragraph 4.4.8]; and
 - The 3 best performing route options were identified to progress to Stage 2 [REP4-032, Table 4-2].
- 8.4.40. At Stage 1 options were developed for the whole route and not individually for the Black Cat junction. The Historic Environment was considered as part of wider higher level environmental assessment of the options. The effects on Brook Cottages were not mentioned, because the assessment considered the effects on the route options rather than junctions [REP4-032, Paragraph 4.4.10].
- 8.4.41. The Option Selection process at Stage 2 identified options for public consultation and ultimately identified a preferred option [REP4-032, Section 4.5]. In addition to the route options, options for the Black Cat junction specifically were developed at this stage [REP4-032 Paragraph 4.1.1]. The works at this stage included:
- Developing 12 high level concept options for the Black Cat junction in 2 dimensions (2D) [REP4-032, Appendix A, Figures 4.1 to 4.12].
 - Red-Amber-Green (RAG) assessment of highways and environmental factors for these 12 options.
 - Merging the route and junction options together to provide three options for non-statutory consultation
- 8.4.42. The Applicant stated that 2 of the 12 options, 1d and 1e, would be likely to affect the setting of Brook Cottages but would be unlikely to require its demolition. These two options were discounted for safety reasons; both had a high number of road interfaces, leading to a high number of potential collision points, with complex junction layouts leading to the high potential for road user confusion, further increasing the risk of collisions [REP4-032, Table 4-4 and Paragraph 4.5.10]
- 8.4.43. All other options were assessed as having the potential to require the demolition of Brook Cottages, due to the requirement for a northbound merge slip road onto the A1 to accommodate the A428/A421 to A1 (northbound) movement. The 2-Dimensional (2D) concept designs were

developed to a level proportionate with a sifting exercise. It was only with further design development that it could be determined whether demolition would or would not be required [REP4-032, Paragraph 4.5.11].

- 8.4.44. The three options for the Black Cat junction that were selected for public consultation were merged Options 1a and 1c; Option 3b and Option 5 merged with elements of Option 6. These were renamed as Options A, B and C respectively and were considered by the Applicant to best meet the objectives of the Proposed Development, solve the traffic problems and offer reasonable environmental alternatives. The non-statutory public consultation considered these three junction options together with the three route options [REP4-032 Paragraphs 4.5.13 to 4.5.16].
- 8.4.45. The Black Cat junction options were presented as concept design layouts at non-statutory consultation where an environmental comparison of the options stated that Option A may affect the setting of the listed building to the north of the Black Cat roundabout whilst Options B and C may result in the removal of the Grade II listed building to the north of Black Cat roundabout [APP-035, Public Consultation Brochure, Page 32] [APP-072, Table 3-2]. Plans showing the three options were also produced for the non-statutory consultation [APP-035, Public Consultation Brochure, Pages 25 to 27].
- 8.4.46. BBC responded to the consultation in support of Option C, whilst HistE did not respond to the consultation; around 60% of the 2538 responses that expressed a preference identified Option C as the preferred junction option. Some respondents, including Toseland Parish Council (PC), raised concerns about the effects on the Historic Environment, including the potential loss of Brook Cottages [REP4-032, Paragraphs 4.5.19 to 4.5.21].
- 8.4.47. In addition to the popular support for Option C, the Applicant stated that the key driver for the preference for Option C was that it was a standard junction layout with fewer conflict points and was better from an operational safety point of view. In contrast, the Applicant considered that Option A was complex and to have safety disadvantages in comparison with Option C [REP6-036, Page 16].
- 8.4.48. Following this non-statutory consultation, the three options were further developed and in greater detail, including 3-dimensional (3D) alignment. This work resulted in the conclusion that all three options may require the demolition of Brook Cottages, in order to provide a new free flow continuous link from the A421 eastbound towards the A1 northbound and a new A1 northbound merge slip road, that would be compliant with national highway safety and design standards [REP4-032 Paragraphs 4.5.26 to 4.5.30]. The Applicant had particular regard to the findings of a Road Safety Audit (RSA) undertaken around this time, which amongst other things recommended maximising the weaving length on the A1 northbound on slip road, to provide the greatest possible distance before the merge onto the A1 carriageway [REP6-036, Page 11].

- 8.4.49. The Applicant's Stage 2 EnvAR assessed the potential environmental effects of the three options. The Historic Environment was given equal weighting to all other environmental criteria. The assessment concluded that all options were likely to have similar significant effects on the environment, with the key effects relating to impact on the floodplain, nature conservation, landscape and the Historic Environment. All three options were assessed to have similar potentially significant effects on the Historic Environment, including Brook Cottages and archaeological remains in the study area. However, the effects on the River Great Ouse floodplain, in terms of floodplain compensation and ecological mitigation were considered more significant than the effects on the Historic Environment, by the Applicant [REP4-032, Paragraph 4.5.25] [REP4-033, Appendix J].
- 8.4.50. The Applicant therefore sought to develop a variation of Option C, known as Option C+, with the specific aim of retaining Brook Cottages, whilst still delivering the objectives of the Proposed Development. However, whilst Option C+ would retain Brook Cottages in situ, it required what were considered by the Applicant to be unacceptable changes to the road geometry in the surrounding area, an increased potential for accidents, poor operational resilience and was initially considered to be significantly more expensive [REP4-032, Paragraph 4.5.30] and [APP-247 Sections 4.3 and 4.4].
- 8.4.51. The Applicant produced a SAR in January 2018 where it was noted that Brook Cottages was likely to be affected by all of the Black Cat junction options, potentially to the point of removal, depending on how the slip roads connected to the A1 [REP4-033, Appendix K, Paragraph 7.5].
- 8.4.52. An option comparison table was included in the SAR, which shows a comparison of the major factors to be considered when selecting the preferred route / junction option. The option comparison table stated that all the options would have the same effects in terms of Traffic Benefit and Road Safety and all were considered feasible and deliverable. However, notwithstanding this, only Options A and C were considered to fully address the objectives of the Proposed Development, whilst Options B and C+ only partially addressed them [REP4-033 Appendix K, Table 10.2].
- 8.4.53. The environmental impact of the options is not addressed in the option comparison table and are said to be addressed elsewhere in the Appraisal Summary Tables (AST), which were originally developed at Stage 0 of the PCF process. The updated ASTs should be included at Appendix B of SAR but are not provided [REP4-033, Appendix K, Section 9, Table 10.2, and Appendix B].
- 8.4.54. The Applicant had concluded that it was not possible to retain Brook Cottages under Options A, B or C and provide a new free-flowing link from the A421 eastbound towards the A1 northbound and a new A1 northbound merge slip road; whilst Option C+ would retain Brook Cottages it was considered unacceptable in terms of highways layout and more expensive to construct by the Applicant.

- 8.4.55. Consequently, a further option, known as Refined Option C, which was comparable to Option C that was considered at non-statutory consultation was developed. The Applicant stated that the RSA findings on maximising the weaving distance on the A1 northbound on slip road were a contributing factor for its design together with the merger of the A421 free flow link with the slip road from the Black Cat gyratory [REP6-036, Page 17].
- 8.4.56. Following completion of the PCF Stage 2 Assessment and governance process, a Preferred Route Decision (PRD) was made in February 2018 confirming Option C as the preferred option for the Black Cat Junction. The PRD is a recommendation to Ministers, who would later determine the Preferred Route Announcement (PRA) [REP6-040, Paragraph 2.1.6]. This Option was revised further and taken forward to the PRA in February 2019 [APP-247, Sections 4.5 and 4.6].
- 8.4.57. The preferred route was further refined and was subject to statutory consultation in June 2019 as part of PCF Stage 3. Of the 440 respondents only 18 opposed the design. The loss of Brook Cottages was again raised by Toseland PC. BBC re-affirmed its longstanding support for improvements in this area and for junction Option C [REP4-032 Paragraph 4.6.3].
- 8.4.58. At ISH4 the ExA raised a number of points regarding the evidence that the Applicant had relied upon in its option identification and selection process. These included:
- the lack of certainty regarding the effects of the Proposed Development on Brook Cottages at each stage up to the PRA in February 2019;
 - the evidence to support discounting Stage 2 junction options 1d and 1e that were likely to have retained Brook Cottages in situ;
 - the evidence to show how and why the three options for non-statutory consultation were selected;
 - the reasoning and evidence for the different information provided for the three options at non-statutory consultation [APP-035 Section 10 Public Consultation Brochure March 2017] [APP-072, Table 3-2];
 - how Option A was identified as an option that did not require the demolition of Brook Cottages [APP-035 Section 10 Public Consultation Brochure March 2017] [APP-072, Table 3-2], when Stage 2 options 1a and 1c both identified that demolition was likely [REP4-032, Table 4-4]; and
 - the evidence to support the development of Option C+ and why a variant of Option A was not considered as well.
- 8.4.59. The Applicant responded that the PCF was a widely-used, iterative process which started at a high level and became more detailed as it progressed and that it considered that there was sufficient information available to assess all relevant aspects of the options at each stage [EV-055, 5] [EV-060] [EV-061].
- 8.4.60. The ExA asked the Applicant to substantiate its statements regarding the points raised above and to address the inconsistencies in its evidence

including the likelihood to demolish Brook Cottages [APP-247] [REP4-032]; the contradictory information in the non-statutory consultation regarding the effects on Brook Cottages [APP-035]; and the inconsistencies between the option appraisal table in Appendix K and the reasons for rejecting Option C+ in terms of traffic benefits and road safety [REP4-032] [REP4-033, Appendix K Table 10.2]

- 8.4.61. The Applicant responded that the iterative process and the differing levels of detail available meant that the assessment of different options changed from stage to stage [EV-060] [EV-061]. The Applicant said that professional judgements were made across a range of criteria at each stage, including as set out in the RAG assessment table [REP4-032, Appendix C]. The Applicant also said that the option appraisal table was a summary of more detailed work and that where conclusions were shown as the same for different options, there would be some detailed differences [REP4-033, Appendix K, Table 10-2].
- 8.4.62. In response to actions from ISH4 [EV-091, 13 and 14], the Applicant submitted an Update on Overview of the Alternatives considered at the Black Cat Junction, including Table 2-1, listing the changes to the design chronologically and with reference to different PCF stages, and which showed that the Orange / C+ option missing from Table 10.2 of Appendix K [REP4-032] had been considered [REP6-040, Tables 2-1 to 2-3 and Paragraph 2.6.6]. The Applicant stated the Refined Option C design was considered to meet the objectives of the Proposed Development, to be safe and operationally resilient, and to minimise the overall environmental impact and satisfy the key traffic and design requirements. The standard grade separated junction design would also offer a more familiar layout for road users which would reduce the risk of accidents [REP6-040, Paragraph 2.7.4].
- 8.4.63. As set out above, one of the Applicant's reasons for discounting other Stage 2 options included non-standard design measures that were considered to be unsafe. The ExA asked the Applicant to provide a list of departures from standard (DfS) for the Proposed Development [EV-091, 15], which was submitted at D6, showing all such departures, some of which would have safety implications [REP6-045].
- 8.4.64. The ExA once again returned to the issue of alternatives and how the Applicant had assessed them at PCF Stage 2 to reach their preferred choice. The Applicant stated that the process was an iterative one with the proportionate development of options undertaken to allow the sifting out of options at each stage, a process that was followed for all major highway projects. Whilst the potential threat to Brook Cottages was recognised in the process, including in the RAG assessment and elsewhere, there remained the potential to develop the design at a future iteration to address the threat. Based on information available at the time there was no compelling evidence to discount options because of their impact upon the Historic Environment [REP8-014, Q3.12.2.3a].
- 8.4.65. The ExA asked why Option C was selected as preferred option at PRA rather than Option A, given the generally similar scores contained in the

SAR [REP4-033, Appendix K, Table 10.2]. The Applicant again noted that Table 10.2, the Options Appraisal Table summarised assessment work undertaken for the whole scheme, and so did not offer the granularity of differences between options, and that other factors were also considered. The Applicant stated that professional judgements were made against a range of criteria and based on the information available at that stage in the process, in selecting the options to be taken forward. The Applicant also stated that all three options were developed further after the PRA to assess the effects on Brook Cottages, amongst other things [EV-060] [EV-065].

- 8.4.66. The ExA sought further justification from the Applicant for discounting Option C+ combined with the Orange route, given its Benefit Cost Ratio (BCR) score against other options and its very similar performance in terms of safety and traffic benefits [PD-014, Q3.12.2.3e]. The Applicant explained that Option C+ had unacceptable safety and technical issues, was initially considered to be significantly more expensive than Option C and had poor operational resilience compared to Option C in a particular circumstance. The Applicant also explained that it considered the additional departure from standard for Option C+ to be so fundamentally unacceptable that it ruled it out as an option, regardless of any other departures. To address these issues would have resulted in the demolition of Brook Cottages [REP8-014, Q3.12.2.3e]. The Applicant also noted the popularity of Option C, at non-statutory consultation, including the support from BBC [REP8-014, Q3.12.2.3c+d].
- 8.4.67. In its closing position statement, the Applicant summarised its approach to selecting the Preferred Option through the iterative PCF process, where the information available at each sifting stage was considered sufficient to inform a decision at that stage and noting that it would not be proportionate or feasible to revisit a previous stage, where undisputed and fundamental reasons for rejecting an option have been identified [REP10-052, Section 3].
- 8.4.68. The Applicant also noted that none of the parties had argued that the process was defective and that none of the parties had provided an alternative option that would deliver comparable benefits. The Applicant stated that the Proposed Development is a design which is technically deliverable; meets the scope and objectives for delivery of substantial benefits; and can be safely built, operated and maintained. Safety factors were emphasised in rejecting alternatives with lesser impacts upon Brook Cottages [REP10-052, Section 3].
- 8.4.69. The Applicant referenced the substantial public benefits of the Proposed Development which included meeting current and expected future transport need by increasing capacity, with consequent benefits to journey times; improving road safety and reducing accidents, with consequent reductions in injuries and fatalities over its 60-year lifetime; supporting economic and housing growth in the host LAs and in nearby Cambridge and providing environmental improvements by reducing the scope for rat-running on local roads [APP-240, Section 4 and Paragraph 6.1.7].

8.4.70. Appendix D – Economic Assessment Report of the Applicant’s Combined Modelling and Appraisal Report sets out the monetised costs and benefits of the Proposed Development over its 60-year lifetime and included a positive BCR of 1.9 [APP-254, Section 4]. An updated Economic Sensitivity Test, in light of new data concerning carbon emissions was submitted by the Applicant during the Examination. This showed that the Proposed Development would still achieve monetised transport related net benefits and a positive BCR of 1.52 [REP9-033, Table 7-1 and Paragraph 7.1.3].

8.4.71. The Applicant re-affirmed its position that the loss of Brook Cottages would cause substantial harm thereby engaging the necessity test and that it had demonstrated how such harm was necessary to achieve substantial public benefits that outweigh that harm or loss, and that there were no reasonable alternatives which would deliver the same benefits, in the same timescale [REP10-052, Section 4]. BBC’s position was unchanged, and it confirmed that it had been unable to identify a reasonable alternative to the Proposed Development that would deliver the highways benefits whilst retaining Brook Cottages, based on the information submitted by the Applicant [EV-060] [EV-065].

ExA’s reasoning on the Applicant’s justification for substantial harm to a DHA, Brook Cottages

8.4.72. The ExA considers that the Proposed Development would cause substantial harm and a total loss of significance to a DHA, Brook Cottages.

8.4.73. The ExA does not consider that the Applicant has demonstrated that “*great weight*” was given to the conservation of this Grade II listed building through the PCF process for several reasons, as set out here:

- 1) the ExA notes that the objectives of the Proposed Development seek to maintain existing levels of Biodiversity and have a beneficial effect on air quality and noise in the surrounding area, but do not mention the Historic Environment.
- 2) at Stage 0 and Stage 1 of the PCF process, the design of the Black Cat Junction was not addressed in a way that would enable a meaningful assessment of its effects on Brook Cottages to be undertaken.
- 3) the sifting of the options involved assessing a wide range of matters over a large spatial area. For the Historic Environment the effect on multiple listed buildings, archaeological remains and other heritage assets were often considered together and there was insufficient information to establish with confidence what the effects of the different options on Brook Cottages would be.
- 4) during the sifting at Stage 2 the effects of the Proposed Development options on Brook Cottages were not certain because of the level of information available at the time. In some instances, the effects would change considerably. Whilst considered sufficient in highways engineering terms, the information available was not detailed enough for firm conclusions to be drawn about the effects on Brook Cottages.

- 8.4.74. It is not, therefore, clear to the ExA what weight the Historic Environment and the retention of Brook Cottages in situ, had in deriving and assessing the 12 Stage 2 Black Cat Junction options and selecting the three options for non-statutory consultation, which ultimately led to the preferred option.
- 8.4.75. The result of the PCF process is an option that requires the demolition of a Grade II listed building, something which the NPSNN states should be clearly and convincingly justified, as well as exceptional. In this context, the ExA does not accept the Applicant's position that it would not be proportionate or feasible to revisit a previous stage if undisputed and fundamental reasons for rejecting an option had already been identified.
- 8.4.76. Furthermore, given the limited levels of information available at earlier stages, the ExA is not convinced that such reasons have arisen in this case. The different conclusions for options from one sift stage to another reinforce the ExA's view on this matter. For example, the three Stage 2 options for the Black Cat Junction, which were developed with 3D modelling showed a very significant change in terms of the effects on Brook Cottages once more detailed assessment work had been undertaken. At non-statutory consultation the Applicant was clear that Option A would not require the demolition of Brook Cottages, although its setting may be affected, whilst Options B and C may require its removal. However, when more detailed work was undertaken after non-statutory consultation, the Applicant concluded that all three options would be likely to require the demolition of Brook Cottages.
- 8.4.77. The Applicant produced the SAR, which included a comparison between the four stage 2 junction options. The ExA recognises that the SAR option comparison table is intended to be a high-level summary. However, a summary table must accurately reflect the findings of the more detailed work upon which it is based and cannot show substantively different outcomes. The Table shows that for Options A, B, C and C+, the effects on road safety are identical [REP4-033, Appendix K, Table 10-2]. Given the strength of the Applicant's stated reasons for why Option C+ was rejected, particularly on the grounds of safety, the ExA regards either the Applicant's stated reasons or the Option Appraisal Table to be highly inaccurate in this regard.
- 8.4.78. Furthermore, the traffic benefits, which include the resilience of the road transport network also show identical results, all of which show an increase in the resilience of the transport network to cope with incidents such as collisions, breakdowns, maintenance and extreme weather [REP4-033, Appendix K, Table 10-2]. The effect on resilience was another of the Applicant's stated reasons for rejecting Option C+.
- 8.4.79. In terms of Engineering and Complexity Option C+ is not assessed at all. However, all four options were considered to be feasible and deliverable [REP4-033, Appendix K, Table 10-2].
- 8.4.80. In terms of costs, the initial cost estimates for Options C and C+ contained in the Black Cat Junction Design Options [APP-247, Paragraph

4.3.12] are very different to those contained in the subsequent SAR [REP4-033, Appendix K, Table 10-2]. Even setting the initial cost differences aside, the BCR for the Orange Route and Option C+ is better than for Orange Route and Options A, B or C [REP6-040, Table 2-3].

- 8.4.81. The SAR option comparison table is said to show a comparison of the major factors to be considered when selecting a Preferred Route and the ExA notes that the SAR was published the month before the PRD and so would have been part of the evidence that informed that decision. The ExA notes the contradictions within the Applicant's evidence, including the SAR, and does not find the Applicant's explanations to be at all plausible.
- 8.4.82. The ExA recognises the non-statutory consultation responses and the strong preference for Option C, which is effectively the Preferred Option with some refinements. However, in addition to concerns about some of the information presented at non-statutory consultation by the Applicant, the ExA notes that there was no consultation on Option C+, which was designed specifically to retain Brook Cottages at Stage 2 in the PCF process. Furthermore, it is not clear why a variation of Option A, which the Applicant's own evidence at the time stated would be the one option that would retain Brook Cottages, was not also reconsidered at this stage.
- 8.4.83. The ExA notes the Applicant's comments that in the consideration and assessment of alternative options, the Historic Environment was given full and equal weight to all other criteria [REP4-032, Paragraph 4.5.25]. With reference to the NPSNN, the conservation of a DHA must be given "*great weight*", and the ExA does not consider that the Applicant gave "*great weight*" to the conservation of Brook Cottages in developing and assessing alternatives for the Black Cat junction.
- 8.4.84. The ExA notes the Applicant's comments that whilst Brook Cottages contributes to the local distinctiveness of the area as an example of historical workers cottages, it is not considered to be rare, and that other examples of such buildings survive both locally and nationally in equal, or better condition. The ExA also notes the Applicant's comment that Grade II is the lowest level of listing [APP-178, 4.1.5] [APP-240, 5.5.61].
- 8.4.85. The ExA finds that these comments further show that the Applicant has not given "*great weight*" to the conservation of this DHA. The ExA considers that even if substantive details of other similar examples of this type of building in the area had been provided by the Applicant, this would not change the listed status of Brook Cottages, or how effects upon it should be considered. The ExA also notes that any listed building, including those that are Grade II listed, has statutory protection because of its special architectural or historical value to the nation, which is recognised by the NPSNN in Paragraph 5.131.
- 8.4.86. The ExA does not consider the Applicant's PCF process to have been adequate in this case, where substantial harm to a DHA would result. It is not clear to the ExA that the Applicant has given "*great weight*" to the

conservation of this DHA, as required by Paragraph 5.131 of the NPSNN, or why, through the PCF process, the loss of Brook Cottages is necessary and so should be exceptionally allowed.

- 8.4.87. In addition to the fundamental concerns with the PCF process, and engagement from key parties, the ExA is not satisfied that the Applicant has justified its decision to select Refined Option C for the Proposed Development. The information provided in the SAR option comparison table is not adequately substantiated in the evidence, particularly in terms of the traffic benefit and road safety differences between Option C and Option C+, which are said to be key reasons for rejecting Option C+, and the relative significance of departures from standard for the different options is not explained satisfactorily.
- 8.4.88. The ExA concludes that the Applicant's approach to, and process for, developing the proposed Black Cat junction did not give "*great weight*" to the conservation of Brook Cottages. On the strength of the evidence in Examination, the ExA cannot be sure that the Applicant could have delivered similar public benefits, including in terms of road safety, using a design layout that retained Brook Cottages. As such the ExA concludes that the Applicant has not provided a "*clear and convincing*" justification for the substantial harm and loss of significance to this Grade II Listed Building, and that this harm is not, therefore, "*exceptional*". The Proposed Development therefore conflicts with Paragraph 5.131 of the NPSNN.
- 8.4.89. With respect to NPSNN Paragraph 5.133, the ExA has considered the substantial harm and loss of significance to Brook Cottages caused by the Proposed Development against the public benefits that would be delivered in two stages.
- 8.4.90. Firstly, in terms of the public benefits that would be delivered by the functionality of the proposed Black Cat junction itself, the ExA considers that the Applicant made valid points about the benefits to be delivered from the proposed highway layout as opposed to the highway layouts of the other options considered, primarily in terms of the safety of the travelling public. However, the Applicant did not provide the further evidence requested by the ExA, to substantiate its position that the safety performance of the proposed junction design was superior to the other options considered, one of which could have retained Brook Cottages in situ, or the extent of any superiority.
- 8.4.91. The ExA has had close regard to the view of the LHA, BBC, who were unable to identify an alternative junction option that would have retained Brook Cottages in situ, whilst also delivering the required highways functionality at the Black Cat junction, including free-flowing traffic between the A421 and the A1 northbound. However, whilst BBC's view corroborates the Applicant's position, the ExA notes that it was a view based on the limited information before it. As such, the ExA is reluctant to rely upon it and cannot be sure that the functionality of the proposed Black Cat junction presented a safer and altogether better design outcome than the other options.

- 8.4.92. Secondly, with regard to the public benefits of the Proposed Development as a whole, the ExA has concluded on this in Chapter 24 of this Recommendation Report. Consistent with its findings there, the ExA finds that the substantial public benefits of the Proposed Development over its 60-year lifetime, in terms of meeting transport need, improving road safety and reducing injuries and fatalities, and supporting economic and housing growth over a wide area, would outweigh the substantial harm and loss of significance that would be caused by the removal of Brook Cottages. The Proposed Development would therefore accord with Paragraph 5.133 of the NPSNN.

Other Heritage Assets

Introduction

- 8.4.93. Within the study area, a total of 556 previously recorded heritage assets have been identified on the Cambridgeshire, Bedford Borough and Central Bedfordshire Historic Environment Records (HERs) and the National Heritage List for England (NHLE). In addition, a total of 69 previous archaeological investigations have been identified within the study area [APP-075, Paragraph 6.6.1].
- 8.4.94. These include Croxton Park, a Grade II* Registered Park and Garden (RPG), 11 Scheduled Monuments, 133 Listed Buildings, 5 conservation areas and 406 non-designated assets dating from the Bronze Age, Iron Age, Roman times, the Middle Ages through to the present day.

Archaeological Remains

- 8.4.95. The LAs and HistE identified that the Proposed Development could affect archaeological remains in their Relevant Representations [RR-008a] [RR-013] [RR-016] [RR-048] [RR-100] [RR-046]. Toseland PC also raised this matter in their Relevant Representation (RR) [RR-115]. The Applicant has determined that after mitigation the Proposed Development would cause less than substantial harm to the archaeological remains, which are non-designated heritage assets [APP-075, Paragraph 6.9.287].
- 8.4.96. Whilst some comments had been raised about the archaeological baseline assessment, by D10 there were no areas of disagreement between the Applicant, HistE and the LAs.
- 8.4.97. BBC, CCC and CBC submitted a Joint Authorities' Archaeology Brief (JAAB) to the Applicant in December 2020, setting out the requirements for the archaeological programme for the Proposed Development. This was issued in response to a draft AMS that had been submitted to CCC by the Applicant without prior engagement.
- 8.4.98. The Cambridgeshire Councils were content with much of the AMS but raised concerns that some parts had conflicting research aims and objectives. Furthermore, positions had polarised between the Cambridgeshire Councils and the Applicant with regard to some archaeological site areas and the investigation methodologies, in particular, Site 18 in Field 74, Sites 36-39 to the northwest of Caxton

Gibbet roundabout and the construction area over archaeological remains at Site 17 [REP1-048, Section 12.2]. Further detail on the suggested approach by the Cambridgeshire Councils was contained in their Joint LIR [REP2-003, 6.2 and 8.2].

- 8.4.99. CBC were in broad agreement with the overarching principles of the AMS but were concerned with disparities between the AMS and the agreed scopes of work and approved written schemes of investigation relating to ongoing works at two locations - Site 4 (Field 34) and Site 7 (Field 44) [REP1-055, Paragraph 11.3]. Further concerns, including with regard to accordance with the JAAB, public accessibility, technical specialisms, monitoring and stakeholders and R9 of the dDCO [AS-026] were also raised [REP1-055, Paragraphs 11.4 to 11.6].
- 8.4.100. BBC raised concerns with the scope of the AMS and how it complied with the JAAB, and that there was insufficient detail in R9 of the dDCO, including with regard to fieldwork, post-excavation assessment and analysis, and publication and archiving [RR-008a].
- 8.4.101. HistE generally welcomed the Applicant's approach to the AMS and were content to defer to the LAs on the detail and scope of works for the AMS [REP1-077, Paragraphs 5.11 to 5.12].
- 8.4.102. Archaeology matters were covered throughout the Examination, including confirmation from the Applicant that the diversion of the High-Pressure Gas Pipeline, which is addressed in Chapter 18 of this Recommendation Report, used the same approach to archaeological remains as for the rest of the Proposed Development [REP1-022, Q1.12.4.1a]. The JAAB was updated following discussions between the LAs and the Applicant during the examination and appended to the updated AMS at D10 [REP10-036a]. The Applicant also responded to the request from HistE at D1 and D4 to provide maps and plans to illustrate the proposed mitigation areas against the geophysical survey data and the results of trenched evaluation for sites where there is contention. Archaeological Mitigation Areas with Evaluation Data was submitted to the examination [REP6-047 to REP6-050].
- 8.4.103. Discussions between the Applicant and the LAs also continued with regard to the AMS [EV-045] [EV-050], [REP3-007, Q1.12.4.1e], [REP4-045, Table 3-1] [REP4-058], which was updated at D3 and D4. However, despite further exchanges between the Applicant and the Cambridgeshire Councils, fundamental disagreement regarding its interpretation and accordance with the JAAB remained, including for some sites and with the terms used and consequent effects on excavations [REP5-014] [REP6-034, 9.23 and 9.55] [REP6-058, 9.64] [REP8-032 9.74] [REP9-026] [REP10-060].
- 8.4.104. At D10, SoCGs between the Applicant and BBC, CBC and HistE were agreed. These documents addressed archaeology, including the AMS and R9 of the dDCO [AS-026], with no outstanding disagreements: BBC [REP10-025, Table 3-5], CBC [REP10-024, Table 3-5] and HistE [REP10-022, Pages 24 and 25]. A SoCG between the Applicant and the

Cambridgeshire Councils was also submitted at D10. With regard to archaeology, this document included areas of agreement as well as remaining disagreement [REP10-026, Table 3-3-5] [REP10-062, Table 3-3-5].

ExA's reasoning on archaeological remains

- 8.4.105. The ExA notes the discussions and correspondence exchanged between the LAs, HistE and the Applicant regarding archaeology and updates to the JAAB and the AMS in particular.
- 8.4.106. Whilst agreement had been reached between the Applicant and BBC, CBC, and HistE by D10 there remained disagreement between the Cambridgeshire Councils and the Applicant regarding the areas for excavation for the following sites: 10, 11, 18, 34, 36-39; the strategies for excavation of the following sites: 17, 20, 27, 32, 35; and both the area and strategies for the following sites: 19, 23, 24, 26, 28, 33, all within the AMS.
- 8.4.107. For 11 of the 30 sites within Cambridgeshire there is agreement between the parties with regard to the AMS. Whilst this means that considerable disagreement remains with regard to the approach to investigations and / or the extent of sites, the ExA is satisfied that the Applicant has considered the points raised by the Cambridgeshire Councils, including with regard to relevant parts of the NPSNN and other relevant local and national policy and in some cases has updated the AMS as a result.
- 8.4.108. Some differences in interpretation are to be expected and the ExA recognises the local knowledge that the Cambridgeshire Councils bring to bear on this issue. However, the ExA has found no compelling evidence that the Applicant's approach is not robust or proportionate, or that would justify a different approach to that contained in the AMS. Even if such changes as the Cambridgeshire Councils were seeking were made, the scale of harm to archaeological remains that was identified is unlikely to significantly change.
- 8.4.109. On the basis of the aforementioned factors, the ExA agrees with the conclusion that the Proposed Development would cause less than substantial harm to archaeological remains, non-designated heritage assets.

Other DHAs

- 8.4.110. During the Examination there were discussions between the Applicant, HistE and the LAs with regard to other heritage assets in the vicinity of the Proposed Development, including the northernmost setting of Croxton Park RPG. From viewpoint 44 [APP-114, Figure 7.13.10], HistE considered that less than substantial harm would be caused to the setting of the RPG by the new carriageway and the bridge taking the existing minor road over it. Notwithstanding the positive effect of moving traffic from the existing A428, HistE did not consider that this would result in an overall positive effect, rather one that would have a slight negative effect [EV-045] [EV-050].

- 8.4.111. HistE also commented on viewpoint 2 [APP-114, Figure 7.13.1] in relation to the effect of the Proposed Black Cat junction on the setting of Roxton Church, distinct from the Roxton Conservation Area, where it considered that less than substantial harm would be caused. HistE also made reference to the moated site at Pastures Farm near to Caxton Gibbet roundabout also suffering less than substantial harm [EV-045] [EV-050].
- 8.4.112. The Applicant responded that whilst it recognised the points raised by HistE, it had reached a different conclusion with regard to the effects of the Proposed Development on the setting of these DHAs [EV-045] EV-050].
- 8.4.113. The Cambridgeshire Councils and HistE stated that they supported the approach of the Applicant in relation to the removal and subsequent relocation of Grade II listed milestones and mileposts. The Cambridgeshire Councils noted that the JAAB included an objective relating to the surveying, recording, conserving and relocating the mile markers. The JAAB is included in the AMS and is intended to direct contractors in terms of work to the Historic Environment [REP10-036a, Appendix B].
- 8.4.114. At D10, SoCGs between the Applicant and BBC, CBC, the Cambridgeshire Councils and HistE were agreed. These documents addressed amongst other things, the setting of DHAs and the treatment of mileposts and milestones: BBC [REP10-025, Pages 74 to 79], CBC [REP10-024, Pages 87 to 89] Cambridgeshire Councils [REP10-026, Paragraph 4.18] and HistE [REP10-022, Table 3-1].

ExA's reasoning on other DHAs

- 8.4.115. The ExA notes the unresolved professional differences between the Applicant and HistE regarding the effect of the Proposed Development on the setting of Croxton Park RPG and Roxton Church. The ExA is familiar with these areas from its USI1 [EV-001] and in terms of the effects of the Proposed Development on the setting of the two DHAs, the ExA considers there would be slight beneficial effect for Croxton Park RPG and a slight adverse effect for Roxton Church. While the ExA agrees with HistE's position in relation to the level of harm that both DHAs would suffer as a result of the Proposed Development, the ExA does not find that this would affect the overall conclusion of the ES in terms of the Historic Environment.
- 8.4.116. The ExA concludes that the Applicant has considered the effects of the Proposed Development on other Heritage Assets appropriately and does not disagree with the Applicant's conclusions regarding the scale of harm identified, that the effects would be no greater than moderate adverse causing less than substantial harm.

8.5. CONCLUSIONS

- 8.5.1. From the evidence the ExA is satisfied that the Proposed Development would cause substantial harm and a total loss of significance to a DHA, the Grade II listed Brook Cottages.
- 8.5.2. The ExA is satisfied that R16 of the dDCO adequately secures the assessment of Brook Cottages and the subsequent dismantling and relocation of Brook Cottages. However, at this stage neither the feasibility or value of dismantling and relocating Brook Cottages has been determined. Given this uncertainty the ExA is not convinced that it would reduce the level of harm and finds that despite R16 and the limited progress made with the survey, the potential relocation can be given no weight in its consideration. Similarly, no weight is attached to the recording of Brook Cottages in R16.
- 8.5.3. The ExA concludes that the Applicant has not given “*great weight*” to the conservation of Brook Cottages and has not provided a “*clear and convincing*” justification for the substantial harm and loss of significance that would be caused by the removal of this DHA. The ExA’s concerns stem from the Applicant’s approach to the Historic Environment in deriving the objectives for the Proposed Development. The Applicant’s PCF option development and selection process meant that the design of the Black Cat Junction was not addressed in a way that would enable a meaningful assessment of the effects on Brook Cottages to be undertaken during the early stages, and even at stage 2, the limited information available was often insufficient for firm conclusions to be drawn about the effects on Brook Cottages. The Applicant was unable to substantiate its position regarding the Black Cat Junction option for the Proposed Development, and at other stages of the process, to the satisfaction of the ExA. Consequently, the ExA does not believe that the removal of Brook Cottages has been shown to be exceptionally necessary and so conflicts with NPSNN Paragraph 5.131.
- 8.5.4. However, the ExA notes the support of BBC for the Proposed Development, and that BBC was unable to identify an alternative to the design of the Black Cat Junction that would retain Brook Cottages whilst providing the connection to and from the Caxton Gibbet junction.
- 8.5.5. In this case, the ExA concludes that the substantial harm and total loss of significance that would be caused by the removal of Brook Cottages is outweighed by the benefits of the Proposed Development, as set out in the evidence and discussed during the Examination, and so passes the test within NPSNN Paragraph 5.133. However, this is a very finely balanced judgement by the ExA.
- 8.5.6. With regard to other DHAs, the ExA agrees with the Applicant’s conclusion that the effects of the Proposed Development on Other Heritage Assets would be less than substantial harm.
- 8.5.7. Taking all the matters reported above, in particular the substantial harm and total loss of significance that would be caused by the removal of the Grade II listed building Brook Cottages, the ExA ascribes the adverse

effects of the Proposed Development on the Historic Environment
substantial weight against making the Order.

9. CLIMATE CHANGE AND CARBON EMISSIONS

9.1. BACKGROUND AND POLICY CONTEXT

- 9.1.1. Climate Change and Carbon Emissions was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. This concerned the overall change in carbon emissions arising from the Construction and Operation of the Proposed Development; the implications for Carbon budgeting; and, the resilience of the Proposed Development to climate change.

National Policy Statement

- 9.1.2. The consideration of Climate Change and Carbon Emissions in the National Policy Statement for National Networks (NPSNN) requires the Applicant to:

- 1) consider the impacts of climate change when planning the location, design, build and operation of new national networks infrastructure, and set out how the proposal will take account of the projected impacts of climate change (NPSNN Paragraph 4.40); and
- 2) describe an assessment of any likely significant climate factors in accordance with the requirements in the Environmental Impact Assessment (EIA) Directive, and provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets (NPSNN Paragraph 5.17).

- 9.1.3. In reaching a decision the Secretary of State (SoS) should be satisfied that:

- 1) the level of increase in carbon emissions from the Proposed Development are not so significant to have a material impact on the ability of the Government to meet its carbon reduction targets (NPSNN Paragraph 5.18);
- 2) evidence of appropriate mitigation measures in both design and construction has been submitted (NPSNN Paragraph 5.19); and
- 3) the effectiveness of such mitigation measures means that in relation to design and construction, the carbon footprint is not unnecessarily high (NPSNN Paragraph 5.19).

Other legislation and policies

- 9.1.4. Other legislation, policies and guidance relevant to Climate Change and Carbon Emissions includes:

- 1) the Climate Change Act 2008 (2050 Target Amendment) Order 2019; and
- 2) the Government's Transport Decarbonisation Plan - Decarbonising Transport A Better, Greener Britain 2021 (TDP).

- 9.1.5. Other legislation, policies and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070,

Section 1.3] [APP-083, Section 14.2] and in Chapter 3 of this Recommendation Report.

- 9.1.6. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration, in particular Chapter 14 – Meeting the Challenge of Climate Change, Flooding and Coastal Change.

9.2. THE APPLICATION

Environmental Statement

- 9.2.1. The Applicant's assessment of Climate is set out in Chapter 14 of the ES [APP-083]. There are other application documents that are relevant including: [APP-155] (transboundary effects screening), [APP-157] (EIA Scoping Response Table and Summary of Methodological Changes), [APP-231] (Scoping Opinion), and [APP-227] (Climate Change Resilience and In-combination Climate Change Impacts Baseline), [APP-250] (Combined Modelling and Appraisal Report), [APP-254] (Appendix D Economic Appraisal Package Economic Assessment Report), [APP-255] (Appendix E Economic Appraisal Package Summary Table and worksheets, [APP-257] (Strategy for dealing with the Uncertain Outcomes arising from COVID-19) and [APP-258] (Scoping Report).

Scope and Methodology

- 9.2.2. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. The Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) LA 114 Climate, supplemented by the use of the Applicant's carbon reporting tool, which has been developed to enable the better management of carbon emissions associated with the strategic road network, LA 105 Air Quality, and other specified guidance.
- 9.2.3. In addition to statutory consultation, non-statutory consultation was undertaken by the Applicant with the Greater Cambridgeshire Shared Planning team in relation to sharing the climate methodology [APP-083, Paragraph 14.3.22].
- 9.2.4. The Assessment focused on the effects of the Proposed Development on three broad components: Greenhouse Gas (GHG) impacts, the effect on the climate of GHG emissions arising from the Proposed Development, including how this would affect the ability of Government to meet its carbon reduction plan targets; Climate Change Resilience (CCR); and In-combination Climate Change Impacts (ICCI), the combined effects of the impacts of the Proposed Development and potential climate change impacts on the receiving environment [APP-083, Paragraph 14.3.23].
- 9.2.5. The Applicant established the baseline conditions for the GHG impact assessment using modelled volumes of traffic currently on the existing affected road network, and its predicted future use (accounting for increases in traffic and associated congestion) through to the year 2086 (assuming a lifetime of 60 years for the Proposed Development).

- 9.2.6. Data was gathered from a number of sources to determine the baseline conditions for the CCR and ICCI assessments. The UK Climate Impacts Programme UK Climate Projections 2018 (UKCP18); the Department for Environment, Food and Rural Affairs (DEFRA) UK Climate Change Risk Assessment 2017 Evidence Report; and Meteorological Office historic climate data [APP-083, Paragraph 14.3.19].
- 9.2.7. For GHG impact assessment a range of scenarios were considered by the Applicant, notably a 'do-minimum' (DM) scenario whereby the Proposed Development is not implemented and a 'do-something' (DS) scenario whereby the Proposed Development goes ahead and the GHG emissions reductions from embedded mitigation measures are taken into account. The Applicant has considered GHG emissions from construction and maintenance of the Proposed Development and its operation, and include land use changes and road user emissions, which considers in part the uptake of low carbon fuels and electric vehicles using the DEFRA Emissions Factors Toolkit (EFT) [APP-083, Paragraphs 14.3.24 to 14.3.35].
- 9.2.8. The Applicant undertook an assessment of CCR for the Proposed Development to identify potential climate change impacts. The potential consequences and likelihood of occurrence were considered, taking into account the measures incorporated into the design of the Proposed Development. The identification of likely significant effects on receptors has been undertaken using professional judgement by combining the measure of likelihood with the predicted consequence of impact [APP-083, Paragraphs 14.3.36 to 14.3.45].
- 9.2.9. For ICCI, the Applicant considered projected changes to average climatic conditions, as a result of climate change, and an increased frequency and severity of extreme weather events have the potential to impact the ability of the surrounding natural environment to adapt to climate change [APP-083, Paragraphs 14.3.46 to 14.3.52].

Applicant's assessment of effects and mitigation proposed

- 9.2.10. The Applicant's assessment [APP-085, Table 16-1, Chapter 14] is that the construction of the Proposed Development would be likely to result in no significant Climate effects during the construction or operational stages.
- 9.2.11. The Applicant's proposed embedded mitigation that is common across the Proposed Development is summarised in the ES [APP-071, Table 2-1]. Embedded mitigation specific to Climate Change and Carbon Emissions includes a number of measures to address the resilience of the Proposed Development during severe weather, and measures to limit and mitigate GHG emissions [APP-235, EMB-C1] to [APP-235, EMB-C7], variously secured in the Works Plans [APP-009] to [APP-010], the Engineering Section Drawings [APP-017] to [APP-022], the First Iteration Environmental Management Plan (EMP) [REP10-018], the general arrangements plans [APP-011], the De-trunking Plans [APP-012] and the

Streets, Rights of Way and Access Plans [APP-013] and in the draft Development Consent Order (dDCO) [AS-026].

- 9.2.12. Essential mitigation has been proposed for Climate Change and Carbon Emissions, and is set out in the outline Energy and Resource Management Plan in the First Iteration EMP [REP10-018, Annex G]. This includes measures to reduce energy consumption and associated GHG emissions for the duration of the construction phase, the specification of recycled or low-carbon materials (i.e. materials that have the lowest GHG emitting life-cycle, compared with alternatives), using materials with lower embedded GHG emissions and water consumption, using sustainably sourced materials, and using recycled or secondary materials.
- 9.2.13. Further mitigation measures are identified with regard to the development and implementation of a procurement strategy to reduce energy consumption and associated GHG emissions, which would include measures relating to the use of renewable and/or low or zero carbon energy sources and the recording of savings achieved [APP-235, ENH-C1]. This would facilitate energy consumption reductions and so reduced GHG emissions but is subject to feasibility and so not secured.

9.3. LOCAL IMPACT REPORTS

Cambridgeshire Councils

- 9.3.1. The Joint LIR of Cambridgeshire County Council (CCC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC) addresses Climate Change issues including relevant development plan policies [REP2-003, Table 8, Sections 6.6 and 8.6 and Appendix A].
- 9.3.2. The Cambridgeshire Councils Joint LIR does not identify any positive effects of the Proposed Development in relation to Climate Change and Carbon Emissions as it would result in an increase in construction emissions of 208,380 tonnes of carbon dioxide equivalent (tCO₂e) and an increase in emissions of 35,280 tCO₂e in the first year of operation when compared to a DM scenario.
- 9.3.3. The Joint LIR also notes that the Proposed Development's emissions would represent 0.011% of the Fifth National Carbon Budget and the presentation of a single project as a percentage of a national emissions budgets will result in a low value leading to an impression that the emissions are small. However, they do still represent an increase in emissions, and when one considers all national level road building under Road Investment Strategy (RIS) 2, road building will lead to an additional 20 million tonnes of carbon dioxide equivalent (MtCO₂e) of cumulative emissions between 2020 and 2032. This represents a 5% increase in emissions over a Do-nothing (DN) scenario, at a time the country should be reducing emissions.
- 9.3.4. The Joint LIR notes that the Committee on Climate Change in their recent June 2021 progress report to parliament states that emissions should be reducing and that decisions on investment in roads should be contingent

on analysis justifying how they contribute to the UK's pathway to Net Zero. This analysis should demonstrate that the proposals would not lead to increases in overall emissions. It also states that wherever possible, investment in roads should be accompanied by proportionate investment in Electric Vehicle (EV) charging infrastructure and in active travel and public transport.

9.3.5. The Joint LIR also notes that the increased kilometres travelled as a result of the Proposed Development will affect the ability of the Cambridgeshire and Peterborough Combined Authority (CPCA) to meet the recommendation from the Cambridgeshire and Peterborough Independent Committee on Climate Change to reduce car miles by 15% by 2030.

9.3.6. The Cambridgeshire Councils state that missed opportunities to use materials with lower embodied carbon should have been identified in making the application, and that opportunities to enhance infrastructure for low emissions vehicles alongside the route of the Proposed Development have been missed.

9.4. THE EXAMINATION

9.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) Policy context;
- 2) Spatial scale for assessing carbon emissions and their significance;
- 3) Economic benefits versus carbon disbenefits;
- 4) Quantum of carbon emissions; and
- 5) Climate change resilience.

Policy context

9.4.2. The ExA wanted to understand the views of the parties, and the Applicant in particular, with regard to certain policies and Government commitments and whether there would be any implications for the ExA and SoS in assessing the effects of the Proposed Development.

9.4.3. Firstly, the ExA asked about the Government's TDP [REP6-131] published in July 2021, just prior to the commencement of the Examination. It sets out how the Government intends to remove carbon from the UK transport system so as to support the national objective of net zero carbon emissions by 2050. The Government also recognised in its TDP that the NPSNN needed to be reviewed in light of the changes to the legislative and policy framework for carbon emissions since it was published, but that the NPSNN remained fully extant.

9.4.4. The ExA asked the parties for their views on the implications (if any) of the Government's commitments contained in the TDP on the assessment of this application [EV-007 3b]. The Applicant stated that it was satisfied that the publication did not undermine the need for the Proposed Development and did not expect to update its submissions in light of the TDP [EV-010] [EV-013].

- 9.4.5. Transport Action Network (TAN) commented on the SoS's preface to the TDP, including what is seen as a different context, with an acknowledgement of uncertainty regarding future traffic levels, with high levels of growth seen as undesirable [REP1-097, 5.2].
- 9.4.6. The ExA asked the Applicant how the forecast GHG emissions from the Proposed Development would be mitigated after 2050, when the UK is committed to becoming carbon neutral [PD-009, Q2.4.1.1d].
- 9.4.7. The TDP was published after the DCO application had been made and so was not considered by the Applicant in its ES. The Applicant referenced the TDP and its own 2030/2040/2050 net zero highways plan which would contribute towards overall net zero emissions by 2050. Any residual emissions, of which there could be up to 10 MtCO₂e emissions per year from the Transport sector nationally, would need to be removed from the atmosphere or offset. The Applicant noted that such mitigation of residual emissions is a recognised part of the TDP and that on Page 46, reference is made to positive emissions from transport needing to be offset elsewhere in the economy [REP4-037, Q2.4.1.1].
- 9.4.8. TAN and the Applicant noted the uncertainty and potential difficulty for the pathway to net zero transport emissions by 2050 contained in the TDP, but that progress with the TDP would be regularly reviewed, and an updated pathway would be published every five years [REP4-073, 2] [REP5-014, REP4-073f].
- 9.4.9. Secondly, the ExA sought the views of the parties with regard to the Paris Climate Change Agreement 2015 (the Paris Agreement). The Applicant noted that the Paris Agreement specified that Nationally Determined Contributions (NDC) were needed by each country to achieve its carbon reduction goals, hence a national focus on emissions reduction. The Applicant noted that compliance with national carbon budgets, as required by the NPSNN, accorded with this. The Applicant also noted that its emissions calculations were a worst-case scenario, because the DEFRA EFT from which they were derived, did not consider future Government interventions to reduce GHG emissions such as are contained in the TDP. The Cambridgeshire Councils agreed with the Applicant in this regard. [EV-062] [EV-067].
- 9.4.10. Thirdly, the ExA asked whether any UK Government obligations from the 2021 United Nations Climate Change Conference in Glasgow would affect the assessment of carbon emissions from the Proposed Development or lead to further mitigation measures, in light of the declared climate emergency [PD-014, Q3.4.1.2a].
- 9.4.11. The Applicant responded that the Glasgow Pact, the principal outcome from the conference, did not require any change in the policy commitments or legislation under which the assessment of carbon emissions of the Proposed Development was made, and the Applicant's assessment remains robust in light of the declared climate emergency. Embedded mitigation is in place to reduce the carbon emissions from the Proposed Development and the Applicant does not consider that

additional measures for this individual development are necessary [REP8-014, Q3.4.1.2a].

- 9.4.12. The ExA also asked whether in light of forecasts in the TDP [REP6-131] and by the Climate Change Committee [REP6-118] [REP6-119] it could be confident that the lifetime GHG emissions of the Proposed Development would be mitigated [PD-014, Q3.4.1.2b]. The Applicant responded that it had sought to reduce carbon through a mitigation hierarchy, which had been applied to the construction and operational phases [REP8-014, Q3.4.1.2b].

ExA's reasoning

- 9.4.13. The ExA considers that the TDP is consistent with the NPSNN in some respects. However, the ExA also recognises that there are themes in the TDP such as a transport mix that utilises less carbon in its function, which in its implementation could require a different approach to assessment of GHG emissions. Government's approach to the implementation of the TDP and the commitments contained within it are not before the ExA, the Applicant, and other parties in the form of policy and are therefore outside the scope of this Examination.
- 9.4.14. The ExA is satisfied that the Applicant has considered the GHG emissions from the Proposed Development against UK Carbon Budgets and that these budgets are the means for the UK to achieve compliance with the Paris Agreement of net zero carbon emissions by 2050, which are unaltered by the 2021 United Nations Climate Change Conference in Glasgow.

Spatial scale for assessing carbon emissions and their significance

- 9.4.15. In light of representations from parties, notably TAN and the Cambridgeshire Councils, the ExA was concerned about the Applicant's approach to assessing the significance of carbon emissions of the Proposed Development, a single scheme, in comparison to the national carbon budgets. The ExA also took note of the quashing of the A38 Derby Junctions NSIP DCO by the High Court, and the subsequent actions from the SoS seeking further evidence about the cumulative effects on local regional and national carbon budgets and how that NSIP would comply with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations).
- 9.4.16. The ExA explored matters relating to:
- 1) understanding the significance of effects of the GHG emissions of the Proposed Development by making like for like comparisons at a local, regional, national and international level;
 - 2) relative significance of the lifetime GHG emissions of the Proposed Development in comparison with other RIS2 schemes; and
 - 3) assessment of the effects of the national RIS2 programme against UK Carbon Budgets.

- 9.4.17. The ExA has reported on the Examination of this wider area under topic based sub-headings but provided combined reasoning due to overlap in the relevance of the evidence provided.

Significant carbon emissions and the EIA process

- 9.4.18. TAN made comments on the significance of carbon emissions, referencing NPSNN Paragraphs 4.15, 4.17, which concern the significance of effects, including cumulative effects in the EIA process and NPSNN Paragraph 5.17, which specifically concerns significant carbon emissions and the EIA process. TAN also referenced 2017 guidance on the preparation of EIA reports which notes that local and regional effects of GHGs may be significant and that the definition of significance is not specified in terms of Climate or any other matter. In TAN's view, the great public concern about climate change means it should be considered significant regardless of numerical magnitude [REP4-073, 3].
- 9.4.19. TAN made further comments, including on the lack of consideration of emissions against local and regional reduction targets, including for the Bedford Borough Council (BBC) and SCDC administrative areas. TAN highlighted that the England's Economic Heartland (EEH) organisation has developed a transport strategy, the traffic reduction and zero carbon by 2040 targets which it contains are considered inconsistent with the Proposed Development by TAN. In not assessing the Proposed Development against local and regional carbon reduction targets, TAN questioned whether the ES complied with the 2017 EIA guidance in this regard [REP4-073, 5].
- 9.4.20. TAN also noted that relating emissions from a single scheme to a national carbon budget was introduced by the NPSNN and that the consequences seem to go against what it saw as the intention of the EIA Regulations [REP4-073, 6].
- 9.4.21. The ExA explored this further and asked the Applicant to comment on its approach to cumulative and local and regional effects of carbon emissions from the Proposed Development, including like for like comparisons, and with regard to the EIA Regulations.
- 9.4.22. The Applicant noted that BBC, Central Bedfordshire Council (CBC), SCDC and HDC, through the EEH regional government organisation, supported the Proposed Development as an immediate priority [REP5-014, REP4-073k].
- 9.4.23. The Cambridgeshire Councils submitted local carbon budgets, produced by the Tyndall Centre, for the HDC and SCDC administrative areas [REP6-072] and summarised their position regarding the value of local carbon budgets [REP6-071, 18]. The Energy-Only carbon budgets included transport related emissions, which for Huntingdonshire and South Cambridgeshire, would include those from the Proposed Development [REP8-035, Q3.4.1.1d].
- 9.4.24. BBC stated that its net zero target for carbon emissions related to the Council's own emissions only, not to all emissions within its

administrative area. Consequently, the Proposed Development would have no bearing on the Council's ability to meet its net zero target [REP8-025, Q3.4.1.1f].

- 9.4.25. The Applicant noted the limited information available to it regarding local and regional carbon budgets and how they related to legally binding national carbon budgets. It also noted that neither the EIA Regulations nor the NPSNN require an assessment of the carbon impacts of the Proposed Development against local and regional carbon budgets and that this would go beyond what it would reasonably be required to do in the circumstances [REP9-029, Paragraphs 1.1.37 to 1.1.42].

SoS's letter regarding A38 Derby Junctions

- 9.4.26. TAN referred to a letter sent to National Highways (NH) from the SoS, following the quashing of the A38 Derby Junctions DCO by the High Court. TAN noted that within the letter the SoS, amongst other things, directly asked NH to identify any relevant local, regional or national targets and/or budgets where they exist and to explain how the assessment complies with the EIA Regulations for that NSIP. TAN commented that in seeking such information the SoS considers it to be relevant and that compliance with the EIA Regulations is also something to be considered, in addition to the NPSNN [REP8-050, Section 4 and Annex 2].
- 9.4.27. Separate to this the ExA issued a letter under Rule 17 of the Infrastructure Planning (Examination Procedure) Rules (EPR) 2010 (Rule 17 letter) on 17 January 2022, seeking further information on the cumulative effects of GHGs from the Proposed Development, on local, regional and national carbon budgets of relevance and on how the assessment complies with the EIA Regulations [PD-016, 1]. In this regard, the ExA's Rule 17 letter was largely in line with the information requested by the SoS from National Highways on several other road NSIPs.
- 9.4.28. In response the Applicant submitted its Cumulative Effects of Greenhouse Gas Emissions from the Proposed Development document [REP9-029]. The Applicant stated that it had followed the appropriate Design Manual for Roads and Bridges (DMRB) guidance for assessing cumulative effects (DMRB LA 104) and climate impacts (DMRB LA 114). Traffic modelling for the Proposed Development was undertaken in accordance with the Department for Transport (DfT) Transport Analysis Guidance (TAG) and was considered by the Applicant to be inherently cumulative given the data sources within the model, an approach that is supported by the Planning Inspectorate's Advice Note (AN) 17. In terms of operational carbon emissions two scenarios are used: one with the Proposed Development and one without the Proposed Development, both of which contain all likely future developments and traffic growth factors [REP9-029, Paragraphs 1.1.8 to 1.1.14].
- 9.4.29. The Applicant repeated their previous position with regard to carbon budgets at different spatial scales. National carbon budgets from the Climate Change Act 2008, cover 11 sectors and are therefore inherently

cumulative. The Applicant noted that there is no legal requirement to set local and regional carbon budgets, or sectoral budgets or targets such as for the transport sector. This means that emissions in the transport sector can be mitigated by reductions in other sectors, within the national carbon budget context.

- 9.4.30. The Applicant also stated that there is no legal requirement to assess the impact of an individual project against total carbon emissions from RIS1 and RIS2. To conduct an impact assessment of carbon emissions at a local / regional level would require an appropriate baseline, which does not exist and which the Applicant cannot produce itself. With reference to R. (Khan) v London Borough of Sutton [2014] EWHC 3663 (Admin) and Preston New Road Action Group v Secretary of State for Communities and Local Government [2018] Env. L.R. 18) the Applicant considers that there is no reasonable basis for it to assess the carbon emission impacts of the Proposed Development [REP9-029, Paragraphs 1.1.15 to 1.1.25].

Cumulative GHG emissions of the RIS2 schemes

- 9.4.31. The ExA asked the Applicant what the cumulative effect of the RIS2 schemes was with regard to GHG emissions, and with regard to UK carbon budgets. In response the Applicant stated that such matters were the responsibility of the DfT. The Applicant was only concerned with the GHG emissions from the Proposed Development when assessed against national carbon budgets, as per the NPSNN Paragraph 5.17 [REP1-022, Q1.4.1.1]. TAN was not satisfied with the Applicant's response and stated that the Applicant had not answered the question [REP4-073, 7].
- 9.4.32. The ExA asked the Applicant and TAN how the forecast GHG emissions from the Proposed Development compared to other RIS / RIS2 schemes. The Applicant responded that emissions were commensurate with other RIS / RIS2 schemes, including A1 Morpeth to Ellingham and A1 Birtley to Coal House, as well as the A38 Derby Junctions and M42 Junction 6 improvements. The Applicant noted that no individual road schemes have been determined significant in terms of the effect on the Government's ability to meet its carbon reduction targets [REP4-037, Q2.4.1.1e+g].
- 9.4.33. TAN set out why it disagreed with the approach used to assess emissions of individual schemes against national carbon budgets, which was not a like for like comparison and was not consistent with the aforementioned EIA guidance. TAN noted that on this basis it was not surprising the Applicant had been unable to identify any other road schemes where carbon impacts were deemed to be significant [REP5-025, 4.1 and 4.2].
- 9.4.34. During a wide-ranging discussion of climate change and carbon emissions at Issue Specific Hearing (ISH) 4, the Applicant did not comment on the ExA's questions regarding what level of emissions would in fact be considered significant in the abstract. The Applicant also re-affirmed its position with regard to national emissions targets, the difficulties and uncertainties, including with the agglomeration of local or regional targets to a national level, and the cross-economy approach to reducing emissions. The Applicant was not aware that an assessment of the lifetime GHG emissions for all the RIS2 schemes had been undertaken

following the quashing of the DCO for the A38 Derby Junctions NSIP [EV-062] [EV-067].

- 9.4.35. TAN re-affirmed its position that it favoured the use of local / regional targets to assess the GHG emissions from the Proposed Development, rather than assessing it against a much larger national carbon budget. TAN also said that a reasonable estimate, based on the approach used by the Department for Business, Energy and Industrial Strategy (BEIS) for road schemes is by length in different Local Authority (LA) areas. TAN said that they had made an estimate of 39 MtCO₂e emissions from the Applicant's data, whilst noting that the evidence for this was not complete and so likely to be an underestimate [EV-062] [EV-067].

High Court Judgement - R (Transport Action Network Limited) v SoST [2021] EWHC 2095 (Admin)

- 9.4.36. Representations were made by the Applicant and TAN [EV-047] [EV-052] regarding a recent High Court judgement - R (Transport Action Network Limited) v Secretary of State for Transport and Highways England Company Limited (2021) EWHC 2095 (Admin), including with regard to the issue of significance of GHG emissions.
- 9.4.37. The ExA explored this further and asked the parties to comment on this Judgement and its relevance and implications for the assessment of carbon emissions from the Proposed Development.
- 9.4.38. The Applicant commented that the High Court had concluded that the total amount of carbon emissions from the RIS2 programme is insignificant in the context of appropriate comparators for assessing the effect on climate change objectives. The Applicant did not consider that the GHG emissions of the Proposed Development, including on a cumulative basis, were likely to have any significant effect on the climate or the UK's ability to comply with its carbon budgets. The increased GHG emissions from the Proposed Development would not give rise to any conflict with Paragraph 5.18 of the NPSNN and would not be a reason to refuse development consent. [REP3-020, 13] [REP4-037 Q2.4.1.e].
- 9.4.39. TAN put forward their position with regard to the High Court Judgement, noting amongst other things that the role of the ExA was distinct from an Administrative Court applying the principles of Judicial Review and that subsequent increases in carbon reduction targets mean that decisions taken on road schemes now are different to those taken when RIS2 was set in March 2020 [REP4-073, 2].
- 9.4.40. The Applicant said that the submitted judgement does not need to be relied upon, with the finding that RIS2 emissions were De Minimis simply providing some context for the emissions of the Proposed Development. The Applicant also noted that the judgement confirmed there was no sectoral target for GHG emissions, and that GHG emissions from one sector of the economy, such as transport, could be offset by reductions in another sector, hence the Applicant's assertion that its approach to this issue was sound [EV-062] [EV-067].

- 9.4.41. The Applicant's final position statement noted that with regard to this High Court Judgement, which was submitted to the Examination by the Applicant [REP3-020, 12 and Appendix A], TAN was refused permission to appeal on 13 January 2022, and the decision therefore remains fully extant [REP10-052, Section 6].

ExA's reasoning on the spatial scale for assessing carbon emissions and their significance

- 9.4.42. The issue of significance of carbon emissions is one that has been considered at length during the Examination. The ExA finds TAN's comments regarding great public concern about climate change and the global nature of the issue to be compelling. The ExA considers that together with the urgency and seriousness of the situation, including as evidenced by the declarations of climate emergency, the issues relating to Climate Change and Carbon Emissions are important in the Examination of the Proposed Development.
- 9.4.43. The ExA notes that the Applicant's approach to the significance of carbon emissions from the Proposed Development has been with reference to the policy direction in the NPSNN. The Applicant has considered the significance of the carbon emissions against the Government's national carbon budgets, and whether they would affect the ability of Government to meet its carbon reduction plan targets. The Applicant's conclusion is that the emissions from the Proposed Development would be so small compared to the national carbon budgets as to be insignificant.
- 9.4.44. Whilst the ExA cannot argue that the Applicant's approach is consistent with the NPSNN, the ExA has concerns that comparing the Proposed Development against national carbon budgets is not a like-for-like comparison. It is not clear to the ExA what the effects of the Proposed Development on local or regional carbon budgets would be. The ExA recognises that reducing carbon emissions to net zero by 2050 will require actions at international, national, regional and local levels and considers the use of local and regional carbon budgets could contribute towards that goal. As such, the ExA sought evidence to explore what, if any, would be a reasonable way to assess the effects of the Proposed Development in terms of GHG emissions at a local level. This would further the ExA's understanding of the local significance of the GHG emissions from the Proposed Development, and if that warranted mitigation measures.
- 9.4.45. The ExA notes the approach put forward by IPs to compare a single road scheme, the Proposed Development, against the Tyndall Centre's local carbon budgets, using the BEIS endorsed approach for apportioning emissions. However, the ExA finds that this would only be an approximation. In the absence of endorsement in the NPSNN and any other relevant policy applicable to the ExA for the Examination of the Proposed Development, the proposed method and data sources cannot be relied on for an indication of the local significance of the Proposed Development in terms of GHG emissions.

- 9.4.46. The ExA notes the Applicant's position with regard to current knowledge and what assessment it could reasonably be expected to make in terms of the effects of the Proposed Development on local and regional carbon budgets. The ExA also accepts the points made by the Applicant as to the limitations of local or regional carbon budgets relative to the statutory national carbon budgets and with regard to the compliance of its approach with the NPSNN Paragraphs 5.17 and 5.18.
- 9.4.47. While there is no denying that the GHG emissions from the Proposed Development would in fact increase GHG emissions over their lifetimes, adversely affecting efforts to reduce GHG emissions to net-zero by 2050, this is not determinative with regard to NPSNN Paragraph 5.18. Likewise, there is no method which prescribes either a geographical boundary for cumulative assessment for the Proposed Development or for it to be assessed alongside other RIS1 and RIS2 projects. Here, the ExA must rely on the High Court's conclusion in the Judgement submitted at D3 which accepted that the emissions from the RIS2 programme would be insignificant in the context of appropriate comparators for assessing the effect on climate change objectives.
- 9.4.48. The ExA is not satisfied with the Applicant's response to its questions on this subject in its Rule 17 letter [PD-016], which was modelled upon the questions posed by the SoS following the quashing of the A38 DCO. However, the ExA recognises that the EIA Regulations do not explicitly require a Cumulative Effects Assessment (CEA) of carbon emissions at different spatial levels.
- 9.4.49. In light of the evidence presented by parties in Examination, and the concerns raised by the ExA itself, the ExA considers that the CEA of GHG emissions, that is comparable at a more relevant spatial scale, is an important matter for the Examination of the Proposed Development. However, in light of the Applicant's position, the High Court Judgement, the EIA Regulations, and the lack of a robust alternative method to assess the effects of GHG emissions at the local level, the ExA must accept the Applicant's cumulative assessment of GHG emissions from the Proposed Development would not be significant.
- 9.4.50. The ExA recognises that there are currently uncertainties with how net zero carbon emissions across the economy will be achieved by 2050. The ExA accepts that it may be possible for positive emissions in transport sectors to be offset by negative emissions elsewhere in the economy as suggested by the Applicant and stated in the TDP. However, this is a matter for Government to demonstrate how this would be done, with respect to future carbon budgets and the required offsets.
- 9.4.51. The ExA considers there are likely to be residual emissions from the Proposed Development after 2050, from maintenance as well as from users, as recognised in the TDP and by the Applicant. While the Cambridgeshire Councils suggested offsetting emissions from the Proposed Development, including after 2050, there is no policy requirement in NPSNN that requires the Applicant to do so.

- 9.4.52. Despite the ExA's own concerns, alongside the great public concern about climate change and the representations from parties, the ExA, as we have already concluded, must accept that the Applicant's approach to assessing the cumulative effects of GHG emissions and the corresponding outcome, and to emissions offsetting, is reasonable and proportionate. In that regard the ExA finds that the Proposed Development would accord with NPSNN Paragraphs 5.17, 5.18 and 5.19.
- 9.4.53. Given the significance of climate change globally, the ExA finds that a precautionary approach to this matter must be adopted. As such, the ExA recommends that the SoS, at the time of making their decision, may want to re-assess the cumulative effects of the GHG emissions from the Proposed Development, in light of the emerging policy context and any new data that might be relevant. The SoS would need to satisfy themselves again that the Applicant has satisfactorily demonstrated that these adverse effects would not be significant.

Economic benefits versus carbon disbenefits

- 9.4.54. At the ExA's behest, the Applicant commented upon the Government's cancellation of the Oxford Cambridge Expressway, noting that it had a separate business case to the Proposed Development and so had no bearing on the need for it. The Applicant said that the Expressway cancellation decision was based primarily on an assessment of value for money. The Proposed Development is focused upon solving local congestion and capacity problems, whereas one of the main objectives of the Expressway was to support new housing development. The Applicant also noted that the Government re-affirmed its commitment to the Proposed Development for safety, connectivity, community and economic growth reasons, when it cancelled the Expressway [REP4-037, Q2.4.1.1m] [REP8-014, Page 72].
- 9.4.55. Reiterating the points made in their Deadline (D)1 submission TAN state that the economic benefits of the Proposed Development, when assessed against the national economy, would be insignificant, thereby undermining the case for the new road in its view [REP4-073, 3].
- 9.4.56. TAN commented on the new carbon values recommended by BEIS in September 2021 and incorporated into the DfT TAG data book in November 2021. TAN noted that the updated figures would mean the Applicant's identified cost of £127 million for carbon emissions for the Proposed Development was likely to be a significant underestimate, which could be large enough to affect the business case for the Proposed Development. In such circumstances TAN considered it was essential to consider cumulative and in-combination effects of the new values [REP8-050, Paragraphs 2.1.1 to 2.1.10] [EV-062] [EV-067].
- 9.4.57. TAN also raised concerns with the parts of the TAG methodology, with particular regard to cumulative impacts and the transparency of traffic and emissions modelling, given uncertainties surrounding other development proposals. TAN considered that three scenarios should be modelled to assess the cumulative effects, the DM and DS scenarios

without these developments and the DS scenario with the developments included. TAN also stated that it was important for the list of such developments to be up-to-date [REP8-050, Paragraphs 2.1.11 to 2.1.15].

- 9.4.58. The Applicant stated that it did not consider that an assessment of the economic impact of carbon emissions was an appropriate means for assessing significance [REP8-014, Q3.4.1.1b]. However, in response to changes to the DEFRA EFT and other changes to the DfT's TAG and associated Supplementary Green Book Guidance in late 2021, the Applicant agreed to carry out a further assessment using the latest data that will then be used for an updated economic appraisal [REP8-014 Q3.4.1.1c].
- 9.4.59. The Applicant produced a table showing the effects of the new EFT with sensitivity testing for the 3rd, 4th, 5th and 6th Carbon budget periods, which lowered carbon emissions in comparison with the ES [REP9-029, Table 1-1].
- 9.4.60. The Applicant submitted an updated economic sensitivity test based in part on the November 2021 TAG update referenced by TAN at D8 [REP9-033]. The Applicant stated that as part of its approach to addressing the uncertainty arising from the COVID-19 pandemic, sensitivity tests were carried out to analyse the impact of the revised forecasts of economic growth on the economic benefits of the Proposed Development. The Applicant stated that updates were only undertaken to re-calculate the operational Transport Economic Efficiency (TEE) benefits, the wider economic benefits and the carbon dis-benefits since these account for the majority of benefits or disbenefits for the Proposed Development. The updated economic sensitivity test also considered the wider economic benefits in LAs beyond the host LAs, including Cambridge and Milton Keynes [REP9-033, Paragraphs 7.1.1 and 7.1.2 and Section 5].
- 9.4.61. The update showed an increased cost of carbon, but a lower level of carbon emissions compared to previously [REP9-033, Figures 6-1 and 6-2]. There was a 16% reduction in TEE, a 21% reduction in wider economic benefits and an increase in carbon disbenefits of 19%. The consequence of this was that the Benefit Cost Ratio (BCR) for the Proposed Development fell by 20% to 1.52 [REP9-033, Table 7-1 and Paragraphs 7.1.3 and 7.1.4].
- 9.4.62. The Applicant considers that these results are likely to have been conservative and that consequently, the data that informed the initial ES climate assessment [APP-083] would have overstated the carbon emissions of the Proposed Development as a result [REP9-029, Paragraphs 1.1.30 to 1.1.36].

ExA's reasoning

- 9.4.63. There are uncertainties in terms of what the GHG emissions of the Proposed Development would be from its construction and over its 60-year operational lifetime. The ExA notes the submissions that have been made and the discussions during the Examination regarding the

calculations and that new and updated datasets, policy and guidance will continue to be developed.

- 9.4.64. The Applicant's updated figure of around 2.1 million tonnes of additional carbon emissions from the Proposed Development identified at D9, including construction emissions, has been produced using the latest Government datasets and in accordance with the established methodologies. The ExA is therefore satisfied that this is a reasonable estimate at the present time.
- 9.4.65. The ExA also notes the updated monetised costs and benefits set out in the Applicant's D9 Economic Sensitivity Test based on this level of emissions. Whilst the cost of carbon has increased as noted by TAN, the forecast volume of emissions has reduced due to changes in the EFT that consider the composition of the UK vehicle fleet between 2030 and 2050, which had previously been fixed from 2030. The updated EFT assumption for a greater proportion of electric vehicles in the fleet from 2030 means that the quantum of emissions would be lower, limiting the effect of the higher carbon price to some extent.
- 9.4.66. Whilst the mechanism for deriving the BCR figure for the Proposed Development is complicated and not transparent, it is the standard mechanism used and there is no substantive evidence before the ExA that would cause it to doubt its accuracy. The matter relating to BCR has also been reported in Chapter 5 of this Recommendation Report.
- 9.4.67. The ExA accepts the Applicant's explanation that the Oxford Cambridge Expressway had a separate business case to the Proposed Development, as reported in Chapter 5 of this Recommendation Report. Consequently, its cancellation would not affect the economic assessment or eventual BCR of the Proposed Development.

Quantum of carbon emissions

- 9.4.68. The ExA explored matters relating to the Applicant's assessment of the quantum of construction carbon emissions, including with reference to paragraph 5.19 of the NPSNN which seeks to ensure that the carbon footprint of the Proposed Development is "*not unnecessarily high*".
- 9.4.69. Campaign for the Protection of Rural England (CPRE) raised concerns that because the Proposed Development would result in increased carbon emissions it would make achieving net zero emissions by 2050 more difficult [REP1-056, Q1.4].
- 9.4.70. The Cambridgeshire Councils noted the emissions during construction and operational stages of the Proposed Development which, whilst small in comparison to the national budgets were still an increase in emissions [REP1-051 Q1.4.1.1d]. The Cambridgeshire Councils also noted that reducing vehicle miles travelled would be key to reducing emissions. The Proposed Development would lead to an increase in miles travelled by vehicles and so would make reducing emissions more difficult [REP8-035, Q3.4.1.1f].

- 9.4.71. TAN commented on what they considered omissions or errors in the Applicant's approach to assessing GHG emissions from the Proposed Development, during construction and operation. This included wider issues such as promoting a more dispersed spatial pattern of development that is difficult to service other than by private vehicles. Given power generation has not been decarbonised yet, TAN expressed concern about the reliability of the Applicant's assessment of emissions from electrically charged vehicles [REP1-097 2, 3 and 4]. Considering carbon emissions over its 60-year lifetime TAN considered the Proposed Development to be one of the worst performing RIS2 projects, using public information on construction and operational GHG emissions which they collated [REP6-120].
- 9.4.72. TAN also made a number of general comments on emissions and referenced the Climate Change Committee's (ClimCC's) June 2021 Report to the UK Parliament, which states that since 2015 surface transport has been the sector with the highest emissions in the UK. As a result of this the ClimCC recommended that road investment decisions should be contingent on analysis showing how they contribute towards the UK's pathway to Net Zero emissions by 2050 [REP1-097 5.1].
- 9.4.73. The Applicant stated that its approach to assessing GHG emissions in the ES [APP-083], was based upon DMRB LA 114 Climate using its recognised Highways Emissions calculation tools for construction and maintenance and the DEFRA Carbon Emissions Toolkit for road users. The Applicant noted that the construction emissions of the Proposed Development were lower than other RIS2 projects [REP1-022 Q1.4.1.2]
- 9.4.74. The Cambridgeshire Councils requested further information regarding the derivation of construction stage emissions, without which it was not possible to verify the Applicant's stated figures. [REP1-051 Q1.4.1.1e].
- 9.4.75. The Applicant submitted a Technical Note on Construction Phase Greenhouse Gas emissions, in response to the request from the Cambridgeshire Councils [REP4-042]. Land Use Carbon Calculations from the Applicant were also provided, showing the effects of changes to Habitats as a result of the Proposed Development on carbon emissions [REP4-048].
- 9.4.76. TAN commented on the Applicant's updated values for land use change and clearance [REP4-048] and suggested alterations to the methodology used. This included the time the sequestration of carbon may take to occur, which would thereby produce a more realistic assessment [REP5-025, 5].
- 9.4.77. The Applicant considered its approach to be consistent with DfT guidance, as well as caselaw concerning the consideration of indirect emissions [REP5-014, REP4-073i]
- 9.4.78. The Applicant updated its Construction Phase Greenhouse Gas Emissions Technical Note [REP9-017] in light of comments made by the Cambridgeshire Councils [REP8-032, Pages 23 and 24] on the Land Use

Carbon Calculations and consistency with the Biodiversity Net Gain (BNG) calculations [REP4-048]. The Applicant also submitted an updated version of the Land Use Carbon Calculations document, now consistent with the BNG calculations referenced by the Cambridgeshire Councils, the results of which were similar to the previous version [REP9-038].

- 9.4.79. The Applicant provided an Economic Sensitivity Test using updated datasets including the November 2021 TAG updates [REP9-033, Paragraph 6.1.7 to 6.1.11 and Table 6-2]. This showed that the forecast carbon emissions for the Proposed Development over its lifetime were reduced to around 2 million tonnes in comparison with the 3.3 million tonnes of emissions specified in the Economic Assessment Report (EAR) [APP-254, Paragraph 4.4.7].
- 9.4.80. The SoCG between the Cambridgeshire Councils and the Applicant, shows agreement regarding some aspects of the data collection and mitigation for Climate. However, the Cambridgeshire Councils disagreed with the Applicant's approach to residual emissions from the Proposed Development, which whilst small compared to a national carbon budget still represented an increase. The Cambridgeshire Councils considered the residual emissions should be dealt with, such as through carbon offsetting, noting that the next ten years would be critical to reducing emissions [REP10-026 4.44 to 4.46] [REP10-062 4.44 to 4.46].

ExA's reasoning

- 9.4.81. The ExA notes the continued disagreement between the Applicant and TAN and the Applicant and the Cambridgeshire Councils in terms of the calculation of carbon emissions for the Proposed Development, particularly during the construction phase and in terms of land-use.
- 9.4.82. The Applicant has sought to address some of the concerns raised and the ExA is satisfied that the data and methodologies for the Construction Phase Greenhouse Gas Emissions Technical Note [REP9-017] and the Land Use Carbon Calculations document [REP9-038] are adequate and provide a reasonable indication of construction emissions and carbon sequestration from habitats associated with the Proposed Development.
- 9.4.83. The ExA also notes the uncertainties that remain as to the precise quantity of GHG emissions from the Proposed Development. However, in the context of the forecast lifetime emissions, the ExA does not consider any outstanding disagreements to be significant in terms of the overall assessment of carbon emissions.
- 9.4.84. The ExA is satisfied that the quantum of GHG emissions presented by the Applicant is a reasonable estimate for the Proposed Development and that with reference to NPSNN Paragraph 5.19, in terms of construction emissions, this is not unnecessarily high.

Climate change resilience

- 9.4.85. Previous global greenhouse gas emissions have already committed us to some degree of continued climate change for at least the next 30 years

(NPSNN Paragraph 4.37). Within this context it is essential that the Proposed Development is shown to be resilient to the currently forecast effects of climate change, certainly for its lifetime (NPSNN Paragraph 4.42).

- 9.4.86. Chapter 14 of this Recommendation Report will consider the resilience of the Proposed Development to flooding, which is one of the key effects of a changing climate, and so those matters are not covered in detail here to avoid duplication.
- 9.4.87. The ExA asked the Applicant to explain the resilience of the Proposed Development to forecast climate change [PD-008, Q1.4.2.1]. The Cambridgeshire Councils commented that some of the species proposed in the Applicant's planting strategies may not be sufficiently resilient to climate change [REP1-051, Q1.4.2.1].
- 9.4.88. The Applicant referred to the Climate Chapter of the ES [APP-083] which set out the approach to the assessment of climate change resilience, including the different scenarios considered and the mitigation measures proposed. The Applicant also referred to the Case for the Scheme [APP-240], which explains how climate change adaptation was considered through the design of the Proposed Development, and that it is consistent with the requirements of the NPSNN. The Applicant confirmed that it was satisfied with the resilience of the Proposed Development [REP1-022, Q1.4.2.1].
- 9.4.89. The ExA asked the Applicant what assessment had been made of the resilience of the Proposed Development to a global temperature rise of 4 degrees Celsius [PD-014 Q3.4.2.1].
- 9.4.90. In response the Applicant set out how the appraisal had followed the Government's TAG and was consistent with the NPSNN Paragraphs 4.36 to 4.45, including with regard to a high emissions scenario. The Applicant stated that their assessment adopted a precautionary approach to climate vulnerability that included a high emissions scenario equivalent to a global temperature rise of 4 degrees Celsius. The climate change vulnerability assessment had identified no significant effects on the Proposed Development [REP8-014, Q3.4.2.1].

ExA's reasoning

- 9.4.91. The ExA considers that there has been an adequate assessment of the likely effects of future climate change on the Proposed Development, including a high emissions scenario consistent with the requirements of the NPSNN.
- 9.4.92. The ExA is satisfied that with appropriate mitigation and management, the Proposed Development would be resilient to the effects of forecast climate change.

9.5. CONCLUSIONS

- 9.5.1. The Applicant has assessed GHG emissions from the Proposed Development against UK carbon budgets and the ExA is satisfied that appropriate regard has been had to the current policy context, including the NPSNN and the Paris Agreement.
- 9.5.2. The ExA notes the disagreements and uncertainties regarding the precise quantity of GHG emissions from the Proposed Development. In the context of the forecast lifetime emissions the ExA is satisfied that the quantum of GHG emissions presented by the Applicant is a reasonable estimate for the Proposed Development and that construction emissions are not unnecessarily high.
- 9.5.3. The ExA is also content that the Applicant has assessed the likely costs and benefits of the Proposed Development using the most up-to-date datasets and that the assessment is therefore reasonably robust. The ExA also notes that the cancellation of the Oxford Cambridge Expressway would not affect this assessment and that it would be sufficiently resilient to the effects of forecast climate change.
- 9.5.4. Despite the ExA's own concerns, alongside the great public concern about climate change and the representations from parties, the ExA, must accept that the Applicant's approach to assessing the cumulative effects of GHG emissions and the corresponding outcome, and to emissions offsetting, is reasonable and proportionate. In that regard the ExA finds that the Proposed Development would accord with NPSNN Paragraphs 5.17, 5.18 and 5.19.
- 9.5.5. However, given the significance of climate change globally, and the urgency of measures needed to address it, the ExA finds that a precautionary approach to this matter must be adopted. As such, the ExA recommends that the SoS, at the time of making their decision, re-assess the cumulative effects of the GHG emissions from the Proposed Development in light of the emerging policy context and any new data that might be relevant. The SoS would need to satisfy themselves again that the Applicant has demonstrated that the adverse effects of the GHG emissions from the construction and operation of the Proposed Development would not be significant.
- 9.5.6. Taking all the matters reported above into account, the ExA is taking a precautionary approach in finding that there could be a residual adverse effect from the Proposed Development in terms of Climate Change and Carbon Emissions, which the ExA concludes to be potentially significant, and provides limited weight against making the Order.

10. GOOD DESIGN

10.1. BACKGROUND AND POLICY CONTEXT

- 10.1.1. Consideration of Good Design in the Proposed Development was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. In this Chapter the Examining Authority (ExA) is reporting on the overarching design principles for the Proposed Development and the design development process, including the process post consent.
- 10.1.2. Matters relating to functional aspects of highway and junction design have been considered in Chapter 6 of this Recommendation Report.

National Policy Statement

- 10.1.3. The assessment for Good Design as set out in NPSNN, requires from the Applicant:
- 1) to include design as an integral consideration from the outset (Paragraph 4.28);
 - 2) to consider the following as key factor in the design of new infrastructure: visual appearance and aesthetics, functionality, fitness for purpose, sustainability, cost, sensitivity to place, efficient use of natural resources and energy (Paragraph 4.29);
 - 3) to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform and vegetation (Paragraph 4.32);
 - 4) acknowledging that given the nature of much national network infrastructure there may be a limit on the extent to which it can contribute to the enhancement of the quality of the area (Paragraph 4.30);
 - 5) to meet, through good design, the principal objectives of the scheme by eliminating or substantially mitigating the identified problems (Paragraph 4.31);
 - 6) 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 (Paragraph 4.33); and
 - 7) to demonstrate in their application how the design process was conducted and how the proposed design evolved (Paragraph 4.35).
- 10.1.4. In reaching a decision the Secretary of State (SoS) should take scheme design as a material consideration in decision making (Paragraph 4.32). The ExA and SoS should take into account the ultimate purpose of the infrastructure and bear in mind the operational, safety and security requirements which the design has to satisfy (Paragraph 4.35).

Other legislation, policies and guidance

- 10.1.5. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1].

- 10.1.6. The National Planning Policy Framework 2021 (NPPF), in particular Chapter 12 Achieving well-designed places, is a relevant consideration for Nationally Significant Infrastructure Project (NSIP) development proposals in respect of Good Design.

10.2. THE APPLICATION

Environmental Statement

- 10.2.1. The Applicant's case for good design is contained in the ES Chapter 2 The Scheme [APP-071, Paragraph 2.5.13 to 2.5.31], the Environmental Masterplan [APP-091] and the Engineering Sections [APP-017 to APP-022]. Also in the ES, Chapters 7 Landscape and Visual Effects [APP-076, Paragraphs 7.8.5 to 7.8.15] refers to design principles that influenced the Landscape Strategy.

Scope and methodology

- 10.2.2. The Applicant states that in developing the preliminary design and the approach to the construction of the Proposed Development, consideration has been given the Highways England (HE) publication 'The road to good design' which contains ten principles for good road design centred on the themes of connecting people, places and processes, and the principles and guidance contained in the 'Manual for Streets'. In addition, the Applicant sets out other considerations relating to usage of materials, visual impact, construction phasing and programme, operational safety, future maintenance operations, and meeting the challenges of climate change [APP-071, Paragraph 2.5.13 to 2.5.16].
- 10.2.3. The Applicant has also explained the engineering layout, functional design and safety consideration in the design of the proposed Black Cat Junction, new Roxton Road bridge, the Roxton Road link, the service road from the BP garage to the Black Cat Junction circulatory, the new dual 2-lane carriageway which would run east-west, the River Great Ouse viaduct, the single overbridge to be provided on the B1046, the new grade separated junction near the existing Cambridge Road roundabout, the Eltisley Link, the Caxton Gibbet junction north roundabout, and tie-in works [APP-071, Paragraph 2.5.17 to 2.5.31].
- 10.2.4. The Environmental Masterplan illustrates the form and location of design-based features embedded into the Proposed Development which has been primarily driven by the process of landscape design [APP-091].

Applicant's assessment of effects and mitigation proposed

- 10.2.5. The Applicant's approach is to use good design to avoid environmental constraints where possible, to mitigate the Proposed Development's environmental effects and to take account of consultation responses and feedback. The Applicant has described the key alternatives that have been considered during the design development of some aspects of the Proposed Development, including: the footbridge at Wintringham Brook,

road design options for the Grade II listed Brook Cottages, the location of borrow pits, floodplain compensation areas and construction compounds, options considered for bat mitigation and inclusion of noise bunds at Roxton and Potton Road [APP-072, Section 3.4]. This approach is also explained in some places in the ES, notably, Chapter 6 Cultural Heritage [APP-075], Chapter 7 Landscape and Visual Effects [APP-076], Chapter 8 Biodiversity [APP-077] and Chapter 11 Noise and Vibration [APP-080].

- 10.2.6. Requirement (R) 12 requires the detailed design for the authorised development to accord with the works plans, the general arrangement plans, the engineering section drawings and the environmental masterplan, all of which are certified documents in Schedule 10 of the draft Development Consent Order (dDCO) as it was submitted into Examination [APP-025].

10.3. LOCAL IMPACT REPORTS

- 10.3.1. Local Impact Reports (LIR) raised several issues relating to the design of individual components of the Proposed Development and that has been reported in other relevant Chapters of this Recommendation Report. None of the LIRs raised any concerns relating to the matters relating to good design that have been reported in this Chapter of the Recommendation Report.

10.4. THE EXAMINATION

- 10.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) Visual appearance and design principles; and
- 2) Design development process post consent (should consent be granted)

Visual appearance and design principles

- 10.4.2. In line with the policy requirements in NPSNN and NPPF, the ExA asked the Applicant for further evidence to demonstrate that the Proposed Development embodies good design in terms of siting and design measures relative to the existing landscape and historical character and function, landscape permeability, landform and vegetation. The ExA also asked for evidence on the design proposals for structural elements of the Proposed Development, such as bridges, viaduct, gantries, and underpasses, and other fixtures, such as street lighting, signs and railings [PD-008, Q1.10] [EV-020, 8].
- 10.4.3. The joint response from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils), referring to local policy in the South Cambridgeshire Local Plan 2018 and Huntingdonshire Local Plan 2019, stated that the Proposed Development should do more to integrate into the host landscape, particularly where there would be considerable infrastructure, such as viaducts, bridges and roundabouts, to be integrated into the landscape. They asked that the Proposed

Development did more to respect and retain, or enhance the local character and distinctiveness of the local landscape and to protect existing trees, woodlands, hedges and hedgerows. They also stated that there was limited design detail regarding the extent and height of safety barriers and approaches to the bridge and overbridge crossfall, and if these would accommodate all Non-Motorised Users (NMU) [REP1-051].

- 10.4.4. In response [REP1-022, Q1.10] [EV-036] [EV-041], the Applicant submitted the Scheme Design Approach and Design Principles (SDADP) document [REP3-014], which sets out the design approach for the preliminary design and the design Vision and principles which would guide the development of the detailed design post consent. The SDADP provides the Applicant's key considerations and principles that have been applied to the preliminary design so far, and would inform the detailed design going forward. These are engineering design principles relating to earthworks cuttings and embankments, drainage and pollution control systems, highway structures, such as bridges and culverts, and gantries, lighting and signage. There are also environmental design principles that have been incorporated to mitigate the environmental effects and these principles broadly align with the proposed embedded mitigation and essential mitigation across the various receiving environments in the ES.
- 10.4.5. To guide detailed design, the Applicant set out general design principles that would be followed for the design development of 21 specific bridges, culverts, underpass and viaduct. These principles are organised under the headings: need, alignment and positioning, scale, height and massing, materials and finishes, and landscaping [REP3-014, Appendix C]. The Applicant stated that proposals for signage, lighting, gantries and railings would not be available for the Examination, and would be progressed through the detailed design stage [REP1-022, Q1.10.1.1].
- 10.4.6. The ExA asked parties to comment on the content of the SDADP, asking specifically if the design principles and features of specific structures [REP3-014, Appendix C] covered the range of physical structures, landscape features, and other measures that design principles should be set out for. The ExA also asked parties if the rationale behind the design principles for individual structures, in relation to the immediate surroundings and sensitivity to place was clear [PD-009, Q2.10.1.1]. Later in the Examination, further to discussions at Issue Specific Hearing (ISH) 5 [EV-056, 7], the ExA asked parties to mark up the SDADP to indicate how their concerns could be addressed. The ExA highlighted that the design consideration relating to engineering principles and environmental principles related to the design development process so far, rather than indicating the principles that would drive detailed design from this point on, or post consent (should consent be granted) [EV-071] [EV-072] [EV-076] [EV-077].
- 10.4.7. Central Bedfordshire Council (CBC) [REP4-062] and Natural England (NE) [REP4-070] responded to express general satisfaction with the SDADP.
- 10.4.8. The Cambridgeshire Councils stated that the approach set out in the SDADP was acceptable subject to detailed design progression. They

reiterated their previous point that there was still nothing in the SDADP that related particularly to the Cambridgeshire landscape or vernacular, and the authorities struggled to see how the structures would reinforce a sense of place. While they did not debate the functionality of the Proposed Development, they questioned if it would add to the overall quality of the area. They suggested that a utilitarian palette had been employed, when, particularly on NMU structures, sustainable timber, or green living bridges that connect both people and wildlife, or public art features would be more aspirational. The Cambridgeshire Councils also expressed concerns about specific proposals relating to planting mixes and quantum of trees, hedges and other landscape typologies and how the individual structures identified have been designed to incorporate embedded biodiversity mitigation, for example mammal crossings [REP4-056]. They highlighted key sections of the SDADP that could incorporate wording and amendments to securing design outcomes that related to the local context, and integrating the interest of a range of users including NMUs [REP6-063].

- 10.4.9. East West Rail (EWR) Company, suggested including a design principle requiring the integration the EWR Project at detailed design and to enable design changes to allow for engineering efficiencies and the coordination of construction programmes. EWR asserted that inclusion of such a principle would ensure engagement in the public interest, and proposed wording to that effect [REP4-067, Q2.10.1.1].
- 10.4.10. Camcycle highlighted ways in which the Applicant could embed local transport note (LTN) 1/20 on cycle infrastructure design in the SDADP to promote active travel, and make the relevant parts of the Proposed Development inclusive and safe for cyclists [REP6-077, ISH5 Action 14].
- 10.4.11. The Applicant responded to EWR stating given the difference in programmes for the Proposed Development and the EWR project, it would not be suitable to include the proposed design principle, especially as there was too much uncertainty for any real consideration to be given to interfaces with EWR. To the Cambridgeshire Councils, the Applicant reinforced its position stating that the principles identified in the SDADP would respond to and reinforce the local landscape character [REP5-015]. The Applicant did not accept almost all Cambridgeshire Councils' amendments to the SDADP stating that local context had been a consideration from the start and would be taken into account where practicable, safe and without compromising sound structural engineering [REP8-010, Appendix B]. The Applicant highlighted that consideration of the local context is embedded in the general design principles in the SDADP, which are described in greater detail in the First Iteration Environmental Management Plan (EMP) [REP10-018, Annex L, Paragraphs 1.9.8 to 1.9.11] and the two documents should be read alongside each other [EV-071] [EV-072] [EV-076] [EV-077].
- 10.4.12. Near the close of the Examination, the Applicant submitted the final version of the SDADP. In the final version, for engineering design principles, the Applicant identified the design principles that would be followed at detailed design, in addition to outlining the design principles

that were followed through preliminary design. This change is predominantly in response to the ExA's comments at ISH5. Also in Appendix C, the Applicant had added further detail, notably identifying a material palette [REP9-015].

ExA's reasoning

- 10.4.13. The ExA finds the Applicant's presentation of its design approach in the application documents, in accordance with the policy requirements in NPSNN and NPPF, was inadequate. The SDADP is welcomed by the ExA, and indeed was welcomed by other parties. In that regard the ExA considers that the Applicant's outline of how design has been integral to the design development process and how it would drive detailed design, is in principle met by the SDADP. In terms of the design approach itself, the ExA agrees with Cambridgeshire Councils and other parties that the broad framework presented in the SDADP is robust.
- 10.4.14. The ExA finds that there is merit in the Applicant's argument that the consideration of local context would be a requirement of the SDADP, given the SDADP has embedded the policy requirements of the NPSNN, and NPPF as well as the Road to Good Design which requires good road design to fit in context and be environmentally sustainable. However, here the ExA is persuaded by the Cambridgeshire Councils that in the SDADP the Applicant has not done enough to demonstrate that the Proposed Development would in fact embody good design in terms of siting and sensitivity to place, or take account of relevant local policies. The ExA considers that the SDADP is lacking a description of the Applicant's understanding of the local context along the route of the Proposed Development, and embedding that understanding in SDADP Appendix C by making specific references to distinguishable aspects of the context that the Applicant intends to consider during detailed design.
- 10.4.15. The ExA acknowledges that the general design principles listed in the SDADP and described in the First Iteration EMP set out several principles such as, integration with rural landscapes, retention of significant features, integrated design and bridges and structures, that if delivered expertly could deliver outcomes that are sensitive to place. For this to be delivered successfully, however, the design development process post consent (should consent be granted) would be crucial to hold the Applicant to account on the application of its own design principles to detailed design outcomes. This has been reported and concluded on in the next section of this Chapter.
- 10.4.16. The ExA noted that as a list, the general design principles are non-descript and do not convey the intentions. As such the ExA had suggested that for completeness the descriptions of the general design principles in the First Iteration EMP, should also be included in the SDADP. The Applicant did not agree with this suggestion, and while this is not entirely helpful, the ExA notes that the SDADP makes a clear link with the in the First Iteration EMP. The ExA is satisfied with the link between these two inter-linked sections in the SDADP and the First Iteration EMP.

Design development process post consent (should consent be granted)

- 10.4.17. The ExA asked parties if they were clear and content about the design development process and who would be consulted going forward [PD-008, Q1.10.2.1] [PD-009, Q2.10.2.1]. Bedford Borough Council (BBC) [REP4-050], Cambridgeshire Councils [REP1-051] [REP4-056], and EWR [REP1-074] [REP4-067] responded to state that engagement with Local Authorities (LA) and parties should be required at detailed design stage and that they were not clear about the process proposed in the SDADP.
- 10.4.18. Throughout the Examination [PD-008, Q2.10.2.1] [EV-020, 8c] [EV-056, 7b] [PD-014, Q3.10.2.1], the ExA also asked the Applicant about the design development process post consent (should consent be granted) seeking clarity on:
- 1) the design development process going forward and which parties will be consulted;
 - 2) if it would be reasonable to set out the design development process and for it to be secured in the dDCO;
 - 3) if the Proposed Development had been through independent design review; and
 - 4) the scope and purpose of the detailed design stage and the engagement expected with parties during detailed design stage.
- 10.4.19. The Applicant maintained its position throughout the Examination, and stated that the SDADP was an initial draft and would be developed through the course of the Examination; however the Applicant confirmed that no further formal consultation with parties is proposed after this Examination. In response to the other parties the Applicant also stated that consultation with LAs would add uncertainty and potential delays [REP1-022, Q1.10.2.1] [REP4-037, Q2.10.2.1] [EV-071] [EV-072] [EV-076] [EV-077] [REP8-014, Q3.10.2.1] [REP8-010, Appendix B].
- 10.4.20. The Applicant clarified that detailed design stage is construction preparation, where the Applicant would develop the information required to enable the planning and commencement of construction. The Applicant confirmed that as set out in the SDADP, engagement during the detailed design stage would be predominantly used to communicate progress with key stakeholders, including LAs and Statutory Environmental Bodies, at regular meetings. The detailed design would also be presented through Public Information Exhibitions to provide visibility to the solution being delivered [REP8-014, Q3.10.2.1].
- 10.4.21. In the ExA's proposed changes to the dDCO, the ExA expressed concern about this approach. The ExA stated that the SDADP was a high level document that provides overarching principles to guide detailed design outcomes of the Proposed Development. On the basis of the content in the document currently in the Examination, the ExA considered that the application of the approach and principles embodied in this document to deliver design outcomes that meet the policy requirements in NPSNN (Paragraphs 4.29, 4.30, 4.31, 4.33) and the NPPF (Chapter 12) would be

a matter of interpretation. As such, the ExA considered that the application of the approach and principles embodied in this document to specific sites and structures along the route should be subject to scrutiny by relevant parties, such as the LAs and Statutory bodies and landowners. While the ExA could see logic in the Applicant's position that the document would not be updated post consent, it remained unconvinced about the extremely limited engagement on detailed design and the application of the approach and principles embodied in this document post consent (should consent be granted). The ExA asked the Applicant to provide suitable wording to be added to secure post consent design engagement with relevant stakeholders [PD-015, Q4.8.1.4].

10.4.22. The Applicant was opposed to the ExA's proposed changes, and stated that it had engaged and formally consulted with key stakeholders during the design development phase and this had influenced various aspects of the Proposed Development. The Applicant considered the design to be significantly more mature than that typically submitted as preliminary design and that going forward the Applicant's overriding consideration for detailed design must be safety and functionality. The Applicant did not consider that any further formal consultation would add any true value to stakeholders in terms of their influence, but could significantly impair the ability and efficiency of the Applicant in developing a detailed design that meets design standards that ensure the performance and safety of the final design throughout the life cycle of the Proposed Development [REP9-024, Q4.8.1.4].

10.4.23. Without prejudice to its position, the Applicant provided wording for an additional Paragraph (3) to R12, which would secure detailed design engagement by the Applicant. The Applicant said that it was intentionally worded to ensure that detailed design could progress in advance of a determination on the Order, as detailed design was progressing now. This wording would also include a definition for 'relevant stakeholders'.

""Relevant stakeholders" means relevant local authorities and relevant statutory environmental bodies"

"(3) Before commencement of development, the undertaker must submit to the Secretary of State for approval a report demonstrating that the undertaker has engaged with relevant stakeholders on how detailed design has been refined in accordance with the scheme design approach and design principles."

10.4.24. Cambridgeshire Councils also proposed wording for an additional Paragraph (3) to R12 [REP9-043, Q4.8.1.4]: *"No part of the authorised development is to commence until, for that part, the detailed design has been approved by the relevant local planning authority in consultation with the relevant local highway authority."*

10.4.25. This matter was not agreed at the close of the Examination.

ExA's reasoning

- 10.4.26. The ExA has already stated that the SDADP is currently lacking a description of place context along the 16 kilometres (km) stretch of the Proposed Development. It follows that the SDADP Appendix C is lacking the Applicant's understanding of the local context by making specific references to distinguishable aspects of the context that the Applicant intends to consider during detailed design. As such, the ExA finds that without engagement with key local stakeholders, there is no accountability for the Applicant to ensure that the application of the design principles in the SDADP would deliver outcomes that meet the policy requirements in NPSNN and the NPPF.
- 10.4.27. The ExA takes note of the Applicant's concern that the overriding consideration for detailed design must be safety and functionality, and agrees that this must not be compromised as set out in NPSNN (Paragraph 4.35). The ExA notes the Applicant's concerns that such engagement could cause delays to the programme, but is content that early engagement as suggested by the Applicant could be managed and mitigate any delays.
- 10.4.28. ExA is not convinced that the Applicant's proposed wording for R12 Paragraph (3) would ensure meaningful engagement with the relevant stakeholders, especially as it does not secure the need for the Applicant to demonstrate how the detailed design has been refined in consideration of the points raised by relevant stakeholders, and in accordance with the SDADP. The ExA proposes the following wording and has included it in the recommended DCO (rDCO), and wording for the definition for 'relevant stakeholders'.

""relevant stakeholders" means relevant local authorities and relevant statutory environmental bodies"

"(3) No part of the authorised development is to commence until, for that part, a report has been submitted to, and, following consultation with the relevant local planning authority, approved by the Secretary of State, demonstrating that—

(a) the undertaker has engaged with relevant stakeholders on refinements to detailed design; and

(b) the detailed design for that part of the authorised development has been refined in accordance with the scheme design approach and design principles and the relevant stakeholders' comments."

10.5. CONCLUSIONS

- 10.5.1. The ExA welcomes the SDADP submitted by the Applicant, and finds that the broad framework presented in it is robust. However, the ExA considers that the SDADP is lacking a description of the Applicant's understanding of the local context along the 16km route of the Proposed Development, and has not embedded that understanding in SDADP Appendix C by making specific references to distinguishable aspects of the context that the Applicant intends to consider during detailed design. The ExA finds that without engagement with key local stakeholders,

there is no accountability for the Applicant to ensure that the application of this design principles in the SDADP would deliver outcomes that meet the policy requirements in NPSNN and the NPPF. As such the ExA proposes the inclusion new Paragraph (3) to R12 in the rDCO to ensure meaningful engagement with the relevant stakeholders and for the Applicant to demonstrate how the detailed design has been refined in consideration of the points raised by relevant stakeholders, and in accordance with the SDADP.

- 10.5.2. With the inclusion of new Paragraph (3) to R12, the ExA is content that the design development process for the Proposed Development and the likely outcomes would meet the policy requirements in the NPSNN (Paragraphs 4.29, 4.30, 4.31, 4.33) and the NPPF (Chapter 12). Taking all the matters reported here into account, the ExA ascribes neutral weight to Good Design for or against making the Order.

11. CONSTRUCTION METHODS AND EFFECTS

11.1. BACKGROUND AND POLICY CONTEXT

- 11.1.1. Consideration of Construction Methods and Effects of the Proposed Development was not a principal issue in the Rule 6 letter [PD-005, Annex C]. At Preliminary Meeting part 1 (PM1) [EV-002] [EV-003] [EV-004] and in Procedural Deadline A (PDA) submissions, and representations were made that the Initial Assessment of Principal Issues (IAPI) did not include effects of the Proposed Development on borrow pits. At PM Part 2 (PM2) [EV-002] [EV-008] [EV-009], the ExA explained that it would consider construction methods and effects in the Examination and this would include the approach to construction, the construction program, construction compounds, borrow pits, waste management, and the environmental management plan. The ExA confirmed that the IAPI would not be updated, but construction methods and effects will be included as a separate section in Written Questions (WQ) throughout the Examination.
- 11.1.2. The effects of the construction of the Proposed Development have been reported in Chapters 6-20 and Chapter 22 of this recommendation Report. This chapter reports on the cross-cutting matters relating to the Applicant's approach to construction and proposed methods. This chapter also reports on provisions in the draft Development Consent Order (dDCO) relating to the construction and maintenance of the Proposed Development.

National Policy Statement

- 11.1.3. The Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 requires an EIA development to submit an Environmental Statement (ES) with a description of the physical characteristics of the whole development, land-use requirements, and expected residues and emissions that would be produced during the construction and operation phases. It also requires a description of the likely significant effects of the development on the environment resulting from the construction of the development (EIA Regulations, Schedule 4, Paragraphs 1 and 5).
- 11.1.4. The National Policy Statement for National Networks (NPSNN), requires the Applicant to provide information on the likely environmental, social and economic effects of the project (Paragraph 4.21). The NPSNN requires from the Applicant, an assessment of construction effects across various receiving environments, such as air quality, climate change, road safety, carbon emissions, biodiversity and ecology, waste management, dust, odour, artificial light, smoke, steam, flood risk, the historic environment, landscape and visual impacts, noise and vibration, transport networks, and water quality and resources.
- 11.1.5. In reaching a decision the Secretary of State (SoS) should be satisfied the Applicant has assessed construction effects, has proposed process

that will be followed to ensure effective management of effects arising, has considered whether mitigation measures are needed and, has provided sufficient information to show that any necessary mitigation will be put in place.

Other legislation and policies

- 11.1.6. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1].

11.2. THE APPLICATION

Environmental Statement

- 11.2.1. The Applicant's approach to the matters reported in this Chapter relating to Construction Methods and Effects is contained in the ES Chapter 2 The Scheme [APP-071,], Chapter 3 Assessment of Alternatives [APP-072], Chapter 4 Environmental Assessment Methodology [APP-073], First Iteration Environmental Management Plan (EMP) [APP-234], and the Borrow Pits Optioneering Report [APP-246]. Additionally, construction effects are identified and assessed in several other Chapters, Figures and Appendices of the ES and supporting documents.

Scope and methodology

Construction works

- 11.2.2. To minimise the disruption caused by construction of the Proposed Development, the Applicant proposes advanced and enabling works to be undertaken ahead of the main construction. Advanced works would primarily comprise archaeological investigations as discussed in Chapter 18 of this Recommendation Report, and diversions of key Statutory Undertakers' (SU) plant. Enabling works would primarily comprise works associated with the establishment of construction compounds, accesses, preliminary site clearance works, haul road and site access works, ecology works and permanent/temporary works to Public Rights of Way (PRoW).
- 11.2.3. The main construction works would be split across the following sections of the Proposed Development:
- 1) Section 1: Black Cat junction;
 - 2) Section 2: River Great Ouse viaduct to East Coast Mainline (ECML) railway;
 - 3) Section 3: ECML railway to Cambridge Road junction;
 - 4) Section 4: Cambridge Road junction;
 - 5) Section 5: Cambridge Road junction to Caxton Gibbet junction; and
 - 6) Section 6: Caxton Gibbet junction.
- 11.2.4. A phased approach to construction of some sections of the Proposed Development, especially Black Cat junction, would be adopted,

determined by the requirements for temporary traffic management (TTM) on existing routes and the need to minimise disruption to the travelling public [APP-071, Paragraphs 2.6.1 to 2.6.7].

Construction programme

- 11.2.5. Based on the Government's commitments in Road Investment Strategy (RIS) 2, the Applicant's initial delivery programme assumed construction would commence in September 2021, with works being completed and the Proposed Development being open for traffic in May 2025 [APP-071, Table 2-2]. However due to delays caused by additional consultation, the the Applicant has reviewed the construction programme and construction would commence in March 2022, with works being completed and the Proposed Development being open for traffic in May 2026. In this scenario, the Applicant assumes that the Order would be consented (if consent were granted) by March 2022 [APP-071, Table 2-3].
- 11.2.6. The EIA has been based on the revised timeline where the Proposed Development would be open for traffic in May 2026. The Applicant states that the traffic modelling undertaken to generate forecasts for certain assessments reported in the ES remains based on the Proposed Development opening in the year 2025. The 12 month difference between the opening year adopted in the traffic modelling and the opening year adopted in the EIA is not considered to invalidate the conclusions of the assessments reported in the Transport Assessment (TA) [APP-241 to APP-243] and ES. This is because the Applicant considers that the forecast flows on the road network in years 2025 and 2040 would be reasonably representative of the traffic flows that would exist on the network in years 2026 and 2041 respectively. The Applicant's original traffic modelling information did not account for vehicle movements associated with the advanced works phase of construction. The Applicant estimated the number of additional trips that would likely result from advanced works and this information has been considered within the relevant construction-phase assessments reported in the ES [APP-071, Paragraphs 2.6.8 to 2.6.20].

Construction workforce and working hours

- 11.2.7. The Applicant has described the works associated with advanced works, enabling works and main construction work associated with the six sections. The Applicant also states that it would expect a maximum monthly workforce of 900 staff including Highways England (HE), now National Highways (NH) staff, technical and management staff and contractors' teams [APP-071, Paragraphs 2.6.241 to 2.6.243].
- 11.2.8. Core construction working hours would be from 07:00 to 18:00 on weekdays and from 07:00 to 13:00 on Saturdays, with the exception of works where night time working is required, works that are weather dependant, and to accommodate engineering practicability [APP-071, Paragraphs 2.6.244 to 2.6.249].

Construction compounds

- 11.2.9. Three main construction compounds would be in place throughout the construction period. The main compound would be at the Wintringham, the western compound would be located to the southeast of the existing Black Cat roundabout, and the eastern compound would be located to the north-east of the existing Caxton Gibbet roundabout. A number of smaller satellite construction compounds would be formed to facilitate construction; these would generally be located adjacent to bridge structures, and would be in operation for a limited duration [APP-071, Table 2-9].
- 11.2.10. Where possible, lighting would be managed to reduce light spill and cabins and facilities would be single story and positioned centrally to minimise impacts on nearby receptors. The compound would be fenced with a 2.4 metre (m) high fence [APP-071, Paragraphs 2.6.256 to 2.6.284].
- 11.2.11. Areas of land within the Order limits that would be subject to restoration are: the main construction compounds, satellite construction compounds, borrow pits, land used temporarily during construction and temporary materials storage areas [APP-071, Paragraphs 2.6.285 to 2.6.292].

Borrow Pits

- 11.2.12. The Applicant proposes to use borrow pits to extract suitable earthworks materials for use during construction, to avoid importing material from external sources and the associated environmental impacts. Four borrow pits would be formed: two borrow pits located immediately north-west and north-east of the existing Caxton Gibbet roundabout, and two borrow pits located to the east of the existing Black Cat roundabout and to the west of Roxton Road. These locations have been selected due to their proximity to where material would be needed during construction. The depth of excavation would range from 2 to 7m [APP-071, Paragraphs 2.6.38 to 2.6.42]. The Applicant has presented its case regarding the need for and description of borrow pits and the site selection process [APP-246].

Maintenance and Decommissioning

- 11.2.13. Appropriate consideration has been given to future maintenance such as periodic inspections and the renewal of components. This has been considered in Chapters 6, 7, 14 and 15 of this Recommendation Report.
- 11.2.14. The Applicant does not expect the Proposed Development to be decommissioned or demolished. In the unlikely event that the Proposed Development needs to be demolished, the Applicant would conform to the statutory process in place at that time, including EIA requirements. Demolition of the Proposed Development has therefore not been considered in the ES.

Applicant's assessment of effects and mitigation proposed

- 11.2.15. The Applicant's optioneering and design-development of the Proposed Development, included decisions that would avoid and prevent adverse environmental effects, including modification of the horizontal alignment of the new dual carriageway and the selection of sites for borrow pits. Where avoidance and prevention have not been possible, the Applicant has identified measures to reduce the adverse environmental effects, for example a comprehensive planting strategy to help integrate the new dual carriageway into the landscape, and to provide biodiversity mitigation and enhancements. The Environmental Masterplan [REP9-037] illustrates the form and location of all such design-based measures embedded into the Proposed Development. The Applicant's proposed embedded mitigation that is common across the Proposed Development is set out in the ES [APP-071, Table 2.1].
- 11.2.16. Mitigation for Land Use is also relevant to matters discussed in this Chapter. Embedded mitigation specific to Land Use includes the following measures and has been secured through the Works Plans [APP-009 to APP-010], the General Arrangements Plans [APP-011] and the First Iteration EMP [REP10-018]:
- 1) designing the Proposed Development to facilitate the reuse of acceptable material arisings and achieving an earthworks balance within the design;
 - 2) inclusion of borrow pits and temporary on-site storage of soils and construction materials within the Order limits of the Proposed Development, and appropriate sizing of the compounds and storage areas; and
 - 3) reuse of excavated materials and the recycling of demolition and construction materials.
- 11.2.17. Essential mitigation has been proposed for construction management in general and this has been secured through the First Iteration EMP and this includes the Soil Management and Handling Plan, Contaminated Land Management Plan, Water Management Plan, and Materials Management Plan [REP10-018, Annex E, F, H, and I].
- 11.2.18. Additional essential mitigation specific to other receiving environments has been reported in Chapters 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, and 18 of this Recommendation Report.

11.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 11.3.1. The borrow pits near Black Cat roundabout are in Bedford Borough. Bedford Borough Council (BBC) in their Local Impact Report (LIR), referred to local policy in Bedford Borough, Central Bedfordshire and Luton Council Minerals and Waste Local Plan 2014, and stated that principal of providing borrow pits to support the supply of materials for the Proposed Development is acceptable. However, they found that the application was lacking information on how the borrow pits would be worked, and the ES does not disaggregate the environmental effects of the borrow pits [REP2-002].

- 11.3.2. BBC also stated that the two borrow pits in its borough, would be located in Grade 1 agricultural land and it is not clear that they will be restored to Grade 1 agricultural land following the completion of the Proposed Development. The precise methodology for stripping, storing and replacing of soils will be critical to the classification achieved as will the management of these in the aftercare period.

Cambridgeshire Councils

- 11.3.3. The borrow pits near Caxton Gibbet roundabout are in the administrative area of Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils). Cambridgeshire Councils in their joint LIR, expressed concern that there is limited information on borrow pits and their management and remediation within the application. They highlight that the borrow pits would affect landscape character, landform, and land use. Additionally, borrow pits would be likely to have diminished soil quality when ultimately reinstated for agriculture. This could lead to temporary or longer term changes in landscape character due to the diminished capability of the soil to grow crops, and level changes resulting from the potential for soil to collapse. The Cambridgeshire Councils felt that an opportunity had been missed to implement a restoration scheme for the borrow-pits at site (sites 3 & 4), site compounds and soil storage areas which benefits biodiversity and breeding and wintering birds in particular [REP2-003].

11.4. THE EXAMINATION

- 11.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) Construction programme;
- 2) Pre-commencement Plan;
- 3) Borrow Pits; and
- 4) Land outside the Order limits in Article 4 and Article 23.

Construction programme

- 11.4.2. The ExA noted the Applicant's construction programme was relying on an outcome to the development consent application by March 2022 [APP-071, Section 2.6]. The ExA asked the Applicant if an update to the construction programme in the ES was required. The ExA also asked what the principal risks of delay were, what contingencies had been included, and if there was a potential for a longer construction programme to give rise to any materially new or materially worse adverse environmental effects in comparison with those assessed in the ES [PD-008, Q1.6.1.2].
- 11.4.3. The Applicant confirmed that no updates were required to the current construction programme [APP-071, Table 2-3] because it included a time risk allowance or contingency, and represents the worst-case timeline for the construction of each section of the Proposed Development. The Applicant however recognised that the key risk to the programme would

be delays arising from the SoS determining the development consent application, and that no specific contingency has been allowed for that delay. The construction programme assumes all works would commence after consent is granted, and the EIA has accordingly been undertaken assuming this worst-case scenario. However, the Applicant explained that a separate Planning Application for archaeological works within the advanced works phases had been submitted to Central Bedfordshire Council (CBC). Pursuant to the planning permission for the advanced works granted by CBC, that archaeological work was currently ongoing. The Applicant stated that it was unlikely that the overall duration of the construction period would extend beyond that set out in its worst-case construction programme [REP1-022, Q1.6.1.2]. The specific archaeological works relate to the diversion of the high-pressure gas pipeline and are reported in Chapter 18 of this Recommendation Report.

ExA's reasoning

- 11.4.4. The ExA is content that the archaeological works within the advanced works phases have indeed made progress, as reported in Chapter 18 of this Recommendation Report. Additionally, the ExA notes the Applicant's response regarding built in contingency time in each section of the construction programme. As such, the ExA is confident that the Applicant's worst-case construction programme is reliable.
- 11.4.5. However, the ExA is still concerned about the Applicant's assumption for consent (if consent is granted) in March 2022, which would be the trigger for all construction activities to start. The SoS, at the time of making the decision, if the decision is to grant consent, may wish to seek confirmation from the Applicant if the construction programme that underpins that EIA still stands. In addition, the SoS may wish to confirm from the Applicant if the traffic modelling undertaken to generate forecasts for certain assessments reported in the ES, can still be relied upon.

Pre-commencement Plan

- 11.4.6. The ExA noted that there was a definition for commence in Article 2 of the dDCO, which carved out several, wide-ranging activities, many of which the ExA thought to be significant construction activities. According to the provision of the dDCO, such as Requirement (R) 3, R11 and others, these activities could be carried out without various plans and written details, such as the Second Iteration EMP and Traffic Management Plan (TMP), being in place. The Explanatory Memorandum (EM) [APP-028, Paragraph 4.1.6.a] referred to these excluded activities as pre-commencement operations. The ExA asked if 'pre-commence' should be defined in the dDCO and asked for suitable wording [PD-008, Q1.7.2.1]. The ExA asked Local Authorities (LA) to elaborate on the works excluded from the definition of 'commence' in the dDCO that would need controls either through First Iteration EMP or other means [EV-015] [EV-012] [EV-016, 10 and 11].
- 11.4.7. The Cambridgeshire Councils highlighted several activities such as pre-construction mitigation works, remedial work in respect of any

contamination or other adverse ground conditions, demolition, protection works and others which could involve wide ranging activities that could have traffic, noise, and dust effects which would not be controlled by approved management plans [REP1-103].

- 11.4.8. The Applicant submitted the Pre-commencement Plan [REP10-037] which describes the proposed pre-commencement works that could be undertaken by the Principal Contractor and details the mitigation measures required to appropriately control those works, prior to the approval of other management plans. The Applicant stated that the Pre-commencement Plan, together with the Biodiversity pre-commencement plan [REP8-004] and the Archaeological Mitigation Strategy (AMS) [REP10-036a] will apply to all pre-commencement works as defined in the dDCO. Accordingly, in the dDCO the Applicant added the Pre-commencement Plan to the list of certified documents in Schedule 10, added a definition of pre-commence to Article 2, and amended R20 to state that any pre-commencement works must be carried out in accordance with the biodiversity pre-commencement plan and the pre-commencement plan [AS-026].

- 11.4.9. The content of the Pre-commencement Plan was edited during the Examination in response to comments from the Cambridgeshire Councils [REP6-061] and the ExA [EV-036] [EV-041] [EV-079] [EV-082] [EV-093, 1], and no matters remained pending or disagreed at the close of the Examination.

ExA's reasoning

- 11.4.10. The ExA welcomes the submission of the Pre-commencement Plan and the related amendments to the dDCO. The Applicant took on board several comments made by the ExA and Cambridgeshire Councils, and the ExA is satisfied that the Pre-commencement Plan and the related amendments to the dDCO provide adequate controls of the activities that would need to take place before the approval of other management plans. The Pre-commencement Plan is secured in the dDCO as a certified document in Schedule 10 and through R20.
- 11.4.11. Matters relating to the Biodiversity pre-commencement plan are reported in Chapter 7, and those relating to AMS are reported in Chapter 8 of this Recommendation Report.

Borrow Pits

- 11.4.12. The ExA and several parties raised concerns, notably BBC, Cambridgeshire Councils and Church Commissioners for England (CCE), regarding the limited information in the application regarding borrow pits. They asked for a detailed description of the worst case scenario of the works related to borrow pits, including identifying the area, height and location of soil stockpiles, method of extraction and numbers of plant and machinery on site, method of delivery to the road scheme, processing of material on site, backfilling and restoration and operating times. BBC said that they wanted to see the noise and dust effects specifically from borrow pits, and did not feel that the First Iteration EMP [APP-234] was

adequate to control the effects from borrow pits specifically. Cambridgeshire Councils said they wanted to see the restoration of borrow pits to include schemes for beneficial biodiversity or geological features. CCE who own land that the Applicant proposes to acquire for a borrow pit near Caxton Gibbet, stated that they wished to be consulted in relation to establishing baseline conditions, the necessary mitigation measures and the detailed proposals for restoration. CCE wished to see an obligation on the Applicant to ensure that the relevant site is restored to the same Agricultural Land Classification (ALC) as it was prior to the borrow pit works being undertaken [RR-008a] [REP1-045] [REP1-040, Q1.2.1.4, Q1.6.2.1, Q1.17.1.1] [REP2-002] [RR-013] [REP1-048] [REP1-051, Q1.6.2.1] [REP2-003] [REP1-084, Q1.6.2.1] [REP1-094, Q1.6.2.1] [REP4-064].

- 11.4.13. The Applicant stated that the detail on borrow pits presented in the ES [APP-071] reflects the preliminary design stage, and that the assessment in the ES had assumed reasonable worst-case assumptions. Pointing to the noise assessment in the ES [APP-080] the Applicant confirmed that the assessment demonstrates that activities at the borrow pits are not a direct source of potentially significant construction noise at nearby receptors. If the Applicant and other parties found at detailed design stage, that further mitigation is required then the Applicant would build on the generic measures set out in the First Iteration EMP [REP10-018] and would adopt industry standard practice [REP1-021] [REP3-008] [REP3-007].
- 11.4.14. The Applicant stated that the activities associated with the formation, operation and restoration of the borrow pits have formed an integral component of the Proposed Development and are not disaggregated as separate components in the ES, in compliance with the EIA Regulations 2017. The Applicant also confirmed that it had not used high level methodologies and that the information and detail for borrow pits has been sufficient to undertake an assessment of their likely environmental effects when considered within the wider construction assessments of the Proposed Development [REP5-015, Q2.6.2.1].
- 11.4.15. The Applicant stated that it was negotiating the possibility of obtaining the borrow pit land by lease outside the Compulsory Acquisition (CA) process, where the land-owners wish to do this. As such, in restoring the borrow pits to agricultural land, the Applicant was addressing the needs of the land-owners and the National Farmers Union (NFU), who did not wish to see agricultural land used for biodiversity [REP5-015, Q2.6.2.1]. CCE confirmed that they strongly objected to biodiversity as the borrow pit on their land was restored. NFU on behalf of other relevant landowners also objected to biodiversity on borrow pit land [EV-046] [EV-051].
- 11.4.16. The Applicant confirmed that the details relating to the restoration of the borrow pits would be completed at the detailed design phase. In accordance with the Soil Handling and Management Plan in the First Iteration EMP [REP10-018, Annex E] that the topsoil management would adhere to the Department for the Environment, Food and Rural Affairs

(DEFRA) Code of Practice for the Sustainable Use of Soils on Construction Sites. The Applicant referred to R6 and R12 of the dDCO [AS-026] which would control the restoration, but noted that compensation for reduced crop yields was a matter of compensation with the affected farmer [REP3-009, Page 9 and Page 43]. However, the Applicant confirmed that at this stage it would not be possible to make the assumption that the borrow pits could be restored to the same ALC as it was prior to the works being undertaken [REP5-015] [EV-046] [EV-051].

- 11.4.17. The Applicant submitted the Borrow Pits Excavation and Restoration Report (BPERR) [REP3-011], which was at first submitted for information in response to the questions raised by the ExA and the parties. The Applicant stated information contained in the BPERR has already been secured; the environmental controls were set out and secured within the First Iteration EMP and the locations of the borrow pits were identified and secured within the Works Plans [APP-009] [APP-010] and Schedule 1 of the dDCO [AS-026]. As such, the Applicant did not feel the detail in the BPERR needed to be secured in any other way. However, subsequently, the Applicant included the information contained within the BPERR into the First Iteration EMP as the Borrow Pits Management Plan (BPMP). BPMP identified the relevant local policies, baseline conditions and nearby receptors to each borrow pit, general control measures applicable to all borrow pit sites and additional mitigation and site specific measure. It also included the process the Applicant intends to follow for borrow pit restoration for each of the four sites and specifies some high level details such as the land would be brought back to original ground levels and restored to a condition to enable agricultural use [REP10-018, Annex R].
- 11.4.18. Parties welcomed the inclusion of the BPMP in the First Iteration EMP, but maintained some previous objections [EV-046] [EV-051].
- 11.4.19. The Cambridgeshire Councils noted that there was limited reference to aftercare in Annex R and that a five-year period for restoration to agricultural land was needed [REP8-032, Page 6]. They remained in disagreement and felt the Applicant had missed an opportunity to maximise biodiversity, which is contrary to Policies 7 and 9 of the Cambridgeshire and Peterborough Minerals and Waste Local Plan [REP10-026, Page 147].
- 11.4.20. BBC was not satisfied that the information provided by the Applicant during the Examination was sufficient to overcome their concerns about the technical feasibility of restoring Borrow Pit land to its previous Grade 1 Agricultural Land Classification (ALC). It also maintained its objection regarding the lack of a separate assessment and mitigation of the noise and dust effects from the borrow pits sites specifically [REP4-049, Q2.6.2.1, Q2.6.2.2, Q2.16.1.1] [REP8-025, Q3.14.1.1, Q3.6.2.1] [REP10-025].
- 11.4.21. The NFU remained in disagreement with the Applicant regarding the soil aftercare duration and process in their SoCG. The NFU consider that up to five years of monitoring and treatment may be necessary, while the

Applicant is proposing 12 months aftercare and any reduced yields would be compensated [REP10-027, Pages 17 to 20].

ExA's reasoning

- 11.4.22. The ExA agrees with parties that the details of activities, mitigation measures and controls relating to borrow pits was not adequate in the application. The inclusion of the BPMP in the First Iteration EMP [REP10-018], is welcome, and the ExA is satisfied that the BPMP contains information regarding the details of activities and mitigation measures which is adequate for Examination and in light of the information currently available to the Applicant. In advance of detailed design, the ExA appreciates the need for flexibility in terms of the outcomes that could be achieved after the sites have been restored and that is reflected in the high level outcomes set out in the BPMP. The BPMP is a part of the First Iteration EMP which is a certified document in Schedule 10 and further iterations are secured through Requirement (R) 2 and R3 in the dDCO [AS-026].
- 11.4.23. In light of the loss of Best and Most Versatile (BMV) land as reported in Chapter 16 of this Recommendation Report, the ExA does feel the Applicant has missed an opportunity for committing to the restoration of the borrow pit land to an agreed agricultural land classification of grade 3a or 2. However the ExA notes that the Applicant has committed to following the DEFRA Code of Practice for the Sustainable Use of Soils on Construction Sites, has secured baseline assessments of the borrow pit land in the BPMP, and also committed to engaging with the landowners especially during restoration of the land in the BPMP. The ExA is therefore satisfied that the Applicant's approach to aftercare for soils, including at the Borrow pitss is acceptable, with the land being returned to agricultural use and any losses incurred by the landowner as a result of lower yields from the disturbed soil to be compensated. The ExA notes that the condition of the soil is expected to improve over time and that the landowners would not be disadvantaged in the intervening period.
- 11.4.24. The ExA also notes the representation made by the Applicant to state that at this stage it would not be possible to make assumptions on the ALC that the borrow pit land could be restored to. As such, the ExA accepts the Applicant's position, and finds that the commitment regarding restoration of the borrow pit land in the BPMP is adequate.
- 11.4.25. While the ExA appreciates BBC's concerns regarding the noise and dust effects from the borrow pits, it is not convinced that there is value in disaggregating the assessment of effects in the ES and apportioning them to individual aspects of the Proposed Development, such as borrow pits. In that regard the ExA is content that the assessment of effects in the ES on sensitive receptors across the entire Proposed Development, including receptors located near borrow pits, is satisfactory. Air quality and Noise related matters are reported in Chapters 12 and 13 of this Recommendation Report.
- 11.4.26. Cambridgeshire Councils' proposal for beneficial biodiversity on the borrow pits as they are restored has merit. However, the ExA does not

see any reason why the restored borrow pit sites are any better for provision of biodiversity than the sites that the Applicant has currently proposed. The ExA also considers that returning the borrow pits to agricultural use is more appropriate in this case, including in terms of economic benefits, than seeking to promote biodiversity there, as suggested by the Cambridgeshire Councils.

- 11.4.27. On a related matter, the ExA notes the representation from landowners who stated that they did not want biodiversity on their land, and intended to secure the land back from the Applicant once the Applicant had no more use for the land. Given the borrow pit sites are all identified for CA, the ExA finds the interest of landowners after the CA of the land is not a matter for consideration for the ExA. It is a matter to be agreed between the Applicant and landowners, and the ExA therefore is not going to comment on it.
- 11.4.28. Matters relating to Biodiversity are reported in Chapter 7 of this Recommendation Report. Matters relating to the CA of borrow pit land are reported in Chapter 22 of this Recommendation Report.

Land outside the Order limits Article 4 and Article 23

- 11.4.29. The ExA noted that Article 4 Development consent etc. granted by the Order, and Article 23 Authority to survey and investigate the land, in the dDCO [APP-026] made provision for the Applicant to exercise powers on land adjacent to the Order limits. The adjacent land has not been defined in the dDCO, and neither was there an explanation of the scope of how far adjacent land could extend.
- 11.4.30. The ExA asked for justification and an explanation of the scope and definition of adjacent land in Articles 4 and 23 [EV-007, 6a] [PD-008, Q1.7.3.3, Q1.7.3.16]. Specific to Article 4, the ExA asked the Applicant to Provide example(s) where the provisions of adjacent land in other made DCOs had been used in practice [EV-016, 9].
- 11.4.31. The Applicant explained that the purpose of Article 4(2) is so any enactments that may be existing within the Order limits or surrounding area will be subject to the terms of the Order. This means that the Order would take precedence over any enactment, and the relevant local Act would be disapplied to the extent it is needed for the purposes of the Order. The Applicant stated that the Article had precedence in other made DCOs, such as the M20 Junction 10a Order and the A14 Order, but was unable to provide an example where this provision had been used in practice. The Applicant said that this provision would not allow the Applicant to do anything outside of the Order limits which is not specifically provided for in the Order. As such, the Applicant did not feel that a definition or scope for 'adjacent land' would be necessary. The Applicant also highlighted the SoS's general power in s120(5)(c) of the Planning Act 2008 (PA2008) to include within the Order any provision that appears to be necessary or expedient for giving full effect to any other provision of the order. As such, the Applicant considers that this

power should be included on the basis that there would still be a risk that relevant provisions have not been identified, and may affect the Proposed Development [EV-012] [EV-015] [REP1-022, Q1.7.3.3, Q1.7.3.16] [REP4-037, Q2.7.3.3].

- 11.4.32. NFU asked for clarification as to why the Applicant would need to undertake surveys and investigate land outside of Order limits as provided for in Article 23, and with reference to other made DCOs stated that for surveys the undertaker would only have power to enter land within the Order limits [REP1-084]. The ExA asked the Applicant to justify forcing a landowner to provide access to their land which is adjacent to but outside the Order limits (notwithstanding subject to notice period and compensation) given that this landowner may never have been consulted on the Proposed Development, with potential human rights interference of the landowners who might be affected [PD-009, Q2.7.3.10].
- 11.4.33. To justify why these powers were needed, the Applicant stated that it would need to undertake pre-construction surveys and monitoring in line with commitments made in the biodiversity assessment, the road drainage assessment, and the First Iteration EMP [REP10-018]. In order to carry out these surveys, monitoring and sampling access to land adjacent to the Order limits may be required. Some non-intrusive surveys could include topographic surveys, structural condition surveys, drainage network surveys, noise and dust monitoring and a range of ecological surveys, and the Applicant anticipates the surveys are to extend roughly 100m to 500m from the Order limits. The applicant anticipates that intrusive surveys would include roughly ten additional boreholes to monitor water quality and groundwater levels, of size 10m x 10m, in place for a week, and could be needed up to 250m from the Order limits [REP3-020, 14, Appendix B].
- 11.4.34. The Applicant stated that the extent of this power would only extend to land adjacent to the Order limits as far as reasonably necessary to carry out the survey activities listed in Article 23 (1)(b). While it would not be possible to define the precise extents of adjacent land, the provision would only apply for a survey that is connected to the authorised development and falls within one of the activities listed in Article 23(1)(b). The Applicant drew a parallel with Section (s) 172 of the Housing and Planning Act (HPA) 2016, and explained that s172 of HPA2016 allows a person authorised in writing by an acquiring authority to enter on and survey or value land in connection with a proposal and that the authorisation under this section may relate to the "*land which is the subject of the proposal or to other land*". The Applicant considered that the 'other land' referred to in s172 could include land that is adjacent to the land to be compulsorily acquired. The Applicant also clarified that it would only seek to use the power in the event that consent could not be obtained from the landowner by agreement. In light of the type of surveys that it might need to use this power for, the Applicant did not feel that this power would pose a significant burden on the landowner. In any event, compensation would be payable to the

landowner for any loss or damage caused [EV-012] [EV-015] [REP1-022, Q1.7.3.3, Q1.7.3.16] [REP4-037, Q2.7.3.10].

- 11.4.35. The ExA asked the Applicant to provide suitable wording for a definition of adjacent land and any related revisions to wording of both Articles [PD-009, Q2.7.3.3] [PD-015, Q4.2.2.4]. While the Applicant maintained its position that including a definition of adjacent land would be unnecessary, it provided wording based on the definition of adjacent land within the A303 Sparkford to Ilchester Dualling DCO 2021 which was accepted by the SoS, and corresponding changes to the wording in Articles 4 and 23 [REP4-037, Q2.7.3.3] [REP9-024, Q4.2.2.4]:

"land adjacent to the Order limits" means any land outside but adjacent to the Order limits which is reasonably necessary to construct or maintain the authorised development or any section or part of the authorised development"

"4.— (2) Any enactment applying to land within the Order limits or land adjacent to the Order limits has effect subject to the provisions of this Order."

"23.— (1) The undertaker may for the purposes of this Order enter on—

(a) any land shown within the Order limits; and

(b) land adjacent to the Order limits, and—"

- 11.4.36. At the close of the Examination, NFU remained unconvinced that the proposed definition addresses what actually is adjacent land and felt that the dDCO should provide a detailed definition clearly specifying the extent of adjacent land [REP10-027].

ExA's reasoning

- 11.4.37. The matter regarding application of the provisions of this dDCO to be applicable to land outside the Order limits was discussed throughout the Examination.
- 11.4.38. With respect to Article 4, while the ExA can see that there would be a need for this provision, and that it can be provided under the general powers available to the SoS under s120(5)(c) of PA2008, the ExA considers that this should be defined more clearly in the dDCO.
- 11.4.39. With respect to Article 23, the ExA notes NFU's point that given that the nature of surveys and how far outside the Order limits they would need to extend are largely known to the Applicant, the extent should be clearly defined in the dDCO, in terms of meters adjacent to the Order limits. While this seems like a logical suggestion, the ExA has two concerns. First, the greatest extent identified by the Applicant for survey access is 500m outside the Order limits. The ExA finds this to be too great a distance and area to be marked outside the entire 16 kilometres (km) stretch of the Order limits, for a blanket provision. Second, if such an area were marked, it would potentially place a requirement on the

Applicant to consult with each and every landowner across the area. The ExA finds that this is a disproportionate burden on the Applicant given the purpose for access would be largely unintrusive surveys and over a limited period of time. Noting the points made by the Applicant regarding precedence in s172 of HPA2016, the largely unintrusive nature of the surveys, the process of engagement, notice period and compensation that would be payable for damages, and that access would only be sought where reasonably necessary for the expressed purpose of the Proposed Development, the ExA is satisfied that the provision is justifiable with respect to Article 23. However, like Article 4, the ExA finds that the need for access to adjacent land in Article 23 should be identified and defined more clearly in the dDCO.

- 11.4.40. The ExA is largely satisfied with the definition in the dDCO for 'land adjacent to the Order limits', but suggests the removal of the words 'or maintain' from the definition, and restrict the provision to construction of the Proposed Development only. This is to further tighten the scope of this provision to only the construction period rather than for the life span of the Proposed Development. The ExA remains entirely unconvinced that the provision to enter land adjacent to Order limit for surveys should be available in perpetuity, especially given that the Applicant has clearly identified the types of surveys it needs would be for a limited period prior to construction. The ExA has proposed this change in the recommended DCO (rDCO).

11.5. CONCLUSIONS

- 11.5.1. In light of the progress with archaeological works within the advanced works phases and the confirmation regarding built in contingency time in each section of the construction programme, the ExA is confident that the worst-case construction programme for the Proposed Development is reliable. However, given the Applicant's programme is based on the assumption for consent in March 2022, the SoS, at the time of making the decision, if the decision is to grant consent, may wish to seek confirmation from the Applicant if the construction programme that underpins that EIA still stands. In addition, the SoS may wish to confirm from the Applicant if the traffic modelling undertaken to generate forecasts for certain assessments reported in the ES, can still be relied upon.
- 11.5.2. The ExA welcomes the submission of the Pre-commencement Plan and the related amendments to the dDCO, and the ExA is satisfied that the Pre-commencement Plan and the related amendments to the dDCO provide adequate controls of the activities that would need to take place before the approval of other management plans. The Pre-commencement Plan is secured in the dDCO as a certified document in Schedule 10 and through R20.
- 11.5.3. The inclusion of the BPMP in the First Iteration EMP, is welcome, and the ExA is satisfied that the details regarding activities on borrow pit land, mitigation measures, and the commitment for restoration of land is adequate. While the ExA does feel the Applicant has missed an

opportunity of committing to the restoration of the borrow pit land to an agreed agricultural land classification of grade 3a or 2, the ExA is satisfied that the land would be returned to agricultural use and any losses incurred by the landowner as a result of lower yields from the disturbed soil would be compensated. The ExA notes that the condition of the soil is expected to improve over time and that the landowners would not be disadvantaged in the intervening period. The ExA agrees with the Applicant's approach to assess noise and dust effects from borrow pit sites in the round along with other wider construction stage effects of the Proposed Development. The ExA does not find compelling need for beneficial biodiversity to be a requirement from the restoration of borrow pits. The BPMP is a part of the First Iteration EMP which is a certified document in Schedule 10 and further iterations are secured through R2 and R3 in the dDCO [AS-026].

- 11.5.4. The ExA accepts the Applicant's justification for the need to access land adjacent to Order limits in Article 4, for the disapplication of local enactments, and in Article 23 for the purpose of surveys. However, the ExA remains unconvinced that the provisions relating to land adjacent to Order limits should be left undefined in the dDCO.
- 11.5.5. The ExA is satisfied with the definition in the dDCO for 'land adjacent to the Order limits', but suggests the removal of the words 'or maintain' from the definition, to further tighten the scope of this provision to only the construction period rather than for the life span of the Proposed Development. The ExA has proposed this change in the rDCO.
- 11.5.6. The ExA is satisfied that the Applicant has assessed construction effects of the Proposed Development in line with EIA Regulations, Schedule 4, Paragraphs 1 and 5, and meets the NPSNN requirements in Paragraph 4.21. With regard to the construction effects discussed in this Chapter, in particular the effects of borrow pits and on land adjacent to the Order limits, the ExA ascribes limited weight against making the Order. The ExA considers that construction effects have also been discussed in Chapters 6-9 and 12-19 of this Recommendation Report, to cover matters relating to construction traffic, biodiversity, historic environment, carbon emissions, air quality, noise and vibration, Flood Risk, Water Quality and Resources, landscape and visual effects, land-use, and socio-economic effects. Taking into account the totality of adverse effects of construction activities, the ExA attributes moderate weight against making the Order.

12. AIR QUALITY

12.1. BACKGROUND AND POLICY CONTEXT

- 12.1.1. The Examining Authority's (ExA's) Rule 6 letter [PD-005, Annex C] identified Air Quality effects as a principal issue of consideration to the ExA). This Chapter reports on matters relating to Air Quality effects on human receptors and the effectiveness of proposed mitigation measures.

National Policy Statement

- 12.1.2. The National Policy Statement for National Networks (NPSNN) details the basis for the Examination by the ExA and decisions by the Secretary of State (SoS) relating to Air Quality issues (Paragraphs 5.3 to 5.15). The NPSNN explains that current UK legislation sets out health-based ambient air quality objectives, in addition, the European Union (EU) has established common, health-based and eco-system based ambient concentration level values for the main pollutants in the Ambient Air Quality Directive (2008/50/EU) (AQD), which Member States are required to meet by various dates (Paragraph 5.4).
- 12.1.3. The NPSNN requires that where the impacts of the project (both on and off-scheme) are likely to have significant air quality effects in relation to meeting Environmental Impact Assessment (EIA) requirements and, or, affect the UK's ability to comply with the AQD, the Applicant should undertake an assessment of the impacts of the proposed project as part of the Environmental Statement (ES) (Paragraph 5.6).
- 12.1.4. The NPSNN states that the SoS should consider air quality impacts over the wider area likely to be affected, as well as in the near vicinity of the scheme (Paragraph 5.10). The NPSNN also explains that air quality considerations are likely to be particularly relevant where schemes are proposed within or adjacent to an Air Quality Management Area (AQMA) (Paragraph 5.11).

Other legislation and policies

- 12.1.5. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The national, regional and local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1] [APP-074, Chapter 5.2].
- 12.1.6. The National Planning Policy Framework (NPPF) 2021 is consistent with the NPSNN in relation to ensuring that decisions should contribute to compliance with relevant limit values or national objectives for pollutants, taking into account the presence of AQMAs, the cumulative impacts from individual sites in local areas and that opportunities to improve air quality or mitigate impacts should be identified (Paragraph 181).

12.2. THE APPLICATION

Environmental Statement and other Application documents

- 12.2.1. The main sections of the application relevant to the Air Quality matters considered here are; ES Chapter 5 Air Quality [APP-074]; ES Chapter 16 Summary of Significant Effects; Figure 5.1 Affected Road Network [APP-094] Figure 5.2 Air Quality Baseline Conditions [APP-095]; Figure 5.3 Air Quality receptors – Operational Assessment [APP-096], Figure 5.3 Air Quality Results – Operational Assessment of NO₂ [APP-097] Figure 5.5 Air Quality Receptors – Construction Dust Assessment [APP-098]; Appendix 5.1 Local Planning Policy [APP-159]; Appendix 5.2 Air Quality Monitoring Data [APP-160]; Appendix 5.3 Air Quality Assessment methodology [APP-161]; Appendix 5.4 Air Quality Results [APP-162] Transport Assessment Report Parts 1 and 2 [APP-241] [APP-242].
- 12.2.2. See also Chapter 11 of this Recommendation Report for matters relating to Construction Effects.

Scope and methodology

- 12.2.3. In determining the likely effects of the Proposed Development on Air Quality the Applicant explains that both construction and operation phases have been considered. The Applicant states that Design Manual for Roads and Bridges (DMRB) LA 105 Air Quality and Air Quality Management Technical Guidance TG16 has been followed [APP-074] and consultation on the methodology was undertaken with South Cambridgeshire District Council (SCDC) and Central Bedfordshire Council (CBC).
- 12.2.4. The Applicant explains that air quality monitoring data from 2015 was obtained from Local Authorities (LAs) and used to verify the air quality model. The year 2015 aligns with the year for which baseline traffic was provided, and also pre-dates the construction of the A14 Cambridge to Huntingdon improvement scheme which used traffic management measures that affected traffic flows within the study area and therefore made subsequent years unsuitable as a base year.
- 12.2.5. The Applicant also explains that the air quality modelling uses a traffic dataset prepared for the Proposed Development, derived from the Strategic SATURN Model. Information regarding the traffic modelling undertaken to inform the Proposed Development is detailed in the Transport Assessment (TA) [APP-241] and discussed in Chapter 6 of this Recommendation Report.
- 12.2.6. The Applicant states that the study area for the construction dust assessment is defined as the area within 200m of dust-generating activities and that the Order limits for the Proposed Development have been chosen as a proxy for the area within which dust-generating activities would occur. This according to the Applicant is a conservative assumption as dust generating activities are unlikely to occur right at the edge of the boundary of the Order limits.

- 12.2.7. The study area for the local air quality assessment for the construction of the Proposed Development focuses on the key risk areas for potential exceedances of the annual mean objectives.
- 12.2.8. The study area for the local air quality assessment for the operation of the Proposed Development was defined according to the screening criteria set out in the Air Quality Assessment (AQA) in line with DMRB LA 105 [APP-074].

Applicant's assessment of effects and mitigation proposed

- 12.2.9. The Applicant concludes that the operational local air quality assessment demonstrated that there would be no likely significant effect for human health or designated habitats during the operation of the Proposed Development [APP-074]. Similarly, the Applicant concludes that the construction local air quality assessment and construction dust assessment shows that there would be no likely significant air quality effect for human health or designated habitats during construction of the Proposed Development [APP-074]. It is also the view of the Applicant that the Proposed Development would not affect the UK's reported ability to comply with the AQD in the shortest timescale possible due to either the construction or operation of the Proposed Development [APP-074].
- 12.2.10. Embedded mitigation that is common across the Proposed Development is set out in the ES [APP-071, Table 2.1]. Embedded mitigation specific to Air Quality matters and secured through the Works Plans [APP-009] [APP-010] states that the Proposed Development has been designed to:
- 1) maintain or increase the distances between properties and traffic, where possible;
 - 2) to maintain traffic flows on the A1 and A421 through Black Cat junction and the surrounding road network; and
 - 3) to remove traffic from the existing A428 onto the new dual carriageway.
- 12.2.11. Essential mitigation has been proposed to deal with various matters associated with Air Quality issues [APP-235], and this includes that the Principal Contractor would develop and implement an Air Quality Management Plan (AQMP) based upon the outline AQMP in the First Iteration Environmental Management Plan (EMP) [APP-234]. The Plan would adopt a range of industry standard good practice construction phase dust mitigation and monitoring measures, and general control measures. The AQMP would be secured through the First Iteration EMP and draft Development Consent Order (dCO) Requirement (R) 3.
- 12.2.12. The Applicant explains that as the air quality assessment has concluded that construction of the Proposed Development would not generate significant air quality effects, no monitoring of the Proposed Development's effects would be required [APP-074].
- 12.2.13. However, the Applicant explains that the First Iteration EMP sets out the construction site monitoring activities that would be undertaken by the

Principal Contractor during the construction stage to ensure that the mitigation measures embedded in the design of the Proposed Development, and those considered essential to mitigate the impacts of activities associated with the Proposed Development are appropriately implemented. Such activities would include undertaking visual checks and inspections, and monitoring of dust deposition [APP-074].

12.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 12.3.1. Bedford Borough Council (BBC) [REP2-002] consider the information available to be insufficient to determine the likely effect of construction phases on air quality, particularly as a result of the use of borrow pits.

Central Bedfordshire Council

- 12.3.2. Central Bedfordshire Council (CBC) [REP2-004] consider that the effects on Air Quality during construction phases could be managed through dust control measures as described in the EMP, albeit CBC do note that the adherence to those dust control measures is critical, and that the Council would need close liaison and contact details of relevant site managers to deal with any issues as and when they arise.
- 12.3.3. CBC have particular concern with regard the effect of the Proposed Development on the Sandy AQMA and the lack of any mitigation measures proposed by the Applicant.

Cambridgeshire Councils

- 12.3.4. In the joint Local Impact Report (LIR) from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) [REP2-003], they agree with the Applicant that the Proposed Development would not have significant effect in terms of air quality on human health with the Cambridgeshire districts, including five identified AQMAs, with regard the modelling undertaken. Although the Cambridgeshire Councils have stated construction activities could have significant impacts on residents, they consider adequate controls can be secured via the Environmental Management Plan (EMP).

12.4. THE EXAMINATION

- 12.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) Air Quality in Sandy
- 2) Construction Dust

Air Quality in Sandy

- 12.4.2. The Applicant describes the air quality effects associated with the operation of the Proposed Development within the Sandy AQMA as being predicted to be, at worst, imperceptible worsening, with some small

improvements recorded [APP-074]. Predicted changes would be -0.7 to +0.2 µg/m³ in annual mean nitrogen dioxide (NO₂). A sensitivity test has been undertaken to update the traffic uncertainty log. This assessment is presented in the Applicant's Sensitivity Test using 2020 Uncertainty Log Data [APP-249]. Within this assessment small (1-5% of the objective value) increases in annual mean NO₂ concentrations were predicted at 7 residential receptors adjacent to the A1, within the Sandy AQMA.

- 12.4.3. The Applicant explained that an imperceptible change (<1% of the objective value of 40µg/m³) is one so small as to not be measurable and is therefore not considered to be a worsening in air quality at these receptors. The Applicant also stated the air quality modelling does not take account of the Road to Zero Strategy [REP4-037] that sets out the Government's approach to reducing emissions from road transport and, had it have, it would be likely lower levels of NO₂ concentrations would have been predicted to be less. As such no mitigation has been proposed by the Applicant.
- 12.4.4. CBC consistently stated that any worsening of air quality, no matter how small and, even if imperceptible, in an AQMA, should be the subject of mitigation [RR-016] [REP1-54] [REP1-055] [REP2-004] [EV-005] [EV-020] [EV-056]. CBC also considered that the traffic effects of the intended East West Rail (EWR) scheme should be included in the modelling of air quality to determine any cumulative effects [REP1-054].
- 12.4.5. The Applicant's position has remained unchanged throughout the Examination, that the effects would not be significant for air quality based on the advice and methodology within the Design Manual for Roads and Bridges (DMRB) LA 105 air quality standard applied and that mitigation would not be necessary [REP1-022] [REP3-019] [REP5-015] [REP8-010].
- 12.4.6. With regard to the exclusion of EWR traffic effects in the modelling undertaken, the Applicant explained that the project was not included because of the lack of detail and certainty around the project, particularly the alignment, location of stations and absence of any formal application. The ExA has concluded regarding the EWR in Chapter 19 of this Recommendation Report. As such the discussion below focuses solely on the air quality effects of the Proposed Development and any other identified projects in consideration of combined effects.
- 12.4.7. The ExA sought views from Interested Parties (IPs), including Public Health England (PHE) regarding the Proposed Development's likely public health effects. PHE confirmed that based on the information contained within the application, namely air quality modelling, that they were satisfied that there would be an insignificant impact on public health. This view being based on the modelled outputs which indicate either air quality objectives would be exceeded at receptor locations or that the new road layout would contribute only imperceptibly to air pollution at the seven locations referred to, with predicted levels of NO₂ above the air quality objective [REP1-090].

- 12.4.8. The ExA sought clarity from CBC on what it considered to be a proportionate mitigation for the imperceptible increases stated and CBC provided the adopted Air Quality Action Plan [REP1-055, Appendix 7] at the request of the ExA. CBC cited possible actions as including average speed cameras and reductions in the speed limit [REP4-062 Q2.2.1.1].
- 12.4.9. CBC raised concern as to why the SATURN model had been used to provide the traffic data to inform the air quality modelling rather than the local VISSIM model that had been developed for roads in Sandy [EV-072] [EV-077]. The Applicant explained that this was because the air quality assessment covered a large geographic area, not just Sandy, where potential changes in traffic may occur. The Applicant stated that the spatial coverage of the SATURN model was illustrated in Figure 3.2 of the Combined Modelling and Appraisal Report [APP-252]. The VISSIM models were developed to provide a more detailed assessment of local areas including junctions. The Applicant explained that as the localised coverage of the VISSIM model was intended to model specific local junctions, a full evaluation of air quality effects on sensitive receptors over a wider area using VISSIM models was not possible. The Applicant also noted that the VISSIM models also only consider the AM and PM peak hours, which would be insufficient for the air quality assessment [REP6-031].
- 12.4.10. For the avoidance of doubt a further request for clarification on the rationale of the Applicant was made by the ExA, in response the Applicant elaborated further how it considered increases of less than 1% to be so small as to be beyond both monitoring and modelling precision [REP8-014]. The Applicant also provided evidence demonstrating that the increases of 1% would be removed within a year of opening, with projected reductions in concentrations of between 0.7 to 0.8 µg/m³ from the opening year to the following year. As a change of this magnitude would be removed within 12 months the Applicant further explained that a significant effect does not arise.
- 12.4.11. The Applicant and CBC were asked to liaise on the matter and to discuss what, if any, mitigation measures might be considered proportionate throughout the Examination. However, the parties could not agree on the matter [REP3-019] [REP8-010] [REP10-024].

ExA's reasoning

- 12.4.12. The ExA notes the concerns of CBC regarding the effect of the Proposed Development on the seven existing properties in the AQMA in Sandy and observed the location during its Unaccompanied Site Inspections (USIs) [EV-095]. The ExA acknowledges it was not necessary for CBC to propose specific mitigation measures in response to the likely predicted effects of the Proposed Development on air quality. However, the provision of such information would have enabled the ExA to consider whether a specific form of mitigation was appropriate to deal with the modelled effects.
- 12.4.13. The Applicant has followed nationally adopted guidance in the modelling of air quality, using data from the SATURN model. The ExA considers the

Applicant was correct to not use data from the VISSIM model to inform the air quality modelling because it would not have followed national guidance and had limited temporal and geographic coverage. The ExA also notes that the modelling did not take account of the Road to Zero strategy intended to facilitate measures to increase the use of zero emission road vehicles.

- 12.4.14. The ExA also relies on the comments received from PHE that support the methodology used by the Applicant and its findings.
- 12.4.15. The ExA is persuaded by the explanations provided by the Applicant that an increase of less than 1% in the objective value of 40µg/m³ is one so small as to not be accurately measurable or reliably monitored. The ExA also agrees with the Applicant's view that a small increase in annual mean concentrations at this location would not amount to a significant adverse effect. The ExA also relies on the Applicant's assessment that within one year of operation the projected minor increase would be wholly offset by a larger reduction.
- 12.4.16. The ExA is mindful of NPSNN Paragraph 5.11 which explains that air quality considerations are likely to be particularly relevant where schemes are proposed within or adjacent to an AQMA. The ExA finds that no significant effect to air quality has been identified, and is content that the small modelled increase in NO₂ would not only be difficult to monitor, but would also be removed within a year of opening.
- 12.4.17. Therefore, the ExA does not consider there to be a sufficiently robust case before the Examination such as to disagree with the Applicant's assessment in relation to specific air quality mitigation measures in Sandy. The ExA is content that no further mitigation measures are required.

Construction Dust

- 12.4.18. BBC raised concern relating to the likely effects of construction dust and whether the management measures proposed by the Applicant would likely suffice in dealing with any associated effects. The main issue for BBC was the absence of detail associated with borrow pits so as to understand any likely effects of construction dust, and therefore enabling it to consider whether Best Practicable Means (BPM) would suffice as an appropriate management control [REP1-040, Q1.2.1.4].
- 12.4.19. CBC explained that close liaison was needed with contractors and site managers to ensure customer contact was dealt with effectively [REP1-055] [REP1-054]. PHE stated that based on the information contained within the application, that there should be an insignificant impact on public health during the construction phase, as the submitted documentation indicated that industry good practice measures would be put in place to manage fugitive construction dust and was typical of similar construction projects [REP1-090].
- 12.4.20. In response to the points made, the Applicant explained that its approach to managing effects of construction in relation to Air Quality are

described in the ES [APP-074]. The Applicant explained that the construction of the Proposed Development would be subject to measures and procedures as defined in the First Iteration EMP [REP10-018, Annex A, Table A-1], using industry standard dust mitigation control measures, including BPM and additional dust mitigation control measures through the Air Quality Management Plan [REP10-018, Annex A, Table A-3]. The Applicant also stated that such management measures would be developed further in the Second Iteration EMP by the Principal Contractor. The Applicant submitted a Borrow Pits Excavation and Restoration Plan [REP3-011] and a Borrow pits Management Plan is included in the First Iteration EMP [REP9-009] [REP9-010] and is reported on Chapter 11 of this Recommendation Report. The Applicant also stated that prior to approval by the SoS of the Second Iteration EMP, LAs would have the opportunity to review the document and provide comments to ensure that all mitigation measures are detailed and satisfactory [REP3-007].

- 12.4.21. The Applicant's proposed additional dust mitigation measures [REP10-018, Annex A, Table A-3] explains that during construction, appropriate mechanisms to communicate with local residents would be set up to highlight potential periods of disruption. The Applicant also stated that the First Iteration EMP includes that an information web page would provide up-to-date information on the progress of the construction works, areas affected by construction, mitigation in place to reduce adverse effects and information regarding planned construction works that may lead to construction dust effects. The Applicant confirmed that regular liaison would be undertaken with the relevant LAs and would include discussing any complaints that had been received.
- 12.4.22. At the close of the Examination, CBC do not consider that the First Iteration EMP contains sufficient information in relation to the detail of proposed liaison with the LA and information sharing with stakeholders [REP10-024]. The Applicant's SoCG with BBC [REP10-025] explained that the matters raised by BBC have been addressed and that the proposals were agreed as being suitable.

ExA's reasoning

- 12.4.23. The ExA is mindful of BBC's concerns regarding the specific effects of borrow pits, relating to dust and noise. However, the ExA finds that the Applicant's approach to consider the adverse effects of borrow pits as part of the wider adverse construction effects, to be sound. The ExA does not find any compelling reason for the adverse effects of a single component of the Proposed Development, specifically borrow pits, to be isolated and assessed separately from other construction effects. Additionally, the ExA considers that the Applicant has followed a reasoned approach, based on national guidance, to determine where sensitive receptors are likely to be with respect to all construction effects, including borrow pits.
- 12.4.24. On the basis of the information before the ExA, including the response from LAs and PHE that adequate control measures are proposed in the First Iteration EMP (Annex A), the ExA is satisfied that the measures

detailed in the First Iteration EMP are adequate. The ExA considers the management of construction dust to be adequately secured through the First Iteration EMP in R1 of the dDCO. The ExA is also satisfied with the post consent process where further detail in the Second Iteration EMP would be subject to consultation with LAs and approval of the SoS as secured in R3 of the dDCO.

- 12.4.25. The ExA acknowledges that CBC have requested more detailed information regarding liaison and information provision. However, the commitment to liaison with LAs and information provision to stakeholders via a dedicated website is included in the First Iteration EMP (Annex A), the detail of which would be developed in the Second Iteration EMP and would be subject to consultation with LAs and approval of the SoS as secured in R3 of the dDCO. The ExA is therefore satisfied that liaison between the Applicant and LAs would occur so as to ensure customer contact would be managed appropriately.

12.5. CONCLUSIONS

- 12.5.1. To arrive at a conclusion regarding the air quality effects in Sandy, the ExA relies on the comments received from PHE that support the methodology used by the Applicant and its findings. The ExA is persuaded by the Applicant's approach to traffic modelling to underpin the assessment of air quality. The ExA is also persuaded by the explanations provided by the Applicant that an increase of less than 1% in the objective value of 40µg/m³ is one so small as to not be accurately measurable or reliably monitored. The ExA relies on the Applicant's assessment that within one year of operation the projected minor increase would be wholly offset by a larger reduction and as such short-lived. Overall, the ExA is content that the increase in annual mean concentrations at this location would not amount to a significant adverse effect. The ExA concludes that the Proposed Development aligns with NPSNN Paragraph 5.11 because no significant effect to air quality has been identified. Consequently, the ExA is content that no further mitigation measures are required.
- 12.5.2. The ExA agrees with PHE, the Applicant and LAs that the matter of construction dust would be adequately managed through the First Iteration EMP, Annex A. The ExA is also content with the post consent process to develop the detail in the First Iteration EMP, which would include consultation with the LAs, and is secured through R3 and R4 of the dDCO.
- 12.5.3. In accordance with NPSNN Paragraphs 5.3 to 5.15, the ExA is content that the Applicant has adequately demonstrated the likely effects of the Proposed Development on air quality, following national guidance and policy. The ExA concludes that the mitigation secured in the first iteration EMP and R3 (Second iteration EMP) and R5 (details of consultation) of the recommended DCO (rDCO) would ensure that the Proposed Development meets the policy requirements of NPSNN Paragraphs 5.10 and 5.11. Further to the very minor and temporary nature of the likely

effects on the Sandy AQMA, the ExA ascribes little weight against the making of the Order in this regard.

13. NOISE AND VIBRATION

13.1. BACKGROUND AND POLICY CONTEXT

13.1.1. Consideration of Noise and Vibration effects of the Proposed Development were identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. In this chapter the Examining Authority (ExA) is reporting on the noise and vibration effects of the construction and operation of the Proposed Development on sensitive receptors; and associated mitigation, management and monitoring of operational noise and vibration effects.

13.1.2. Matters related to borrow pits are reported in Chapter 11 of this Recommendation Report.

National Policy Statement

13.1.3. The assessment for Noise and Vibration as set out in National Policy Statement for National Networks (NPSNN), requires from the Applicant:

- 1) a description of noise sources, identification of noise sensitive receptors, and characteristics of the existing noise environment (NPSNN Paragraph 5.189);
- 2) an assessment of the effect of predicted changes on any noise sensitive premises and noise sensitive areas as well as mitigation, considering best available techniques to reduce noise impacts (NPSNN Paragraph 5.189);
- 3) to consider potential noise impact elsewhere that is directly associated with the development, such as changes in road traffic movements (NPSNN Paragraph 5.190); and
- 4) assessment of operational noise using the principles of the relevant British Standards, Noise Insulation Regulation and other guidance (NPSNN Paragraphs 5.191 and 5.199).

13.1.4. In reaching a decision the Secretary of State (SoS) should be satisfied:

- 1) that the statutory requirements for noise must be met and that due regard has been given to the relevant sections of the Noise Policy Statement for England (NPSE), the National Planning Policy Framework and National Planning Practice Guidance (NPPG) on noise. (NPSNN, Paragraph 5.193);
- 2) that the scheme layout is optimised to minimise noise emissions and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission. (NPSNN, Paragraph 5.194);
- 3) the scheme will avoid significant adverse impacts on health and quality of life; and
- 4) that the scheme will avoid, mitigate and minimise other adverse impacts on health and quality of life, and where possible improve health and quality of life (NPSNN, Paragraph 5.196)

13.1.5. The ExA and SoS should put in place requirements to specify mitigation that are proportionate measures, relating to engineering, materials, layout and administration, if they are needed over and above any which

may form part of the project application (NPSNN, Paragraph 5.196. 5.197, 5.198).

Other legislation and policies

- 13.1.6. Other legislation and guidance relevant to Noise and Vibration are: NPSE, the NPPF and NPPG.
- 13.1.7. Further information is in the Environmental Statement (ES) [APP-080] and in Chapter 3 of this Recommendation Report. The national, regional and local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-080, Section 11.2] [APP-159, Appendix 5.1].

13.2. THE APPLICATION

Environmental Statement and other Application Documents

- 13.2.1. The main sections of the application relevant to the Noise and Vibration matters considered here are; Chapter 11 Noise and Vibration [APP-080]; Chapter 16 Summary of Significant Effects [APP-085]; Figure 11.1 Noise Location Plan [APP-143]; Figure 11.2 Construction Traffic Noise Affected Routes [APP-144]; Figure 11.3 Noise Affected Routes [APP-145]; Figure 11.4 Long Term Without Scheme Change [APP-146]; Figure 11.5 Short term With Scheme Change [APP-147]; Figure 11.6 Long Term With Scheme Change [APP-148]; Appendix 11.1 Noise and Vibration terminology [APP-210]; Appendix 11.2 Noise Monitoring [APP-211]; Appendix 11.3 Construction Phase Noise Predictions [APP-212]; Appendix 11.4 Noise Modelling Details [APP-213]; Affected Routes – Construction and Operation [APP-214]; Compliance with Noise Insulation Regs and Noise Important Areas [APP-215] and the Schedule of Mitigation [APP-235].
- 13.2.2. The Applicant identified typographical errors in the ES relating to the dates of baseline traffic data [REP3-027] that informed the noise modelling, and confirmed that the data was from 2015 not 2016 but the error did not have a bearing on the assessment undertaken.

Scope and methodology

- 13.2.3. In the ES [APP-080, Paragraph 11.3.13] the Applicant explains that the assessment of construction and operational noise and vibration has been undertaken using the methodology set out in Design Manual for Roads and Bridges (DMRB) LA 111 Noise and Vibration Revision 2. Noise and Vibration effects of future maintenance and management activities were scoped out by the Applicant further to the limited potential for such activities to occur.
- 13.2.4. Noise Important Areas are identified at six locations across the Order limits of the Proposed Development [APP-080, Paragraph 11.6.1].

- 13.2.5. The ES explains that where a new development, was anticipated to be occupied prior to the completion of the Proposed Development, including the northern extent of the Wintringham site, the likely effects on those residents has been included within the baseline assessment of likely noise effects. Other developments including future phases of the Wintringham development, Loves Farm and Cambourne West that were not predicted to be occupied prior to construction have not been included as there would be no effect on future residents. However, the screening effects of these developments have been included in the prediction of traffic noise levels at existing noise sensitive receptors.
- 13.2.6. The Applicant consulted with Local Authorities (LAs) during 2019 and 2020 on the methodology and approach adopted; whilst the approach of the Applicant was agreed by LAs [REP10-024] [REP10-025] [REP10-026], concerns were raised during Examination regarding the age of baseline monitoring and the interpretation of the modelling undertaken. These matters are reported on in this Chapter of this Recommendation Report.

Applicant's assessment of effects and mitigation proposed

- 13.2.7. Significant residual adverse construction noise and vibration effects are identified at the closest receptors to the construction works in the vicinity of receptors identified in the ES [APP-085, Table 16-1]. Likewise significant adverse operational traffic noise effects are identified at seven receptors. The Applicant also identifies significant beneficial operational noise effects at the village of Croxton, including the Eltisley Manor care home and community facility and the village of Eltisley. The Applicant also identifies significant beneficial effects in Yelling, Toseland, Gamlingay and Abbotsley due to decreases in traffic noise.
- 13.2.8. Whilst the design is not yet finalised and further development of noise mitigation measures would occur during detailed design, subject to the approval of the SoS, the Applicant considers that the assessment takes account of the worst-case scenarios and the mitigation measures have been developed in this context. The Applicant's proposed embedded mitigation that is common across the Proposed Development is set out in the ES [APP-071, Table 2.1]. Embedded mitigation specific to noise and vibration can broadly be split between the construction and operation phases.

Construction Phase

- 13.2.9. A table of environmental mitigation measures [APP-235, Table 7] sets out the proposed essential mitigation measures during construction, as described in the First Iteration Environmental Management Plan (EMP) and secured by Requirement (R) 3 in the draft DCO (dDCO) [AS-026]. The First Iteration EMP [REP10-018, Annex B] details how noise and vibration would be controlled and managed in the form of a Noise Management Plan (NMP).
- 13.2.10. Construction mitigation measures include:

- 1) the Principal Contractor would develop and implement a NMP based upon the outline NMP in the First Iteration EMP [REP10-018], which would detail the management and processes to be introduced across all construction sites and compounds;
- 2) the appointment of a Community Relations Manager, responsible for leading engagement with affected communities, reporting to the Principal Contractor;
- 3) noise monitoring during the construction stage of the Proposed Development, as detailed in the First Iteration EMP and R3 off the dDCO; and
- 4) working hours restrictions as specified within R19 of the dDCO.

13.2.11. The First Iteration EMP [REP10-018, Annex B] and the ES [APP-080] also refers to ensuring other Best Practicable Means (BPM) are employed and that regular onsite observation surveys are proposed to take place. The survey and compliance assurance would be set out within the Second Iteration EMP.

Operation Phase

13.2.12. Operation phase mitigation to minimise noise and vibration effects includes the following measures:

- 1) sections of the Proposed Development would be positioned below existing ground level within earthworks cuttings, secured through Schedule 1 of the dDCO [AS-026], and other certified documents including the Works Plans [APP-009] [APP-010], Engineering Section Drawings [APP-017 to APP-022] and General Arrangement Plans [APP-011];
- 2) low noise surfacing would be installed along the length of the new dual carriageway, from its tie in with the existing A421 through to the tie in with the existing A428 dual carriageway east of Caxton Gibbet junction, on the A1 through Black Cat junction, the new Black Cat Junction, Cambridge Road Junction, Eltisley Link and the realigned A428 and Caxton Gibbet Junction. These measures would be secured through the Environmental Masterplan [APP-091] and First Iteration EMP; and
- 3) earth bunds up to a maximum of 3m height would be formed adjacent to the Proposed Development as detailed in the First Iteration EMP between tie in points with the existing A421 and the Roxton Road Bridge [APP-009, Sheet 1]. Similarly, alongside of the dual carriageway north of Top Farm accommodation bridge to the new B1046 Bridge [APP-010, Sheet 3]. These measures are secured through the Environmental Masterplan [APP-091].

13.2.13. The Applicant concludes [APP-080] that taking into account mitigation measures set out, significant impacts during construction and operation by way of noise and vibration would be minimised, albeit adverse effects would remain.

13.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 13.3.1. Bedford Borough Council (BBC) [REP2-002] is in broad agreement with the methodology, assessment, and outputs of the operational noise assessment. In the Local Impact Report (LIR), BBC raised concerns regarding the noise effects specifically from borrow pits during construction. Matters relating to borrow pits are reported in Chapter 11 of this Recommendation Report.

Central Bedfordshire Council

- 13.3.2. In its LIR, Central Bedfordshire Council (CBC) [REP2-004] raised concerns relating to the provision of additional baseline monitoring that was originally postponed due to COVID-19 and subsequently considered unnecessary by the Applicant. The strategic approach in relation to the provision of noise mitigation measures at specific receptors was also identified by CBC to be unacceptable in both construction and operational phases. CBC also identify that no cumulative effects of both the potential East West Rail (EWR) scheme and the Proposed Development has taken place. Matters related to the potential EWR scheme are reported in Chapter 5 and 19 of this Recommendation Report.

Cambridgeshire Councils

- 13.3.3. The joint LIR from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) identifies issues relating to adverse construction noise specifically at and around the proposed Potton Road junction and proposed Cambridge Road junction and on specific routes. Significant adverse construction vibration effects are identified by Cambridgeshire Councils at various locations where it is considered moderate or major adverse vibration annoyance impacts are predicted to occur [REP2-003].

13.4. THE EXAMINATION

- 13.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) extent of baseline monitoring;
- 2) operational monitoring;
- 3) construction working hours;
- 4) operational noise effects at receptors Re16 (The Barns), Re17 (Rectory Farm) and Re18 (Hills Farm); and
- 5) noise effects at Roxton, Great Barford and Loves Farm

Extent of baseline monitoring

- 13.4.2. The LAs queried the further baseline monitoring that had been previously agreed with the Applicant in 2019 and 2020. The ExA sought clarification from the Applicant if any additional baseline noise monitoring was planned or had been undertaken [EV-041] [EV-052].
- 13.4.3. The Applicant explained that a baseline noise survey was completed in November and December 2017. Noise monitoring locations are shown in the ES [APP-211]. The Applicant explains that the locations were chosen

to focus on some of the closest receptors both to the Proposed Development and routes bypassed by the Proposed Development. The Applicant explained that this additional monitoring had been delayed due to COVID-19 [REP1-022, Q1.16.1.2] [REP3-019, Appendix B]. The Applicant further explained that measured baseline noise levels are not used to determine the magnitude of impact of the Proposed Development as this is based on future conditions both with and without the Proposed Development. Therefore, any additional monitoring would not change the assessment outcomes, including mitigation, and would not change the outcome of the noise validation process reported in the ES [APP-080] [EV-041] [EV-052].

- 13.4.4. In response to the ExA, CBC [REP4-062, Q2.16.1.2] and CCC [REP4-059, Q2.16.1.2] agreed with the Applicant on that matter. However, as noted in their Statement of Common Ground (SoCG) [REP10-025], BBC considered more up to date monitoring should occur so as to provide a more reliable assessment [REP4-050, Q2.16.1.2].

ExA's reasoning

- 13.4.5. The ExA noted during the Unaccompanied Site Inspection (USI) [EV-095] that the dominant noise experienced locally to the Proposed Development is of that created by traffic and agrees with the points submitted by the Applicant [REP3-019]. Likewise, BBC has not raised substantive reasoning as to why the available baseline information should be considered unreliable, such as any known changes to the baseline noise environment in the intervening years.
- 13.4.6. Whilst the ExA note the points raised by BBC that additional baseline monitoring would likely provide a richer, more up to date picture of current noise levels experienced across the Order limits for the purposes of validation, the ExA has no evidence before it to consider that there have been changes to the baseline noise environment. The ExA is therefore satisfied that the age of the surveys does not lead to a deficiency in information and provides an adequate assessment of the likely noise effects of the Proposed Development and associated need for mitigation. The ExA is satisfied that the baseline monitoring is a reliable basis for the Applicant's assessment in the ES, and to determine corresponding mitigation measures.

Operational monitoring

- 13.4.7. While the Applicant has proposed measures to mitigate noise effects of traffic of the Proposed Development including low noise surfacing [APP-235, Table 7] [APP-080] [REP3-007] it proposes to undertake no monitoring to measure the effectiveness of the proposed mitigation measure once the Proposed Development is in operation.
- 13.4.8. The ExA expressed concern that without monitoring the effectiveness of proposed mitigation measures, there could be unintended effects at modelled receptor points and potentially beyond. This concern was shared by CCC, particularly for receptors at and around the Cambridge Road junction and Potton Road junction [EV-072] [EV-077] [REP6-020],

and by CBC for receptors near Little Barford [EV-072] [EV-077] [REP6-018]. Similarly, representations from residents and businesses were received regarding the need for operational monitoring so as to ensure any adverse noise effects would be identified and remediated [RR-020] [RR-025].

- 13.4.9. The Applicant clarified that mitigation measures, such as low noise surfacing would be checked to ensure that it met the intended level of noise mitigation following construction and that the exact detail of materials specifications would be subject to the approval of the SoS prior to implementation, through R18 of the dDCO [REP8-014, Q3.16.2.1].
- 13.4.10. The Applicant confirmed that there would not be any ongoing operational monitoring at the sites monitored in baseline surveys, because it would not be possible to make like for like comparisons between such surveys. The Applicant added that it would not be possible to recreate the same circumstances or environment in which the initial surveys were undertaken, including but not limited to environmental conditions and scope for different sources of noise being present. The Applicant also pointed out that post scheme operational traffic noise monitoring at specific receptors had not previously been made a Requirement in fifteen other similar projects for the same reasons [REP8-014, Q3.16.2.1].
- 13.4.11. This matter remained a point of disagreement between the Applicant and LAs.
- 13.4.12. The ExA proposed including additional wording to R18 of the dDCO to include monitoring at specific receptors to ensure the noise effects felt in reality do not exceed that which has been modelled [PD-015,Q4.8.1.6]. The Applicant responded that the proposed approach to monitoring is in accordance with Section 4.2 of DMRB LA 111 in that mitigation measures included in the project design are incorporated in the as-built project and ensuring specifications of noise mitigation measures such as low noise surfaces meet design standards [REP9-024, Q4.8.1.6] [REP10-046].
- 13.4.13. The Applicant subsequently updated the Register of Environmental Actions and Commitments in the First Iteration EMP to secure the specification requirement for the proposed low noise surfacing and its delivery, also the extent and height of noise bunding proposed at Roxton Road and Potton Road [REP10-018].

ExA's reasoning

- 13.4.14. On the basis of the Applicant's confirmation and related commitment in the First Iteration EMP that all mitigation measures would be delivered to required design standards subject to the approval by the SoS, which according to the Applicant would ensure their effectiveness and compliance with associated design standards, and being retained thereafter, the ExA is satisfied that no associated operational noise monitoring at specific receptor points would be necessary. In drawing this conclusion, the ExA also relies on the evidence provided by the Applicant about other made DCOs for highway projects, including but not limited to A1 Birtley to Coal House and A1 Morpeth to Ellingham, where

this approach to operational noise mitigation from road traffic has been accepted

- 13.4.15. The ExA is satisfied that the mitigation measures and approach described above are secured in the First Iteration EMP [REP10-018] and R18 of the dDCO.

Construction Working Hours

- 13.4.16. The Applicant originally detailed the intended working hours in R19 of the dDCO [APP-025] to be 0700 hours to 1800 hours Monday to Friday, and 0700 hours to 1300 hours on Saturday, with no activity on Sundays or bank holidays, except as specified in relation to daily start up and shutdown and construction work for essential activities assessed in the ES outside of these hours.
- 13.4.17. The ExA sought views from the Applicant and the LAs about the significant construction noise effects identified at the closest receptors to the construction works, and if the proposed measures would adequately mitigate those effects [PD-008, Q1.16.1.6]. The affected receptors are listed in the ES [APP-080, Paragraph 11.9.8].
- 13.4.18. CBC and Cambridgeshire Councils considered the intended working hours of construction activity to be too wide and likely to give rise to adverse noise effects for those living near to the construction sites, compounds and on routes used by construction vehicles [REP1-051] [REP1-054] [REP1-055].
- 13.4.19. The Applicant explained that the effect would be of short duration and did not consider them to be significant effects. The Applicant added [REP3-007, Q1.16.1.6] that a consequence of changing the proposed working hours could be an extension to the construction programme. The Applicant assured parties that it has committed to engage with LAs in the First Iteration EMP [APP-234, Annex B]. This would ensure agreements can be sought when working close to noise sensitive locations such as residential properties, or at specific points in time such as near to schools during exam times. Such matters and any required mitigation would be discussed at the detailed design stage.
- 13.4.20. The Applicant also confirmed that noise measurement surveys would be undertaken during construction as required [APP-080]. The timing, locations and frequency of monitoring is not before the ExA as the Applicant intends to develop this detail further to an updated construction noise assessment at detailed design stage [REP3-007].
- 13.4.21. The updated First Iteration EMP [REP6-008] included activities that would be excluded from the set construction hours across the extent of the Order limits. The ExA asked Interested Parties (IPs), including LAs for their view on the appropriateness of such activities falling outside the set hours [PD-014, Q3.6.3.1]. BBC considered it reasonable to restrict the timing of activities listed in the First Iteration EMP [REP6-008, Appendix K.1.4.3] and that the Principal Contractor should monitor compliance outside of the agreed construction hours. Cambridgeshire Councils

included the removal of certain previous exceptions that were considered to be potentially noisy activities in their comments on the dDCO. CBC considered there to be scope for deliveries to site causing disruption outside of the hours proposed, also that potentially noisy activities could form exceptions, including earthworks, piling and concrete pours.

- 13.4.22. In response [REP9-023] the Applicant proposed changes to the list of exceptions to the dDCO [REP9-004], including amendment of wording to Requirement 19 (2) and sub paragraphs (k), (m), (n) and (o), requiring agreement with the relevant LA in advance of works described taking place.
- 13.4.23. At the close of the Examination CBC requested that construction hours did not commence until 0800 hours with any proposed divergence agreed with CBC in advance [REP10-024]. The Cambridgeshire Councils were of the view that if start-up is not included construction hours should not commence until 0800 hours [REP10-026]. This matter was not agreed with the Applicant at the close of the Examination for the same reasons, including the risk of extending the overall construction programme.

ExA's reasoning

- 13.4.24. The ExA agrees that receptors would likely suffer from noise disturbance during the construction period and disturbance should be avoided as far as possible. However, the ExA takes into account that the period of disturbance on any given day would be for a short duration, and would only extend over the temporary construction period.
- 13.4.25. The ExA agrees with parties that restrictions on construction hours, in particular activities that would be allowed to take place outside working hours, are necessary to minimise adverse effects on nearby receptors. The Applicant's initial proposal to exclude activities from extended construction hours, in the ExA's view was not adequate. This is because certain activities that were not excluded from taking place outside construction hours, could be potentially noisy and would likely lead to disruption to residential receptors closest to the Proposed Development, at times when background noise would be low given likely reduced traffic levels, such as during the night and on weekends.
- 13.4.26. The ExA accepts that the noise mitigation and control measures will be refined and updated during detailed design and as part of the Second Iteration EMP, secured through R3 of the dDCO. The document would also include a NMP, to be the subject of consultation, enabling LAs to provide more detailed location specific concerns at the appropriate stage of detailed design. In that regard the ExA welcomes the Applicant's amendments to R19 (2), making provision for approval from the respective LA prior to such works commencing outside of agreed hours of working and concludes that this would minimise the likelihood of such disruption.
- 13.4.27. The ExA notes the LAs point that delaying the start time for construction works would be of likely benefit to receptors, particularly residential dwellings. However, the ExA are persuaded by the Applicant that a

blanket delay of start times across the Proposed Development would potentially create a delay to the construction of the Proposed Development. In light of the restricted activities requiring approval of the relevant LA, secured through R19 of the dDCO, the ExA is satisfied that the adverse effects can be adequately managed, without delaying the start time for construction activities.

- 13.4.28. The ExA is content that the construction working hours, the activities which fall outside the restricted hours and the means for approval being granted for departures from that described through the control of the LAs are appropriately worded in the First Iteration EMP and secured in the dDCO.

Noise effects at receptors near Barford Road, Re16 (The Barns), Re17 (Rectory Farm) and Re18 (Hills Farm)

- 13.4.29. Throughout the Examination CBC raised concern regarding operational noise effects at receptors (Re) Re16 (The Barns), Re17 (Rectory Farm) and Re18 (Hills Farm) [REP1-054] [REP1-055] [EV-005] [EV-020] [EV-056] [REP10-024]. The receptors of concern are identified in the ES [APP-243, Figure 11.1]. CBC contend that because noise levels will rise significantly, from current levels, mitigation should be provided.
- 13.4.30. The Applicant argues that although increases in noise would be major in EIA terms, none of the referred to properties are predicted to experience traffic noise above Significant Observed Adverse Effect Level (SOAEL). The Applicant does not consider the properties to experience significant adverse effects in terms of the NPSE and the NPSNN [REP3-008]. The Applicant's assessment findings were that the traffic noise levels at these properties would be low, at and around the Lowest Observed Adverse Effect Level (LOAEL) [REP3-008], which is considered acceptable in EIA terms. These LOAELs are the levels above which the Applicant explains adverse effects on health and quality of life from road traffic noise occur, and that the NPSNN requires these to be minimised in the context of sustainable development.
- 13.4.31. The Applicant explained that the Barns near Barford Road (Re16) would experience a decrease in noise levels on their front facades in the opening year due to the removal of traffic from Little Barford Road with the Proposed Development in place. These levels, which are currently at, near to or above SOAEL during both the day and night, would be reduced by around 10dB. However, these properties are predicted to experience an increase in noise levels on the rear façade as the Proposed Development would be approximately 300m away. The noise levels on both facades of the property would remain below the daytime LOAEL even with predicted traffic noise increases. Predicted levels range from 47-50dB without the Proposed Development and 51-56dB with the Proposed Development.
- 13.4.32. The Applicant explained that at Rectory Farm (Re17), the property is predicted to experience moderate and major increases in the opening

year on its north and east facades of between 5 and 14dB in the daytime with the Proposed Development in place. Despite this increase the traffic noise levels at all facades would remain low, around or below the daytime LOAEL.

- 13.4.33. The Applicant explained that at Hills Farm (Re18), the property is predicted to experience moderate and major increases in the opening year on all its facades of between 4 and 10dB in the daytime with the Proposed Development in place. Despite this increase, the traffic noise levels would remain low, below the daytime LOAEL. Predicted levels range from 35-44dB without the Proposed Development and 40-52dB with the proposed Development.
- 13.4.34. CBC remained concerned about Re17 and it explained that Rectory Farm would experience an increase of between 10.8 and 14.5dB during the daytime and 9.3 to 10.7dB at night, therefore CBC consider that mitigation should be provided. The ExA asked CBC and the Applicant to provide a joint position statement to clearly explain matters of agreement and disagreement in relation to whether mitigation should be provided at the location and what mitigation had been considered [REP6-046] [REP9-020] as detailed below.
- 13.4.35. In the position statement the Applicant explained that a road traffic noise source – Little Barford Road, currently exists approximately 700m west of Rectory Farm. However, when monitoring was undertaken here in 2017 the Applicant identified that other noise sources, such as overhead lines, rail, and agriculture were also present at the property. The baseline day-time noise level measured ranged between 49-52dB(A). The Applicant confirmed that the contribution from the road traffic noise sources derived from its noise model was around 45.4dB(A), which according to the Applicant demonstrates that other noise sources are more dominant than the noise predicted from traffic on the Proposed Development. The Applicant also confirmed that the 14dB(A) increase in road traffic noise predicted at a facade facing the Proposed Development would not result in a 14dB increase in overall noise at the property given other non-traffic sources would offset the effect. Whilst accepting the predicted noise levels and methodology used, CBC maintained that the Applicant should provide mitigation.
- 13.4.36. The Applicant contends that mitigation measures, including low noise surfacing have been incorporated in the design to minimise adverse operational noise effects however some residual effects will remain at the locations.
- 13.4.37. The Applicant said that while other forms of mitigation were considered for all properties a 3m high noise barrier at the Barns (Re16), and bunding and noise barrier at Rectory Farm (Re17) these were dismissed [REP3-008]. At Rectory Farm this was because the resultant likely benefit was found to not be proportionate in terms of cost, or sustainable in terms of effectiveness over the life of the Proposed Development [REP9-020]. At Hills Farm (Re18), the Applicant explained that based on the very large distance between the property and the Proposed Development

and the very low predicted traffic noise levels, a barrier has not been explicitly modelled. However, the benefit of a barrier would be negligible.

- 13.4.38. CBC disagrees with the Applicant's position, and highlight that NPSNN Paragraph 5.195, states that mitigation should be provided, no matter how small the mitigation effect would be. CBC remains concerned about the overall effect of the Proposed Development which is likely to occur at Rectory Farm and that the different characters of the noise sources present at this property may influence the perception of the change in noise levels [REP9-020]. For the same reasons CBC disagrees with the Applicant's approach to Re16 and Re18.

ExA's reasoning

- 13.4.39. The ExA considers that even with the predicted increase in traffic noise, the day and night traffic noise levels with the Proposed Development in operation, are low, at or around the LOAEL of 55dB(A) in the daytime and 40dB(A) during the night. The ExA notes that the LAs in particular CBC did not challenge the Applicant's assessment and noise modelling results.
- 13.4.40. The ExA also relies on the Applicant's analysis that traffic noise levels at LOAEL would not cause adverse effects on health and quality of life.
- 13.4.41. The ExA accepts the Applicant's rationale that mitigation measures at both the Barns and Rectory Farm, in addition to embedded mitigation of low noise surfacing would provide marginal benefit and only marginally decrease noise levels by 1.1dB and would not deliver value for money.
- 13.4.42. In particular at Rectory Farm the use of additional mitigation in the form of a noise barrier 3m high and 1.1 kilometres (km) in length would only likely result in a further reduction of 1.6dB of noise, which the Applicant explains is not meaningful, especially since the traffic noise levels would be below SOAEL. More importantly the ExA takes account of the existing noise levels at this property, which would mean that the noise effects of the Proposed Development would not be perceptible.
- 13.4.43. At Hills Farm (Re18), the ExA notes that the Proposed Development would be over 600m from the property and that the traffic noise levels at the property with the Proposed Development in place would be below the daytime LOAEL. The ExA has not been presented with substantive evidence from CBC that further mitigation would be required or provide any meaningful benefit to the property.
- 13.4.44. The ExA accepts the Applicant's position and is content that the increase in operational noise levels would not cause adverse effects on health and quality of life for the receptors at the Barns, Rectory Farm and Hills Farm. The ExA is satisfied that embedded mitigation measures proposed by the Applicant are adequate and additional mitigation measures at the locations above are not required. The ExA concludes that given the imperceptible benefits of the additional mitigation modelled by the Applicant, the additional benefits would not be required to meet the requirements of the NPSNN.

Noise effects and proposed mitigation at Roxton, Great Barford and Loves Farm

- 13.4.45. Representations were received from IPs regarding the absence of detailed information regarding noise mitigation measures such as bunds or noise barriers at Roxton, Great Barford and Loves Farm [RR-020] [RR-103] [RR-064] [RR-072] [RR-093]. Roxton Parish Council (PC) [RR-093] recalled assurances from the Applicant to deliver noise mitigation in the context of a different scheme, referred to as the Great Barford Bypass in 2000 to 2005; and considered this as an opportunity to deliver on those assurances.
- 13.4.46. The Applicant responded that the use of noise barriers or enclosures during construction, where necessary has been secured in the First Iteration EMP [REP10-018]. The Applicant responded that the embedded mitigation measures included low noise surfacing and to incorporate cuttings near the locations that the IPs were concerned about. The Applicant did not find any further need for noise barriers [APP-080]. The Applicant also explained that specific noise mitigation measures would be developed during detailed design and would need approval from the SoS, in accordance with R18 of the dDCO.
- 13.4.47. The Applicant acknowledged that during construction adverse noise effects are predicted to occur at properties locally to Roxton [REP1-021]. However, the Applicant is of the view that the measures in the outline NMP in the first iteration EMP [REP10-018] would ensure that noise would be controlled effectively through industry standard good practice, including monitoring and control measures. Additionally, the Applicant has also proposed measures such as 3m high noise bunding, incorporating native planting, alongside the A421 to the north of Roxton and low noise surfacing, which would ensure noise effects would be minimised during operation.
- 13.4.48. The Applicant did not consider matters relating to historic commitments associated with the Great Barford Bypass can be included in the Proposed Development unless there is overlap between the embedded or essential mitigation required for the Proposed Development [REP1-021].
- 13.4.49. In response to the concerns raised by Love's Farm Community Association [RR-064] regarding increased traffic noise, the Applicant stated that the increases in traffic noise predicted at some of the existing properties at the development as a result of the Proposed Development would be minor and the Applicant feels that the embedded mitigation measures would be adequate to mitigate these effects [REP1-021]. The proposed embedded mitigation measures are shown in the Environmental Masterplan [APP-091], including low noise surfacing.
- 13.4.50. Effects on individual properties at the proposed Loves Farm East development have not been reported as the properties are not predicted to be occupied prior to the start of construction. As such the Applicant is of the view that future residents would not experience a change in noise as a consequence of either construction or operational phases.

- 13.4.51. No further submissions were received from the referred to IPs in response to the Applicant's position during the Examination.

ExA's reasoning

- 13.4.52. The ExA cannot give weight to previous commitments in relation to the Great Barford Bypass, unless there are relevant adverse effects of the Proposed Development that need to be mitigated. In this regard the ExA agrees with the Applicant and has not considered this matter any further
- 13.4.53. The ExA notes that the Applicant would consider the use of temporary noise barriers or enclosures during construction in addition to industry standard good practice to mitigate the effects of construction noise if considered necessary at detailed design or further to monitoring during construction, and that a NMP would be the subject of consultation with LAs. The ExA is satisfied with the Applicant's approach and agrees that the embedded mitigation measures would be adequate to alleviate adverse noise effects during the operation of the Proposed Development.
- 13.4.54. The ExA also accepts that where planned developments would not be occupied prior to construction, future residents and businesses would not experience a change in noise as a consequence of the Proposed Development so as to require specific mitigation.
- 13.4.55. The ExA is satisfied that the operation stage mitigation measures are secured in the First Iteration EMP [REP10-018].

13.5. CONCLUSIONS

- 13.5.1. The ExA is satisfied that adequate baseline noise surveys have been undertaken to inform the assessment of noise effects and associated mitigation measures of the Proposed Development.
- 13.5.2. The ExA is satisfied that in accordance with NPSNN Paragraph 5.195, subject to R18 Noise Mitigation and R19 Construction Working Hours of the dDCO, the noise effects of the Proposed Development during construction and operation would not have any adverse effect on nearby residents, providing mitigation where appropriate and in the context of value for money.
- 13.5.3. The ExA also consider that further to that detailed in the First Iteration EMP relating to noise monitoring and R18 Noise Mitigation of the dDCO, including the future approval of the SoS to detailed design, that the Applicant has satisfied that required in NPSNN Paragraph 5.196. The ExA accept that mitigation measures have been put forward by the Applicant that would ensure noise levels from the Proposed Development would not exceed those described in the assessment, or any other estimates on which the decision is based.
- 13.5.4. Notwithstanding the above accordance with the NPSNN the ExA does acknowledge that the likely effects of noise at specific receptor points including, amongst others, Rectory Farm, would likely worsen as a result of the Proposed Development. However, the ExA accepts that noise

levels would remain no greater than SOAEL and has considered the evidence provided by the Applicant regarding the very marginal benefits that would be experienced by providing additional mitigation. As such the ExA agrees with the Applicant, that on balance the marginal benefit does not justify the cost of implementation and subsequent maintenance. However, given the negative effect, the ExA apportions little weight against the making of the Order as opposed to neutral weight.

- 13.5.5. In accordance with NPSNN Paragraphs 5.193 and 5.194 the ExA is content that the Applicant has had regard to the NPSE, NPPF and NPPG on noise, incorporating measures to minimise noise emissions, including the use of cuttings, bunds and low noise surfacing.

14. FLOOD RISK, WATER QUALITY AND RESOURCES

14.1. BACKGROUND AND POLICY CONTEXT

Introduction

- 14.1.1. Flood Risk and Water Quality and Resources were identified as principal issues in the Rule 6 letter [PD-005, Annex C]. These concerned the sequential approach to route selection and design; construction phase effects; passing the Exception Test as required; interactions between different sources of flooding; attenuation measures, including floodplain storage reprovision; climate change resilience; construction effects of the Proposed Development on groundwater, watercourses and water bodies; operational effects of the Proposed Development on surface water drainage, outfalls, and the use and extent of detention basins; compliance with the requirements of the Water Framework Directive, particularly in the light of changes to water courses and water bodies; and the effectiveness of mitigation and compensation measures.
- 14.1.2. Following the Examination, the ExA has addressed these issues together, given their overlapping nature.

National Policy Statement

Flood Risk

- 14.1.3. The assessment of Flood Risk contained in the National Policy Statement for National Networks (NPSNN), requires the Applicant to:
- 1) undertake a Flood Risk Assessment (FRA) for projects in Flood Zones 2 and 3, medium and high probability of river flooding (NPSNN, Paragraph 5.92); and
 - 2) in the FRA identify and assess the risks of all forms of flooding to and from the project and demonstrate how these flood risks will be managed, taking climate change into account (NPSNN, Paragraph 5.93).
- 14.1.4. In reaching a decision the Secretary of State (SoS) should be satisfied that:
- 1) the submitted FRA is appropriate and that the Sequential and Exception Tests have been applied as necessary (NPSNN, Paragraphs 5.98 and 5.105-5.109);
 - 2) flood risk will not be increased elsewhere and development is appropriately flood resilient and resistant, and gives priority to the use of sustainable drainage systems (SuDS) (NPSNN, Paragraph 5.99);
 - 3) the proposed drainage system complies with any National Standards referenced in the Flood and Water Management Act 2010; and
 - 4) there is provision for the adoption and maintenance of any SuDS, and that the most appropriate body is being given the responsibility for

maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site (NPSNN, Paragraph 5.100).

Water Quality and Resources

- 14.1.5. The assessment of Water Quality and Resources contained in NPSNN, requires the Applicant to set out:
- 1) opportunities to improve upon the quality of existing discharges where these are identified and shown to contribute towards Water Framework Directive (WFD) commitments (NPSNN Paragraph 5.222); and
 - 2) describe the existing quality of waters, water resources, physical characteristics of the water environment affected by the proposed project, the impacts of the proposed project on water bodies or protected areas under the WFD and Source Protection Zones (SPZs) around potable groundwater abstractions and any cumulative effects (NPSNN Paragraph 5.223).
- 14.1.6. In reaching a decision the SoS should be satisfied that:
- 1) the interface between the planning and other relevant regimes, such as pollution control has been considered and appropriately applied in terms of discharges, water abstraction and controlled water (NPSNN Paragraph 5.224);
 - 2) greater weight is given to the effects on the water environment where a project would be assessed to have adverse effects on the achievement of the environmental objectives established under the WFD (NPSNN Paragraph 5.225);
 - 3) the proposal has had regard to the River Basin Management Plans and to the WFD and daughter Directives and aims to achieve no deterioration of ecological status in watercourses (NPSNN Paragraph 5.226); and
 - 4) there are proposals to mitigate adverse effects on the water environment through Requirements in the DCO (NPSNN Paragraph 5.227).

Other Legislation and policies

- 14.1.7. Other legislation and policies relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3] [APP-078, Section 9.2], [APP-082, Section 13.2] [APP-083, Section 14.2] and in Chapter 3 of this Recommendation Report.
- 14.1.8. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration for Nationally Significant Infrastructure Project (NSIP) development proposals in respect of Flood Risk, Water Quality and Resources, in particular Chapters 14 and 15. In determining applications regard must also be had to the effects of current and future climate change, and the NPPF is referenced in the NPSNN (Paragraphs 5.91 and 5.93).

14.2. THE APPLICATION

Environmental Statement

- 14.2.1. The Applicant's assessment of Flood Risk, Water Quality and Resources is contained in its ES, in Chapter 13 Road Drainage and the Water Environment [APP-082] and Chapter 9 Geology and Soils [APP-078].
- 14.2.2. There are Appendices to ES Chapters 13 and 9 that are also relevant, including the FRA [APP-220] to [APP-223] the WFD Assessment [APP-217], the Assessment of Road Runoff and Spillage Risk to Watercourses (HEWRAT) [APP-218], the Drainage Strategy Report [APP-219], the Water Quality Monitoring Report [APP-224], Water Resources data [APP-225], the Groundwater Risk Assessment [APP-226]. ES Chapter 13 Figures of relevance include the Superficial Geology [APP-139], the Solid Geology [APP-140], the Surface Water Environment [APP-151] and the Water Environment Flood Zones [APP-152].

Scope and Methodology

- 14.2.3. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. The Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) including LA 113 Road Drainage and the Water Environment, in liaison with statutory and non-statutory consultees and stakeholders, including the Environment Agency (EA) and Lead Local Flood Authorities (LLFAs).
- 14.2.4. The assessment focused on identifying the effects on water quality, surface water and groundwater from construction and operation of the Proposed Development; the potential for increased volume and rate of surface water runoff from new impervious areas leading to an impact on flood risk; the potential for changes in surface water drainage patterns; and effects on hydraulic processes and hydromorphology of potentially affected water bodies.
- 14.2.5. It was informed by a WFD Assessment and a FRA [APP-082, Paragraphs 13.3.1, 13.3.2 and 13.3.22] [APP-078, Paragraphs 9.3.2, 9.3.13 and 9.3.29]. The FRA [APP-220, Section 10.1] and WFD [APP-217, Section 4] highlight various water bodies of relevance, including the River Great Ouse, Begwary Brook and Hen Brook.

Applicant's assessment of effects and mitigation proposed

- 14.2.6. The Applicant's assessment [APP-085, Table 16-1, Chapter 13] is that the construction of the Proposed Development would result in no significant effects during construction or operational stages, for Flood Risk, Water Quality and Resources.
- 14.2.7. The Applicant's proposed embedded mitigation specific to Flood Risk, Water Quality and Resources is secured through the Engineering Section Drawings [APP-017 to APP-022], the Works Plans [APP-009 to APP-010], the Environmental Masterplan [REP9-037], and the draft Development Consent Order (dDCO) [AS-026], and includes:

- 1) incorporation of treatment trains into the design of the Proposed Development, comprising features including, but not limited to, wet ponds, filter drains, swales, new highway ditches and hydrodynamic vortex flow separators;
- 2) the incorporation of sustainable drainage features into the design of the Proposed Development, including with regard to future flood events associated with climate change;
- 3) the installation of 39 new engineered outfalls features in the design of the Proposed Development;
- 4) the construction of flood compensation areas within the Order limits at seven locations;
- 5) the construction of a viaduct over the River Great Ouse and its floodplain, carrying the new eastbound and westbound carriageways. Piers and adjoining embankments designed and located to avoid the river channel and provide minimal obstruction of floodplain flows;
- 6) the installation of culverts at various locations within the Order limits; and
- 7) the diversion, realignment or re-routing of existing watercourses at various locations.

14.2.8. Essential mitigation specific to Flood Risk, Water Quality and Resources has been secured through the First Iteration Environmental Management Plan (EMP) [REP10-018] and the dDCO [AS-026] and includes the development of a Water Management Plan to manage, amongst other things, surface water runoff, floodplain activities and groundwater flood risk.

14.2.9. Further mitigation measures are identified with regard to improving watercourses within the Order limits [APP235, ENH-RD1] and outside the Order limits [APP-235, ENH-RD2]. These measures would improve the WFD status of watercourses but are subject to feasibility and so not secured.

14.3. LOCAL IMPACT REPORTS

Cambridgeshire Councils

14.3.1. The Joint Local Impact Report (LIR) of Cambridgeshire County Council (CCC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC) (Cambridgeshire Councils) addresses flooding and water issues [REP2-003, Table 9, Sections 6.8 and 8.8 and Appendix A], including relevant development plan policies.

14.3.2. In their Joint LIR the Cambridgeshire Councils were satisfied with the Applicant's proposed utilisation of attenuation basins which they stated would manage flows, promote water quality and would reduce future pollution risks to surrounding watercourses.

14.3.3. However, they highlighted the risk of sediment and pollutants entering watercourses and waterbodies, and stated that more detailed mitigation would be needed. They had specific concerns relating to the design and orientation of the Wintringham Brook culvert which may adversely affect flood risk, and expressed a preference for SuDS supplemented by

features such as reed planting, instead of the proposed proprietary treatment systems.

- 14.3.4. The Cambridgeshire Councils expressed concern regarding the proposed discharge rates from the attenuation basins which could increase flood risk for existing and future residents around St Neots. The importance of clearly defined future maintenance of the SuDS is also highlighted to ensure effective future drainage and flood risk management.

14.4. THE EXAMINATION

Introduction

- 14.4.1. The NPSNN (Paragraph 5.91) and the NPPF (Paragraphs 159 to 165) make clear that development should be directed towards areas at the lowest risk of flooding through a sequential approach to site/route selection.
- 14.4.2. However, where development cannot avoid areas at a higher risk of flooding then it may still be acceptable, subject to the requirements of the Exception test. To pass the Exception test, a development must demonstrate wider sustainability benefits that would outweigh the flood risk; and, that it would be safe for its lifetime, taking account of the vulnerability of its users, without increasing flood risk elsewhere and where possible reducing overall flood risk.
- 14.4.3. The Proposed Development is classed as Essential Infrastructure in the Government's Planning Practice Guidance, and is located primarily in areas at low risk of flooding. However, as a result of connecting the Black Cat roundabout with the Caxton Gibbet roundabout, it cannot avoid crossing areas at a higher risk of flooding: the River Great Ouse, its functional floodplain and various ordinary watercourses that are some of its tributaries.
- 14.4.4. The NPSNN (Paragraph 5.226) states that a proposal should have regard to River Basin Management Plans and the requirements of the WFD and daughter Directives. The NPPF states that new development should not contribute to unacceptable levels of water pollution and wherever possible should help improve local water quality (Paragraph 174e).

Issues raised

- 14.4.5. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

1) Flood Risk

- Black Cat Quarry and Floodplain compensation;
- Maintenance and Run-off rates;
- Interactions between different sources of flooding;
- Compounds and Storage Areas;
- Climate Change Allowances; and
- Protective Provisions (PP) and Disapplication of Legislation.

- 2) Sequential and Exception Tests
- 3) Water Quality

Flood Risk

- 14.4.6. The route of the Proposed Development would pass through areas at risk of flooding and so a FRA is required. Furthermore, the Proposed Development, which is classed as Essential Infrastructure in terms of flood risk, would pass through Flood Zones 3a and 3b and so must be considered against the Sequential and Exception Tests.
- 14.4.7. The Applicant's FRA comprises a suite of documents, including the principal FRA document [APP-220].
- 14.4.8. The FRA notes that the majority of the land in this area is located within flood zone 1 and has a low probability of flooding, the Proposed Development crosses the River Great Ouse and its floodplain (flood zone 3 – high probability of flooding) as well as a number of ordinary watercourses (flood zones 2 and 3 – medium and high probability of flooding) [APP-220, Paragraph 10.1.2].
- 14.4.9. The FRA also considers that surface water flood risk is very low, with the exception of areas that intersect with the fluvial channels, which can be medium to high. Groundwater flood risk is low in the majority of the area, with the exception of land towards the western end of the Proposed Development, where shallow groundwater conditions and scope for interactions with surface water in the River Great Ouse floodplain, means there is a high probability of groundwater flooding there [APP-220, Paragraph 10.1.3 and 10.1.4].

Black Cat Quarry and Floodplain compensation

- 14.4.10. The EA raised concerns regarding the completion of restoration works to the Black Cat Quarry and an increase in modelled flood depths on a third party's land [RR-036]. In response the Applicant confirmed that the Black Cat Quarry restoration works would be completed prior to the commencement of the Proposed Development, thereby according with the flood risk baseline modelling and the FRA [REP3-007, Q1.9.2.2]. Furthermore, the Applicant noted that the increase in flood depth on a third party's agricultural land would be acceptable to the third party, given the overall reduction of flood depths across the third party's land [REP3-007, Q1.9.4.2].
- 14.4.11. Floodplain compensation areas by the River Great Ouse are contained in the FRA. They would be required to provide equivalent flood water storage to that which would be lost by the construction of the viaduct for the Proposed Development [APP-220 and APP-221]. Bedford Borough Council (BBC) sought justification for the size of the proposed floodplain compensation area to the southeast of the existing Black Cat roundabout, and the Compulsory Acquisition (CA) of this land [RR-008b, 11] [REP1-045, 6] [REP4-050, Q2.5.3.6] [REP6-054, 1]. This concerns Work No. 24 of the dDCO [AS-026] and is also covered in Chapter 22 of this Recommendation Report.

- 14.4.12. The Applicant responded to BBC [REP1-021, RR-008bd] [REP5-015, Q2.5.3.6] [REP8-010] setting out that the proposed floodplain compensation areas would be needed to manage flood risk from the River Great Ouse, and the CA of the land was for that purpose. There is a signed Statement of Common Ground (SoCG) between BBC and the Applicant which agrees the Black Cat Quarry restoration [REP10-025, Pages 50-51]; flood compensation near to the Proposed Black Cat Junction [REP10-025, Pages 47-50] and Flood Risk data, effects, assessment and mitigation for the Proposed Development [REP10-025, Pages 105-106].

ExA's reasoning

- 14.4.13. The ExA is satisfied from the FRA, which is a certified document in Schedule 10 of the dDCO [AS-026] that the assessment of flood risk has considered the restoration of the Black Cat Quarry, and appropriate floodplain compensation for the River Great Ouse as a result of the viaduct for the Proposed Development.
- 14.4.14. Without the restoration of the Quarry and the CA of land for compensatory floodplain storage, there is no substantive evidence that flood risk from the River Great Ouse can be safely managed. The ExA relies on the agreement between BBC and the Applicant and the EA and the Applicant on this matter of flood risk management.

Maintenance and Run-off rates

- 14.4.15. Central Bedfordshire Council (CBC) raised the need for the effective maintenance of drainage watercourses and the need for an effective maintenance plan with roles and responsibilities identified, at detailed design stage [REP1-055]. CBC's comments were noted and welcomed by the Applicant at D3 [REP3-008, 055j and 055k]. There is a signed SoCG between CBC and the Applicant which agrees the associated maintenance plan [REP10-024, Pages 109-110].
- 14.4.16. The Cambridgeshire Councils also raised the need for maintenance responsibilities to be resolved [REP1-048, 14.3]. The Applicant stated that maintenance for some SuDS features would be on the basis of CCC as Local Highway Authority (LHA) taking responsibility for the maintenance of the identified drainage assets [REP3-008, REP1-048ct].
- 14.4.17. The Cambridgeshire Councils raised a concern regarding the run-off rates from some drainage basins for the Proposed Development being too high, which would increase the risk of flooding downstream. Reference is made to this being upstream of large developments such as Wintringham Park and the wider St Neots area. However, no specific watercourses are identified [REP2-003, Paragraph 8.8.6]. The Cambridgeshire Councils acknowledged that there was a balance between discharge rates and the risk of blockage but suggested that where the current runoff rate is below 5 l/s (litres per second) then the default rate should be 2 l/s/ha or 75mm diameter flow controls [REP1-048, Paragraph 14.3.4].

- 14.4.18. In response the Applicant stated that it could apply alternative minimum flow restrictions such as a minimum 75mm diameter flow control measure, where required [REP3-007, 14.3.1]. Cambridgeshire Councils responded that whilst some matters can be left to the detailed design stage it required certainty over the approach [REP4-060, Page 28], which was not contained in the Drainage Strategy Report [APP-219]. The Applicant stated that it would consider reviewing the Drainage Strategy Report wording in this regard [REP5-014, Page 97]. This matter was unresolved at the close of the Examination as the changes to the Drainage Strategy Report were not submitted into Examination [REP10-026, Paragraph 4.43].
- 14.4.19. The Cambridgeshire Councils sought further evidence to demonstrate there were no downstream flooding issues at Wintringham Brook [RR-013] [REP1-048, Chapter 14] [REP3-040]. The Applicant responded to the issue raised by Cambridgeshire Councils [REP1-021] [REP3-008, REP1-048ct] [REP4-036] stating that the 1-Dimensional (1D) modelling at Wintringham Brook incorporated into the FRA shows no out-of-bank flows at the intersections with the Proposed Development or increased flows downstream. Cambridgeshire Councils did not respond further to this matter [REP10-026, Paragraph 4.42].
- 14.4.20. The Cambridgeshire Councils raised concerns regarding the design and orientation of culverts beneath the Proposed Development and the disapplication of the Land Drainage Act 1991 which would remove the ability of CCC to comment on proposals [REP2-003, Paragraph 8.8.4] and that maintenance arrangements have not been agreed [REP2-003, Paragraph 8.8.7]. In response the Applicant noted that detailed design of the culverts had not yet been undertaken, that discussions would continue with CCC regarding disapplication of legislation and maintenance arrangements [REP3-007, Pages 108 to 110].
- 14.4.21. Discussions continued between the Applicant and the Cambridgeshire Councils during the Examination with regard to maintenance responsibilities. However, agreement was not reached by the close of the Examination [REP10-026, Paragraph 4.43].

ExA's reasoning

- 14.4.22. The ExA notes the points raised by the Cambridgeshire Councils in relation to maintenance of drainage infrastructure, and runoff rates from the proposed attenuation basins. However, the ExA does not consider the future maintenance of specified SuDS by the LHA to be unreasonable and notes the LHA already has drainage maintenance responsibilities for roads under its control. The ExA is content that the First Iteration EMP [REP10-018] contains sufficient provisions to adequately control this.
- 14.4.23. The ExA is also satisfied that the drainage system for the Proposed Development gives priority to the use of SuDS and would comply with National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010. Furthermore, whilst the ExA appreciates the concerns raised by the Cambridgeshire Councils, it is satisfied the minimum runoff rates from attenuation basins

would be unlikely to cause flooding downstream, and the ExA is mindful of the need for sufficient flow to prevent the accumulation of sediment in drainage channels, which could itself increase flood risk. The ExA expects that this matter will be resolved between the parties at detailed design stage but is not unduly concerned with a minimum drainage rate of 5 l/s from the basins.

- 14.4.24. With regard to potential flooding downstream of Wintringham Brook and the design of culverts beneath the Proposed Development, the ExA is satisfied that the FRA, which is a certified document, and the Drainage Strategy Report have appropriately considered these matters and that the residual flood risk is low.

Interactions between different sources of flooding

- 14.4.25. The EA raised concerns in relation to groundwater including the potential for permanent dewatering for some elements of the Proposed Development [RR-036]. The EA also raised concerns in relation to the absence of an assessment of interactions between groundwater and surface water flooding in the FRA, which was a particular concern at the proposed Black Cat Junction [REP1-076] [REP1-008].
- 14.4.26. The ExA asked the Applicant to provide an update on the proposed permanent groundwater dewatering systems [PD-009, Q2.9.2.2], and whether an assessment of the interactions between groundwater and surface water at the three grade separated junctions, the various underpasses and culverts, and any geographical low points had been undertaken [PD-008, Q1.9.2.1].
- 14.4.27. The Applicant responded that following discussions with the EA, there were no proposals for permanent groundwater dewatering for any part of the Proposed Development, including the proposed A1 underpass, which would be permanently sealed [REP4-037]. The Applicant confirmed that assessments had been undertaken for the three grade separated junctions and the underpasses, but that other areas had been scoped out. The assessments concluded that during both construction and operational phases, the magnitude of interaction impacts at the assessed locations would be no more than minor, resulting in adverse effects that would not be significant [REP1-022].
- 14.4.28. The EA agreed with the Applicant's position apart from in relation to the proposed Black Cat Junction, where a further risk assessment of the residual flow from the sealing of the underpass, would be needed [REP4-068, Q2.9.2.1 and Q2.9.2.2]. The EA also stated that it remained concerned with the content of the Applicant's FRA and that its concerns were not being addressed by the Applicant [REP4-068].
- 14.4.29. In response to the ExA and the concerns raised by the EA [EV-060] [EV-065], the Applicant submitted a FRA Technical Note [REP6-042] and a Groundwater Risk Assessment Technical Note [REP6-043] to supplement the existing assessments. In response the EA confirmed that it was satisfied with the groundwater and surface water interactions at the

proposed Black Cat Junction [REP8-046, Q.3.9.2.1] but still had concerns with the FRA Technical Note [REP8-046, Q.3.9.2.2].

- 14.4.30. The ExA asked the Applicant and the EA to ensure that any unresolved differences with the FRA, including the FRA Technical Note were clearly set out in their final SoCG or other supporting document [PD-017, 8ii].
- 14.4.31. The Applicant submitted a final FRA Technical Note, previously shared with the EA [REP10-038] as well as a signed SoCG with the EA [REP10-021]. The Applicant stated that there were no remaining significant unresolved differences with the EA [REP10-046, 8ii]. The EA advised that an amended version of the FRA Technical Note was considered acceptable. However, the EA also sought an additional requirement for the dDCO concerning the sharing of modelling data [REP10-065]. This matter was addressed in the agreed FRA Technical Note, a certified document, as well as in the First Iteration EMP [REP10-018], and is shown as separately agreed with the Applicant in the SoCG on this basis [REP10-021, Pages 39-40]. Consequently, with reference to Paragraph 4.9 of the NPSNN, the ExA is not satisfied that such a requirement would meet the tests of necessity or reasonableness.
- 14.4.32. BBC advised that for the Black Cat Junction, the Bedford and River Ivel Internal Drainage Board (BRIIDB) would be responsible for groundwater drainage [EV-060] [EV-065]. The Applicant confirmed that they had consulted BRIIDB on the FRA Technical Note [REP6-030, 12]. The ExA asked BRIIDB for their views on the drainage arrangements for the Proposed Black Cat Junction, in light of the EA's previously stated concerns [PD-014, Q3.9.2.1]. BRIIDB responded confirming consent to the disapplication provisions under s23 and s66 of the Land Drainage Act 1991 and withdrew its earlier representation [REP1-092].
- 14.4.33. The Cambridgeshire Councils noted that interactions at the Grade separated junctions were to be addressed at detailed design stage and sought assurance from the Applicant that there would not be adverse impacts on receiving surface waters in Cambridgeshire [REP4-059, Q2.9.2.1]. The Applicant agreed that there should not be any adverse impacts on receiving surface waters, such as increased flows or pollution [REP5-015, Q2.9.2.1].

ExA's reasoning

- 14.4.34. In terms of the interactions between different sources of flooding, and particularly groundwater and surface water interactions at the proposed Black Cat junction, the ExA is content that this matter has been covered during the Examination, including through the provision of the FRA Technical Note and Groundwater Risk Assessment Technical Note by the Applicant. The ExA notes that neither BBC, BRIIDB or the EA have any objections to the arrangements and does not disagree with the parties in this regard.
- 14.4.35. The ExA is also satisfied that whilst interactions for other junctions would be considered further at detailed design stage, there would not be any significant adverse effects on receptors.

Compounds and Storage Areas

- 14.4.36. The EA highlighted that Appendix B of the FRA Technical Note [REP6-042] showed that one of the proposed site compounds and some soil storage areas were located in Flood Zone 3 [REP8-046, Q3.6.3.1].
- 14.4.37. Following further discussions with the Applicant, further revisions to the FRA Technical Note were made [REP10-038], including potential temporary flood compensation areas. The EA confirmed that it was satisfied with the final revision to the FRA Technical Note, which includes compound and storage area locations [REP10-065].

ExA's reasoning

- 14.4.38. In terms of the concerns raised by the EA with regard to the site compounds and soil storage areas in flood zone 3, the ExA notes the revisions to the FRA Technical Note and that the EA is satisfied with the arrangements. Given that the EA is satisfied with the approach the ExA is also satisfied in this regard.

Climate Change Allowances

- 14.4.39. Climate Change Allowances (CCAs) for future flood risk, including sensitivity tests, were agreed with the EA at the outset [APP-220, Paragraphs 5.3.10 and 5.3.11] and have been considered as part of the assessment of flood risk for the Proposed Development.
- 14.4.40. The EA published new CCAs in July 2021, which were different to those previously agreed. The ExA asked the Applicant and the EA what the implications were of the publication of the new CCAs for flood risk, and what effect this would have on the FRA [PD-008, Q1.9.1.2]. This was a matter also raised by the Cambridgeshire Councils [REP1-048, 14.6].
- 14.4.41. The EA [REP1-076] and the Applicant [REP1-022] both stated that the CCAs used in the FRA were appropriate and so there was no need to update the FRA as a result of the new CCAs. This matter is also included in the SoCG between the EA and the Applicant [REP-021, Page 19].

ExA's reasoning

- 14.4.42. The EA was able to confirm during the Examination that the appropriate CCAs were used in the assessment of flood risk by the Applicant. The ExA is therefore satisfied that appropriate regard to the forecast effects of climate change has been given in assessing flood risk to and from the Proposed Development.

Protective Provisions and Disapplication of Legislation

- 14.4.43. There is a signed SoCG between BBC and the Applicant which addresses PP for BBC as LLFA and shows agreement [REP10-025, Page 42].
- 14.4.44. There is a signed SoCG between CBC and the Applicant which shows agreement to the PP for CBC as LLFA for the disapplication of Sections of the Land Drainage Act 1991 and the Water Resources Act 1991 [REP10-024, Page 45].

- 14.4.45. The Cambridgeshire Councils agreed to the PP for its role as LLFA in its SoCG with the Applicant [REP10-026, Paragraphs 1.40 and 1.41].
- 14.4.46. The EA agreed to the PP and the disapplication of Sections of the Water Resources Act 1991 in its SoCG with the Applicant. [REP10-021, Pages 58-61, and Pages 61-62].

ExA's reasoning

- 14.4.47. Given the parties' agreement with regard to these matters, there is nothing that was raised during the Examination that would cause the ExA concern. The measures are secured in the dDCO [AS-026].

ExA's overall reasoning on Flood Risk

- 14.4.48. The ExA is satisfied that the Proposed Development has adequately considered compensatory floodplain storage for the River Great Ouse. The ExA also considers that the drainage run-off rates and the approach to the maintenance of drainage infrastructure is satisfactory.
- 14.4.49. The ExA is also content that interactions between different sources of flooding, particularly groundwater and surface water run-off have been considered appropriately, including at the three proposed grade separated junctions, and that the revised FRA Technical Note [REP10-038] shows site compounds and storage areas located appropriately. The ExA is also satisfied that PP for affected parties are adequate for the disapplication of relevant legislation.
- 14.4.50. Overall, the low level of residual flood risk from the Proposed Development would be safely managed through measures secured in the First Iteration EMP [REP10-018] and the FRA certified documents.

Sequential and Exceptions Tests

- 14.4.51. The Sequential and Exception Tests are set out in the NPPF and referenced in the NPSNN. They are required for developments that take place in areas of flood risk.
- 14.4.52. The Sequential Test aims to locate development in areas of lowest flood risk. However, where development cannot avoid areas with significant flood risk, then the Exception Test is needed. It has two parts, both of which must be satisfactorily addressed for the Exception Test to be passed. Firstly, to show that the development would have wider sustainability benefits to the community that outweigh the flood risk, and secondly that the development would be safe for its lifetime and would not increase flood risk elsewhere.

Sequential Test

- 14.4.53. The ExA asked how the sequential approach to route selection was used in determining the preferred route and junction designs for the Proposed Development [PD-008, Q1.9.1.1a].

- 14.4.54. The Applicant responded that given the fixed start and finish points of the Proposed Development at the Black Cat roundabout and Caxton Gibbet roundabout, it was not possible to avoid areas at medium and high risk of flooding, such as the River Great Ouse, Hen Brook and other ordinary watercourses [REP1-022, Q1.9.1.1a].
- 14.4.55. The EA commented that each of the three route options [APP-093] for the Proposed Development crossed the River Great Ouse to the south of St Neots and so would have had a similar impact on main river flood risk. However, whilst each of the three route options would have crossed the ordinary watercourse floodplains at some point, the EA was unable to assess which of the different options would have been better in terms of flood risk, due to the absence of detailed modelling of ordinary watercourses [REP1-076, Q1.9.1.1].
- 14.4.56. The ExA asked the Applicant to explain how the sequential approach to flood risk was used in determining the preferred route of the Proposed Development between the River Great Ouse and Caxton Gibbet roundabout, as it crossed various ordinary watercourses and their floodplains; the EA were also asked to comment [PD-017, 8].
- 14.4.57. The Applicant summarised its approach to determining the preferred route of the Proposed Development in terms of flood risk [REP10-046, 8] and referenced various documents to support this, including the FRA Technical Note [REP10-038], and the Environmental Assessment Report (EnvAR) [REP4-033, Appendix G and Appendix I/Appendix J].
- 14.4.58. All but one of the eight Stage 1 options had a similar effect in terms of the water environment. Option 2 had a less adverse effect but was not taken forward to Stage 2 due to poor performance in other assessment criteria. All of the three Stage 2 options had a similar effect in terms of the water environment.
- 14.4.59. However, given the Proposed Development is required to connect the Black Cat roundabout with the Caxton Gibbet roundabout, and with reference to the Environmental Constraints Plan in Appendix B of the Stage 1 EnvAR, which shows rivers and floodzones [REP4-033 Appendix I] and Figure 13.2 [APP-152], all of the options had a broadly similar level of flood risk in terms of the Sequential Test.

Exception Test

- 14.4.60. Notwithstanding the results of the Sequential Test, the route of the Proposed Development would pass through flood zones 2 and 3 and so the Exception Test must also be applied.
- 14.4.61. The ExA asked the Applicant to identify the wider sustainability benefits of the Proposed Development in relation to the Exception Test [PD-08, Q1.9.3.1a] [EV-021, 7].
- 14.4.62. In response [REP1-022, Q1.9.3.1], the Applicant referred to their Case for the Scheme document [APP-240] and, in particular the need for the Proposed Development in terms of addressing capacity and delays at the

Black Cat roundabout and the existing A428 road, which are expected to worsen in the future [APP-240, Sections 4.2 to 4.4]. Road safety benefits over the 60-year life of the Proposed Development are also referenced as a benefit, mostly as a result of shifting traffic from the existing A428 to the new road [APP-240, Section 4.5].

- 14.4.63. The Applicant noted that the Proposed Development would be located within the Oxford Cambridge Arc, where investment in infrastructure is seen as a way of realising the area's potential by delivering business growth and new housing [APP-240, Paragraphs 4.6.8 to 4.6.20]. BBC, CBC, HDC and SCDC are planning for significant housing and employment growth in their development plans, some of which would be linked to the Proposed Development [APP-240, Paragraphs 4.6.22 to 4.6.27].
- 14.4.64. The Applicant's Case for the Scheme document also included reference to the Economic Assessment showing the monetised benefits and costs of the Proposed Development [APP-240, Section 4.7].
- 14.4.65. The Applicant's FRA states that the provision of the viaduct crossing the River Great Ouse and its floodplain means that some of the existing floodplain storage would be lost by the viaduct's support columns. Replacement areas for floodplain storage are proposed to compensate for these losses and so the Proposed Development would increase flood risk elsewhere as a result [APP-221, Section 5]. Hydraulic modelling of ordinary watercourses also shows that in some cases, the Proposed Development, with mitigation works, would increase flood risk elsewhere [APP-222, Sections 10, 11 and 12].
- 14.4.66. The Applicant's FRA states that flood risk to and from the Proposed Development, during construction and operation, and from fluvial, surface water, groundwater and sewer flooding, is considered to be low. Areas that would be at a greater flood risk as a consequence of the Proposed Development, such as near to the River Great Ouse, do not contain sensitive receptors and either flood under the modelled baseline scenario or are intended as compensatory storage areas. Consequently, the FRA concludes that the Proposed Development would be safe for its lifetime and would not cause a significant increase in flood risk elsewhere [APP-220, Sections 10.5 and 10.6].
- 14.4.67. There is a signed SoCG between BBC and the Applicant which addresses the findings of the FRA and shows agreement [REP10-025, Page 106]. There is a signed SoCG between CBC and the Applicant which addresses the findings of the FRA and also shows agreement [REP10-024, Pages 109-110]. The Cambridgeshire Councils do not agree the findings of the FRA, primarily due to the evidence provided in relation to downstream flooding from Wintringham Brook [REP10-026, Paragraph 4.42].
- 14.4.68. Following submission of the FRA Technical Note [REP10-038] and on the basis that all the documents comprising the FRA were certified documents at Schedule 10 of the dDCO, the EA confirmed it was satisfied with the assessment of flood risk [REP10-065].

- 14.4.69. To address the EA's position a new Requirement (R)21 was added to the dDCO [REP6-023, Table 1-3]. This new R21 required the Authorised Development to be undertaken in accordance with the FRA, which is listed in Schedule 10, Documents to be Certified of the dDCO [REP10-032, Table 1-3, Page 43].
- 14.4.70. The ExA noted the SoCG between the Applicant and the EA [REP10-021]. However, the ExA also noted that document reference number contained in the EA's D10 submission [REP10-065], which set out the basis for its SoCG with the Applicant, was different to that of the submitted document, and that the FRA documents listed as certified documents at Schedule 10 of the dDCO was inaccurate and incomplete. The ExA raised these points with the Applicant and the EA. The Applicant stated that the submitted version of the FRA Technical Note was the one that the EA had agreed and amended Schedule 10 of the dDCO so that it reflected the agreed position [AS-026]. The EA did not respond to the ExA before the close of the Examination.

ExA's reasoning

- 14.4.71. The Sequential Test concerns flood risk only and it is not helpful for the assessment of flood risk to be included in a wider assessment of the water environment as the Applicant has done. Neither the NPSNN nor the NPPF advocate such an approach, considering flood risk alone. Furthermore, as the route options are not seen alongside the flood zones and other areas of flood risk, the ExA cannot be certain that the route option selection process directed the development to areas at lowest risk of flooding in this case, as the Sequential Test requires.
- 14.4.72. Nevertheless, the ExA is satisfied that the Applicant followed a sequential approach in determining the route for the Proposed Development and that the levels of risk are generally low and are broadly similar for the options considered.
- 14.4.73. In terms of the first part of the Exception Test, the Applicant's FRA concluded that the Proposed Development would provide wider sustainability benefits that would outweigh the identified flood risk. The ExA does not disagree with this conclusion.
- 14.4.74. With regard to the second part of the Exception Test, the FRA shows that with the specified mitigation measures, the Proposed Development would be safe for its lifetime and would remain operational and safe for users during a time of flood. Whilst the proposed mitigation measures would result in a very limited increase in flood risk at certain locations near the River Great Ouse, these areas do not contain sensitive receptors and either flood under the modelled baseline scenario or are intended as compensatory storage areas.
- 14.4.75. The ExA finds that the FRA is a certified document [AS-026, Schedule 10]; that R21 requires the Proposed Development to be undertaken in accordance with the FRA; and, that the FRA provides a suitable basis for conducting the Sequential and Exception Tests and demonstrates that the Proposed Development passes the Exception Test, given the

generally low level of flood risk and the low residual flood risk. However, the SoS may want to confirm with the EA that the certified FRA documents listed in amended Schedule 10 of the dDCO are those agreed with the Applicant.

Water Quality

- 14.4.76. The Proposed Development could affect groundwater, watercourses, and water bodies during its construction. In addition, the operational effects on surface water drainage, outfalls and the use and extent of attenuation basins need to be considered in relation to the requirements of the WFD and climate change resilience.
- 14.4.77. The ExA asked whether the proposed flood risk pollution control mechanisms were sufficient to protect the environment, including with regard to climate change [PD-008, Q1.9.4.2f]. The EA responded that whilst the FRA did not mention pollution control, it was satisfied that the proposed mechanisms in other documents were satisfactory [REP1-076, Q1.9.4.2f]. The WFD Assessment [APP-217], Highways England Water Risk Assessment Tool (HEWRAT) [APP-218] and the Drainage Strategy Report [APP-219] show the basis for the Applicant's approach. BBC responded that it had no objections in this regard [REP1-040, Q1.9.4.2].
- 14.4.78. The ExA also asked whether construction activities and water use, and the risks of pollution from the Proposed Development during construction and operation would cause harm to the water environment and species that live within it [PD-008, Q1.19.1.1]. The Cambridgeshire Councils referred to a new version of the NPPF in July 2021, and in particular the threshold for remediating contaminated land, which was lower than that set by Part 2A of the Environmental Protection Act 1990. The Cambridgeshire Councils suggested that the dDCO was altered to ensure that if contamination was encountered, the land was remediated to a "safe" level under the Environmental Protection Act [REP1-051, Q1.19.1.1].
- 14.4.79. The Applicant noted that the section of the NPPF referenced had not been updated and set out how contaminated land would be addressed in the dDCO through R8 and Annex I of the First Iteration EMP [REP3-007, Q1.1.1.3].
- 14.4.80. The ExA asked why penstock chambers were to be provided for some but not all watercourses, to prevent potential pollutants from the Proposed Development from progressing to drainage watercourses [PD-009, Q2.3.6.1b]. The Applicant stated that the treatment trains and measures in the design of the drainage networks are as summarised in Table 1-1 of HEWRAT [APP-218] and include a CCA which, in its view, is considered to be sufficient to protect the environment. Where HEWRAT identified the highest risk of a pollutant spill, a penstock is proposed above an attenuation pond, although there is capacity to provide a penstock at any of the attenuation ponds if required [REP4-037, Q2.3.6.1b].

- 14.4.81. The ExA asked the Applicant and the EA about the various Biodiversity mitigation measures raised by the EA in its Relevant Representation (RR) [PD-014, Q3.3.6.1]. Much of this is reported in Chapter 7 of this Recommendation Report. However, the Water Management Plan contained in the First Iteration EMP [REP10-018, Annex F] manages construction site run-off and accidental spillages amongst other things, one of the identified mitigation measures that is relevant to water quality.
- 14.4.82. The Cambridgeshire Councils commented on the use of proprietary treatments in the proposed surface water attenuation basins [REP1-048, Paragraph 14.3.5] and in the joint LIR [REP2-003, Paragraph 8.8.5]. The Cambridgeshire Councils stated that it preferred treatment by natural means where possible, such as the inclusion of reed beds at the inlets of the watercourses, to reduce the risk of failure and consequent pollution. The Applicant responded to say that planting details, such as for reeds, would be addressed at detailed design stage [REP3-008, 048cx]. The Applicant also noted that oil interceptors are not proposed, and the proprietary treatment that would be used at some locations would be done so in combination with other SuDS measures [REP3-009, Paragraph 8.8.5].
- 14.4.83. Cambridgeshire Councils noted the Applicant's responses but stated that the proposals for managing and treating water should be set out before detailed design [REP4-060]. Despite further discussions between Cambridgeshire Councils and the Applicant, this matter was not resolved by the close of the Examination [REP10-026, Paragraph 4.43] [REP10-062 Paragraph 4.43].
- 14.4.84. Neither the EA [REP1-076, Q1.19.1.1] nor Natural England (NE) [REP1-088, Q1.19.1.1] had any concerns that the Proposed Development would harm the water environment or species within it.

ExA's reasoning

- 14.4.85. The ExA is satisfied that appropriate pollution control measures, including attenuation ponds, planting and proprietary measures to protect the water environment of the area during the construction and operational phases were proposed by the Applicant, and notes that neither the EA nor NE had any concerns in this regard.
- 14.4.86. The ExA notes the outstanding disagreement between the Cambridgeshire Councils and the Applicant regarding the measures to manage and treat water from the Proposed Development. However, the ExA is satisfied that there would be no significant increase in the risk of pollution from the Applicant's approach and that this matter can be addressed at the detailed design stage.
- 14.4.87. The ExA finds that the Proposed Development, with the proposed mitigation measures and if well maintained, would not adversely affect water quality or resources. This is secured through the Environmental Masterplan, the First Iteration EMP [REP10-018] and in the dDCO [AS-026].

14.5. CONCLUSIONS

- 14.5.1. The ExA is satisfied that the Proposed Development has adequately considered compensatory floodplain storage for the River Great Ouse. The ExA also considers that the drainage run-off rates and the approach to the maintenance of drainage infrastructure is satisfactory.
- 14.5.2. The ExA is also content that interactions between different sources of flooding, particularly groundwater and surface water run-off have been considered appropriately, including at the three proposed grade separated junctions, and that the revised FRA Technical Note [REP10-038] shows site compounds and storage areas located appropriately. The ExA is also satisfied that PP for affected parties are adequate for the disapplication of relevant legislation. Overall, the low level of residual flood risk from the Proposed Development would be safely managed through measures secured in the First Iteration EMP [REP10-018] and the FRA certified documents.
- 14.5.3. The ExA concludes that the FRA [AS-026, Schedule 10] provides a suitable basis for conducting the Sequential and Exception Tests and demonstrates that the Proposed Development passes the Exception Test, given the generally low level of flood risk and the low residual flood risk. However, the SoS may want to confirm with the EA that the certified FRA documents listed in amended Schedule 10 of the dDCO are those agreed with the Applicant.
- 14.5.4. The ExA is also satisfied that appropriate pollution control measures, including attenuation ponds, planting and proprietary measures to protect the water environment of the area during the construction and operational phases were proposed by the Applicant, and notes that neither the EA nor NE had any concerns in this regard.
- 14.5.5. The ExA finds that the Proposed Development, with the proposed mitigation and if well maintained, would not adversely affect water quality or resources. This is secured through the Environmental Masterplan, the First Iteration EMP [REP10-018] and in the dDCO [AS-026].
- 14.5.6. Taking all the matters reported above into account, the ExA ascribes Flood Risk, Water Quality and Resources neutral weight in making the Order.

15. LANDSCAPE AND VISUAL EFFECTS

15.1. BACKGROUND AND POLICY CONTEXT

- 15.1.1. Landscape and Visual Effects was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. This concerned the effects of the Proposed Development on the approach to landscape and visual impact assessment including landscape sensitivity; the effects of artificial lighting; the effects on tranquillity; the effects on landscape character and landscape designations; cumulative effects; and the approach to mitigation, including appropriate replacement planting and approach to the Borrow Pits.

National Policy Statement

- 15.1.2. The assessment for Landscape and Visual Effects in the National Policy Statement for National Networks (NPSNN), requires the Applicant to:
- 1) identify any likely significant landscape and visual effects in the Environmental Statement, including with reference to any landscape character assessments or studies and taking account of any relevant development plan policies based on these assessments (NPSNN Paragraph 5.144);
 - 2) assess construction and operational effects of the Proposed Development on landscape character, including historic landscape characterisation (NPSNN Paragraph 5.145); and
 - 3) assess the visibility and conspicuousness of the Proposed Development during construction and its presence and potential impacts on views and visual amenity during operation, including with regard to noise and light pollution, local amenity, tranquillity and nature conservation (NPSNN Paragraph 5.146).
- 15.1.3. In reaching a decision the Secretary of State (SoS) should be satisfied that:
- 1) the nature of the existing landscape likely to be affected and the nature of the likely effect have been considered in assessing the impact of the Proposed Development. Having regard to siting, operational and other relevant constraints, the aim should be to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate (NPSNN Paragraph 5.149);
 - 2) the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to avoid adverse effects on landscape or to minimise harm to the landscape, including by reasonable mitigation (NPSNN Paragraph 5.157); and
 - 3) the benefits of the Proposed Development would outweigh any visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area (NPSNN Paragraph 5.158).

Other legislation and policies

- 15.1.4. Other legislation, policies and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3], [APP-076, Section 7.2] and in Chapter 3 of this Recommendation Report.
- 15.1.5. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration for Nationally Significant Infrastructure Project (NSIP) development proposals in respect of Landscape and Visual Effects, in particular Chapter 15 – Conserving and Enhancing the Natural Environment.

15.2. THE APPLICATION

Environmental Statement

- 15.2.1. The Applicant's assessment of Landscape and Visual Effects is set out in Chapter 7 of the ES [APP-076]. There are Appendices to ES Chapter 7 that are also relevant, including Landscape and Visual Impact Assessment (LVIA) Planning Policy [APP-179], LVIA Methodology and Study Area [APP-180], Visual Baseline Conditions and Effects Schedules [APP-181 and APP-182], and Arboricultural Impact Assessments [APP-183 to APP-187]. ES Chapter 7 Figures [APP-102 to APP-138] also concern landscape and visual effects. Other application documents that are relevant to Landscape and Visual Effects include the Black Cat Junction Design Options [APP-247].

Scope and Methodology

- 15.2.2. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. In developing the scope and content of the LVIA the Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) including LA 107 Landscape and Visual Effects. Further specified standards and guidance were also used.
- 15.2.3. Establishment of the baseline involved consultation with statutory bodies, Local Authorities (LAs), other organisations and landowners, reference to existing data sources through desk studies and fieldwork surveys. The Applicant used published landscape character assessments to assist in the initial identification of the boundaries, qualities, elements and key characteristics of individual landscape character areas, and their landscape value. Reference was also made to the prevailing policy framework, Ordnance Survey mapping, 3-dimensional topographical data, and site photographs and aerial photography. Fieldwork surveys were undertaken by the Applicant using landscape architects to review the desk-based position. Arboricultural and other habitat surveys were undertaken and a landscape baseline, which included existing physical features, was established. From this, 16 local landscape character areas (LLCAs) were defined. A visual baseline including zones of theoretical visibility (ZTV) was also established [APP-076, Paragraph 7.3.18 to 7.3.33].
- 15.2.4. The Landscape and Visual sensitivity of receptors was then considered and the magnitude of landscape and visual effects and night-time lighting

effects were assessed. Different assessment scenarios were considered at different temporal stages of the Proposed Development: Construction, Year 1, and Year 15 [APP-076, Paragraph 7.3.34 to 7.3.48].

- 15.2.5. The Construction and Year 1 assessments are during winter, when no or minimal screening from vegetation is assumed and existing deciduous vegetation is not in leaf and therefore less effective at filtering or screening views of construction or operational activity. This represents a worst-case assessment scenario. The Year 15 assessment is during summer, once all planting has been established and reached a level of maturity where it would fulfil its intended visual screening and landscape integration functions and deciduous vegetation would be in leaf. The year 15 assessment therefore represents a best-case assessment scenario [APP-076, Paragraph 7.3.49 to 7.3.56].

Applicant's assessment of effects and mitigation proposed

- 15.2.6. The Applicant's assessment [APP-085, Table 16-1, Chapter 7] is that the construction of the Proposed Development would result in a range of adverse effects on eight LLCAs during the Construction phase, ranging from Very Large Adverse to Moderate Adverse; a range of adverse effects on the eight LLCAs during Year 1 of Operation ranging from Large Adverse to Moderate Adverse; and Moderate Adverse effects on four LLCAs during Year 15 of Operation. The Applicant also identified a range of adverse effects for identified locations, again during Construction and Year 1 and Year 15 of Operation, also ranging from Very Large Adverse to Moderate Adverse, and again with a generally reduced effect from Construction to Year 15 of Operation.
- 15.2.7. For visual effects during construction, significant adverse effects on 96 visual receptors were identified, of which 64 would be residential visual receptor groups [APP-076, Table 7-3 and Paragraph 7.9.142]. In Year 1, 73 visual receptors would experience significant adverse effects from the Proposed Development, of which 50 would be residential visual receptor groups [APP-076, Table 7-5 and Paragraph 7.9.146]. In Year 15, 30 visual receptors would experience significant adverse effects of which 22 would be residential visual receptor groups [APP-076, Table 7-7 and Paragraph 7.9.150].
- 15.2.8. The Applicant's proposed embedded mitigation that is common across the Proposed Development is summarised in the ES [APP-071, Table 2-1]. Embedded mitigation specific to Landscape and Visual Effects is secured through the Works Plans [APP-009] [APP-010], the Engineering Section Drawings [APP-017 to APP-022], the General Arrangements Plans [APP-011], the Environmental Masterplan [REP9-037] and in the First Iteration Environmental Management Plan (EMP) [REP10-018] and in the draft Development Consent Order (dDCO) [AS-026], and includes:
- 1) the total area of land within the Order limits has been limited to that required to construct, operate and maintain the Proposed Development;

- 2) optimisation of the horizontal and vertical alignment of the new dual carriageway;
- 3) confining road lighting introduced as part of the Proposed Development to new and improved sections of road where road safety is a priority and minimising the introduction of new gantries and Variable Message Signs (VMS) throughout the Proposed Development;
- 4) the outline definition of zones within the main site compounds to accommodate materials storage areas, define areas for temporary works and operations, and the locations for other equipment and infrastructure; the reinstatement of land used temporarily during construction where required;
- 5) factoring landscape and visual considerations into the form and design of permanent structures (for example footbridges); and
- 6) implementation of the following elements of the planting strategy within Chainage 0 – 1000 (A421 tie-in to the Black Cat junction); Chainage 1000 – 2450 (Black Cat junction to the River Great Ouse); Chainage 1000 – 2450 (Black Cat junction to the River Great Ouse); Chainage 2450 – 3850 (River Great Ouse to the East Coast Mainline (ECML) railway); Chainage 3850 – 7150 (East Coast Mainline (ECML) railway to Alington Hill); Chainage 7150 – 9200 (Alington Hill to Wintringham); Chainage 9000 – 12250 (Cambridge Road junction, and Wintringham Brook to Gallow Brook); Chainage 12250 – 15300 Croxton Park (Gallow Brook and West Brook Tributary); Chainage 15300 – 17550 (West Brook Tributary and access track to Pastures Farm); and Chainage 17550 – 19137 (Caxton Gibbet junction).

15.2.9. Essential mitigation specific to Landscape and Visual Effects is secured through the First Iteration EMP [REP10-018], and in the dDCO [AS-026], and includes:

- 1) the Principal Contractor will develop and implement a Landscape and Ecological Management Plan (LEMP) based upon the measures and approaches detailed within the outline LEMP;
- 2) maintaining well-managed and tidy construction working areas and site compounds to minimise their visual impact and appearance in the landscape;
the retention and protection of trees in proximity to construction working areas, to avoid damage to existing vegetation;
- 3) finishing site offices and facilities within the main project compound at Wintringham in a recessive colour to blend into the local landscape and immediate surroundings;
- 4) keeping construction lighting to the minimum luminosity necessary for safe working within construction compounds and working areas and where possible, fitting it with motion sensors to minimise the duration of potential light spill in night-time views;
- 5) a detailed plan for the establishment and maintenance of planting and hedgerows within the contract period will be developed by the Principal Contractor based on the principles and outline prescriptions presented in LEMP; and
- 6) during Year 15, a monitoring visit would be made by National Highways to each viewpoint identified within the LVIA predicted to experience significant visual effects, to ensure that the planting has

established and is delivering its intended screening and integration objectives. Should the landscape planting be found not to have established as intended or be insufficient to provide the required level of screening and integration, remedial works would be undertaken as necessary.

15.3. LOCAL IMPACT REPORTS

Central Bedfordshire Council

- 15.3.1. Central Bedfordshire Council's (CBC's) Local Impact report (LIR) does not directly address matters of Landscape and Visual Effects beyond a reference to policies in the development plan and noting that the Proposed Development is within a known archaeological landscape [REP2-004, Paragraph 5.3].

Cambridgeshire Councils

- 15.3.2. The Joint LIR of Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) addresses Landscape and Visual Effects including relevant development plan policies [REP2-003, Table 2, Sections 6.1 and 8.1 and Appendix A].
- 15.3.3. The Cambridgeshire Councils Joint LIR states that the benefits of the Proposed Development include a reduction in traffic, including lorries on the existing A428, with a beneficial effect on landscape character; the new road would be positioned in open countryside away from settlements thereby having a negligible effect on those sensitive receptors; significant new areas of mitigation planting will be established along the route, enhancing the landscape character and reconnecting some fragmented woodland, whilst providing long-term screening of the route.
- 15.3.4. The Joint LIR states that adverse effects of the Proposed Development include the permanent and temporary loss of a significant amount of agricultural land whilst the existing road will remain, albeit de-trunked; major disruption to local character areas from major earthworks, construction traffic, borrow pits, storage areas and compounds and the presence of heavy plant, new bridges, embankments, drainage lagoons etc. causing permanent and large-scale change to Landscape Character Areas (LCAs) and to visual amenity; significant removal of vegetation including trees and hedgerows, and hedgerows with trees which are characteristic of the Clayland LCAs, and with a consequent delay whilst replacements grow and mature; large-scale features such as bridges roundabouts and embankments will adversely affect the landscape, including the historical landscape of the area, mitigated to some extent by screening; areas of bare ground are proposed within the Order limits which will look barren and unfinished until native species colonise and establish themselves - grassland, trees and hedgerows are preferable; reinstated Borrow pits by Caxton Gibbet roundabout where drainage and soil quality may impede future agricultural use or landscape value; new Highway infrastructure will be visually intrusive and uncharacteristic

features; and would cause an overall negative effect on rural areas that had previously enjoyed greater tranquility.

- 15.3.5. The Joint LIR also identifies missed opportunities, including more trees within hedgerows by roadsides; more trees near major settlements to improve screening of the Proposed Development; inappropriate / unsuitable species mixes proposed that may not be resilient; the Cambridgeshire Green Infrastructure Strategy identifies the opportunity to create wet woodland and wet meadow to enhance biodiversity, and the implementation of species rich grasslands to enhance landscape character at St Neots.

15.4. THE EXAMINATION

- 15.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:

- 1) Landscape and Visual Impacts Assessment methodology
- 2) Mitigation measures including Landscaping

- 15.4.2. There are heritage aspects to parts of the landscape in this area which are considered below; effects upon the setting of listed buildings and conservation areas are considered in Chapter 8 of this Recommendation Report.

Landscape and Visual Impacts Assessment methodology

- 15.4.3. The Proposed Development would have a significant effect on the predominantly agricultural landscape in this area, both visually and in terms of character. Representative viewpoints within the area were also considered, together with the effects on LLCAs [APP-076, Section 7.9].
- 15.4.4. The Proposed Development would also be visible from many receptors during construction and operation [APP-076 Section 7.9], including those identified in the ES that would be subject to in-combination effects [APP-084, Table 15-3 and 15-4].
- 15.4.5. Natural England (NE) noted that there were no statutorily designated landscapes relevant to the Proposed Development [REP1-087, Paragraph 2.5.1].
- 15.4.6. Historic England (HistE) noted that the route of the Proposed Development would mean it would form part of the setting of various designated heritage assets (DHAs) including historic landscapes such as Croxton Park, a former deer park that is a Grade II* listed Registered Park and Garden (RPG), containing other DHAs within it which contribute to the historic landscape [REP1-077, Paragraphs 2.3 and 3.6]. HistE stated that it was broadly content with the assessment of the impact of the Proposed Development on historic landscapes carried out by the Applicant and with their conclusions [REP1-077, Paragraph 5.1].

- 15.4.7. The ExA sought views from the parties on the Applicant's LVIA methodology. The Cambridgeshire Councils and CBC confirmed that following discussions with the Applicant the methodology had been agreed [REP1-051 Q1.13.1.1] [REP1-055 Q1.13.1.1]. HistE was asked for their views on certain DHAs within the landscape and confirmed that there would be less than substantial harm to the settings of Roxton Barrow and Caxton Pastures Farm [REP1-077 Paragraph 5.1] [REP4-069 Q2.13.1].
- 15.4.8. The ExA also sought an explanation from the Applicant for how the design and appearance of the various permanent structures of the Proposed Development were considered in the LVIA, given the limited detailed information at this stage in the process [PD-008, Q1.13.2.1].
- 15.4.9. In its response the Applicant noted that its approach was consistent with other approved NSIPs and summarised how design contributed to the Proposed Development. The Applicant also summarised how the LVIA considered the design of permanent structures and the information available to illustrate the designs. Design principles were developed at an early stage and further measures, including with regard to setting, design objectives, materials, responding to local landscape and historic character, integration with Public Rights of Way (PRoW) were also utilised. The Applicant submitted a design approach and principles document which has been reported in Chapter 10 of the Recommendation Report.
- 15.4.10. The Cambridgeshire Councils raised a query in relation to the Zones of Theoretical Visibility (ZTV) used by the Applicant, noting the allowances in the Limits of Deviation for the Proposed Development and for high-sided vehicles to be using the road [REP1-051, Q1.13.2.1]. The Applicant responded that the ZTVs had accounted for the matters raised by the Cambridgeshire Councils and that other desk based and field measures had also been used in identifying visual effects [REP3-007, Q1.13.2.1]; the Cambridgeshire Councils did not respond to the Applicant's statement.
- 15.4.11. The ExA visited a number of viewpoints during its Unaccompanied Site Inspection (USI1) [EV-001] and Accompanied Site Inspection (ASI) [EV-022] and so gained a good appreciation of the landscape and receptors that would be affected by the Proposed Development. Following meetings with the Cambridgeshire Councils the Applicant submitted revisions to the LEMP, including with regard to proposed species to be used in landscaping works [REP10-018, Annex L]

ExA's reasoning

- 15.4.12. The ExA is satisfied that the effects of the Proposed Development on the historic landscape have been appropriately considered and that the design of permanent structures has had due regard to the landscape within which they would be positioned.
- 15.4.13. The ExA finds that the Applicant's assessment and conclusions regarding the Landscape and Visual Effects of the Proposed Development have

been reasonable and have general support from the parties. From the evidence, USI and ASI, the ExA is also satisfied with the Applicant's approach and conclusions in this regard.

Mitigation measures, including Landscaping

- 15.4.14. The landscape within which the Proposed Development would be located is predominantly agricultural, with arable farmland, hedgerows and some areas of woodland to the east of the River Great Ouse containing numerous villages and hamlets. The existing Black Cat Roundabout and the A1 and A428 roads are heavily trafficked and so have a very different character, whilst there are a number of growing settlements nearby, including St Neots in the west and Cambourne to the east. The Applicant identified LLCAs and visual receptors that would be adversely affected during both construction and operation of the Proposed Development [APP-076, Tables 7-2 to 7-7]. The ExA noted many of these features and characteristics on its USI1 [EV-001] and at the ASI [EV-022].
- 15.4.15. The ExA asked about the level of mitigation that would be provided through the First Iteration EMP, including the LEMP in relation to lighting, screening of settlements and the timing and details of proposed planting [PD-008, Q1.13.3.1].
- 15.4.16. The Cambridgeshire Councils raised a number of points in relation to biodiversity matters in response to this question, rather than in terms of landscaping and screening of the Proposed Development [REP1-051, Q1.13.3.1a]. The Cambridgeshire Councils suggested further screening would benefit residents of St Neots, particularly in the vicinity of Wintringham Park [REP1-051, Q1.13.3.1c] and asked for assurances regarding the timing, method and species for proposed planting, given problems with landscaping for another road NSIP in the area – the A14 Cambridge to Huntingdon [REP1-051, Q1.13.3.1d].
- 15.4.17. The Applicant advised that it was not intending to submit any further information regarding lighting beyond that contained in the First Iteration EMP but noted that further information would be developed by the Principal Contractor at detailed design stage, which would need to be agreed with the SoS [REP1-022, Q1.13.3.1b].
- 15.4.18. The Applicant responded to the Cambridgeshire Council's comments that it had assessed the visual effects on the future residents of the Wintringham Park development in St Neots and noted the comments made in the Cambridgeshire Council's LIR that the route of the Proposed Development would have a negligible impact in this regard. In response to the issues raised about planting, the Applicant set out the approach contained in the First Iteration EMP with regard to timing and maintenance [REP3-007, Q1.13.3.1].
- 15.4.19. The ExA raised a number of points concerning Landscape and Visual Effects, including in relation to screening of prominent structures and locations and the approach to planting [EV-021, 8].

- 15.4.20. The Applicant stated that the screening process was iterative alongside the LVIA and had been considered from the outset of the design process. The Applicant referred to the Environmental Masterplan and the planting of vegetation for screening purposes as well as for other purposes such as habitat creation. Each location was considered individually in response to its landscape context [EV-047] [EV-052].
- 15.4.21. The Cambridgeshire Councils suggested that additional screening for the Toseland Road bridge in terms of views from Croxton Park and that with a greater land-take there could be a more natural form of screening planting. The National Farmers Union (NFU) responded that there was already a lot of agricultural land lost for screening and habitat creation purposes and they would not wish to see further losses. The Cambridgeshire Councils referred to the need for further planting along the River Great Ouse corridor. The Applicant noted extensive engagement with the Local Authorities (LAs) to date and did not feel that revisions were needed but would continue discussions with the LAs [EV-047] [EV-052].
- 15.4.22. Cambridgeshire Councils also raised concerns about the proposed areas of bare ground to be colonised by local native species, and the concern that these would be unsightly in the short term and may not achieve an aesthetically pleasing mix of species. The Applicant stated that there would be patches of bare ground for local native species to colonise, but not large areas [EV-047] [EV-052].
- 15.4.23. The Campaign for the Protection of Rural England (CPRE) raised the issue of maintenance, given problems with unsuccessful planting on the nearby A14 scheme. The Applicant referred to the First Iteration EMP [REP10-018] which deals with maintenance and monitoring of planting, amongst other things [EV-047] [EV-052].
- 15.4.24. The Applicant stated that trees in hedgerows were proposed as was suitable to the landscape context and provided further details and locations in response to a Hearing Action [EV-043, 11]. The Applicant also signalled its willingness to discuss proposed species mixes with the LAs for inclusion within the First Iteration EMP [REP10-018, Annex L] and for subsequent agreement in Statements of Common Ground (SoCG).

ExA's reasoning

- 15.4.25. The ExA notes that in terms of Landscape and Visual Effects there is no disagreement between the Applicant and NE [REP10-023], the Cambridgeshire Councils [REP10-026], and CBC [REP10-024] and no indication of disagreement between the Applicant and Bedford Borough Council (BBC) [REP10-025] and HistE [REP10-022] regarding the identified effects from the ES.
- 15.4.26. Notwithstanding the inherent tension between the use of land for agricultural purposes or for landscaping or biodiversity, the ExA is content with the Applicant's approach to landscaping for the Proposed Development. Furthermore, the ExA considers that the Applicant's approach to lighting of the Proposed Development is also adequate.

These measures would be secured through the First Iteration EMP [REP10-018, Annex D, G and K and L].

- 15.4.27. However, from the evidence and observations during the USI1 and ASI, the ExA finds that the Proposed Development would adversely affect identified LLCAs and identified visual receptors during construction and operation, as the Applicant's ES concluded, and that even after mitigation there would be significant residual adverse effects [APP-076, Tables 7-2 to 7-7].

15.5. CONCLUSIONS

- 15.5.1. The ExA notes the general agreement on matters of Landscape and Visual Effects between the Applicant and Interested Parties (IPs). The ExA is satisfied that the Applicant's approach to assessing landscape and visual impacts of the Proposed Development has been thorough, with representative viewpoints identified and local landscape character considered.
- 15.5.2. The proposed mitigation, including landscaping, is also considered to be reasonable and proportionate by the ExA and is secured in the First Iteration EMP [REP10-018] and in the dDCO [AS-026].
- 15.5.3. Nevertheless, the ExA agrees with the Applicant that the Proposed Development would result in significant adverse effects on Landscape and Visual Effects even after mitigation. Taking all the matters reported above into account, the ExA considers Landscape and Visual Effects provides moderate weight against making the Order.

16. LAND USE

16.1. BACKGROUND AND POLICY CONTEXT

16.1.1. Land use including open space, green infrastructure and Green Belt was identified as a principal issue in the Rule 6 letter [PD-005, Annex C]. This concerned the construction and operational phase effects of the Proposed Development; the approach to land use, particularly Best and Most Versatile (BMV) agricultural land; fragmentation and viability of remaining BMV agricultural land; effects on minerals resources; and proposed mitigation.

16.1.2. The ExA shortened the title to Land Use during the Examination, as a result of its approach to the examination of issues.

National Policy Statement

16.1.3. The assessment for Land Use in the National Policy Statement for National Networks (NPSNN), requires the Applicant to:

- 1) set out the arrangements that are proposed for minimising, managing and disposing of any waste produced by the development (NPSNN Paragraph 5.42);
- 2) identify existing and proposed land uses near the project, any effects of replacing an existing use or preventing a use on a neighbouring site from continuing (NPSNN Paragraph 5.165);
- 3) consider the economic and other benefits of BMV agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification);
- 4) where significant development of agricultural land is demonstrated to be necessary, applicants should seek to use areas of poorer quality land in preference to that of a higher quality and should seek to minimise impacts on soil quality (NPSNN Paragraph 5.168);
- 5) ensure that risk posed by land contamination has been considered, and show how it is to be addressed (NPSNN Paragraph 5.168); and
- 6) safeguard any mineral resources on the proposed site as far as possible (NPSNN Paragraph 5.169).

16.1.4. In reaching a decision the Secretary of State (SoS) should be satisfied that:

- 1) the Applicant has proposed an effective process that will be followed to ensure effective management of waste arising from the construction of the Proposed Development (NPSNN Paragraph 5.43);
- 2) appropriate weight has been given to the stage in a development plan's preparation in determining the weight it should be given, where the Proposed Development would conflict with the development plan. The closer the plan is to being adopted, the greater the weight which can be attached to the impact of the proposal on the plan (NPSNN Paragraph 5.173);
- 3) networks of green infrastructure identified in development plans have been protected from inappropriate development and the value of

- linear infrastructure in supporting biodiversity has been considered (NPSNN Paragraph 5.175);
- 4) the economic and other benefits of BMV agricultural land have been taken into account (NPSNN Paragraph 5.176);
 - 5) the direct effects of a project on existing uses in the area have been minimised through good design principles, (NPSNN Paragraph 5.179);
 - 6) efforts have been made to maintain the functionality and connectivity of the green infrastructure network, to mitigate any adverse impact and, where appropriate, to improve it (NPSNN Paragraph 5.180); and
 - 7) appropriate mitigation measures to safeguard mineral resources have been considered where a proposed development would have an impact on a Mineral Safeguarding Area (MSA) (NPSNN Paragraph 5.182).

Other legislation and policies

- 16.1.5. Other legislation, policies and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-070, Section 1.3], [APP-078, Section 9.2] and [APP-079, Section 10.2], and in Chapter 3 of this Recommendation Report.
- 16.1.6. The National Planning Policy Framework 2021 (NPPF) is a relevant consideration for Nationally Significant Infrastructure Project (NSIP) development proposals in respect of Land Use, in particular Chapter 15 - Conserving and Enhancing the Natural Environment.

16.2. THE APPLICATION

Environmental Statement

- 16.2.1. The Applicant's assessment of Land Use is set out in Chapter 9 - Geology and Soils of the ES [APP-078] and in Chapter 10 - Material Assets and Waste of the ES [APP-079]. There are Appendices to ES Chapter 9 and Chapter 10 that are also relevant, including Ground Investigations [APP-208], and Minerals Safeguarding [APP-209]. ES Chapter 9 and Chapter 10 Figures [APP-139 to APP-141] [APP-142] also concern geology and agricultural land classifications.

Scope and Methodology

- 16.2.2. The scope of the Applicant's assessment is based on the 2019 Scoping Opinion [APP-231] [APP-258]. Pursuant to this the Applicant gave consideration to the requirements of the Design Manual for Roads and Bridges (DMRB) including LA 109 Geology and Soils and LA 110 Material Assets and Waste. Further specified standards and guidance were also used with regard to soils.
- 16.2.3. The Applicant's assessment focused on the construction stage of the Proposed Development, with maintenance and operation fully or partly scoped out. The establishment of the baseline involved consultation with Natural England (NE) and the Environment Agency (EA), Local Authorities (LAs), other organisations and landowners, reference to existing data

sources through desk studies and fieldwork surveys [APP-078, Paragraph 9.3.28 to 9.3.37] [APP-079, Section 10.3.2].

- 16.2.4. Modelling and fieldwork surveys, including soil sampling surveys and ground investigations were undertaken by the Applicant and relevant desk studies reviewed. The Applicant identified the sensitivity of receptors, such as soils of different agricultural land classification and including BMV, and mineral resources, including MSAs, the magnitude of impacts from the Proposed Development and the consequent significance of effects [APP-078, Paragraph 9.3.38 to 9.3.49] [APP-079, Section 10.3.3 to 10.3.21].

Applicant's assessment of effects and mitigation proposed

- 16.2.5. The Applicant's assessment [APP-085, Table 16-1, Chapters 9 and 10] is that the construction of the Proposed Development would be likely to result in very large adverse (permanent) effects from the loss of 37.17 hectares (ha) of Grade 1 agricultural land and 285.40 ha of Grade 2 agricultural land and large adverse (permanent) effects from the loss of 26.37 ha of Grade 3 agricultural land, all of which are BMV agricultural land. No other significant effects are identified for the construction stage, and none are identified for the operational stage.
- 16.2.6. The Applicant's proposed embedded mitigation that is common across the Proposed Development is summarised in the ES [APP-071, Table 2-1]. Embedded mitigation specific to Land Use has been secured through the Works Plans [APP-009 to APP-010], the Engineering Section drawings [APP-017 to APP-022], the General Arrangements Plans [APP-011], the First Iteration Environmental Management Plan (EMP) [REP10-018], the De-Trunking Plans [APP-012], and the Streets, Rights of Way and Access Plans [REP10-002] and in the draft Development Consent Order (dCO) [AS-026], and includes:
- 1) modifications made to the horizontal alignment of the new dual carriageway during the design-development process; limiting the total area of land within the Order limits to that required to construct, operate and maintain the Proposed Development;
 - 2) incorporation of drainage solutions and the grading of cut and fill slopes within the design to a maximum of 1 in 3 gradients;
 - 3) designing the Proposed Development to facilitate the reuse of acceptable material arisings and achieving an earthworks balance within the design of the Proposed Development, where possible;
 - 4) inclusion of borrow pits and temporary on-site storage of soils and construction materials within the Order limits of the Proposed Development, and appropriate sizing of the compounds and storage areas within the design;
 - 5) retention of existing highways infrastructure within the design of the Proposed Development where feasible;
 - 6) reuse of excavated materials and the recycling of demolition and construction materials within the Proposed Development;

- 7) optimisation of junction designs within the Proposed Development to reduce the height of retaining walls and pile lengths and optimisation of bridge, underpass and culvert designs; and
- 8) construction methodology for the Proposed Development including for the importation of alternative aggregate materials during construction, where practicable.

16.2.7. Essential mitigation specific to Land Use has been secured through the First Iteration EMP [REP10-018] and the dDCO [AS-026], and includes:

- 1) the Principal Contractor will implement the requirements for soil reinstatement, monitoring, and aftercare as detailed in the outline Soil Management and Handling Plan;
- 2) the Principal Contractor will implement the requirements for treatment of contaminated land as detailed in the outline Contaminated Land Management Plan;
- 3) the Principal Contractor will implement the requirements for limiting water runoff from cuttings and borrow pits as detailed in the Outline Water Management Plan;
- 4) the Principal Contractor will implement the requirements for construction waste identification, handling, management, recovery and disposal as detailed in the outline Materials Management Plan; and
- 5) the Principal Contractor will implement the requirements for the identification, quantification and management of construction materials as detailed in the outline Materials Management Plan.

16.2.8. Further mitigation measures for Material Assets are identified for the detailed design and construction phases of the Proposed Development [APP-235, ENH-MW1]. These measures would lead to a more efficient management of material assets but are subject to feasibility and so not secured.

16.3. LOCAL IMPACT REPORTS

Cambridgeshire Councils

- 16.3.1. The Joint LIR of Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) addresses Land Use issues including relevant development plan policies. The focus of comments are the effects on agricultural land [REP2-003, Table 2 and Table 10, Sections 6.1, 6.9, 8.1 and 8.9 and Appendix A].
- 16.3.2. The Joint LIR states that adverse effects of the Proposed Development include the permanent loss of a significant amount of agricultural land as a result of the proposed road and the temporary disruption of existing agricultural use during construction.
- 16.3.3. The Joint LIR also identifies missed opportunities, which include whether it would be more sustainable to acquire the required materials from local quarries, and aid in their restoration by disposing of inert materials at those locations.

16.4. THE EXAMINATION

Introduction

- 16.4.1. The predominant existing use for land within the Order limits of the Proposed Development is BMV agricultural land, which in this part of the country comprises Grade 1, 2 and 3 agricultural land.
- 16.4.2. Four Borrow pits are proposed as part of the Proposed Development within the Order limits, and are addressed in Chapter 11 of this Recommendation Report.
- 16.4.3. There are Minerals Safeguarding Areas (MSAs) in the area and there is a former quarry to the east of the existing Black Cat Roundabout, which has ceased operation and is being restored to a wetland habitat and flood storage area.
- 16.4.4. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
 - 1) Agricultural Land
 - 2) Minerals

Agricultural Land

- 16.4.5. Natural England (NE) noted that the Proposed Development would result in a permanent loss of BMV agricultural land and that there would be further disturbance to BMV agricultural land as a result of temporary land take for construction. NE requested that soil resource surveys that had been interrupted by the pandemic be completed so that a full assessment could take place [REP1-087, 2.7].
- 16.4.6. The Applicant stated that work to complete the soil sampling surveys it was unable to undertake in 2020, as a result of the restrictions imposed during the COVID-19 pandemic, was being scheduled in discussion with landowners [REP1-022, Q1.14.2.1].
- 16.4.7. The Applicant also explained how they had considered BMV agricultural land, including with regard to the views of landowners, to minimise the amount of land affected by the Proposed Development. This included limiting the land used for landscaping and locating the main construction compound on land identified for redevelopment rather than BMV agricultural land. The Applicant also explained that for land that was to be returned to agricultural use after construction, the soil condition would be managed and restored in accordance with Annex E of the First Iteration EMP [REP1-022 Q1.14.1.1a and c].
- 16.4.8. At the behest of the ExA, the Applicant also referred to Chapter 15 of the ES to explain how the Cumulative and In-combination Effects of the Proposed Development were assessed with regard to soils, and how the conclusion of no significant effects was reached. For Single Project effects this identified no potential for the geological receptors, soil resources and contamination-sensitive receptors to experience combined effects from

construction and operation of the Proposed Development. For Different Project effects a number of developments were identified within the 500 metre Zone of Influence (ZoI) of the Order limits. However, the adverse effects of the Proposed Development associated with the loss of, or disturbance to, agricultural soils would be confined to those resources located within the Order limits. Similarly, the effects on soils from the identified developments would be confined to their respective project boundaries [REP1-022, Q1.14.2.1] [APP-078].

- 16.4.9. At Issue Specific Hearing (ISH) 3 there was a discussion regarding the effects of the proposed Development on soils, including updates on the postponed soil surveys, at which the National Farmers Union (NFU) participated [EV-046] [EV-51]. The Applicant was asked to provide an update on discussions with landowners regarding regenerative agricultural soil reprovion as a Hearing Action [EV-043, 10]. At Deadline 3 (D3) the Applicant responded that discussions had taken place but there had been no substantive developments in this regard [REP3-020].
- 16.4.10. The Applicant submitted its Agricultural Technical Note (ATN), which included the findings of the postponed 2021 soil sampling surveys. These surveys revealed that the quality of agricultural land is generally slightly lower than had been previously assumed in Chapter 9 of the ES [APP-078, Table 9-14]. Nevertheless, the land in question remains BMV and the Applicant states that the reported significance of effect – Permanent Very Large and Large adverse effects during construction, is not changed by these surveys [REP6-029, Section 4].
- 16.4.11. The ExA sought the views of Interested Parties (IPs) on the ATN [PD-014, Q3.14.1.1]. NE stated that whilst generally acceptable they would prefer some changes to the methodology and reporting for the large areas where survey access was not granted. NE also sought a better understanding in relation to the balance between Grade 2 land and Grade 3a land [REP8-049, Q3.14.1.1].
- 16.4.12. The Applicant submitted a final version of the ATN [REP9-018] which addressed the points made by NE at D8. There were no disagreements between the Applicant and NE concerning soils and agricultural land in their Statement of Common Ground (SoCG) [REP10-023 Pages 38 to 40]. Central Bedfordshire Council (CBC) was also in agreement with the Applicant with regard to agricultural land in their SoCG [REP10-024].
- 16.4.13. The Cambridgeshire Councils were in general agreement with the Applicant with regard to the effect of the Proposed Development on Geology and Soils and Minerals and Waste [REP10-026, Pages 142 to 147] [REP10-062, Pages 142 to 147].

ExA's reasoning

- 16.4.14. The ExA notes the work that the Applicant has undertaken to address the concerns of NE and the NFU, including the updated soil surveys and analysis, and that these do not alter the conclusions of the ES. Consequently, the ExA is satisfied that the Applicant has adequately

considered effects of the Proposed Development on agricultural land in this area, which is overwhelmingly BMV agricultural land [APP-141].

- 16.4.15. Given the fixed start and finish points of the Proposed Development at the Black Cat roundabout and Caxton Gibbet roundabout, the ExA is satisfied that it would not have been possible for the route to avoid BMV agricultural land. In addition to the construction and operation of the Proposed Development there are other significant effects identified in the ES which require land to mitigate, including biodiversity, flood risk, water quality, minerals and waste. Whilst the loss of large amounts of BMV agricultural land is significant, the ExA is content that the Applicant has endeavoured to minimise the BMV land required both during construction and operation of the Proposed Development.
- 16.4.16. Notwithstanding the locational constraints of the Proposed Development between the Black Cat and Caxton Gibbet roundabouts, and the Applicant's measures to minimise land needed for the Proposed Development and proposed restoration measures, the Proposed Development would result in the permanent loss and temporary disturbance of large areas of BMV agricultural land, a significant adverse effect.

Minerals

- 16.4.17. Within the Order limits are MSAs for sand and gravel, by the Black Cat Roundabout in Bedford Borough and in the vicinity of Hen Brook in Cambridgeshire.
- 16.4.18. The Applicant has considered the effects of the Proposed Development on these MSAs in a Minerals Safeguarding Report. The Applicant does not consider that workable sand and gravel resources within the MSAs are capable of prior extraction for various reasons, including the environmental impact of such works [APP-209, Paragraphs 6.1.2 and 6.1.3].
- 16.4.19. The Applicant notes the benefits of the Proposed Development and that there is no immediate recognised need for sand and gravel within the Host Minerals Planning Authorities, with a landbank for sand and gravel well in excess of the seven years required as a national target in Cambridgeshire and Peterborough and greater than the seven years target in Bedford, Central Bedfordshire and Luton [APP-209, Paragraphs 6.2.3 to 6.2.5].

ExA's reasoning

- 16.4.20. Given the fixed start and finish points of the Proposed Development at the Black Cat roundabout and Caxton Gibbet roundabout, it would not have been possible for the route to avoid MSAs [APP-209, Figure 3].
- 16.4.21. The ExA considers that the benefits of the Proposed Development, the current supply of sand and gravel in the area and the environmental and other effects of prior extraction have been considered by the Applicant

and that the adverse effects of the Proposed Development on Minerals have been addressed so far as possible [APP-209, Section 6.4].

- 16.4.22. Nevertheless, the Proposed Development would result in the permanent loss of sand and gravel minerals, a significant adverse effect.

16.5. CONCLUSIONS

- 16.5.1. The ExA notes the general agreement on matters of Land Use between the Applicant and IPs and notes the outstanding concerns of the NFU with regard to soil restoration.
- 16.5.2. The ExA is satisfied that the Applicant has sought to minimise the loss of BMV agricultural land and that it would not be appropriate for the sand and gravel resources to be extracted prior to the commencement of the development. The ExA is also satisfied that the geographical parameters of the Proposed Development between the Black Cat roundabout and Caxton Gibbet roundabout mean it would not be possible for the route to avoid BMV agricultural land or MSAs.
- 16.5.3. Nevertheless, the Proposed Development would result in significant and permanent adverse effects on BMV agricultural land and the permanent loss of sand and gravel minerals. Taking all the matters reported above into account, including the geographical constraints of the route of the Proposed Development, the ExA concludes that Land Use provides moderate weight against making the Order.

17. SOCIO-ECONOMIC EFFECTS

17.1. BACKGROUND AND POLICY CONTEXT

- 17.1.1. Socio-economic effects of the Proposed Development was identified as a principal issue in the Rule 6 letter [PD-005]. This Chapter reports on matters relating to social and economic effects on individuals and communities, including direct jobs creation, and inter-related effects on human health and community well-being.
- 17.1.2. In addition to the issues identified in the Rule 6 letter, this Chapter also reports on the effects of the Proposed Development on the lives, homes and businesses of two Affected Persons (APs), within the assessment framework of NPSNN (Paragraphs 4.79 to 4.82), the Equality Act 2010 and the Human Rights Act 1998 (HRA1998). The effects of the Proposed Development on individuals with an interest in land within the Order limits (AP) has been covered in Chapter 22 of this Recommendation Report.
- 17.1.3. Matters relating to effects of the Proposed Development supporting wider local and national economic activity and employment have been reported on in Chapter 5, and the effects on agriculture and farming operations and on green infrastructure have been reported on in Chapter 16 of this Recommendation Report.

National Policy Statement

- 17.1.4. NPSNN identifies a need for development on the national networks to support national and local economic growth and regeneration, particularly in the most disadvantaged areas (NPSNN, Paragraph 2.6).
- 17.1.5. The assessment of health effects as set out in NPSNN, requires the Applicant to identify and set out the assessment of any likely significant adverse health impacts and measures to avoid, reduce or compensate for adverse health impacts as appropriate (NPSNN, Paragraph 4.81). Given the adverse effects of a scheme may affect people simultaneously, the Secretary of State (SoS) in determining an application for development consent should consider the cumulative impact on health (NPSNN, Paragraph 4.82).

Other legislation and policies

- 17.1.6. The other legislation that are relevant in the assessment of socio-economic effects are: the Equality Act 2010 and the HRA1998.
- 17.1.7. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-081, Section 12.1] [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1].

17.2. THE APPLICATION

Environmental Statement and other documents

- 17.2.1. The Applicant's case relating to the effects on human health and Socio-economic Effects reported in this Chapter, is in the ES Chapters 12 Population and Human Health [APP-081], the Case for the Scheme [APP-240], Figure 12.2 [APP-150], and Equality Impact Assessment (EqIA) [APP-245].

Scope and Methodology

- 17.2.2. The scope of the Applicant's assessment of the likely effects of construction on land use and accessibility include effects on: private property and housing, agricultural land holding, community land and assets development land and businesses and walkers, cyclists and horse riders (WCH). The scope of the Applicant's assessment of the likely effects of construction on human health comprises of effects on: access to and severance from facilities, open and green space, the use of WCH routes, air quality and noise and vibration. The Applicant agreed with the Planning Inspectorate (the Inspectorate) that effects associated with the maintenance and management of the Proposed Development would be scoped out of the assessment [APP-081, Section 12.3].
- 17.2.3. When assessing impacts on land use and accessibility, the study area has been defined as the Order limits and an area extending 500 metres (m) beyond those limits. The human health baseline study area aligns with the study area outlined for land use and accessibility impacts, and in addition the Local Authority (LA) administrative areas for Bedford Borough Council (BBC), Central Bedfordshire Council (CBC), Huntingdonshire District Council (HDC) and South Cambridgeshire District Council (SCDC) [APP-081, Section 12.5].

Applicant's assessment of effects and mitigation proposed

Assessment of effects

- 17.2.4. Brook Cottages, formed of two private dwellings, is a Grade II listed building located along the western side of the A1 to the north of the existing Black Cat roundabout. Brook Cottages would be removed as a result of the construction of the Proposed Development. The loss of Brook Cottages as a heritage asset is reported on in Chapter 8 of this Recommendation Report. One of the dwellings at Brook Cottages is currently inhabited by a tenant. In the ES, the Applicant has stated that the loss is not considered to be critical in the decision-making process given that the scale of loss is less than five properties, at which scale the Applicant considers there would be no effect on the community [APP-081, Paragraph 12.9.2]. The ExA considered that it was important to examine the effects on the tenant, Mr Baron, and the ExA's findings have been reported in this Chapter.
- 17.2.5. A residential property located above the commercial premises of A1 Keen Screens would be demolished as a result of the Scheme. In the ES, the Applicant has stated that the loss is not considered to be critical in the

decision-making process given that the scale of loss is less than five properties, at which scale there would be no effect on the community [APP-081, Paragraph 12.9.3]. The home owner and occupier of the residential dwelling, Mr and Mrs Chamberlain (the Chamberlains), also owns the other units on that plot that are currently occupied by businesses that the Chamberlains' let. These would be demolished due to the Proposed Development. As such, the effects on the inhabitants of the property, the Chamberlains, and their tenants was examined and has been reported in this Chapter.

- 17.2.6. While no other private properties in the study area are directly affected, the Applicant has assessed that the effects on other residential areas would be a temporary slight adverse effect [APP-081, Paragraph 12.9.4 and Paragraph 12.9.5].
- 17.2.7. The effect of the construction works on community and land assets is assessed to be neutral or temporary slight adverse [APP-081, Paragraph 12.9.6 to 12.9.10]. The closure of the existing A428 between the existing Caxton Gibbet roundabout and Cambridge Road roundabout is assessed to have a temporary slight adverse effect upon Eltisley Manor [APP-081, Paragraph 12.9.8].
- 17.2.8. Except for recreational facilities and activities over the River Great Ouse, no recreational facilities will be directly affected by the construction of the Proposed Development. The temporary closure of the River Great Ouse is assessed to be a moderate adverse effect [APP-081, Paragraphs 12.9.11 to 12.9.12].
- 17.2.9. The effects of the Proposed Development on existing businesses is assessed to be negligible or slight adverse. While the access to two businesses, BP services and Kelpie Marina, would be permanently closed, a permanent alternative would be provided and overall the effects are considered slight adverse. The Proposed Development would result in the permanent closure of all existing businesses and infrastructure at Black Cat Services, including the Travelodge Hotel, Shell Petrol Station and A1 Keen Screens. However, the Applicant has taken into account the availability of alternative premises and employment opportunities within the study area, and assessed the displacement and loss of jobs to be modest compared to the level of economic activity and opportunity in the area. The Proposed Development is assessed to have a permanent slight adverse effect arising from the closure of the businesses at Black Cat Services [APP-081, Paragraphs 12.0.13 to 12.9.21].
- 17.2.10. The effect of temporary land take upon the employment zone at the Wintringham development site is assessed to be neutral [APP-081, Paragraphs 12.0.22].
- 17.2.11. The effect of the Proposed Development on agricultural land holdings has been assessed in relation to the original scale of these holdings, and if the overall viability of the farm businesses would be compromised. In all cases, the Applicant has assessed the effects to be temporary and permanent slight adverse [APP-081, Paragraphs 12.0.23 to 12.9.28].

Matters relating to agricultural land have been reported in Chapter 16 of this Recommendation Report.

- 17.2.12. During the construction it would be necessary to temporarily close and permanently change some of the WCH routes within the study area. These effects on various WCH routes have been assessed to range between temporary slight adverse, neutral, permanent slight beneficial and permanent slight adverse effect. The effect on Public Right of Way (PRoW) 73/17 due to closure during construction Phase 2 of Caxton Gibbet junction is assessed to have a temporary moderate adverse effect [APP-081, Paragraphs 12.0.30 to 12.9.53].
- 17.2.13. The Applicant has assessed that the Proposed Development would have neutral residual effects on health, in relation to severance and accessibility issues, access to open and green space, blue space, and play space, and air quality as determinants of human health. Noise and vibration as a determinant of human health during construction will result in a negative health outcome. Closure of River Great Ouse during construction may result in a negative outcome upon the health and well-being of the local population with regard to access to recreational activities [APP-081, Paragraphs 12.0.54 to 12.9.76]. Wider matters relating to Air Quality and Noise effects and related mitigation has been covered in Chapters 12 and 13 of the Recommendation Report.
- 17.2.14. The Applicant has assessed that the operations stage effects of the Proposed Development on private property and housing, community land and assets and businesses, development land, agricultural land holdings, and routes for WCH would give rise to permanent slight beneficial effect in most areas, with some slight adverse, minor adverse, and negligible effects [APP-081, Paragraphs 12.0.77 to 12.9.93].
- 17.2.15. The Proposed Development is assessed to have a positive health outcome for residents within the health baseline study area in terms of accessibility and physical activity. The Applicant expects changes to air quality during the operation of the Proposed Development would result in neutral health outcomes. The Proposed Development is assessed to have a beneficial impact upon road safety, and as such a positive health outcome within the health baseline study area. However, in terms of noise and vibration as a determinant of human health, the Proposed Development would result in a negative health outcome for the people living and working in over 20 properties and significant beneficial noise effects in three properties [APP-081, Paragraphs 12.0.94 to 12.9.104].

Proposed mitigation

- 17.2.16. The Applicant's proposed embedded mitigation which is common across the Proposed Development is set out in the ES [APP-071, Table 2.1]. Further essential mitigation proposed includes [APP-081, Section 12.8]:
- 1) Appropriate alternative temporary or permanent access would be provided where temporary or permanent access is severed as a result of the Proposed Development. This has been secured indicatively in the Environmental Masterplan [REP6-051] and would be worked out

in detail between the Principal Contractor and the affected landowners, during the detailed design stage, on a case by case basis. Matters relating to accesses have also been reported on in Chapters 6 and 22 of this Recommendation Report.

- 2) Measures would be in place to ensure patients and staff have access to Eltisley Manor, especially during night hours through the Schedule of Mitigation (SoM) [APP-235] and the Outline Construction Traffic Management Plan (OCTMP) [REP10-019]. These measures would include communication with the care home at an early stage, informing of any relevant operations or traffic management measures, alternative plans for access, and preventing employees working night shifts [APP-081, Paragraph 12.8.10].
- 3) Further essential mitigation is proposed to PRow includes fencing of work areas, consultation with LA, instatement of local diversion routes, and appropriate signage. This has been secured in the OCTMP [REP10-019].
- 4) To manage the effects of the closure of River Great Ouse, works would be carried out for a period not exceeding 24 hours and the public would be given prior notice. However, the Applicant assesses that these measures would not mitigate the significant adverse effect [APP-081, Paragraph 12.10.2] [APP-235].
- 5) Mitigation of noise effects has been covered in Chapter 13 of this Recommendation Report.

17.3. LOCAL IMPACT REPORTS

Bedford Borough Council

- 17.3.1. BBC has set out in its Local Impact Report (LIR) that it considers the Proposed Development to be a vital component of the Strategic Road Network (SRN) and one which will alleviate the poor performance of the current route. It considers the Proposed Development would provide an essential link which would enhance opportunities for economic growth and housing delivery, improve conditions for local communities, and will reduce travel time between Bedford (and all points west) and Cambridge [REP2-002]. As these matters relate to wider economic benefits of the Proposed Development, they have been reported on in Chapter 5 of this Recommendation Report.

Central Bedfordshire Council

- 17.3.2. Central Bedfordshire Council (CBC) [REP2-004], is concerned about the adverse effect of the Proposed Development on Sandy Air Quality Management Area (AQMA), and finds the Applicant's position to not undertake any mitigation to counteract or offset the adverse effect on the health of CBC residents at a highly sensitive location would counteract their efforts to improve air quality in the AQMA. This matter is reported in Chapter 12 of this Recommendation Report.

Cambridgeshire Councils

- 17.3.3. The joint LIR from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) [REP2-003], identifies benefits during

construction, such as direct and indirect employment opportunities for local residents including training and apprenticeship opportunities, additional economic benefits via the spend of the construction workforce on elements such as food and accommodation, opportunities for local construction companies for subcontract work and to upskill their business, and low levels of business disruption. During operation, the benefits identified are reduced journey time and alleviation of congestion during peak times, faster and more reliable journey times between Cambridge, Bedford, Milton Keynes (M11, A1, M1), resulting in improved access to existing and future employment sites, faster and more reliable journey times to St Neots Mainline Railway Station for North South travel, and potential for improved Non-Motorised User (NMU) provision to facilitate active travel connecting existing and new communities with current and future employment sites.

- 17.3.4. Cambridgeshire Councils' concerns during construction include: the lack of a communication plan leading to poor communication with local residents, the potential severance to access to emergency services during the night closures and increase in local traffic and potential for collisions. During operation their concerns include greater effects on mental health and well-being than has been assessed and the lack of embedded mitigation measures proposed to address any impacts of the impacts on human health. They also feel that the Applicant has not maximised the opportunities to provide significant improvements to the PRoW. They identify construction related traffic disruption and costs associated with the disbenefits of construction identified in the Applicant's economic assessment, as a concern. Cambridgeshire Councils feel that during operation the businesses located at the service area at Caxton Gibbet could suffer due to loss of direct access from the main carriageway. Additionally, they highlight that the Applicant has missed an opportunity to align with East West Rail (EWR) project.

17.4. THE EXAMINATION

- 17.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are the effects of the Proposed Development on:
- 1) a community asset, namely Eltisley Manor mental health facility;
 - 2) the tenant at Brook Cottages; and
 - 3) the owners and occupiers of the property near Black Cat Roundabout.

Eltisley Manor mental health facility

- 17.4.2. Eltisley Manor nursing home is a psychiatric nursing home offering specialist and complex mental health care services for a range of age-groups. It has been identified as a community asset that would be affected by the Proposed Development within the study area [APP-081, Table 12.7, Paragraph 12.6.20]. The Applicant has assessed the sensitivity of the receptor to be medium as there are limited alternative mental healthcare facilities available within nearby communities. The closure of the existing A428 between the existing Caxton Gibbet roundabout and Cambridge Road roundabout is assessed to have a

temporary slight adverse effect upon Eltisley Manor [APP-081, Paragraph 12.9.8].

- 17.4.3. In its Relevant Representation (RR), Public Health England (PHE) found insufficient justification for the residents of Eltisley Manor to be considered medium sensitivity [APP-081, Paragraph 12.9.8], and asserted that the vulnerability of this population group should be highly sensitive to both temporary and permanent change and impacts. PHE stated that while an approach to the identification of vulnerable populations was provided within the ES, it was not included within the Equality Impact Assessment (EqIA). PHE's particular concern was that the nursing home, which could only be accessed by using the existing A428, could be affected by overnight road closures, and potential delay in journey time, particularly in case of emergency access or egress. PHE also had concerns regarding the potential for delays in journeys during the daytime movement of staff, residents and visitors, which PHE noted, had been identified in the EqIA as a general effect on residents [RR-085].
- 17.4.4. In its response, the Applicant explained that the assignment of medium sensitivity to Eltisley Manor is on the basis that there are limited alternative facilities and the facility is used frequently but by a minority of the community and severance to access to the facility would be limited. As such the Applicant considered that the balance of considerations supported assigning a value of medium sensitivity [REP1-021, RR-085].
- 17.4.5. The Applicant further explained that the EqIA, draws upon the findings of the ES, including the finding on Population and Human Health [APP-081]. The Applicant decided not to include Eltisley Manor residents in the EqIA, because through engagement with the manager of Eltisley Care Home, it was decided that there would be a potential impact of closures and delays only if adequate communication had not been undertaken; and because the residents and staff were now aware of the potential delays the scope of the two assessments in its view did not interface or warrant cross-reference [REP1-021, RR-085].
- 17.4.6. The Applicant highlighted that to mitigate the effects of the road closures, Eltisley Manor Care Home has been specifically mentioned within the Outline Construction Traffic Management Plan (OCTMP) [REP10-019] which commits the Principal Contractor to communicate with the care home regarding any operations or traffic management measures that may affect the routes they use and make alternative plans as necessary [REP1-021, RR-085].
- 17.4.7. Early in the Examination, this matter was resolved between parties, and it was confirmed by PHE that the Applicant's proposed mitigation to minimise severance to Eltisley Manor, in addition to the ongoing and proposed liaison with Eltisley Manor, had adequately addressed its initial concerns [REP1-089].

ExA's reasoning

- 17.4.8. The ExA agrees with PHE, and finds that that the patients of Eltisley Manor care home, covered by the protected characteristic of disability, should have been included in the EqIA. Conversely, the ExA finds that the Applicant's argument to not include the care home residents in the EqIA on account of them having prior information about the adverse effects, to be unconvincing. However, the ExA takes into account the confirmation from PHE that it is now satisfied with the Applicant's proposed mitigation measures, and the confirmation from the Applicant that the proposed communication plan was discussed with the Eltisley Care Home manager. As such, the ExA is persuaded that the Applicant's proposed measures would adequately mitigate the severance of access to Eltisley Manor and corresponding delays for its staff, residents and visitors. Despite not being included in the EqIA, the ExA is satisfied that the mitigation does in fact take special account of the effects to the vulnerable residents of the care home because the communication with Eltisley Manor has been specifically mentioned in the OCTMP [REP10-019, Section 3.16]. The ExA is satisfied that the Applicant's proposed mitigation is described in the OCTMP [REP10-019, Section 3.16] and secured through R11 of the draft Development Consent Order (dDCO) [AS-026].

The tenant at Brook Cottages

- 17.4.9. Brook Cottages is formed of two private dwellings, and is a Grade II listed building located along the western side of the A1. One of the dwellings is occupied by a tenant, Mr Baron. All heritage related matters relating to Brook Cottages have been reported in Chapter 8 of this Recommendation Report, and matters relating to the effects of the Proposed Development on the occupier at Brook Cottages are reported here.
- 17.4.10. The proposed Compulsory Acquisition (CA) and subsequent removal of Brook Cottages [APP-081, Paragraph 12.9.2] would affect the tenant Mr Baron, who would need to relocate. During Issue Specific Hearing (ISH) 3 [EV-045] [EV-050], while giving evidence [EV-021, 5a] on Brook Cottages survey and re-location update, the Applicant talked about difficulty gaining access to Brook Cottages for the purpose of intrusive surveys to determine the potential for relocating the Grade II listed building. The reason, the Applicant explained, was because the owner was denying access to protect their infirm tenant, the current occupant at one of the dwellings. The ExA decided to examine the matter relating to the tenant of Brook Cottages separately from that point on in the Examination. The ExA sought information from the Applicant and BBC in order to determine:
- 1) whether the occupier might have protected characteristics under Section (s) 4 of the Equality Act 2010 and the implications for the Applicant and BBC as regards s19 and s20 of the Equality Act duties to avoid indirect discrimination and make reasonable adjustments and under the Public Sector Equality Duty (PSED) in s149 of the Equality Act;

- 2) the instances where the Applicant made, or attempted to make contact with the occupier and owner of Brook Cottages to assess whether any reasonable adjustments were requested or made to facilitate their engagement;
- 3) whether the Proposed Development would interfere with the human rights of the occupier, specifically Article 1 of the First Protocol (protection of property) and Article 8 (respect for private and family life) of the HRA1998/European Convention on Human Rights (ECHR), and the Applicant's justification relating to this specific case; and
- 4) whether reasonable alternatives to CA, including modifications to the scheme, have been explored, in line with CA guidance.

- 17.4.11. The Applicant stated that they had met Mr Baron and spoken to him on the telephone, and had corresponded with the owner, and confirmed that Mr Baron did indeed have protected characteristics. To support Mr Baron through this process, the Applicant stated it has worked with BBC and its supporting agencies to support the application for social housing, and has outlined the compensation that may be available to support a house move. At the landowner's request, the Applicant has stopped direct contact with Mr Baron to reduce stress to Mr Baron [REP4-037, Q2.12.2.3].
- 17.4.12. The Applicant pointed to the EqIA [APP-245] which has identified the potential adverse impacts for specific groups with protected characteristics and provided recommendations for monitoring these predicted impacts including further engagement with affected individuals [REP4-037, Q2.12.2.3].
- 17.4.13. To provide further justification for the interference with the human rights of Mr Baron, the Applicant reiterated that the balancing exercise described in the Statement of Reasons (SoR) [REP10-013] would be applicable to any interference with rights under ECHR Article 1 of the First Protocol and Article 8, that the interference would be justified because it would be in the public interest and proportionate, and that any person affected would be entitled to compensation.
- 17.4.14. For the alternatives that the Applicant considered to the CA of the specific site of Brook Cottages, the Applicant reiterated its position in the application and subsequent submission [APP-247] [REP6-040] that the specific plot would be required for the construction and operation of the A421/A1 free flow link, in particular to ensure the safety and design standards compliant with entry and exit slip roads. The Applicant explained that the proximity of Brook Cottages to the existing Black Cat roundabout and the A1 carriageway and the scale and complexity of delivering a new junction at Black Cat within a highly constrained location, has meant that no suitable design solution has been identified that would enable the Proposed Development to be delivered with the retention of Brook Cottages [REP4-037, Q2.12.2.3].
- 17.4.15. The ExA was mindful that further examination of this matter would require disclosure of some personal information and specific circumstances and needs of individuals. To ensure such information did not get placed in the public domain, the ExA decided to discuss a few

matters at the Compulsory Acquisition Hearing (CAH) 2 [EV-060] [EV-065], but largely requested information in writing under Rule 17 of the Infrastructure Planning (Examination Procedure) (EPR) Rules 2010 (Rule 17 letter), dated 9 December 2021 [PD-012]. In doing so the ExA made it clear that the responses received would be redacted in line with the Inspectorate's Advice Note (AN) 8.4 and related rationale applied at the discretion of the ExA before being published to the Inspectorate's website. Additionally, in light of the evidence received so far from the Applicant [REP4-037] and in compliance with its duties under the Equality Act 2010, the ExA via the Case Team at the Inspectorate provided additional support to Mr Baron to participate in the Examination. In the first instance, the Rule 17 was sent to Mr Baron in paper format and through the post. To aid understanding the ExA extracted the questions directed at Mr Baron in a separate Annex, written in plain English. Additionally, a member of the Case Team telephoned Mr Baron to explain the matters contained in the Rule 17 letter and its Annex, after it had been sent.

- 17.4.16. Through CAH2 and the Rule 17 letter, the ExA sought further information about how BBC and the Applicant had discharged their duties under the Equality Act, including PSED, evidence to corroborate their case and progress with Mr Baron's social housing application. The ExA also asked the owner of Brook Cottages, and Mr Baron further questions about their engagement in the process, Mr Baron's protected characteristics, the support available to him and needed by him, and the implications of the relocation from Brook Cottages [PD-012].
- 17.4.17. Mr Braidwood, the owner of Brook Cottages, gave evidence making a case for Mr Baron's relocation to a nearby location where Mr Baron may preserve his quality of life. Mr Braidwood also mentioned that Mr Baron does not always have access to a computer [EV-060] [EV-065]. Mr Braidwood stated that he had been involved in the process and in conversation with the Applicant since 2017. He also provided email evidence which shows that he has been in conversation with the Applicant about Mr Baron's resettlement, and in order to improve his chances of getting alternative accommodation, had recently served him notice to terminate the tenancy agreement [REP7-010].
- 17.4.18. BBC's update confirmed Mr Baron's protected characteristics, ongoing communication with the re-housing team at BBC and the support Mr Baron had received with the application process. BBC also confirmed that Mr Baron's bid for a suitable property had previously been unsuccessful but only days before CAH2, his priority level had increased, which put him in a position to be re-housed in two to three months [EV-060] [EV-065] [REP7-005].
- 17.4.19. The Applicant submitted evidence of correspondence with the owners of Brook Cottages, formal letters that were sent to Mr Baron, and of email communications with the owners which had references to Mr Baron, and to speaking with him on the telephone. In terms of reasonable adjustment, the Applicant provided evidence of offering to purchase the property early, outside of the discretionary purchase process to reduce

uncertainty for the owner and occupier. The Applicant stated that it limited direct communication with Mr Baron and delayed the process of intrusive surveys to avoid stress to him. During the Examination, the Applicant alerted Mr Braidwood's agent of the ExA's relevant Hearing agendas and Rule 17 letter. The Applicant also provided Mr Braidwood, further clarity on compensation that would be available to Mr Baron [REP7-003, redacted].

17.4.20. The ExA received a representation from Mr Baron confirming that he had authorised a representative to respond to the information requested in the Rule 17 letter. Mr Baron's representative confirmed Mr Baron's protected characteristics and that he would be homeless if the re-housing application does not deliver an outcome in time. He explained that Mr Baron had lived at the property for a long time. He confirmed that Mr Baron had been visited by the Applicant and was in regular dialogue with BBC regarding re-housing in the local area, where Mr Baron had a support network [REP7-013, redacted].

17.4.21. There was no further communication received from any parties on this matter.

ExA's reasoning

17.4.22. Due to the personal information contained in the evidence referred to above, some content has been redacted or not published. However, all of the information was before the ExA during Examination and at the time of reporting, and the ExA is satisfied that there is adequate evidence to support and confirm the representations by all parties, the Applicant, BBC, Mr Braidwood and Mr Baron.

17.4.23. In light of the representations made, the ExA can confirm that Mr Baron has protected characteristics in line with s4 to s12 of the Equality Act 2010. The ExA acknowledges, in particular, the Applicant's decision to delay the intrusive surveys until Mr Baron had been re-housed, BBC's decision to upgrade Mr Baron's priority level, and Mr Braidwood's decision to not disturb Mr Baron until suitable accommodation had been found for him. On this basis the ExA is satisfied that the Applicant and BBC, with the support of Mr Braidwood, made adequate effort and reasonable adjustments to ensure that Mr Baron was not disadvantaged through the process of negotiation to acquire the property. Additionally, the ExA is content that Mr Baron has had a fair chance to participate in the Examination, with the reasonable adjustments made by the ExA, and through the Case Team. The ExA can conclude that all parties have complied with s19 and s20 of the Equality Act.

17.4.24. The ExA will conclude if interference with human rights are justified and proportionate in Chapter 22 of this Recommendation Report in light of the conclusions reached in Chapter 21. However, the ExA finds that the interference with Mr Baron's Human Rights under Article 1 of the First Protocol and Article 8 of ECHR require greater consideration; this is because the effect of this Proposed Development is a greater upheaval on his life in light of his protected characteristics and disturbance to his long-standing living arrangements. In addition to the Applicant's

justification which relies on the public benefits delivered by the Proposed Development, the ExA finds that the adjustments made by the Applicant and BBC with the support of Mr Braidwood, to a typical negotiation process and the offer for compensation for a home move go some way in demonstrating the greater consideration which has been given in respect of Mr Baron's case.

- 17.4.25. However, the ExA finds that the greater consideration needed for Mr Baron's case is not reflected in the ES, where the Applicant has stated that the loss of this property is not considered to be critical in the decision-making process given that the scale of loss is less than five properties, at which scale there would be no effect on the community [APP-081, Paragraph 12.9.2]. It follows, the Applicant has not proposed any mitigation in this regard. The ExA finds that the threshold of five properties is arbitrary. Moreover regardless of the number of properties that would be demolished the effect on individual persons must be considered on a case by case basis. The ExA would expect to see recognition in the ES, and indeed the cross reference here with the EqIA to acknowledge the effects on Mr Baron.
- 17.4.26. Given that Mr Baron would have to relocate from his long-standing home, the effect of the CA on him is undoubtedly significant. Despite the assurances from BBC, Mr Baron's re-housing application had not yielded a confirmed outcome during the Examination, and the ExA cannot ignore the possibility that Mr Baron could be left homeless. The ExA has weighed the effects on Mr Baron specifically in its conclusion on Socio-Economic effects of the Proposed Development and the overall planning balance.
- 17.4.27. The ExA notes that Mr Braidwood and Mr Baron in their representations did not object to the CA of the property by the Applicant.

The owners and occupiers of the property near Black Cat Roundabout

- 17.4.28. A residential property located above the commercial premises of A1 Keen Screens, located along the eastern side of the A1 to the north of the existing Black Cat Junction would be demolished as a result of the Proposed Development. The owners and occupiers of the residential dwelling also own other units on that plot that are currently let to other businesses. These would be demolished due to the Proposed Development.
- 17.4.29. During the Examination, the Chamberlains made a representation, stating that they were freehold owners of the site and commercial properties on it, and occupiers of the residential property. They stated that they had not received crucial communication from the Applicant and from the Examination and as such had not registered to be Interested Parties (IPs). They added that they were objecting to the Proposed Development primarily on account that it would lead to the loss of their home and their business, and they did not feel they were receiving fair

compensation for their property. They stated that the process so far had left them stressed [AS-018] [AS-019].

- 17.4.30. As the representations were received on 29 November 2021 [AS-018] and 1 December 2021 [AS-019], only a day before CAH2 on 2 December 2021, the ExA decided to seek further information through written submissions. The ExA was however, able to seek clarification from the Applicant on procedural matters at CAH2. The Applicant confirmed that the Chamberlains were indeed owners of the property and occupiers of the residential dwelling, and the Applicant had several meetings and email communications with the Chamberlains to negotiate the acquisition of their property.
- 17.4.31. The Applicant confirmed that the Chamberlains were included in the Book of Reference (BoR) at the time of submission [APP-032] and had been sent the s56 notice on 26 April 2021. The Applicant confirmed that the address that the notice was sent to is the address as detailed on the Land Registry title for the property and the same as all previous correspondence since 2017. The Applicant also stated that given the s56 notice and any other previous post had not been returned to the Applicant, from the Applicant's point of view it could be assumed that the address was correct and the s56 notice and all previous post had been received [EV-060] [EV-065] [REP7-002, Appendix A, REF-059 – confidential, not published]. Likewise, the ExA was also notified by the Examination Case Team that the same address had been used for the Chamberlains to send official notices such as the Rule 6 and Rule 8 letters. As these had not been returned to the Examination, it was assumed that they had been received.
- 17.4.32. Given the timing in the Examination, the ExA decided to amend the Examination Timetable under Rule 8(3) of the EPR, to include an additional Deadline to seek clarification on the issues raised by the Chamberlains and other relevant parties. This matter has been reported in Chapter 2 of this Recommendation Report. In addition to amendments to the Examination Timetable, the ExA also explained key procedural decisions made by the ExA regarding the Chamberlains' participation in the Examination under s89 (3) of the Planning Act 2008 (PA2008), and requested further information under Rule 17 of the EPR. This was done through a letter (Rule 8(3) and Rule 17 letter), dated 9 December 2021. Because this letter contained amendments to the Examination Timetable, which affected all parties, it was sent to all parties, including the Applicant, BBC and the Chamberlains [PD-011].
- 17.4.33. In the Rule 8(3) and Rule 17 letter, the ExA acknowledged that due to a possible error with the postal address for Mr and Mrs Chamberlain, they may not have received postal communication relating to the Examination. On the basis of the Chamberlains' submission, and the evidence presented by the Applicant at CAH2 regarding their interest, the ExA decided that the Chamberlains, should be treated as if they were an AP for the purposes of the Examination of the Proposed Development [PD-011].

- 17.4.34. The ExA also acknowledged that the Chamberlains may not have received notification from the Applicant of acceptance of the application in accordance with s56(2)(d) of the PA2008. Furthermore, there is a likelihood that they fall within one of the categories set out in s102B of PA2008 and could formally apply to become an IP, who have special status in the Examination. In consideration of the specific circumstances that arise in this case and bearing in mind the ExA's duties under the Equality Act and the ECHR/ HRA1998, the ExA also decided that it would be appropriate to treat the Chamberlains as if they were IPs in advance of receiving a formal request in accordance with s102A [PD-011].
- 17.4.35. In consideration of the decisions to treat the Chamberlains as if they were an AP and an IP, the ExA further decided to give them an opportunity to request a CAH under s92 of the PA2008 and request an Open Floor Hearing (OFH) under s93 of the PA2008, with four weeks to notify the ExA to request the Hearings, should they wish to. Since other APs and IPs involved had been given an opportunity to request a CAH and an OFH [PD-005] in the Rule 6 letter issued on 9 July 2021 with adequate notice to make that request, the ExA clarified that it did not intend to accept requests from anyone else [PD-011].
- 17.4.36. In light of the evidence received so far from the Applicant [EV-060] [EV-065] and from the Chamberlains [AS-018] [AS-019], the ExA found that it was possible that the Chamberlains might have protected characteristics. Taking a precautionary approach and in compliance with its duties under the Equality Act 2010, the ExA via the Case Team at the Inspectorate provided additional support to the Chamberlains to participate in the Examination. In the first instance, the Rule 8(3) and Rule 17 letter was sent to the Chamberlains in paper format through the post, and also via email. To aide understanding the ExA extracted the questions directed to the Chamberlains in a separate Annex, written in plain English. Additionally, a member of the Case Team telephoned the Chamberlains to explain the matters contained in the Rule 8(3) and Rule 17 letter and its Annex, after it had been sent.
- 17.4.37. To explore the effect of the Proposed Development on the Chamberlains and the proposed CA of their land, the ExA requested information from relevant parties. Recognising that responses to these questions would include personal and sensitive information and information that reveals specific circumstances and needs of individuals, the ExA made it clear that the responses received would be redacted in line with the Inspectorate's AN 8.4 and related rationale applied at the discretion of the ExA before being published to the Inspectorate's website.
- 17.4.38. In the Rule 8(3) and Rule 17 letter, the ExA sought further information about BBC and the Applicant discharging their PSED, and evidence to corroborate their case. The ExA also asked the Applicant for information regarding when they had attempted to make contact with the Chamberlains and details regarding any reasonable adjustments that were requested or made to facilitate their engagement. The ExA asked the Applicant to explain if the Proposed Development would interfere with the human rights of the occupier, specifically Article 1 of the First

Protocol (protection of property) and Article 8 (respect for private and family life) of the ECHR, and the Applicant's justification relating to this specific case and if reasonable alternatives to CA, including modifications to the scheme, have been explored, in line with CA guidance [PD-011].

- 17.4.39. The Applicant provided evidence of engagement with the Chamberlains which included email exchanges, formal letters from the Applicant, reference to telephone conversations, and reference to and minutes of meetings. BBC was present during at least one of these meetings [REP7-002, Appendix A redacted].
- 17.4.40. In terms of reasonable adjustments, the Applicant met with the Chamberlains at their property to explain the discretionary purchase process and provided them with hard copies of government publications on CA and discretionary purchase. They provided evidence of a meeting which was in person and socially distanced during the pandemic, to accommodate the Chamberlains who expressed difficulty accessing video conferencing services. The Applicant provided evidence of ten occasions when the Chamberlains were told that they could employ a land agent to support them and advised that reasonable fees would be payable by the Applicant. The Applicant provided evidence of email exchanges where the Chamberlains were advised that the Applicant would pay reasonable costs to clear the site, to recover material and sell it, and to hire skips to dispose of any waste material. The Applicant also stated that the Chamberlains had rejected the Applicant's offer for their property and a counter offer had not yet been forthcoming [REP7-002, Appendix A redacted].
- 17.4.41. To provide further justification for the interference with the human rights of the Chamberlains, the Applicant pointed to the summary of the benefits of the Proposed Development [APP-240], and the SoR [REP10-013]. In light of the minimum land-take necessary to deliver the Proposed Development, the attempts to acquire the interests by agreement and the compelling public benefits that the Proposed Development would deliver, the Applicant considered that the interference with human rights would be both proportionate and justified [REP7-002].
- 17.4.42. The Applicant provided a technical note setting out the alternatives that were considered to the CA of this specific site. The Applicant stated the three options for the Black Cat junction - A, B and C - that were considered prior to the Preferred Route Announcement (PRA) would all result in demolition of the property because of its proximity to the existing A1 and Black Cat junction. After PRA, the alternatives considered by the Applicant were dismissed because those alternatives would have required greater land acquisition, unsafe access arrangement for the property, and greater environmental effects such as additional floodplain compensation, diversion of a high-pressure gas main of national importance and potentially further impact on archaeology in the area [REP7-002, Appendix B].

- 17.4.43. In the Rule 8(3) and Rule 17 letter the ExA asked the Chamberlains to confirm if they wanted to request a CAH and/or OFH. The Chamberlains were asked about the engagement they had had with the Applicant, and the formal/ official notification that they had received from the Applicant and the Examination. The ExA asked the Chamberlains about their protected characteristics in line with s4 to s12 of the Equality Act, the support available to them and needed by them, and the implications of the CA of their property and relocation from their home [PD-011].
- 17.4.44. The Chamberlains confirmed that they wanted to continue their engagement with the Examination via email and written submissions, and did not request any Hearings. The ExA has deduced from the Chamberlains response that it is unlikely that they received the s56 notice from the Applicant and the Rule 6 and Rule 8 letters from the Examination. However, the Chamberlains gave details of meetings, email exchanges and telephone conversations with the Applicant since early 2018 and through the Examination [REP7-011] [REP7-012].
- 17.4.45. The Chamberlains confirmed that they do have protected characteristics and the implications of CA would be for them to relocate from their home which is a residential property located above one of the commercial premises on the site, and cessation of their current income from their business tenants. The Chamberlains also talked about potential effects on their grandson (who is over the age of 18) and was involved in their business. The Chamberlains stated that they were dissatisfied with the valuation process and the compensation that was offered to them. They stated that there was a lack of comparable properties in the areas and provided evidence relating the valuation of other similar properties [REP7-011] [REP7-012].
- 17.4.46. Responding to the Chamberlains concerns regarding the Applicant's offer of compensation not being commensurate with a fair price for the property, the Applicant explained their approach to valuation which was based on best available transactional evidence in a reasonable proximity to the subject property and analysed line with the Royal Institute of Chartered Surveyors (RICS) Guidance [REP9-027].

Identification of second tenant at the Chamberlains property, Mr Goodwin

- 17.4.47. In response to the Rule 8(3) and Rule 17 letter the Chamberlains clarified that they are the only two residents at this property and stated that they currently had two commercial tenants on their property [REP7-011] [REP7-012].
- 17.4.48. The ExA noted that the BoR in Examination at that time [REP4-010] only contained details of one business tenant at the plots (1/38a, 1/39a and 1/39b), while in their response the Chamberlains claimed that there were two tenants [REP7-012, 7]. Through another Rule 17 letter dated 17 January 2022, the ExA sought clarity from the Applicant to determine if any additional persons would need to be provided a fair opportunity to participate in the Examination. The Applicant was asked if any person with an interest in the land had not been sent s56 notice, not been

included in the s59 notice, and not been included in the BoR [REP4-010]. The ExA also asked the Applicant the reasons for any omissions and the actions that would be needed in relation to this Examination [PD-016, 2].

- 17.4.49. The Applicant stated that the information about the second tenant at the Chamberlain property came to its attention in the Chamberlains' recent submission [REP7-012]. Subsequently, the Applicant had obtained the tenant's contact details, identified as Mr Goodwin, spoken with him on the telephone and issued a letter on 20 January 2022 to explain his rights to become an IP. Until the close of the Examination, the ExA was not made aware of any communication received from Mr Goodwin on this matter [REP9-027] [REP9-028] [REP10-044].
- 17.4.50. The Chamberlains responded that they did have a second tenant and asserted that the Applicant and the Valuation Office Agency (VOA) Officer had been made aware of this in March 2021. The Chamberlains did not provide evidence to support their representation [REP9-057].
- 17.4.51. The ExA has reviewed the email exchange with the Chamberlains, provided by the Applicant and notes that in some emails the Chamberlains made reference to a single tenant [REP7-002, Appendix A redacted, REF-062, REF-063, REF-068]. In an email dated 24 May 2021, to the VOA officer, responding to questions from the VOA officer, the Chamberlains talk about the tenant that has always been accounted for in the BoR in Unit 2. However, the Chamberlains also confirmed a tenant in the car sales area that is currently let on a verbal agreement since approximately three years ago [REP7-002, Appendix A redacted, REF-070]. The ExA received responses to queries regarding the second tenant, Mr Goodwin, at Deadline (D) 9, on 25 January 2022.
- 17.4.52. The BoR [REP10-014] and SoR [REP10-013] were updated to reflect the new information regarding the second tenant and submitted to Examination before closing.
- 17.4.53. The matters regarding the Chamberlains' objection to the Proposed Development and their second tenant, Mr Goodwin, remained unresolved at the close of the Examination.

ExA's reasoning

- 17.4.54. Due to the personal information contained in the evidence referred to above some of it has been redacted or not published. However, all of the information was before the ExA during Examination and at the time of writing this Recommendation Report, and the ExA is satisfied that there is adequate evidence to support and confirm the representations by the Applicant and the Chamberlains.
- 17.4.55. The first matter for consideration before the ExA here is, whether the Chamberlains have had a fair opportunity to participate in the Examination in line with Article 6 of ECHR. The ExA has no reason to doubt the evidence from the Applicant and indeed from the Examination Case Team that post sent to the Chamberlains had not been returned, and is therefore content that there was no lack of due diligence from the

Applicant in this regard. However, the ExA notes that there is in fact a difference between the postal address used by the Applicant in the BoR [REP10-014] and the address provided on the Land Registry title [REP7-002, Appendix A, REF-059 – confidential, not published] and on the Chamberlains submissions letterhead [AS-018]. As such, the ExA is content that all subsequent procedural decisions taken as set out in the Rule 8(3) and Rule 17 letter were indeed necessary and correct. The ExA is also content that those Procedural Decisions provided the Chamberlains the opportunity to participate in the Examination as an AP and IP would. As such, the ExA finds that the Chamberlains were treated fairly and had all reasonable opportunities to advance their case fairly to the ExA.

- 17.4.56. The ExA will conclude if interference with human rights is justified and proportionate in Chapter 22 of this Recommendation Report in light of the conclusions reached in Chapter 21. However, the ExA finds that the interference with the Chamberlains' Human Rights under the ECHR Article 1 of the First Protocol and Article 8 require greater consideration; this is because the effect of this Proposed Development is a greater upheaval on their life in light of their protected characteristics and disturbance to their long-standing living arrangements and sources of income. In addition to the Applicants justification which relies on the public benefits delivered by the Proposed Development, the ExA finds that the adjustments made by the Applicant, to a typical negotiation process and offer of compensation for site clearance go some way in demonstrating the greater consideration needed for the Chamberlains case.
- 17.4.57. However, the ExA finds that the greater consideration needed for the Chamberlains case is not reflected in the ES, where the Applicant has stated that the loss of this property is not considered to be critical in the decision-making process given that the scale of loss is less than five properties, at which scale there would be no effect on the community [APP-081, Paragraph 12.9.3]. It follows, the Applicant has not proposed any mitigation in this regard. The ExA finds that the threshold of five properties is arbitrary. Moreover regardless of the number of properties that would be demolished the effect on individual persons must be considered on a case by case basis. The ExA would expect to see recognition in the ES, and indeed the cross reference here with the EqIA to acknowledge the effects on the Chamberlains. Given that the Chamberlains would have to relocate from their long-standing home and lose their long-standing source of income, the effect on them is undoubtedly significant. The ExA has weighed the effects on the Chamberlains specifically in its conclusion on Socio-Economic effects of the Proposed Development and the overall Planning Balance.
- 17.4.58. The ExA finds that besides the upheaval to their lives, the Chamberlains dominant concern was regarding the fairness of the compensation they were due to receive; they did not find the Applicant's offer acceptable and had rejected it once. In accordance with s106(1)(c) of PA2008 matters of compensation are not for consideration by the ExA, as such a view on that matter is not offered here. However, the Applicant's

approach to valuation of the property based on evidence and industry guidance from RICS seems reasonable to the ExA.

- 17.4.59. On a related matter, the ExA has reviewed the correspondence presented by the Applicant, and by the Chamberlains. In light of the number and frequency of the email exchanges and meetings, and the compensation offered for the property as well as the offer for other services and expertise in light of their protected characteristics, the ExA is content that the Applicant has behaved reasonably with the Chamberlains. The ExA sympathises with the Chamberlains and acknowledges the adverse effects on them caused by the Proposed Development, but the ExA finds that they have been offered reasonable levels of advice and support to navigate the process.
- 17.4.60. The ExA can only assume that the second tenant mentioned in the email dated 24 May 2021, is Mr Goodwin. The ExA also notes that the only evidence regarding a second tenant on the Chamberlains' property is in an email that was addressed to the VOA officer. As far as the ExA can tell the Applicant was not included in the email recipient list. The email also states that the tenancy arrangement between the Chamberlains and the second tenant is a verbal one and as such possibly not formally recorded anywhere for the Applicant to find. The ExA cannot fault the Applicant's due diligence in this regard and finds that the omission of Mr Goodwin from the BoR is not a fault that can be allocated to any single party in this case.
- 17.4.61. The ExA notes that the second tenant at the Chamberlains property, Mr Goodwin, was formally notified of his right by the Applicant on 20 January 2022, by letter and by telephone as confirmed by the Applicant. This would mean that Mr Goodwin was notified four weeks before the close of the Examination on 18 February 2022. The ExA finds that this would be adequate time for Mr Goodwin to notify the Examination of his interest to be given IP status and to make a representation. The ExA acknowledges the lateness of the formal notification sent to Mr Goodwin, but considers that he has had a fair opportunity to participate in the Examination, had he chosen to. Since no correspondence has been received by Mr Goodwin, the ExA is satisfied that the effects of the Proposed Development on Mr Goodwin would be considered in the legislative tests in Chapter 22 of this Recommendation Report. The ExA can also confirm that Mr Goodwin has been included in the BoR, which means that he would be entitled to any compensation owed to him.
- 17.4.62. The Chamberlains objection to the CA of their property has been taken into account in Chapter 22 of this Recommendation Report.

17.5. CONCLUSIONS

- 17.5.1. The wider beneficial economic effects of the Proposed Development have been considered and concluded on under the assessment of Need in Chapter 5 of this Recommendation Report. In this Chapter, the ExA has examined, considered, and concluded specifically on the effects of the Proposed Development on a community asset Eltisley Manor mental

health facility; the tenant at Brook Cottages, Mr Baron; the owners and occupiers of the property near Black Cat Roundabout, the Chamberlain); and the second tenant at the Chamberlains' property, Mr Goodwin.

- 17.5.2. The ExA is satisfied that effects of the Proposed Development on Eltisley Manor and corresponding delays for its staff, residents and visitors would be adequately managed through the measures described in the OCTMP [REP10-019, Section 3.16] and secured through R11 of the dDCO [AS-026].
- 17.5.3. Based on the evidence in the Examination, the ExA is content that parties made reasonable adjustments to ensure that Mr Baron was not disadvantaged through the process of negotiation, that he has had a fair chance to participate in the Examination, and that parties have complied with s19 and s20 of the Equality Act.
- 17.5.4. The ExA acknowledges the delay in the Chamberlains starting their participation in the Examination, but on account of the procedural decisions set out in the Rule 8(3) and Rule 17 letter, the ExA is content that the Chamberlains had a fair opportunity to participate in the Examination as an AP and IP would.
- 17.5.5. The ExA sympathises with the Chamberlains and acknowledges the adverse effects of the Proposed Development on their longstanding home and sources of income. However, based on the evidence in the Examination the ExA is content that the Applicant has behaved reasonably with the Chamberlains and offered them reasonable advice and support to navigate the process.
- 17.5.6. While the ExA has not considered matters relating to compensation offered for the Chamberlains property, in accordance with s106(1)(c) of PA2008, the ExA finds that the Applicant's approach to valuation of the property based on evidence and industry guidance from RICS seems reasonable.
- 17.5.7. The ExA acknowledges the lateness of the formal notification sent to Mr Goodwin, but considers that he has had a fair opportunity to participate in the Examination.
- 17.5.8. The ExA acknowledges the adverse effects of the Proposed Development on both Mr Baron and the Chamberlains who would have to relocate from their long-standing homes, and the Chamberlains would lose their source of income. In that regard the ExA disagrees with the Applicant's approach that the loss of these properties is not considered to be critical in the decision-making process and to not identify appropriate mitigation. Because of the permanent and irreversible adverse effects of the Proposed Development on the lives of both Mr Baron and the Chamberlains, the ExA ascribes substantial weight against the order being made.
- 17.5.9. The ExA must clarify that the attribution of weight here is with respect to the effects of the Proposed Development on the specific parties considered here, and does not take into account the wider economic

benefits of the Proposed Development which the ExA has already concluded weighs substantially in favour of making the Order.

18. DIVERSION OF HIGH-PRESSURE PIPELINE

18.1. BACKGROUND AND POLICY CONTEXT

18.1.1. The proposed diversion of Girtford to Horsey Lock High-Pressure Gas Pipeline (pipeline diversion) currently operated by Cadent Gas Limited (Cadent) was identified as a principal issue in the Rule 6 letter [PD-005]. The Examining Authority (ExA) has considered if the pipeline diversion should be treated as a Nationally Significant Infrastructure Project (NSIP) if it meets the thresholds as set out in Section (s) 20(3)(b) of the Planning Act 2008 (PA2008). The ExA examined effects relating to scope and location, consideration of the proposed route and timescales, the assessment of the effects, including on the significance of impact on archaeology, and the adequacy of the draft Development Consent Order (dDCO) to cover the effects of the pipeline diversion.

18.1.2. Wider matters relating to archaeology have been reported on in Chapter 8 of this Recommendation Report.

The Planning Act 2008

18.1.3. The pipeline diversion must be treated as an NSIP if it meets the following thresholds in s20(3)(b) of the PA2008:

- 1) is the construction of gas pipeline by a gas transporter;
- 2) is wholly in England;
- 3) is likely to have a significant effect on the environment;
- 4) will have a design operating pressure of more than 7 bar gauge; and
- 5) when constructed, will convey gas for the supply (directly or indirectly to at least 50,000 customers, or potential customers, of one or more gas suppliers.

National Policy Statement

18.1.4. If the pipeline diversion is considered an NSIP in its own right, then it would be considered against the Overarching National Policy Statement for Energy (NPS EN-1) and the National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4). The policy requirements in NPS EN-1 and NPS EN-4 that are not included in National Policy Statement for National Networks (NPSNN), but would be relevant for the assessment of the pipeline diversion are:

- 1) submission of an Environmental Statement (ES) including an assessment of the impact of the project by the Applicant (NPS EN-1, Paragraph 4.2, NPS EN-4, Paragraph 2.19.3);
- 2) assessment of effects arising from commissioning infrastructure once it is completed but before it comes into operation (NPS EN-1, Paragraph 4.2.3);
- 3) national security considerations that apply across all national infrastructure (NPS EN-1, Paragraph, 4.15);

- 4) presumption in favour of the conservation of designated heritage assets (NPS EN-1, Paragraph 5.120 to 5.142); and
- 5) use of well established standards, covering design, operation and maintenance of UK sector major accident hazard pipelines to demonstrate risks are as low as reasonably practicable, and consultation with the Health and Safety Executive (HSE) (NPS EN-4, Paragraph 2.19.6).

Other legislation and policies

- 18.1.5. Other legislation and guidance relevant to the Proposed Development are set out in the ES [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159], particularly relating to Historic Environment [APP-075, Section 6.2].

18.2. THE APPLICATION

Environmental Statement

- 18.2.1. The Applicant has submitted a Pipeline Statement [APP-248], and a Screening Assessment [APP-158]. The Consultation Report contains a specific section on the consultation for the pipeline diversion [APP-063]. The assessment of the environmental effects of the pipeline diversion is included across all relevant chapters and documents in the ES, notably Chapter 6 Cultural Heritage [APP-075] and related Figures and Appendices.

Scope and methodology

- 18.2.2. The pipeline is currently located south of St Neots and east of the existing Black Cat roundabout in an area currently used for agricultural purposes. The pipeline lies to the east of the East Coast Main Line (ECML) railway and runs parallel with it. The Proposed Development would be constructed in the same location as the pipeline. The pipeline diversion is Work No 51 in Schedule 1 of the dDCO [AS-026].
- 18.2.3. The Applicant has determined that the pipeline diversion would meet all but one of the tests in s20(3)(b) of the PA2008, because the pipeline would be wholly in England, would have a design operating pressure of more than 7 bar gauge and would supply to more than 50,000 customers. The pipeline is expected to be constructed by Cadent (the current operator of the gas pipeline) who is a gas transporter (as it holds a licence under the Gas Act 1986) [APP-248].
- 18.2.4. To determine if the pipeline diversion is an NSIP in its own right, the Applicant would need to assess if it would cause significant environmental effects, to meet the last pending test contained in s20(3)(b) of the PA2008. In order to determine whether the pipeline diversion would have significant environmental effects, the Applicant has done a screening assessment where its effects are assessed alone rather than as part of the wider Proposed Development [APP-158].

- 18.2.5. The Applicant states that the proposed pipeline would be designed in accordance with the relevant standards to ensure risks are as low as reasonably possible, including the Institution of Gas Engineers & Managers' (IGEM's) TD/1 Edition 5 and in accordance with a live data base of Policies, Standards, Specifications, Codes and Procedures. Therefore, in the Applicant's assessment there has been no need to engage with the Health and Safety Executive (HSE) or undertake a gap analysis [APP-240, Appendix B].

Applicant's assessment of effects and mitigation proposed

Assessment of effects

- 18.2.6. At the time of application submission, the findings in the Applicant's assessment were that there would be no likely significant effects of the pipeline diversion on air quality, landscape and visual effects, biodiversity, geology and soils, material assets and waste, noise and vibration, population and health, road drainage and the water environment and climate [APP-158, Table 1-1].
- 18.2.7. For cultural heritage the Applicant stated that the site of the pipeline diversion is not designated. However, through geophysical survey and evaluation trenching it has been identified as a site that has Roman and Iron Age remains and had been evaluated as being of high heritage value archaeological remains [APP-158, Table 1-1]. The site has been identified as Field 44 in the Archaeology summary table [APP-177].
- 18.2.8. The Applicant's qualitative assessment showed that the only factor likely to give rise to significant effects as a result of the pipeline diversion would be adverse effects on the high heritage value archaeological remains. Therefore, to the extent that the adverse effect on the high heritage value archaeology could be minimised or mitigated, it would not give rise to likely significant effects (LSE) and therefore the pipeline diversion would not meet the threshold for an NSIP under s20 of the PA2008 [APP-158, Section 1.4].

Mitigation proposed

- 18.2.9. The Applicant submitted a Planning Application for permission to excavate the archaeological remains to Central Bedfordshire Council (CBC). To the extent that the archaeological remains are excavated pursuant to that planning permission, the adverse effects of the pipeline diversion would effectively be mitigated in advance, and the pipeline diversion itself would not give rise to significant effects on the environment, when constructed as part of the Proposed Development [APP-158, Section 1.4].

18.3. LOCAL IMPACT REPORTS

Central Bedfordshire Council

- 18.3.1. CBC, in its Local Impact Report (LIR), state that the Proposed Development lies within a known archaeological landscape with several multi-period sites within the Order limits and its immediate surroundings. This has been documented in the Central Bedfordshire and Luton Historic Environment Record (CBHER). CBC states that there are no designated heritage assets with archaeological interest within the Order limits. CBC state that while the Proposed Development would have an impact on sub-surface archaeological remains, these sites are now known due to the evaluation works undertaken by the Applicant, and the sites range in date from the Late Bronze Age to the early Saxon period. CBC remains supportive of the proposal in principle, but would welcome further discussion with the Applicant to address the local concerns and secure necessary mitigation [REP2-004].

18.4. THE EXAMINATION

- 18.4.1. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) the need for pipeline diversion and update on the archaeological excavation pursuant of the Planning Permission from CBC; and
 - 2) the process of determining if the pipeline diversion would be an NSIP in its own right.

Pipeline diversion and archaeological excavation

- 18.4.2. Through written questions, site visits, at Hearings and requests for further information under Rule 17 of the Infrastructure Planning (Examination Procedure) Rules 2010 (EPR) (Rule 17 letter) [EV-007, 5a] [PD-008, Q1.8] [PD-009, Q2.8] [EV-021, 10] [PD-014, Q3.8] [PD-017, 2], the ExA sought regular updates on the progress with the archaeological excavation itself and the corresponding updates to the screening assessment. In addition, the ExA asked the Applicant and CBC:
- a. to provide an update on the Planning Application submitted to CBC and a summary of conditions if relevant;
 - b. if alternatives to the pipeline diversion had been considered to avoid affecting the archaeology;
 - c. if the archaeological excavation would be carried out in accordance with the Archaeological Mitigation Strategy (AMS) [REP10-036a]; and for views from Historic England (HistE);
 - d. for evidence of notification and consultation with HSE, in compliance with policy requirements in NPS EN-4 (Sections 2.4); and
 - e. for the provision for the pipeline diversion in the dDCO and the implications of the archaeological excavation that would be carried out pursuant of the Planning Permission from CBC.
- 18.4.3. CBC confirmed right at the outset that Planning Permission had been granted and with the conditions of three year time limit and CBC's approval would be required for the archaeological works post excavation survey [REP1-055, Q1.8.3.2]. The Applicant confirmed that pursuant to the Planning Permission archaeological excavation work in Field 44 started in July 2021 and was programmed to run for 25 weeks, which

would mean completion just before the close of the Examination in January 2022 [REP1-022, Q1.8.3.2]. The ExA also visited the site of pipeline diversion [EV-001] and was able to observe the archaeological excavation work accompanied by the Applicant and CBC [EV-022].

- 18.4.4. Regarding alternatives that could avoid affecting the archaeology, the Applicant explained that the Proposed Development would need to cross this general area there is no location that would avoid the archaeological site without a significant realignment of the proposed carriageway [REP1-022, Q1.8.3.2].
- 18.4.5. While the Applicant and CBC initially had some discussions about the AMS itself, the AMS [REP10-036a] was later agreed between the two parties. This has been reported in Chapter 8 of this Recommendation Report.
- 18.4.6. Relating to the archaeological excavation work in Field 44, Applicant and CBC confirmed [REP1-022, Q1.8.3.2] [REP10-046] [REP10-064] that it was being carried out in accordance with the revised version of the AMS at that time [REP4-031]. The ongoing and completion of work would be undertaken alongside the other archaeological works post consent, in line with the final AMS [REP10-036a] which is a certified document in the dDCO [AS-026]. HistE stated that they considered the matter to be outside its remit, and it was content to defer to the CBC Archaeological Advisors [REP1-078].
- 18.4.7. The Applicant stated that HSE was consulted and responded that it would advise against the Applicant's proposed dual carriageway because it passes through the land use planning zones, specifically the inner zone of these pipelines. However, it also stated that if the gas pipes were moved so that the dual carriageway was not within the inner zones of the above pipelines then HSE would not advise against the proposal [APP-064, Pages 183 to 184]. HSE was again consulted as part of the pipeline diversion consultation and it responded that it would not advise against the proposal [APP-068, Pages 674 to 675]. HSE also stated that the presence of hazardous substances could mean that Hazardous Substances Consent (HSC) is required [APP-064, Pages 183 to 184].
- 18.4.8. In response to HSE and in line with NPS EN-4 (Section 2.4), the Applicant states the proposed pipeline diversion would not include any storage of hazardous substances, and so HSC would not be necessary [REP10-046, 2]. Additionally, the Applicant has submitted written confirmation from Cadent, that the pipeline diversion would comply with HSE Regulations [REP10-046, Appendix A].
- 18.4.9. The Applicant explained the pipeline diversion is Work No 51 in Schedule 1 of the dDCO [AS-026]. Article 59 makes provision for the pipeline diversion works to be carried out pursuant to planning permission granted from CBC, defined as 'advanced works permission' within Article 2. Article 59 recognises that the pipeline diversion works would be carried out in advance of granting of the Order and therefore that the requirements in Schedule 2 of the Order would not apply. However,

should the Applicant or Cadent serve notice that it will carry out the pipeline diversion works pursuant to the Order then the requirements in Schedule 2 of the Order would apply [REP1-022, Q1.8.1.1] [REP10-008].

- 18.4.10. At the close of the Examination the update from CBC and the Applicant confirmed that the archaeological excavation work in Field 44 was 99% complete on 15 February 2022 and will be completed by the end of Examination. However, the full mitigation would only be completed when all the archaeological works, including the post-excavation analysis, assessment, reporting and deposition of the archive has taken place [REP10-046]. CBC further explained that the completion of the post excavation works would be undertaken with the other post consent archaeological works in line with the AMS [REP10-036a]. Furthermore, the works at Field 44 are subject to CBC's planning condition and therefore, if the Order was not made, measures are in place for the completion of the archaeological works [REP10-064].

ExA's reasoning

- 18.4.11. In light of the consultation response from HSE stating the gas pipes would need to move to ensure that the Proposed Development would not be within the inner zones of the pipelines, the ExA considers that the pipeline diversion is essential to the delivery of the Proposed Development. Given the extent of the archaeological remains in the area, the ExA is also convinced that there was no alternative to deliver the pipeline diversion in a way that did not effect the archaeology.
- 18.4.12. The ExA agrees with the Applicant's approach to mitigate Field 44, which involved excavating the archaeology, analysing and assessing it, and producing a report for the archives, in advance of delivering the Proposed Development. In that regard the approach to seek Planning Permission to do the archaeological excavation and the pipeline diversion as advance works is the right one. It follows that the provision in the dDCO under Article 59 is suitable.
- 18.4.13. The main matter before the ExA is if the mitigation of Field 44 would be completed to the extent that there would be no LSE on the archaeology. In this regard the ExA relies on the confirmation from the Applicant and CBC that the excavation has followed the AMS, which has been tested in this Examination, as reported in Chapter 8 of this Recommendation Report. The ExA has noted that there has been consistent agreement between the Applicant and CBC archaeologist regarding the progress with the archaeological excavation work, which was evident through the regular written updates, at a Hearing and as observed by the ExA during the site visit.
- 18.4.14. On this basis, the ExA is confident that the archaeological excavation work completed during the Examination, as reported by the Applicant and CBC, has progressed satisfactorily and to the standard that would be expected of any archaeological mitigation work delivered under this Order, if it were made.

- 18.4.15. Both parties state that the mitigation would be fully completed only when the analysis is completed and reported to archives, in line with the AMS, and with CBC's Planning conditions. As the analysis and archives report is not before the ExA, the ExA has not commented on the post excavation work or its outcome.

Determining if the pipeline diversion would be an NSIP in its own right

- 18.4.16. In light of the near completion of the archaeological excavation work at Field 44, at the close of the Examination the Applicant updated the screening assessment [REP10-016] which states that the pipeline diversion would not give rise to LSE due to the absence of any archaeological receptors. The Applicant also updated the Explanatory Memorandum (EM) [REP10-008] to state that in the absence of LSE arising from the diversion of the gas pipeline, the thresholds in s20 of the PA2008 would not be met and the Cadent pipeline diversion will not be an NSIP in its own right.
- 18.4.17. The ExA asked the Applicant to outline the steps required by the Applicant, Cadent, and subsequently by the Secretary of State (SoS), after the close of the Examination. The Applicant explained [REP1-022, Q1.8.2.1] [REP10-046] that Cadent would agree the final design for the pipeline diversion works and then apply for a screening opinion from the SoS for Business, Energy and Industrial Strategy (BEIS) in accordance with the screening criteria. The screening opinion from the SoS for BEIS, the Applicant anticipates, will confirm no LSE based on the updated screening assessment [REP10-016]. In any event, the screening opinion would determine if the pipeline diversion would be treated as an energy NSIP, reliant on whether the SoS confirms LSE or not [REP10-046].
- 18.4.18. The ExA highlights the letter issued jointly by the Department for Transport (DfT) and BEIS on 30 July 2021², confirming that it has been agreed that the SoS for Transport would be the sole decision maker for the Proposed Development and that the SoS for BEIS would be consulted on the recommendations made by the ExA in relation to the energy NSIP. The comments made by SoS for BEIS would be taken into account when the SoS for Transport makes their decision.

ExA's reasoning

- 18.4.19. ExA is satisfied that the Applicant's process to determine whether or not the pipeline diversion is an NSIP, is consistent with the test set out in s20 of the PA2008. However, given the relevant screening opinion and that the determination from the SoS for BEIS is not before the ExA, the ExA must consider the pipeline diversion to be an NSIP in the context of the recommendation for the Proposed Development.

² <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2021/08/DfT-BEIS-TR010044-TR010032-Transport-DCOs-with-energy-elements.pdf>

- 18.4.20. The ExA highlights CBC's planning condition that CBC's approval would be required for the archaeological works post excavation survey. The ExA suggest that this approval from CBC is sought by the SoS for BEIS when the screening assessment is submitted by Cadent for an opinion.

18.5. CONCLUSIONS

- 18.5.1. Based on the evidence before the ExA, notably the Applicant's screening assessment, consultation with HSE, confirmation of health and safety discipline from Cadent, the archaeological excavation updates from the Applicant, and related endorsement from the planning authority, CBC, the ExA is content that the significant environmental effects of the pipeline diversion have been assessed and would be adequately mitigated in accordance with NPS EN-1 and NPS EN-4. In particular the ExA is convinced that the archaeological work in Field 44, completed so far and ongoing, would be in line with the AMS, and would adequately mitigate the adverse effects on the archaeology. Wider considerations relating to the mitigation of adverse effects on other archaeology and the AMS have been reported in Chapter 8 of this Recommendation Report.
- 18.5.2. The ExA notes that upon satisfactory completion of the archaeological excavation work, the screening opinion from SoS BEIS would likely to determine that the pipeline diversion is not an NSIP. In that circumstance the pipeline diversion would most likely be delivered under the planning permission granted by CBC.
- 18.5.3. However, since the final completion of the archaeological excavation work and the screening opinion from SoS BEIS is not before the ExA, the ExA has determined that the pipeline diversion should be considered an NSIP in the context of the recommendation for the Proposed Development. The ExA has also determined that the pipeline diversion would be needed to enable the delivery of the Proposed Development. As such, the benefit of the pipeline diversion is intrinsically linked to enabling the delivery of the benefits relating to traffic improvements, road safety and economic growth from the Proposed Development. Accordingly, the ExA concludes that the benefits of the pipeline diversion in enabling the delivery of the wider A428 Black Cat to Caxton Gibbet Road Improvement Scheme, would outweigh the harm caused to the archaeology in Field 44. The ExA advises that s104(7) of PA2008 is engaged and the ExA concludes that on the planning balance the case is made for the proposed pipeline diversion. If the pipeline diversion needs to be delivered as part of this Order, that provision is adequately secured in Article 59 and the relevant Requirements in Schedule 2 of the dDCO would apply.

19. SIGNIFICANT CUMULATIVE EFFECTS

19.1. BACKGROUND AND POLICY CONTEXT

- 19.1.1. Significant Cumulative Effects of the Proposed Development was identified as a principal issue in the Rule 6 letter [PD-005]. The Examining Authority (ExA) has considered effects relating to Cumulative Effects with other major projects and interrelated effects on the living conditions of local residents. In-combination effects, as they relate to Habitats Regulation Assessment (HRA), are reported in Chapter 20 of this Recommendation Report.

National Policy Statement

- 19.1.2. The assessment for Cumulative Effects requires the Applicant to provide information on how the effects of the Proposed Development would combine and interact with the effects of other developments, including projects for which consent has been granted, as well as those already in existence (National Policy Statement for National Networks (NPSNN), Paragraph 4.16).
- 19.1.3. The ExA should consider how significant cumulative effects and the interrelationship between effects might as a whole affect the environment, even though they may be acceptable when considered on an individual basis with mitigation measures in place (NPSNN, Paragraph 4.17).
- 19.1.4. When considering combined effects, where different types of effects may affect people simultaneously, the Applicant, and the Secretary of State (SoS) (in determining an application for development consent) should consider the cumulative effects on health (NPSNN, Paragraph 4.82).

Other legislation and policies

- 19.1.5. Other legislation and guidance relevant to the Proposed Development are set out in the Environmental Statement (ES) [APP-084, Section 15.2] [APP-070, Section 1.3] and in Chapter 3 of this Recommendation Report. The local planning policies that are considered relevant to the Proposed Development are also described in the ES [APP-159, Appendix 5.1].

19.2. THE APPLICATION

Environmental Statement

- 19.2.1. The Applicant has set out its case relating to Significant Cumulative Effects in Chapters 15 Assessment of Cumulative Effects [APP-084] and 16 Summary of Significant Effects [APP-085], Figures 15.1 [APP-153] and 15.2 [APP-154], and Appendices 15.1 [APP-228] and 15.2 [APP-229]. Significant Cumulative Effects have also been discussed in other ES chapters, in particular Chapter 5 Air Quality [APP-074], Chapter 11 Noise and Vibration [APP-080], and In-combination Climate Change Impacts (ICCI) in Chapter 14 Climate [APP-083].

Scope and Methodology

- 19.2.2. The Applicant has considered Combined Effects and Cumulative Effects. The assessment of Combined Effects has been considered where an individual receptor would likely be affected by more than one type of effect simultaneously (such as effects on a residential occupant exposed to simultaneous noise and air quality effects as a result of earth moving activities during the construction phase). The Applicant has assessed Cumulative Effects as those resulting from the effects of the Proposed Development acting together with effects associated with other proposed schemes on a single receptor [APP-084, Section 15.3].
- 19.2.3. The Applicant's assessment of Combined Effects has assessed the interaction of noise, air quality and visual effects on residential receptors during both construction and operation [APP-084, Section 15.3.5]. The Applicant's assessment of effects in several policy areas already considers interactions of different types of adverse effects, and those have not been repeated in the assessment of combined effects [APP-084, Section 15.3.5].
- 19.2.4. For the assessment of Cumulative Effects, the Applicant's methodology follows the Planning Inspectorate's (the Inspectorate) Advice Note (AN) 17 on matters relating to establishing the study area and Zone of Influence (ZoI), establishing the long list and short list of other existing or approved developments, information gathering and assessment. The long list of other developments and search methodology was discussed and agreed with the local planning authorities: South Cambridgeshire District Council (SCDC), Central Bedfordshire Council (CBC), Bedford Borough Council (BBC) and Huntingdonshire District Council (HDC) in June 2020 [APP-084, Paragraphs 15.3.41 to 15.3.42]. The short list of five other developments that the Applicant has included in the assessment of Cumulative Effects are:
- 1) Potton Road Housing;
 - 2) mixed use urban extension Wintringham;
 - 3) development at Cambourne comprising: residential, retail, offices/light industry and schools;
 - 4) mixed use development at Loves Farm comprising: residential, hotel employment, school and new access junctions onto Cambridge Road; and
 - 5) new mixed-use village at Bourn Airfield.
- 19.2.5. Traffic related effects are presented within the Transport Assessment [APP-241 to APP-243], which includes details of the other development projects included within the traffic model. Since the forecasts derived from the traffic model has informed the assessment of effects to: Air Quality, Noise and Vibration, Population and Human Health, and Road Drainage and Water Environment, the Applicant asserts that by default the cumulative effects with other development projects are included and reported within their operational assessments.

Applicant's assessment of effects and mitigation proposed

- 19.2.6. The Applicant's assessment [APP-084, Table 15-3] is that the construction of the Proposed Development would result in moderate adverse Combined Effects for 19 receptors and large adverse effects for four receptors (receptors R11, R36, R37 and R52) [APP-112]. The Applicant's assessment is that during operation the Proposed Development would likely result in significant beneficial combined effects at one receptor and large adverse combined effects at seven receptors. Eight receptors are likely to experience moderate adverse combined effects, but four would reduce to slight adverse at year 15 as planting matures. All operational in-combination effects are of a permanent nature [APP-084, Table 15-4].
- 19.2.7. Of the five other developments included in the assessment of Cumulative Effects, the Applicant considers that Potton Road Housing and Bourn Airfield would not cause any significant cumulative effects with the Proposed Development [APP-084, Paragraph 15.6.2]. The Applicant has assessed that the Wintringham development would cause temporary moderate adverse or slight adverse cumulative landscape effect on the local landscape area, and temporary moderate adverse cumulative construction noise effect at R25 [APP-112]. With the other development, Cambourne, the Applicant has assessed temporary moderate adverse cumulative landscape effect on the local landscape, and moderate adverse cumulative visual effect reducing to slight adverse by year 15, and to neutral cumulative effect by year 1 of the Proposed Development [APP-084, Paragraph 15.6.3].
- 19.2.8. The Applicant's proposed embedded mitigation that is common across the Proposed Development is set out in the ES [APP-071, Table 2.1]. Additionally, the Applicant's proposed essential mitigation measures that would be delivered across other receiving environments are summarised in the ES and secured in the First Iteration Environmental Management Plan (EMP). The Applicant has proposed no further mitigation measures to alleviate the temporary construction related combined effects [APP-084, Section 15.5]. Similarly for construction and operation related Cumulative Effects, the Applicant has proposed no additional mitigation measures above those presented within the First Iteration EMP, and no monitoring of significant effects is proposed [APP-084, Section 15.7].

19.3. LOCAL IMPACT REPORTS

Central Bedfordshire Council

- 19.3.1. Central Bedfordshire Council (CBC) in their Local Impact Report (LIR) [REP2-004] expressed concern that the Applicant had not adequately factored in the Cumulative Effects of the Proposed Development with the East-West Rail Link (EWR) proposals on Air Quality and traffic generation due to the proposed new station at Tempsford or St Neots, and noise. Regarding cumulative noise effects, CBC were concerned because they anticipated noise from the A1 to dominate to such an extent that the

uplift to the noise levels from the EWR operation overall would have little additional impact over and above that already identified. However, the cumulative effects still need to be considered and demonstrated as both are major infrastructure projects that are likely to impact on the ambient noise environment and air quality in this area for the long-term. CBC noted concerns regarding the communication and co-ordination between the two project teams.

- 19.3.2. Matters relating to the inclusion of EWR proposal in the Cumulative Effects Assessment (CEA) has been reported here. Matters relating to Air Quality, traffic congestion and Noise are reported in Chapters 12, 6 and 13 of this Recommendation Report.

Cambridgeshire Councils

- 19.3.3. The joint LIR from Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils) [REP2-003], noted concerns regarding assessment of Cumulative Effects of the Proposed Development with respect to carbon emissions and Public Rights of Way network (PRoW). These matters have been discussed in Chapters 9 and 6 of this Recommendation Report respectively.

19.4. THE EXAMINATION

- 19.4.1. In-combination effects, as they relate to HRA, are reported in Chapter 20 of this Recommendation Report. Other chapters where, Significant Cumulative Effects have been reported are Chapters 6 and 9.
- 19.4.2. Issues emerging during Examination that the ExA has examined, considered, and concluded on are:
- 1) Scope of the CEA and adequacy of proposed mitigation;
 - 2) Whether or not EWR project should be included in the CEA; and
 - 3) Consideration of the likely interactions between the Proposed Development and EWR project.
- 19.4.3. Matters relating to the Applicant's regard to the EWR project on the assessment of need for the Proposed Development and the findings of that assessment are reported in Chapter 5 of this Recommendation Report.

Scope of the CEA and adequacy of proposed mitigation

- 19.4.4. The ExA sought confirmation from Local Authorities (LA) if they were satisfied this the Applicant's Approach to assessing Cumulative Effects and Combined Effects, if effects of construction traffic had been included in the assessment of Combined Effects, and if they agreed with the five other schemes that had been shortlisted for the assessment of Cumulative Effects. No concerns were raised from LAs [REP1-040, Section Q1.17] [REP1-051, Section Q1.17] [REP1-055, Appendix 1]. The Applicant reiterated that a construction traffic model was developed for

the Proposed Development to establish the likely number of vehicles that would be added to the road network during each phase of construction. This modelling informed the assessments of Air Quality, Noise and Vibration. Landscape and Visual Effects. Accordingly, the Applicant confirmed that the CEA has appropriately considered the combined effects on receptors of construction traffic by virtue of this being a component assessed within the construction-based assessments of the receiving environments [REP1-022, Q1.17.1.1].

- 19.4.5. The ExA enquired if it was adequate for the Applicant to propose no further mitigation for the significant cumulative effects that would be caused by the Proposed Development and three other proposed schemes, and for the receptors that would experience large and moderate adverse combined effects. The Cambridgeshire Councils highlighted additional mitigation for some receptors that would experience large and moderate adverse combined effects [REP1-051, Q1.17.3.1]. The Applicant responded that most of the additional mitigation as suggested by the Cambridgeshire Councils would not further reduce the adverse effects or accelerate the effectiveness of mitigation [REP3-007]. Cambridgeshire Councils did not raise any further concerns in this regard [REP3-042].
- 19.4.6. The ExA further suggested if additional mitigation could be identified in the form of a first point of contact for community members and landowners to provide immediate and short-term mitigation to effects of the construction period. Cambridgeshire Councils added that any such mitigation would ideally provide early engagement and in that regard, the First Iteration EMP is too high level and the provision of the Second Iteration EMP may be too late in some circumstances [REP4-056, Q2.17.3.1]. The Applicant responded [REP4-037, Q2.17.3.1] to confirm that there is a commitment for the Proposed Development to be supported by a Community Relations Manager who would be responsible for managing communications with the public, stakeholders and LAs during construction, and liaising with the Principal Contractor regarding any concerns raised and to implement appropriate response measures. This role has been secured in the First Iteration EMP [REP10-018, Table 2-1], and the Applicant explains it is embedded mitigation.

ExA's reasoning

- 19.4.7. The ExA considers that construction of NSIPs inevitably lead to the accumulation of inter-related adverse effects for some receptors and can put stress on affected communities. The Applicant's approach of assessing Combined Effects (where an individual receptor would likely be affected by more than one type of effect simultaneously) and Cumulative Effects (resulting from the effects of the Proposed Development acting together with effects associated with other proposed schemes on a single receptor) is an effective one and in line with the NPSNN (Paragraphs 4.17 and 4.82).
- 19.4.8. The ExA finds that the Applicant's presentation to not propose any additional mitigation [APP-084, Table 15-3, 15-4] for receptors that would experience moderate and large adverse effects is not effective or immediately explicable. In that regard, securing the Community

Relations Manager in the First Iteration EMP, as the Applicant highlighted later in the Examination, goes some way in providing a means for community members and LAs to report concerns and complaints. The ExA considers there is value in Cambridgeshire Councils' suggestion for early engagement between the Community Relations Manager and the affected receptors. Given the Community Relations Manager has a role in reviewing relevant sections of the Second Iteration EMP, and developing appropriate mitigation, control and protection measures for sensitive receptors in local communities [REP4-037, Q2.17.3.1] [REP10-018, Table 2-1], the ExA believes that there is an opportunity for the Applicant to take the proactive step of initiating early engagement with particular receptors.

- 19.4.9. On the basis of the evidence and representations in Examination, the commitments secured through the First Iteration EMP [REP10-018], Requirement (R) 2 and R3, and Schedule 10 in the dDCO [AS-026], and the ExA's aforementioned reasoning, the ExA is satisfied that the Applicant's proposed methodology for assessing Combined Effects and Cumulative Effects and the adequacy of the proposed mitigation.

Whether or not EWR should be included in the CEA

- 19.4.10. EWR wrote to the Examination on 30 June 2021, after the close of the Relevant Representation (RR) period (on 10 June 2021), stating that they had been tasked by the Government to deliver a rail project connecting Oxford and Cambridge and EWR intended to make an application for a DCO for the section between Bedford and Cambridge. Because the rail project would be in close proximity to the Proposed Development, EWR considered there to be significant engineering interfaces between them. As such EWR wished to take part in the examination of the Proposed Development in order to seek appropriate protection for the rail project. EWR acknowledged that it was not an Interested Party (IP) in the application within the meaning of Section (s) 102(1) of the Planning Act 2008 (PA2008), but as a promoter of a registered NSIP, it suggested that it should be treated during the Examination as if it were an IP [AS-004].
- 19.4.11. The ExA used its discretion to accept the representation from EWR and invited EWR to the Preliminary Meeting Part 1 (PM1) on Tuesday 10 August 2021. At PM1, the ExA explained that while EWR were not an IP because their submission was received after the close of the RR period and they did not meet any of the criteria in s102A and 102B of the PA2008, EWR had status of 'Other Person' and as it is allowed under the provisions in the Infrastructure Planning (Examination Procedure) Rules (EPR) 2010, in particular Rule 6, the ExA will allow EWR to participate in all aspects (written and oral) of the Examination as an Other Person [EV-002 to EV-004]. The Applicant, EWR or any other IPs did not object to this approach.
- 19.4.12. The Examination of the interactions between EWR and the Proposed Development was prominent through the Examination. At the outset, the ExA asked for confirmation of status and policy support for the EWR project. EWR set out that SoS made a declaration under S35 PA2008 that

the works to be comprised in the proposed new railway between Bedford and Cambridge should be treated as development for which development consent is required, and set out the policy support embodied in national and local policies [REP1-074, Q1.17.4.1a].

- 19.4.13. In addition to its LIR [REP2-004], CBC reiterated in its Written Representation (WR) [REP1-055], the need for a joined-up approach between the Proposed Development and EWR to ensure the Cumulative Effects are assessed. Several other IPs also made representations regarding the lack of coordination between the Proposed Development and the EWR project and potential cumulative effects [too numerous to list]. The ExA asked for views with reference to the Inspectorate's Advice Note 17, if the EWR project should be included in the assessment of Cumulative Effects in the ES. EWR and Applicant, both responded that the EWR project is not a development that is of sufficient certainty to be apt for the assessment of Cumulative Effects with the Proposed Development [REP1-074, Q1.17.4.1g] [REP1-022, Q1.17.4.1g]. EWR clarified that after the second non-statutory consultation two route alignments were identified as potential emerging preferences [REP1-073] [REP1-074, Q1.17.4.1] [EV-010] [EV-013].
- 19.4.14. The Applicant added that in accordance with the four-stage assessment approach contained in Advice Note 17, the Stage 1 long list of other developments included EWR project and categorised it as a Tier 3 development on the basis that a scoping report had not yet been prepared and because project information within the public domain was limited [APP-228]. While EWR project's possible geographical and temporal relationships with the Proposed Development were acknowledged, there was limited information regarding its likely environment effects, and the extent and timing of its effects. Accordingly, the EWR project was discounted from further consideration as the Applicant concluded that the absence of this information prevented a meaningful CEA being undertaken [REP1-022, Q1.17.4.1g]. The Applicant reiterated these points in response to CBC's concerns [REP3-009].
- 19.4.15. Matters relating to the provision for pedestrian and cyclist access under and over the new A428 around Barford Road to accommodate traffic to potentially a new EWR station in the area, air quality and noise effects for reasons wider than just Cumulative Effects, remain unresolved and not agreed between the Applicant and CBC [REP10-024]. The discussion of these matters was wider than just Cumulative Effects and has been covered in greater detail in in Chapters 12, 6 and 13 of this Recommendation Report.

ExA's reasoning

- 19.4.16. Given that EWR project would be examined as an NSIP and its geographical proximity to the Proposed Development, the ExA is satisfied with its early decision to accept EWR's submission and allow it to participate in the Examination as Other Person, in its role as the promoter of EWR project.

- 19.4.17. The ExA considers CBC's points are well made particularly in the LIR and WR, where CBC anticipate that the Cumulative Effects of both NSIPs need to be considered together, because there is a risk that the additionality of one scheme may not seem significantly adverse, but collectively are likely to affect and change the local area near Barford Road, Sandy and Tempsford in a significant way and for a long time. However, given the Inspectorate's guidance contained in Advice Note 17, the ExA cannot disagree with the Applicant's and EWR's agreed position that it would not be appropriate to include EWR in the CEA for the Proposed Development due to the uncertainty with EWR project and the lack of detail and information. As such, the ExA is satisfied with the CEA in the application and the other developments included in it.
- 19.4.18. The ExA acknowledges representations from several IPs as well as LAs about the lack of coordination between the Proposed Development and the EWR project, given the potential geographical proximity and engineering interfaces between the two. However, the Proposed Development and the EWR project are two separate projects, brought forward by two different promoters. Given the difference between the timescales and stages of development, the coordination between the two projects or lack thereof is beyond the scope of this Examination.
- 19.4.19. The ExA has considered the Applicant's approach to CEA with regards to the CEA of greenhouse gas (GHG) emissions of the Proposed Development in Chapters 4 and 9 of this Recommendation Report.

Consideration of the likely interactions between the Proposed Development and EWR

- 19.4.20. EWR asserted that as a promoter of a registered NSIP its position is analogous to that of a Statutory Undertaker (SU). EWR summarised for each of the shortlisted route alignments the engineering interface between the EWR project and the Proposed Development, in particular for routes one and nine that were emerging as EWR preferred alignments, and had more significant interfaces with the Proposed Development. Consequently, all through the Examination EWR asserted that the dDCO for the Proposed Development include Protective Provisions (PP) for the protection of its undertaking, to secure joint working, and clarity regarding the process where there is an interface between the two projects. EWR acknowledged that the EWR project was not yet a physical asset, but considered the inclusion of PP would be appropriate, and would reflect the approach typically adopted for the protection of undertakings, as opposed to assets [AS-004] [REP1-074, Q1.17.4.1] [REP4-067, Appendix 1] [REP6-094] [REP8-044] [REP8-045] [REP9-049].
- 19.4.21. In response, the Applicant resisted including PP in the dDCO in the absence of any clear existing apparatus which would need to be protected. Instead, the Applicant offered an alternative cooperation agreement as a more suitable mechanism through which engagement between the two parties could be managed [REP1-021] [REP3-007] [REP8-014]. The Applicant provided a point by point response regarding

the unsuitability of the draft PP [REP6-031]. In response to ExA's queries regarding the protection afforded to the EWR project in the cooperation agreement, the Applicant stated that it did not consider that protection is required to be secured for EWR, given there had not been a preferred route announcement, and no specific evidence to suggest that the Proposed Development would prejudice EWR's ability to deliver their project. Consequently, the Applicant concluded that the cooperation agreement would not be material consideration for the ExA [REP8-014, Q3.5.2.2].

- 19.4.22. To accompany the draft PP, EWR also proposed that it should be listed in Article 11(5) of the dDCO, which would mean that the SoS's consent would not be required in order for the undertaker to transfer or grant the benefit of the provisions of the dDCO to EWR. EWR stated that this reflected the position in respect of the other SU listed at Article 11(5) and would circumvent the administrative burden of seeking the SoS's consent where specified works were to be constructed by EWR [REP6-094] [REP8-044]. In response the Applicant resisted this proposal for the same reasons that the entities listed in 11(5) are SU and they are listed against specific works to their existing assets. The Applicant did not consider this to be comparable to EWR, who it stated was not a SU and did not have existing assets. The Applicant added that this did not preclude EWR from carrying out works under the Order, simply that SoS approval would first be required [REP10-028].
- 19.4.23. Before the close of the Examination, EWR stated that an agreement had been completed with the Applicant. Accordingly, EWR withdrew the representations it submitted into Examination, and confirmed that it no longer required the draft PP to be included in the dDCO [REP10-067]. However, EWR maintained its position that EWR should be listed in Article 11(5) of the dDCO. This matter remains not agreed at the close of the Examination [REP10-028].

ExA's reasoning

- 19.4.24. ExA considers that the negotiations on the interactions between the Proposed Development and EWR was managed inefficiently and in a way that was wasteful of Examination time. Given the lack of detail on the EWR projects, the ExA agrees with the Applicant that the content of any cooperation agreement would be outside the scope of the Examination. The ExA however notes that the Applicant and EWR could have ensured that the negotiations were further progressed prior to Examination, enabling the ExA to focus on the relevant matters relating to the assessment of need, CEA and design and engineering interfaces (if relevant).
- 19.4.25. Given the request for PP has been withdrawn, the ExA is not going to reason or conclude on that matter. However, given the case for PP for the EWR project in the dDCO has not been made, the ExA finds the inclusion of EWR in Article 11(5) in the dDCO is not justified, and agrees with the Applicant that EWR's position is not comparable to a SU. The ExA also considers that the works that may need to be carried out by EWR may or may not have been assessed in the ES. As such, any

potential works by EWR are not comparable to the specific works that the SU listed in Article 11(5) may need to do to their existing assets because these works have been assessed in the ES. Additionally, in the absence of a preferred route and supporting details, the ExA strongly recommends not including EWR in Article 11(5) to ensure that any work that EWR may want to carry out under the Order, would need to be considered the SoS for approval. In its consideration, the SoS would need to ensure that the environmental effects of the proposed works do not give rise to any materially new or materially different environmental effects to those identified in the ES.

19.5. CONCLUSIONS

- 19.5.1. The ExA is satisfied with the Applicant's proposed methodology for assessing Combined Effects and Cumulative Effects and the adequacy of the proposed mitigation. The ExA also accepts that it would not be appropriate to include EWR in the CEA for the Proposed Development in line with the guidance contained in Advice Note 17.
- 19.5.2. The ExA acknowledges representations from several IPs as well as LAs about the lack of coordination between the Proposed Development and the EWR project, given the potential geographical proximity and engineering interfaces between the two. However, the Proposed Development and the EWR project are two separate projects, brought forward by two different promoters. Given the difference between the timescales and stages of development, the coordination between the two projects or lack thereof is beyond the scope of this Examination.
- 19.5.3. The ExA is satisfied that the Proposed Development would be in line with the policy requirements of NPSNN (Paragraphs 4.16, 4.17 and 4.82). Taking all the matters reported here, ExA and gives Significant Cumulative Effects, limited weight against making of the Order.

20. FINDINGS AND CONCLUSIONS IN RELATION TO HABITATS REGULATIONS ASSESSMENT

20.1. INTRODUCTION

20.1.1. This Chapter sets out the ExA's analysis and conclusions relevant to the Habitats Regulation Assessment (HRA). This will assist the Secretary of State for Transport (SoS), as the Competent Authority, in performing their duties under the Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations').

20.1.2. This Chapter is structured as follows:

- Section 1.3: Findings in relation to Likely Significant Effects on the UK National Site Network and European sites;
- Section 1.4: Conservation objectives for sites and features;
- Section 1.5: Findings in relation to Adverse Effects On Integrity; and
- Section 1.6: HRA conclusions.

20.1.3. In accordance with the precautionary principle embedded in the Habitats Regulations, consent for the Proposed Development may be granted only after having ascertained that it will not adversely affect the integrity of European site(s)³ and no reasonable scientific doubt remains⁴.

20.1.4. The ExA has been mindful throughout the Examination of the need to ensure that the SoS has such information as may reasonably be required to carry out their duties as the Competent Authority. We have sought evidence from the Applicant and the relevant Interested Parties (IPs), including Natural England (NE) as the Appropriate/Statutory Nature Conservation Body (ANCB), through written questions and ISHs.

RIES and Consultation

20.1.5. The ExA produced a Report on the Implications for European Sites (RIES) [PD-013] which compiled, documented, and signposted HRA-relevant

³ For the purposes of this chapter, in line with the Habitats Regulations and relevant Government policy, the term "European sites" includes Special Areas of Conservation (SAC), candidate SACs, possible SACs, Special Protection Areas (SPA), potential SPAs, Sites of Community Importance, listed and proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on any of these sites. For ease of reading, this chapter also collectively uses the term "European site" for 'European sites' defined in the Conservation of Habitats and Species Regulations 2017 and 'European Marine Sites' defined in the and the Conservation of Offshore Marine Habitats and Species Regulations 2017, unless otherwise stated.

⁴ CJEU Case C-127/02 Waddenzee 7 September 2004, Reference for a preliminary ruling from the Raad van State (Netherlands) in the proceedings: Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij

information provided in the DCO application and Examination representations up to Deadline (D)6 (14 December 2021). The RIES was issued to set out the ExA understanding on HRA-relevant information and the position of the IPs in relation to the effects of the Proposed Development on European sites at that point in time. Consultation on the RIES took place between 17 December 2021 and 14 January 2022. Comments were received from the Applicant [REP8-015] and NE [REP8-048] at D8 (14 January 2022). Responses to these comments on the RIES were then submitted by the Applicant [REP9-026] at D9 (25 January 2022). These comments have been taken into account in the drafting of this Chapter. It is important to note that at the time of publishing the RIES, the 2021 bat surveys had not been completed and the final findings had not yet been submitted to the examination; as a result, the consultation on the RIES was not comprehensive of all the developments within the examination. However, following the submission of the survey results at D8, NE and other IPs had the opportunity to provide comments (and NE did so [REP9-056]).

- 20.1.6. The ExA's recommendation is that the RIES, and consultation on it, may be relied upon as an appropriate body of information to enable the SoS to fulfil their duties of consultation under Regulation 63(3) of the Habitats Regulations, should the SoS wish to do so.

20.2. PROPOSED DEVELOPMENT DESCRIPTION AND HRA IMPLICATIONS

- 20.2.1. The Applicant's assessment of effects is presented in the following application document:
- Habitats Regulations Assessment: No Significant Effects Report [APP-233], hereafter referred to as 'the Applicant's NSER'.
- 20.2.2. The Applicant's NSER includes evidence of consultation with NE [APP-233, Appendix C].
- 20.2.3. The spatial relationship between the Order limits of the Proposed Development and European sites is shown in Figures 1 and 2 of Appendix A to the No Significant Effects Report [APP-233].
- 20.2.4. The Proposed Development is not directly connected with, or necessary to, the management of a European site. Therefore, the SoS must make an 'appropriate assessment' of the implications of the Proposed Development on potentially affected European sites in light of their Conservation Objectives.
- 20.2.5. Additional information was submitted during the Examination.
- 20.2.6. At D6 in response to ISH4 actions [EV-091, 3], the Applicant submitted the citations for the Ouse Washes SPA and Ramsar site [REP6-030 Appendix A]. In response to WQ3, the Applicant submitted a revised screening matrix for the Ouse Washes SPA [REP8-015, Appendix A]. This updated screening matrix replaces Table 2 of the NSER [APP-233], and

clarifies which features were assessed. This did not alter the conclusions of the assessment.

- 20.2.7. In response to concerns raised by NE [RR-076], the Applicant undertook further bat survey work during the examination and presented the results in the following documents:
- Complete Bat Survey Results for the A428 Black Cat Scheme - Parts 1 to 3 [REP9-030 to 032].
- 20.2.8. The Applicant's opinion is that the survey results support the original conclusions of the NSER [APP-233]. However, in response to a request from NE, the Applicant (without prejudice to their position of no likely significant effect) submitted the following document with respect to the Eversden and Wimpole Woods SAC, should the SoS consider that it is necessary to undertake an 'Appropriate Assessment' in the determination of the DCO application:
- Habitats Regulations Assessment Report to Inform Appropriate Assessment - Rev 1 [REP8-016], hereafter referred to as 'the Applicant's AA'.
- 20.2.9. This was revised at D10 [REP10-040] to respond to concerns raised by the ExA [PD-017] pertaining to the in-combination assessment. References to 'the Applicant's AA' generally refers to the latest version [REP10-040] unless otherwise specified.
- 20.2.10. The Applicant has not identified any Likely Significant Effects (LSE) on European sites in European Economic Area (EEA) States in its NSER [APP-233] or within its ES [APP-070 to APP-229]. Only European sites which form part of the UK National Site Network are addressed in this Report. No such impacts were raised for discussion by any IPs during the Examination.

Summary of HRA Matters Considered During the Examination

- 20.2.11. The main HRA matters raised by the ExA, NE and other IPs and discussed during the Examination were:
- Whether there was sufficient information available to rule out LSE with regard to the Eversden and Wimpole Woods SAC Barbastelle bat population.
 - Whether negative screening conclusions pertaining to the hydrologically connected sites (Ouse Washes SAC, SPA and Ramsar site and Portholme SAC) relied on measures intended to avoid or reduce the harmful effects of the Proposed Development on the sites (which would go against the European Union Court of Justice (CJEU) Sweetman judgement (C-323/17)⁵).

⁵ The 2018 ruling by the Court of Justice of the European Union (the CJEU) on the interpretation of the Habitats Directive in the case of People Over Wind and

- Whether the Applicant had screened all the correct features for the Ouse Washes SPA and Ramsar site.

These matters are discussed in the Sections below, as appropriate.

20.2.12. Matters which were undisputed by IPs, including NE as the ANCB were:

- Conclusions with respect to the Ouse Washes SAC, SPA and Ramsar site and Portholme SAC.

20.3. FINDINGS IN RELATION TO LIKELY SIGNIFICANT EFFECTS (LSE)

- 20.3.1. Under Regulation 63 of the Habitats Regulations, the Competent Authority must consider whether a development will have LSE on a European site, either alone or in combination with other plans or projects. The purpose of the LSE test is to identify the need for an 'appropriate assessment' (AA) and the activities, sites or plans and projects to be included for further consideration in the AA.
- 20.3.2. The Applicant carried out a pre-screening site selection exercise to identify the European sites and the qualifying interest features to be taken forward into the screening stage; this was referred to as a 'scoping' stage and is summarised in Paragraphs 3.2.5-3.2.7 of the NSER [APP-233]. The European sites and qualifying features that were considered in the Applicant's assessment of LSE are presented in Table 2.1 of the RIES [PD-013]. The sites included:
- Ouse Washes SAC;
 - Ouse Washes SPA;
 - Ouse Washes Ramsar site;
 - Portholme SAC; and
 - Eversden and Wimpole Woods SAC.
- 20.3.3. The NSER [APP-233] sets out the conservation objectives for the sites in Tables 4-2, 4-3 and 4-4.
- 20.3.4. Appendix C of the NSER [APP-233] includes correspondence from NE dated 28th July 2019 confirming agreement that the European sites identified should be the focus of the HRA. Agreement with the sites screened is also provided in the SoCG with NE [REP10-023]. No IPs raised concerns about the scope of the European sites considered.
- 20.3.5. During the examination, the ExA sought confirmation of the qualifying features of the Ouse Washes SPA and Ouse Washes Ramsar site. This was raised at ISH4 [EV-055, 3a] [EV-091, 3] and in response the Applicant provided the citations for the two sites at D6 [REP6-030 Appendix A]. The citation for the Ouse Washes SPA was dated 1992 and

Sweetman vs Coillte Teoranta (2018) ('the Sweetman judgement'), confirmed that mitigation should not be taken into account at screening stage.

considering more recent Supplementary Advice from NE⁶ (2019), the ExA questioned in the RIES [PD-013, Paragraph 2.1.5] and in Q3.3.4.1 [PD-014], whether the Applicant had analysed the correct features. The Applicant accepted that the consideration of these features was not entirely clear [REP8-015] and submitted a revised screening matrix for the Ouse Washes SPA [REP8-015, Appendix A]. This updated screening matrix replaced Table 2 in Appendix D of the NSER [APP-233], and clarified which features were assessed. The Applicant also commented on other differences between the 1992 and 2019 citations [REP8-014], however these did not alter the conclusions of the assessment.

- 20.3.6. No IPs raised concerns about the qualifying features of the European sites considered.
- 20.3.7. The ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 20.3.8. The Applicant's NSER sets out the methodology applied to determining what would constitute a 'significant effect' at Paragraph 3.2.19 of the NSER [APP-233]. The identification of LSE was determined based on four factors:
- the likelihood that a qualifying feature would be present in the area surrounding the Proposed Development.
 - the likelihood that a pathway exists that connects the qualifying feature to a population protected within a European Site and the extent to which the qualifying feature contributes to that population.
 - the ability of the qualifying feature to avoid or adapt to impacts.
 - the conservation objectives for the European Site and the importance of the area around the Proposed Development to the qualifying feature.

LSE from the Proposed Development Alone

- 20.3.9. The Applicant's NSER [APP-233] concluded no LSE from the Proposed Development alone on all of the qualifying features of all five sites screened:
- Ouse Washes SAC;
 - Ouse Washes SPA;
 - Ouse Washes Ramsar site;
 - Portholme SAC; and
 - Eversden and Wimpole Woods SAC.

Ouse Washes SPA, SAC and Ramsar site and Portholme SAC - water quality effects

⁶ NE Ouse Washes SPA Conservation Objectives Supplementary Advice (2019)
<http://publications.naturalengland.org.uk/publication/6636062256398336>
 Published 2019/03/23

- 20.3.10. The ExA had concerns, prompted by the wording used by NE in their RR [RR-076], that the negative screening conclusions pertaining to the hydrologically connected sites (Ouse Washes SAC, SPA and Ramsar site and Portholme SAC) relied on measures intended to avoid or reduce the harmful effects of the Proposed Development on the sites (contrary to the Sweetman judgement).
- 20.3.11. As explained in Paragraphs 3.1.1 to 3.1.3 of the RIES [PD-013], NE confirmed at ISH3 [EV-044] [EV-049] that the measures are embodied mitigation and would have been necessary regardless of the presence of the designated site and are therefore not relied on solely for the purposes of the assessment conclusions on LSE. The Applicant provided further evidence in [REP3-007] that the intervening hydrological distances between the Proposed Development and the Ouse Washes SPA, SAC and Ramsar site and the Portholme SAC (43.2 kilometres (km) and 20km respectively) and natural dilution rates and settlement rates, are sufficient on their own to conclude no LSE on these sites.
- 20.3.12. The Applicant's conclusions regarding the impacts to these sites were not disputed by NE or any IP.
- 20.3.13. The ExA agrees on the basis of the information provided, with the Applicant's conclusion of no LSE for the Ouse Washes SPA, SAC and Ramsar site and Portholme SAC from the Proposed Development alone.

Eversden and Wimpole Woods SAC – species displacement effects

- 20.3.14. As explained in the RIES [PD-013, Paragraphs 3.1.4 to 3.1.14], during the examination the Applicant's conclusion of no LSE for the Eversden and Wimpole Woods SAC Barbastelle bat feature was disputed by NE [RR-076] [REP1-087] [REP1-010] and Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (hereafter 'the Cambridgeshire Councils') [REP1-048].
- 20.3.15. NE disagreed that there was sufficient information available to rule out LSE with regard to the Eversden and Wimpole Woods SAC Barbastelle bat population [RR-076] [REP1-087]. NE argued that Barbastelle bats are known to travel up to 20km from their roosting sites, which is within reach of the Proposed Development boundary (8km away at its nearest point), and that the application documents do not provide sufficient evidence to prove, beyond reasonable doubt, that functional linkages do not exist between the SAC and the Barbastelle bat roosts within, or immediately surrounding, the Order limits. The Cambridgeshire Councils [REP1-051] shared this view.
- 20.3.16. NE requested that further survey work be undertaken to fill the data gaps and improve the understanding of how the Barbastelle population from the SAC interacts with the wider landscape [REP1-087] [REP1-088]. This position was supported by the Cambridgeshire Councils [REP1-048] [REP1-052].
- 20.3.17. In response to this, the Applicant agreed [REP1-033] to undertake further bat surveys during 2021 before the close of the examination,

whilst maintaining their position that sufficient information already existed to rule out LSE on Eversden and Wimpole Woods SAC.

- 20.3.18. It was confirmed at ISH3 [EV-044] [EV-049] and ISH4 [EV-059] [EV-064] that NE and the Cambridgeshire Councils were in agreement with the Applicant over the proposed scope of the additional surveys. The surveys took place between September and December 2021 and comprised:
- habitat suitability inspections;
 - crossing point surveys at locations along the Scheme; and
 - advanced licence bat survey techniques (ALBST) to trap and tag Barbastelle bats within Eversden and Wimpole Woods SAC.
- 20.3.19. The surveys were completed in December 2021 and the findings were submitted at D8 [REP8-009] (see also the compiled Complete Bat Survey Results submitted at D9 [REP9-030 to 032]). The survey results concluded that the Barbastelles trapped and tagged during the September 2021 trapping and tracking surveys at the SAC did not roost or spend any time foraging or commuting within or close to the Proposed Development's Order limits. In addition, the bat crossing point surveys and woodland hibernation suitability results indicate low usage of the Order limits and adjacent woodlands by local Barbastelle populations.
- 20.3.20. A further additional data source was also discussed and submitted during the examination: NE noted at ISH4 [EV-059] [EV-064] that ALBST results undertaken for the East West Rail (EWR) project in 2020 supported the findings of the Applicant's 2021 trapping and tracking (i.e. that no Barbastelle bats trapped and tagged at the SAC interacted with / crossed the Order limits). The EWR results were requested by the ExA [EV-091, 5] and submitted at D6 [REP6-053], however the Applicant clarified [REP8-018] that the EWR 2020 bat survey was not relied upon as part of the Environmental Statement or NSER.
- 20.3.21. As discussed in the biodiversity chapter of this report, there were also discussions during the examination regarding the scope of the 2018/2019 bat surveys (concerns regarding the bat activity surveys April/May to October 2018 (transects) and June to October 2019 and April/May to October 2018 (statics) and Bat Crossing Point Surveys May to September 2019 were raised by NE [REP9-056]).
- 20.3.22. The ExA [PD-017] sought a response from the Applicant to these concerns and also queried the robustness of the 2021 survey conclusions, raising the possibility that some SAC bats may use the site of the Proposed Development and so may be affected by it.
- 20.3.23. In response to the Rule 17 [PD-017], NE [REP10-066] clarified that:
- *NE "is satisfied that the Applicant's SAC barbastelle bat trapping and tagging data adequately demonstrates that SAC barbastelles are not interacting with the area of the Proposed Scheme. This is supported by other survey data referenced in the HRA [referring to the Applicant's AA [REP8-016]]";*

- *"It would not be possible to prove that the barbastelle SAC population never use the area of the Proposed Scheme without trapping and tagging the whole population"; and*
- *"Whilst the HRA data sets are based on relatively small samples, in the context of the size of the SAC barbastelle population and bearing in mind the above points, Natural England is satisfied that the sample size and survey data obtained is sufficient to demonstrate, beyond reasonable scientific doubt, that SAC barbastelles are not interacting with the Proposed Scheme".*

- 20.3.24. The SoCG with NE [REP10-023] also records the ANCB's satisfaction with the consolidated bat survey data and the HRA baseline.
- 20.3.25. The Applicant therefore considered [REP8-016] that the 2021 survey results support the original conclusion of the NSER [APP-233] and, in the Applicant's opinion, confirm that LSE can be ruled out at Stage 1 in relation to the Eversden and Wimpole Woods SAC.
- 20.3.26. NE however considered [REP8-048] [REP9-056] that there was uncertainty with respect to the original conclusion of no LSE, and therefore the assessment should progress sequentially to the AA stage with the additional surveys being used to inform this. NE [REP8-048] [REP9-056] also put forward the view that the level of survey and assessment undertaken to inform the NSER equates to an Appropriate Assessment.
- 20.3.27. The ExA considers that with the addition of the 2021 survey results into the totality of evidence presented to the ExA, the baseline survey data submitted to date (i.e. [APP-233] and [REP9-030 to 032]) is sufficient to demonstrate, beyond reasonable scientific doubt, that SAC barbastelles are not interacting with the Proposed Scheme. Considering the comments from the Applicant and NE on this matter, the ExA is of the view that there would be no LSE for the Eversden and Wimpole Woods SAC alone.

LSE from the Proposed Development In-Combination

- 20.3.28. The Applicant addressed potential in-combination effects arising from the Proposed Development within their NSER [APP-233 Section 5.1]. No in-combination LSE have been identified for the sites and qualifying features where LSE were excluded from the Proposed Development alone. The Applicant maintains that for an in-combination effect to exist between the Proposed Development and another plan or project, the assessment of the Scheme must conclude a likelihood of an impact or effect occurring on the European Site in isolation [APP-233]. In-combination effects have been excluded because the HRA screening exercise has concluded that in the absence of any impacts there is no potential for in-combination effects to occur [APP-233, Paragraph 5.1.4].
- 20.3.29. With respect to the hydrologically connected sites (Ouse Washes SPA, SAC and Ramsar site and Portholme SAC) the ExA agrees, on the basis of the information provided, with the Applicant's conclusion of no LSE from

the Proposed Development in combination with other plans and projects, as there is no basis to carry out an assessment of in-combination effects when there are no effects to take into account.

Eversden and Wimpole Woods SAC – species displacement effects

- 20.3.30. For the reasons explained in Paragraph 1.3.29 above, the NSER [APP-233] excludes in-combination effects on the Eversden and Wimpole Woods Barbastelle bat qualifying feature.
- 20.3.31. Notwithstanding their position, the Applicant's AA addressed in-combination effects [REP8-016, Paragraph 6.3.1]. The ExA raised the possibility that some SAC bats could use the area of the Order limits, and so could be affected by the Proposed Development and sought [PD-017] further detail in the Applicant's AA assessment of in-combination effects. The final AA [REP10-040] was revised to include an in-combination assessment focused on developments within a 10km impact risk zone. This concludes [REP10-040, Paragraph 6.2.15] that there is no potential for in-combination effects to occur on the SAC as a result of the Proposed Development interacting with other plans and projects.
- 20.3.32. The ExA agrees, on the basis of the information provided, with the Applicant's conclusion of no LSE from the Proposed Development in combination with other plans and projects.

20.4. HRA ASSESSMENT CONCLUSIONS

- 20.4.1. The Proposed Development is not directly connected with, or necessary to, the management of a European site, and therefore the implications of the project with respect to adverse effects on potentially affected sites must be assessed by the SoS.
- 20.4.2. Five European Sites and their qualifying features were considered in the Applicant's assessment of LSE:
- Ouse Washes SAC;
 - Ouse Washes SPA;
 - Ouse Washes Ramsar site;
 - Portholme SAC; and
 - Eversden and Wimpole Woods SAC.
- 20.4.3. The ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 20.4.4. The outcomes of the assessment are summarised in Table 1.1.
- 20.4.5. The ExA considers that the Proposed Development is not likely to have a significant effect from the impacts identified in Table 1.1 on the qualifying features of the European sites identified in Table 1.1 when considered alone, or in combination with other plans or projects. As discussed above, this was not disputed by NE during the Examination

with the exception of Eversden and Wimpole Woods SAC. In reaching that conclusion the ExA applied the precautionary principle and is of the view that at the end of the Examination there was no remaining reasonable scientific doubt.

20.4.6. The ExA is content that sufficient information has been provided by the Applicant to conclude:

- There are no likely significant effects of the Proposed Development on any European sites or their qualifying features.
- No mitigation relevant to a HRA has been proposed and none would be required.
- The Proposed Development can proceed without an Appropriate Assessment being undertaken by the SoS.

Table 5 European sites and features for which LSE was excluded

European site(s)	Qualifying Feature(s)	Impact pathways	Screening result: LSE alone or in combination?	Agreed with ANCB and other relevant parties?	Screening recommendation of the ExA
Ouse Washes SPA	Bewick's swan; <i>Cygnus columbianus bewickii</i> (Nonbreeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Whooper swan; <i>Cygnus cygnus</i> (Non-breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Eurasian widgeon; <i>Anas penelope</i> (Non-breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE

	Gadwall; <i>Anas strepera</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Eurasian teal; <i>Anas crecca</i> (Non-breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Mallard; <i>Anas platyrhynchos</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Northern pintail; <i>Anas acuta</i> (Non -breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Garganey; <i>Anas querquedula</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE

	Northern shoveler; <i>Anas clypeata</i> (Non - breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Northern shoveler; <i>Anas clypeata</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Hen harrier; <i>Circus cyaneus</i> (Non - breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Ruff; <i>Philomachus pugnax</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Black -tailed godwit; <i>Limosa limosa limosa</i> (Breeding)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE

	Waterbird assemblage	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Breeding bird assemblage	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
Ouse Washes SAC	Spined Loach (<i>Cobitis taenia</i>)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
Ouse Washes Ramsar	Ramsar criterion 1 - Seasonally flooding washland	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE
	Ramsar criterion 2 – Nationally scarce plants: Small water pepper <i>Polygonum minus</i> ;	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	Yes	No LSE

	<p>Whorled water-milfoil <i>Myriophyllum verticillatum</i>; Greater water parsnip <i>Sium latifolium</i>; River waterdropwort <i>Oenanthe fluviatilis</i>; Fringed water-lily <i>Nymphoides peltate</i>; Long-stalked pondweed <i>Potamogeton praelongus</i>; Hair-like pondweed <i>Potamogeton trichoides</i>; Grass-wrack pondweed <i>Potamogeton compressus</i>; Tasteless waterpepper <i>Polygonum mite</i>; Marsh dock <i>Rumex palustris</i>.</p>				
	<p>Ramsar criterion 2 - Relict fenland fauna, including British Red Data Book species: Large darter dragonfly <i>Libellula fulva</i>; Rifle beetle <i>Oulimnius major</i></p>	<p>Habitat loss Pollution Climate change Species displacement In-combination effects</p>	No LSE	Yes	No LSE

	<p>Ramsar criterion 5 - Assemblages of international importance</p> <p>59133 waterfowl (5 year peak mean 1998/99- 2002/2003)</p>	<p>Habitat loss</p> <p>Pollution</p> <p>Climate change</p> <p>Species displacement</p> <p>In-combination effects</p>	No LSE	Yes	No LSE
	<p>Ramsar criterion 6 – species/populations occurring at levels of international Importance:</p> <p>Tundra swan <i>Cygnus columbianus bewickii</i>;</p> <p>Whooper swan <i>Cygnus Cygnus</i>; Eurasian wigeon <i>Anas Penelope</i>;</p> <p>Gadwall <i>Anas strepera strepera</i>; Eurasian teal <i>Anas crecca</i>; Northern pintail <i>Anas acuta</i>;</p> <p>Northern shoveler <i>Anas clypeata</i></p>	<p>Habitat loss</p> <p>Pollution</p> <p>Climate change</p> <p>Species displacement</p> <p>In-combination effects</p>	No LSE	Yes	No LSE
Portholme SAC	<p>Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>)</p>	<p>Habitat loss</p> <p>Pollution</p> <p>Climate change</p>	No LSE	Yes	No LSE

		Species displacement In-combination effects			
Eversden and Wimpole Woods SAC	Barbastelle bat (<i>Barbastella barbastellus</i>)	Habitat loss Pollution Climate change Species displacement In-combination effects	No LSE	No	No LSE

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21. CONCLUSION ON THE CASE FOR DEVELOPMENT CONSENT

21.1. INTRODUCTION

- 21.1.1. This chapter sets out the Examining Authority's (ExA) reasoning and conclusions on the planning balance of the Proposed Development and whether there is a case for the making of a Development Consent Order (DCO) for the Proposed Development.

Policy and legislative context

- 21.1.2. Section (s) 104 of the Planning Act 2008 (PA2008) sets out at subsection (2) the matters to which the Secretary of State (SoS) must have regard to where there is a relevant National Policy Statement (NPS). These include having regard to the relevant NPS, Local Impact Reports (LIRs), any matters prescribed in relation to development of the description to which the application relates, and any other matters which the SoS thinks are both important and relevant to the decision.
- 21.1.3. The Proposed Development relates primarily to highway infrastructure and is a Nationally Significant Infrastructure Project (NSIP) under s22 of PA2008. The designated National Policy Statement for National Networks (NPSNN) provides the primary basis for making decisions on development consent applications for national networks NSIPs in England.
- 21.1.4. The application includes the proposal for the diversion of the Girtford to Horsey Lock High-Pressure Pipeline (pipeline diversion) operated by Cadent Gas Limited (Cadent). The pipeline diversion would need to be considered as an NSIP in its own right under s20 of PA2008, if the pipeline diversion would have significant environmental effects on buried archaeology in a field near Tempsford, immediately to the east of the East Coast Mainline (ECML) railway. The assessment of the effects of the pipeline diversion has been against the policy provisions in the Overarching National Policy Statement for Energy (NPS EN-1) and the National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4).
- 21.1.5. The Proposed Development would result in the demolition of two homes, and the residents would need to relocate, and one of the residents would also lose their source of income. With respect to these two parties, the ExA has had regard to the Equality Act 2010 and to Article 1 of the First Protocol, Article 6 and Article 8 of the European Convention on Human Rights (ECHR). The ExA has had regard to the Equality Act and Human Rights with respect to Compulsory Acquisition (CA) and Temporary Possessions (TP) and this is reported in Chapter 22 of this Recommendation Report.

- 21.1.6. As set out in Chapter 3 of this Recommendation Report, the Examining Authority (ExA) has also taken all other relevant law and policy into account in reaching its conclusions.

Environmental Impact Assessment

- 21.1.7. The ExA is content that the Environmental Statement (ES) and associated information submitted by the Applicant at the time of making the application and subsequently during the Examination, have provided an adequate assessment of the environmental effects of the Proposed Development. The ExA is satisfied with the Applicant's approach to assessment of alternatives as described in the ES is comprehensive and complies with the requirements of the Environmental Impact Assessment (EIA) Directive (Regulation 14 and Schedule 4).
- 21.1.8. The ExA is satisfied with the Applicant's proposed methodology for assessing Combined Effects and Cumulative Effects, and the adequacy of the proposed mitigation. In particular, the ExA is satisfied that in line with Planning Inspectorate Advice Note 17 it would not be appropriate to include East West Rail (EWR) project in the Cumulative Effects Assessment (CEA) for the Proposed Development. While IPs queried if the CEA of Greenhouse Gas (GHG) emissions of the Proposed Development would be de minimis, and not have a significant effect, the ExA remains satisfied that the Applicant's approach to CEA meets the requirements of NPSNN and EIA regulations, and is in line with the Inspectorate's Advice Note 17

Conclusions in Relation to Habitats Regulations

- 21.1.9. The NPSNN states that prior to granting Development Consent, the SoS must, under the Habitats Regulations, consider whether it is possible that the project could have a significant effect on the objectives of a European site, or on any site to which the same protection is applied as a matter of policy, either alone or in combination with other plans or projects.
- 21.1.10. Five European Sites and their qualifying features were identified by the Applicant prior to screening and the ExA is satisfied that the correct European sites and qualifying features have been identified for the purposes of assessment, and that all potential impacts which could give rise to significant effects have been identified.
- 21.1.11. Following the Applicant's screening assessment and submission of additional survey and other information, the ExA is content that sufficient information has been provided by the Applicant to conclude there are no likely significant effects of the Proposed Development on any European sites or their qualifying features; that no mitigation relevant to a HRA has been proposed and none would be required; and, the Proposed Development can proceed without an Appropriate Assessment (AA) being undertaken by the SoS.

21.2. CONSIDERATIONS IN THE OVERALL PLANNING BALANCE

21.2.1. The Examining Authority's (ExA) conclusions relate to all matters which the ExA considers are both important and relevant to the Secretary of State's (SoS) decision, and follow from consideration of all evidence presented to the Examination, including:

- the application documents;
- the ES;
- Habitat Regulation Assessment (HRA);
- LIR;
- Statements of Common Ground (SoCG);
- relevant and written representations;
- oral submissions at Hearings;
- answers to ExA's Written Questions and responses to requests for information; and
- site inspections.

Need

21.2.2. The need for highway infrastructure has been established in the National Policy Statement for National Networks (NPSNN). However, for the Proposed Development, the ExA has, as a matter of exception, examined the Applicant's assessment of need because of the indications of change to the relevant policy context, including the NPSNN itself, in the Government's Transport Decarbonisation Plan (TDP).

21.2.3. The ExA accepts the Applicant's case that the existing Black Cat junction and the A428 between St Neots and Caxton Gibbet struggles to cope with current usage and the situation is forecast to worsen in future, adversely effecting journey times, journey time reliability and road safety. As the Strategic Road Network (SRN) becomes less appealing to use, drivers would inevitably switch to more inappropriate routes on the local road network.

21.2.4. The Proposed Development would improve journey times and journey time reliability, particularly for journeys between Bedford and Cambridge using the existing A421 and A428, likewise for traffic using the A1. Between Renhold and Cambourne journey times would reduce by around 15 minutes. By making use of the SRN more attractive, traffic would switch to using the SRN to the benefit of the Local Road Network (LRN) and the communities it serves. The Proposed Development would be more fit for purpose for future predicted volumes of traffic and have fewer vehicle movement conflicts than the existing A428, saving 8 fatalities, 116 serious and 805 slight casualties over a 60-year period. The described traffic benefits would in turn facilitate economic and housing growth.

21.2.5. The Benefit Cost Ratio (BCR) for the Proposed Development has been reviewed throughout the Examination, in line with national guidance and is estimated to give a BCR of 1.52, this means that for every £1 spent £1.52 is predicted in wider societal benefit.

21.2.6. The ExA is satisfied that the Applicant has followed national adopted guidance in the modelling of the forecast BCR for the Proposed

Development. Furthermore, the ExA considers that the Applicant has transparently updated the BCR throughout the course of the Examination. Whilst the BCR has reduced from 1.9 to 1.52, the ExA accepts that this reduction is not due to the overall construction cost of the Proposed Development, but rather changes to the nationally agreed modelling, with similar reductions in BCR being witnessed on other RIS2 schemes.

- 21.2.7. Therefore, the ExA agrees with the Applicant and Local Authorities that there is strategic need for the Proposed Development and it would play a crucial role in facilitating economic and housing development in the area.
- 21.2.8. The ExA notes that NPSNN Paragraphs 5.17 and 5.18 allow for development consent if the carbon emissions of the Proposed Development do not have a material impact on the ability of UK Government to meet its carbon reduction targets. The ExA is satisfied that the publication of the TDP does not require additional information or justification from the Applicant to enable the ExA to consider the need case for the Proposed Development.
- 21.2.9. The ExA considers that irrespective of whether the proposed EWR scheme is delivered, there would remain a need for the Proposed Development and only a small proportion of traffic using the Proposed Development would reassign to rail in the event of its construction. The ExA is also satisfied that the Applicant has undertaken appropriate sensitivity testing to account for COVID-19 on the demand for travel, and is content that for the purpose of this Examination, the effects of COVID-19 pandemic do not have a bearing on the need for the Proposed Development.
- 21.2.10. Overall, therefore, the ExA concludes that the Need for the Proposed Development has been established in accordance with the requirements of the NPSNN Paragraph 4.6, that the Proposed Development accords with NPSNN Paragraphs 2.13, 2.21, 2.23 and 4.27, and that the presumption in favour of development is engaged. Taking all the matters reported above, the ExA apportions substantial weight to the matter in favour of the making of the Order.

Highways and Traffic Matters

- 21.2.11. The ExA considered effects of the Proposed Development in relation to Highways and Traffic Matters during the Examination. The main areas of Examination included, traffic modelling, construction phase traffic effects, monitoring of operational traffic effects, operational effects at existing locations on the LRN and SRN, the operational effects at proposed junctions, the provision for Non-Motorised Users (NMU) (walkers, cyclists and horseriders) and various other matters.

Traffic modelling

- 21.2.12. The ExA considers that the traffic modelling undertaken, following national guidance, adequately demonstrates the likely construction and operational traffic effects of the Proposed Development on the LRN and

SRN and is therefore sufficient for the purposes of the Examination. However, the ExA does consider that much of this work should have been agreed prior to the start of the Examination. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.204 and 5.212.

Construction phase traffic effects

- 21.2.13. The ExA is satisfied that the Outline Construction Traffic Management Plan (OCTMP) would substantially mitigate the modelled likely effects of construction related traffic across the road network. However, it is apparent that disruption would inevitably occur at specific locations, including Tempsford. The ExA considers that this disruption would be minimised through careful project planning and discussion at Traffic Management Forums (TMFs) as secured in the OCTMP, in addition to that which would typically be expected of any project affecting the LRN in terms of network occupancy.
- 21.2.14. However, the ExA considers that traffic diverting on to the LRN during construction should be monitored because all Highway Authorities (HAs), including the Applicant, should have an accurate picture of traffic behaviour on their own network, likewise if they are affecting the movement of traffic on another HAs network. Therefore, the ExA considers that the Applicant should provide monitoring both before construction commences and during the construction phases, as detailed in Requirement (R) 22 of the recommended DCO (rDCO). Without the Proposed Development the likely need for such data would be less for a Local Highway Authority (LHA) as much of the existing network surrounding the Proposed Development is rural in nature and less likely to be used to such a degree as during the construction period.
- 21.2.15. The ExA does not consider it necessary or reasonable to expect the Applicant to fund and, or, deliver undefined interventions at unlimited cost on the LRN during construction as part of the dDCO. Instead, the ExA considers that such matters should be considered and dealt with jointly, following traffic monitoring, between LHAs and the Applicant at the TMFs referred to in the OCTMP.
- 21.2.16. The ExA shares the view of LAs that a Workers Travel Plan is necessary given 900 workers would be involved in the construction of the Proposed Development. The ExA considers that the Outline Workers Travel Plan is adequate for this stage of the Proposed Development's preparation and note that LAs would have further opportunity to comment on the content of the proposed measures and initiatives during its finalisation as part of the Second Iteration Environmental Management Plan (EMP), secured by R3 of the dDCO.
- 21.2.17. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.204, 5.211 and 5.215. Whilst the OCTMP and R22 of the rDCO would enable construction phase traffic effects to be monitored and mitigated.

Monitoring of operational traffic effects

- 21.2.18. The ExA accepts that the Applicant, as HA for the SRN is required, under its Operating Licence, to monitor its own network in order to effectively manage it. The ExA also notes that where the Applicant proposes to adopt a monitor and manage approach on the SRN it has not relied on such an approach as any form of formal mitigation in relation to the Proposed Development. Therefore, the ExA is satisfied that appropriate monitoring would occur on the SRN and if necessary subsequent intervention would take place.
- 21.2.19. The ExA agrees with the LHAs that the absence of monitoring of traffic effects during operation, would lead to a void in the LHAs' understanding of the Proposed Development's effects on traffic on the LRN and how it should be managed. The ExA does not accept that such monitoring, where the Applicant's modelling anticipates worsening of traffic flow, should be absorbed within the day to day duties and existing budgets of the LHAs because it would at least in part be due to the Proposed Development. Therefore, the ExA considers that operational traffic monitoring should be undertaken by the Applicant, as proposed in R22 of the dDCO and R23 of the ExA's rDCO, to ensure that evidence is available for the Applicant and LHAs to consider whether any subsequent intervention is required.
- 21.2.20. However, at this point there is little evidence to suggest what, if any intervention would be necessary as the results of monitoring are unknown. Therefore, precise intervention measures cannot be detailed and the ExA has no realistic picture of any likely cost of such measures so as to consider whether they would be necessary or reasonable. Furthermore, the ExA accepts that it would be very difficult to demonstrate that traffic flow changes on the LRN were solely as result of Proposed Development and not other factors such as wider demand for travel, nearby new development or changes in the way the LRN was managed. Monitoring by the Applicant would however inform such discussion.
- 21.2.21. In this regard the ExA considers that further to operational phase monitoring, the Proposed Development would accord with NPSNN Paragraph 5.215.

Operational phase traffic effects at existing junctions on the local network

- 21.2.22. Although some worsening is likely to be experienced at specific arms of junctions, the ExA is mindful that the overall picture at LRN junctions shows an improved functioning compared to without the Proposed Development in future years. The ExA also notes that many of the local junctions are already either approaching capacity or at capacity. The ExA considers that operational traffic monitoring, as secured in R22 of the dDCO and R23 of the ExA's rDCO, would assist in demonstrating any subsequent need for intervention on the LRN in conjunction with monitoring that any LHA would typically be expected to routinely undertake at key junctions and links on their own network.

- 21.2.23. The exception to the above reasoning, which is of concern to the ExA, is the A1303 corridor between the A428 and the M11 junction 13. At this location the ExA notes there is uncertainty with regard the likely timing and likelihood of new development coming forward and other transport improvement projects. However, the Applicant as HA for the SRN would, under its Operating Licence, be responsible for ensuring any effects on the SRN were appropriately managed, including the potential for queuing back on to the A428 from the eastbound off-slip.
- 21.2.24. Therefore, in this regard the Proposed Development would accord with NPSNN Paragraphs 5.204 and 5.211.

Operational phase traffic effects at existing junctions on the SRN

- 21.2.25. The ExA notes that the Proposed Development would likely have minor adverse effects on nearby junctions on the SRN away from the Proposed Development. The ExA therefore agrees with the Applicant that monitoring of the situation is sufficient for the purposes of the Proposed Development's effect on traffic flows and accepts that this would follow the Monitor and Manage approach under the terms of the Applicant's Operating Licence.
- 21.2.26. In this regard the Proposed Development would accord with NPSNN Paragraphs 5.215 and 5.216.

Operational phase traffic effects at proposed highway layouts

- 21.2.27. The ExA is satisfied that the intended highway layouts of the Proposed Development would deliver the predicted traffic benefits, as described in the Chapters 5 and 6 of this Recommendation Report and would operate safely, within capacity and effectively.
- 21.2.28. Alternative proposals and suggested amendments to road layouts have been appropriately considered by the Applicant including in response to the Buchanans and Roxton Parish Council (PC), Welcome Break Services and Eltisley PC. However, in the view of the ExA, those proposals would likely have worse environmental effects and, or require additional CA than that proposed by the Applicant.
- 21.2.29. The ExA notes that matters relating to Departures from Standard (DfS) were unresolved at the end of the Examination between Cambridgeshire County Council (CCC) and the Applicant. However, on the basis that the Proposed Development has been the subject of a formal Road Safety Audit (RSA), the ExA agrees that the proposed layout would be safe and appropriate for DfS to be agreed in the event that associated side agreements are not made with LHAs.
- 21.2.30. The ExA appreciates that Landowners have requested greater detail regarding proposed accesses. However, the ExA notes that intended points of access are shown on the works plans provided and considers that detail regarding accesses should be dealt with on a case by case basis, in negotiation between the Applicant and relevant landowners at

the detailed design stage, post consent, subject to the making of the Order.

- 21.2.31. In this regard the Proposed Development would therefore accord with NPSNN Paragraphs 2.12 to 2.14, 2.23 and 5.211.

Provision for Non-Motorised Users

- 21.2.32. The ExA is of the view that where existing NMU (walkers, cyclists and horseriders) provision interacts with the Proposed Development, the Applicant has sought to adequately mitigate effects through the use of diversions and new infrastructure that would not compromise likely future usage. Measures which would enhance existing NMU provision have also been provided.
- 21.2.33. The ExA acknowledges that given the wider geographic area surrounding the Proposed Development there would be scope to improve various existing NMU links as well as to fill missing links in the Public Rights Of Way (PRoW) network. However, the ExA is satisfied that the Applicant has justified the extent of the proposed NMU infrastructure forming part of the Proposed Development, as a robust methodology and approach was formulated. The Walking Cycling Horeseriding Assessment Report (WCHAR) forms the basis of this. Having considered the submissions of the Applicant and IPs, the ExA does not consider there to be robust justification for the provision of additional NMU infrastructure to be necessary, albeit it would be desirable to IPs.
- 21.2.34. In accordance with NPSNN Paragraphs 5.205 and 5.215 to 5.217 the ExA therefore considers that the Proposed Development includes adequate NMU infrastructure.

Other matters

- 21.2.35. The ExA has considered other issues as raised by Interested Parties (IP) and the ExA itself with regard to highways and traffic matters. Notwithstanding legal agreements are being discussed between the Applicant and the LHAs, these are not before the ExA. However, the ExA is satisfied that appropriate handover mechanisms would be in place for the de-trunking of the existing A428 and the transfer of new local highway infrastructure subject to Articles 13 and 14 of the dDCO being in place.
- 21.2.36. With regard to the proposed loss of the existing services at the Black Cat roundabout, the ExA notes that alternative existing provision would be made available from the Proposed Development a short distance to the north of the Black Cat junction via the proposed services link road.
- 21.2.37. The ExA does not consider it would be appropriate for the maintenance responsibilities for field ditches and culverts that would run along-side proposed new local highway infrastructure to be the responsibility of adjacent landowners by default but rather the LHA. However, there would be nothing to preclude LHAs and landowners entering into agreements following handover if this was desirable.

- 21.2.38. The ExA is satisfied that the Proposed Development would assist LHAs and the Applicant in discharging their Network Management Duty (NMD) under the Traffic Management Act 2004 in future by tackling existing known congestion and safety issues on both the existing A428 and the nearby LRN. The provision of traffic monitoring both during construction and operational phases by the Applicant, as detailed in R22 and R23 of the ExAs rDCO would further assist LHAs and the Applicant in discharging their NMD.

Overall conclusion on Highways and Traffic Matters

- 21.2.39. For the reasons above the ExA concludes that the Proposed Development accords with NPSNN Paragraphs 2.12 to 2.14, 2.23, 5.204, 5.205, 5.211, 5.212 and 5.215 to 5.217.
- 21.2.40. For the totality of Highway and Traffic matters the ExA in its conclusion has given weight to three separate matters: construction traffic effects; operation effects or traffic benefits resulting from the proposed highway design and layout (not double counting the overall traffic benefits discussed in need); and the effects on NMUs. The ExA concludes that with regard to construction phase traffic effects, limited weight should be apportioned against the making of the Order. The ExA concludes that the benefits to the future operation of the LRN and SRN within the Order limits, carries substantial weight in favour of the making of the Order. The ExA considers that the Proposed Development includes adequate NMU infrastructure, as such the ExA apportions neutral weight in relation to this matter to making the Order.

Biodiversity

- 21.2.41. The ExA considered the effects of the Proposed Development on Biodiversity, including with regard to the Environment Act 2021, the baseline survey information, designated sites, priority habitats and protected species.
- 21.2.42. The ExA is satisfied that the Environment Act 2021 does not raise any significant issues in relation to the Proposed Development at the present time.
- 21.2.43. The ExA considers the updated surveys submitted into Examination have been helpful in understanding the biodiversity of the area. The ExA notes the Applicant's views that on the basis of the updated surveys the assessment and conclusions in the ES remain unchanged. The ExA is satisfied that the surveys that underpin the ES assessment are robust. The ExA also takes into account the Applicant's secured commitments for updated surveys post-consent.
- 21.2.44. The effects of the Proposed Development on internationally designated sites, including the Eversden and Wimpole Woods Special Area of Conservation (SAC), are addressed in Chapter 20 of this Recommendation Report. The ExA notes the HRA conclusion of no Likely Significant Effects (LSE) on internationally designated sites and the neutral effect this would have in terms of Biodiversity.

- 21.2.45. The ExA also accepts the effects of the Proposed Development on nationally designated sites would be negligible and there would be only minor effects on protected species. The ExA considers that residual adverse effects on some locally designated sites as a result of the Proposed Development cannot be excluded. However, the overall effect of the Proposed Development on Designated Sites is not considered to be significantly harmful.
- 21.2.46. The ExA recognises that there is no requirement for an assessment of Biodiversity Net Gain (BNG) to be made for an NSIP at the present time. Nevertheless, such assessments have been undertaken for a number of recent road NSIPs, and has been undertaken for the Proposed Development. The Department for the Environment, Food and Rural Affairs (DEFRA) 2.0 metric (D2M) has also been used for other road NSIPs and the ExA notes the preference amongst parties for the D2M. From the evidence, the ExA considers that the D2M provides a more robust assessment of BNG than the Highways England metric (HEM). The ExA is also satisfied that the Applicant's survey data would be suitable to underpin the D2M assessment, and that the Applicant's resulting BNG score is reliable. The Applicant's comment that the D2M results supersede the initial HEM results for the Proposed Development is also significant to the ExA.
- 21.2.47. Consequently, the ExA finds that the results of D2M are manifestly relevant to the ES conclusions on Biodiversity, in particular the loss of High and Medium distinctiveness habitats and what this means for overall Biodiversity. As such, the ExA concludes that there is no certainty from the D2M that there would not be an uncompensated loss of priority habitats which would significantly and adversely affect Biodiversity.
- 21.2.48. Therefore, as suggested by Natural England (NE) and Cambridgeshire County Council, Huntingdonshire District Council and South Cambridgeshire District Council (Cambridgeshire Councils), the ExA proposes a Requirement be included in the rDCO, to ensure that an updated BNG assessment is undertaken. Additionally, should this BNG assessment show an uncompensated loss of priority habitats, including hedgerows, then the ExA also proposes, in line with the suggested requirement from the Cambridgeshire Councils, that the Applicant should be required to deliver a Biodiversity Offsetting Scheme for priority habitats, to avoid conflict with Paragraph 5.25 of the NPSNN. This would be a new R24 in the rDCO.
- 21.2.49. The ExA is satisfied opportunities for promoting biodiversity have been identified through the Proposed Development. The ExA notes that with appropriate mitigation there would be positive effects on certain habitats and species, whilst there would be adverse effects on other types of habitat and species. However, taking all the matters reported above into account, the ExA ascribes limited weight against making the Order to Biodiversity.

Historic Environment

- 21.2.50. The ExA considered the effects of the Proposed Development on different aspects of the Historic Environment including with regard to Designated Heritage Assets, in particular the scale of harm to Brook Cottages, and the Applicant's justification for this harm, and to archaeological remains.
- 21.2.51. From the evidence the ExA is satisfied that the Proposed Development would cause substantial harm and a total loss of significance to a Designated Heritage Asset (DHA), the Grade II listed Brook Cottages.
- 21.2.52. The ExA is satisfied that R16 of the dDCO adequately secures the assessment of Brook Cottages and the subsequent dismantling and relocation of Brook Cottages. However, at this stage neither the feasibility or value of dismantling and relocating Brook Cottages has been determined. Given this uncertainty the ExA is not convinced that it would reduce the level of harm and finds that despite R16 and the limited progress made with the survey, the potential relocation can be given no weight in its consideration. Similarly, no weight is attached to the recording of Brook Cottages in R16.
- 21.2.53. The ExA concludes that the Applicant has not given "*great weight to the conservation*" of Brook Cottages and has not provided a "*clear and convincing justification*" for the substantial harm and loss of significance that would be caused by the removal of this DHA. The ExA's concerns stem from the Applicant's approach to the Historic Environment in deriving the objectives for the Proposed Development. The Applicant's Project Control Framework (PCF) option development and selection process meant that the design of the Black Cat Junction was not addressed in a way that would enable a meaningful assessment of the effects on Brook Cottages to be undertaken during the early stages, and even at stage 2, the limited information available was often insufficient for firm conclusions to be drawn about the effects on Brook Cottages. The Applicant was unable to substantiate its position regarding the Black Cat Junction option for the Proposed Development, and at other stages of the process, to the satisfaction of the ExA. Consequently, the ExA does not believe that the removal of Brook Cottages has been shown to be exceptionally necessary and so conflicts with NPSNN Paragraph 5.131.
- 21.2.54. However, the ExA notes the support of Bedford Borough Council (BBC) for the Proposed Development, and that BBC was unable to identify an alternative to the design of the Black Cat Junction that would retain Brook Cottages whilst providing the connection to and from the Caxton Gibbet junction.
- 21.2.55. In this case, the ExA concludes that the substantial harm and total loss of significance that would be caused by the removal of Brook Cottages is outweighed by the benefits of the Proposed Development, as set out in the evidence and discussed during the Examination, and so passes the test within NPSNN Paragraph 5.133. However, this is a very finely balanced judgement by the ExA.

- 21.2.56. With regard to other DHAs, the ExA agrees with the Applicant's conclusion that the effects of the Proposed Development on Other Heritage Assets would be less than substantial harm.
- 21.2.57. Taking all the matters reported above, in particular the substantial harm and total loss of significance that would be caused by the removal of the Grade II listed building Brook Cottages, the ExA ascribes the adverse effects of the Proposed Development on the Historic Environment substantial weight against making the Order.

Climate Change and Carbon Emissions

- 21.2.58. The ExA considered the effects of the Proposed Development on Climate Change and Carbon Emissions, including with regard to the policy context, the spatial scale for assessing carbon emissions / significance, the economic benefits and carbon costs, the quantum of carbon emissions and resilience of the Proposed Development to climate change.
- 21.2.59. The Applicant has assessed Greenhouse Gas (GHG) emissions from the Proposed Development against UK carbon budgets and the ExA is satisfied that appropriate regard has been had to the current policy context, including the NPSNN and the Paris Agreement.
- 21.2.60. The ExA notes the disagreements and uncertainties regarding the precise quantity of GHG emissions from the Proposed Development. In the context of the forecast lifetime emissions the ExA is satisfied that the quantum of GHG emissions presented by the Applicant is a reasonable estimate for the Proposed Development and that construction emissions are not unnecessarily high.
- 21.2.61. The ExA is also content that the Applicant has assessed the likely costs and benefits of the Proposed Development using the most up-to-date datasets and that the assessment is therefore reasonably robust. The ExA also notes that the cancellation of the Oxford Cambridge Expressway would not affect this assessment and that it would be sufficiently resilient to the effects of forecast climate change.
- 21.2.62. Despite the ExA's own concerns, alongside the great public concern about climate change and the representations from parties, the ExA, must accept that the Applicant's approach to assessing the cumulative effects of GHG emissions and the corresponding outcome, and to emissions offsetting, is reasonable and proportionate. In that regard the ExA finds that the Proposed Development would accord with NPSNN Paragraphs 5.17, 5.18 and 5.19.
- 21.2.63. However, given the significance of climate change globally, and the urgency of measures needed to address it, the ExA finds that a precautionary approach to this matter must be adopted. As such, the ExA recommends that the SoS, at the time of making their decision, re-assess the cumulative effects of the GHG emissions from the Proposed Development in light of the emerging policy context and any new data that might be relevant. The SoS would need to satisfy themselves again that the Applicant has demonstrated that the adverse effects of the GHG

emissions from the construction and operation of the Proposed Development would not be significant.

- 21.2.64. Taking all the matters reported above into account, the ExA is taking a precautionary approach in finding that there could be a residual adverse effect from the Proposed Development in terms of Climate Change and Carbon Emissions, which the ExA concludes to be potentially significant, and provides limited weight against making the Order.

Good Design

- 21.2.65. Here the ExA examined, considered and concluded on matters relating to the Applicant's approach to visual appearance and design principles for the various structural elements in the Proposed Development, and the design development process post consent. Matters relating to highway design, layout and functionality are considered under Highway and Traffic matters and not included here.
- 21.2.66. The ExA welcomes the Scheme Design Approach and Design Principles (The ExA welcomes the SDADP submitted by the Applicant, and finds that the broad framework presented in it is robust. However, the ExA considers that the SDADP is lacking a description of the Applicant's understanding of the local context along the 16km route of the Proposed Development, and embedding that understanding in SDADP Appendix C by making specific references to distinguishable aspects of the context that the Applicant intends to consider during detailed design.
- 21.2.67. The ExA finds that without engagement with key local stakeholders, there is no accountability for the Applicant to ensure that the application of this design principles in the SDADP would deliver outcomes that meet the policy requirements in NPSNN and the NPPF. As such the ExA proposes the inclusion new Paragraph (3) to R12 in the rDCO to ensure meaningful engagement with the relevant stakeholders and for the Applicant to demonstrate how the detailed design has been refined in consideration of the points raised by relevant stakeholders, and in accordance with the SDADP.
- 21.2.68. With the inclusion of new Paragraph (3) to R12, the ExA is content that the design development process for the Proposed Development and the likely outcomes would meet the policy requirements in the NPSNN (Paragraphs 4.29, 4.30, 4.31, 4.33) and the NPPF (Chapter 12). Taking all the matters reported here into account, the ExA ascribes neutral weight to Good Design for or against making the Order.

Construction Methods and Effects

- 21.2.69. The effects of the construction of the Proposed Development have been considered across all receiving environments. Here the ExA examined, considered and concluded on cross cutting matters relating to the construction programme, Pre-commencement Plan, borrow pits, and the provision in the dDCO for the Applicant to access land outside the Order limits in Article 4 and Article 23.

Construction programme

- 21.2.70. In light of the progress with archaeological works within the advanced works phases pursuant of the Planning Permission by Central Bedfordshire Council (CBC) and the Applicoant's confirmation regarding built in contingency time in each section of the construction programme, the ExA is confident that the worst-case construction programme for the Proposed Development is reliable.
- 21.2.71. However, given the Applicant's programme is based on the assumption for consent in March 2022, the SoS, at the time of making the decision, if the decision is to grant consent, may wish to seek confirmation from the Applicant if the construction programme that underpins that EIA still stands. In addition, the SoS may wish to confirm from the Applicant if the traffic modelling undertaken to generate forecasts for certain assessments reported in the ES, can still be relied upon.

Pre-commencement Plan

- 21.2.72. The ExA welcomes the submission of the Pre-commencement Plan and the related amendments to the dDCO. The ExA is satisfied that there would adequate controls for the activities that would need to take place before the approval of other management plans. The Pre-commencement Plan is secured in the dDCO as a certified document in Schedule 10 and through R20.

Borrow Pits

- 21.2.73. The inclusion of the Borrow Pit Management Plan (BPMP) in the First Iteration EMP, is welcome, and the ExA is satisfied that the details regarding activities on borrow pit land, mitigation measures, and the commitment for restoration of land is adequate. While the ExA does feel the Applicant has missed an opportunity of committing to the restoration of the borrow pit land to an agreed agricultural land classification of grade 3a or 2, the ExA is satisfied that the land would be returned to agricultural use and any losses incurred by the landowner as a result of lower yields from the disturbed soil would be compensated. The ExA notes that the condition of the soil is expected to improve over time and that the landowners would not be disadvantaged in the intervening period. The ExA agrees with the Applicant's approach to assess noise and dust effects from borrow pit sites in the round along with other wider construction stage effects of the Proposed Development. The ExA does not find compelling need for beneficial biodiversity to be a requirement from the restoration of borrow pits. The BPMP is a part of the First Iteration EMP which is a certified document in Schedule 10 and further iterations are secured through R2 and R3 in the dDCO [AS-026]

Land outside the Order limits in Article 4 and Article 23

- 21.2.74. The ExA accepts the Applicant's justification for the need to access land adjacent to Order limits, in Article 4 for the disapplication of local enactments, and in Article 23 for the purpose of surveys. However, the ExA remains unconvinced that the provisions relating to land adjacent to Order limits should be left undefined in the dDCO. In this regard, the

Applicant has proposed a definition for 'land adjacent to Order limits' in its dDCO, and relevant changes to the wording for both Articles 4 and 23. The ExA is satisfied with the proposed changes, but in the definition for 'land adjacent to the Order limits', the ExA suggests the removal of the words 'or maintain' from the definition, to further tighten the scope of this provision to only the construction period rather than for the life span of the Proposed Development. The ExA has proposed this change in the rDCO.

Overall conclusion on construction methods and effects

- 21.2.75. The ExA is satisfied that the Applicant has assessed of construction effects of the Proposed Development in line with EIA Regulations, Schedule 4, Paragraphs 1 and 5, and meets the NPSNN requirements in Paragraph 4.21. With regard to the construction effects discussed in this Chapter, in particular the effects of borrow pits and on land adjacent to Order limits, the ExA ascribes little weight against making the Order. The ExA considers that construction effects have also relate to construction traffic, biodiversity, historic environment, carbon emissions, air quality, noise and vibration, flood risk and water quality and resources, landscape and visual effects, land-use, and socio-economic effects. Taking into account the totality of adverse effects of construction activities, the ExA attributes moderate weight against making the Order.

Air Quality

- 21.2.76. The ExA considers that the effects of the Proposed Development on the Air Quality Management Area (AQMA) in Sandy would be very minor and not significant. The ExA accepts that a modelled increase of less than 1% in Nitrogen Dioxide (NO₂) would be difficult to reliably monitor and notes that the modelled effects would likely be reversed and improved compared to the baseline within the first year of operation. The ExA also accepts that a worst-case scenario has been modelled by the Applicant. The ExA considers that in the absence of proportionate potential mitigation, the short-lived nature of the effect and the difficulty in monitoring such minor effect, described by the Applicant as imperceptible, no formal mitigation is necessary in this location.
- 21.2.77. The ExA agrees with Public Health England (PHE), the Applicant and LAs that the matter of construction dust would be adequately managed through the proposed Air Quality Management Plan and notes that LAs would be consulted on such measures as secured through R3 First Iteration EMP and R4 Second Iteration EMP of the dDCO.
- 21.2.78. In accordance with NPSNN Paragraphs 5.3 to 5.15, the ExA is content that the Applicant has adequately demonstrated the likely effects of the Proposed Development on air quality, following national guidance and policy. The ExA concludes that the mitigation secured in the First Iteration EMP and R3 (Second Iteration EMP) and R5 (details of consultation) of the dDCO would ensure that the Proposed Development meets the policy requirements of NPSNN Paragraphs 5.10 and 5.11. Further to the very minor and temporary nature of the likely effects on

the Sandy AQMA, the ExA apportion little weight against the making of the Order in this regard.

Noise

- 21.2.79. The ExA is satisfied that adequate baseline noise surveys have been undertaken to inform the assessment of noise effects and associated mitigation measures of the Proposed Development.
- 21.2.80. The ExA is satisfied that in accordance with NPSNN Paragraph 5.195, subject to R18 Noise Mitigation and R19 Construction Working Hours of the dDCO, the Proposed Development would avoid significant impacts on health and quality of life, providing mitigation where appropriate and in the context of sustainable development.
- 21.2.81. The ExA also considers that further to that detailed in the First Iteration EMP relating to noise monitoring, the Noise Management Plan and R18 Noise Mitigation of the dDCO, including the future approval of the SoS of detailed design that the Applicant has satisfied that required in NPSNN Paragraph 5.196, in that mitigation measures have been put forward by the Applicant that would ensure that the noise levels from the Proposed Development would not exceed those described or any other estimates on which the decision is based.
- 21.2.82. Notwithstanding the above accordance with the NPSNN the ExA does acknowledge that the likely effects of noise at specific receptor points including, amongst others, Rectory Farm, would likely worsen as a result of the Proposed Development. However, the ExA accepts that noise levels would remain no greater than Significant Observed Adverse Effect Level (SOAEL) and has considered the evidence provided by the Applicant regarding the very marginal benefits that would be experienced by providing additional mitigation. As such the ExA agrees with the Applicant, that on balance the marginal benefit does not justify the cost of implementation and subsequent maintenance. However, given the negative effect, the ExA apportions little weight against the making of the Order as opposed to neutral weight.
- 21.2.83. In accordance with NPSNN Paragraphs 5.193 and 5.194 the ExA is content that the Applicant has had regard to the Noise Policy Statement for England (NPSE) and NPPF on noise, incorporating measures to minimise noise emissions, including the use of cuttings, bunds and low noise surfacing.

Flood Risk, Water Quality and Resources

- 21.2.84. The ExA considered the effects of the Proposed Development on Flood Risk, Water Quality and Resources, including with regard to the Sequential and Exception tests for Flood Risk and the Water Framework Directive (WFD).
- 21.2.85. The ExA is satisfied that the Proposed Development has adequately considered compensatory floodplain storage for the River Great Ouse.

The ExA also considers that the drainage run-off rates and the approach to the maintenance of drainage infrastructure is satisfactory.

- 21.2.86. The ExA is also content that interactions between different sources of flooding, particularly groundwater and surface water run-off have been considered appropriately, including at the three proposed grade separated junctions, and that the revised Flood Risk Assessment (FRA) Technical Note [REP10-038] shows site compounds and storage areas located appropriately. The ExA is also satisfied that Protective Provisions (PP) for affected parties are adequate for the disapplication of relevant legislation. Overall, the low level of residual flood risk from the Proposed Development would be safely managed through measures secured in the First Iteration EMP [REP10-018] and the FRA certified documents.
- 21.2.87. The ExA concludes that the FRA [AS-026, Schedule 10] provides a suitable basis for conducting the Sequential and Exception Tests and demonstrates that the Proposed Development passes the Exception Test, given the generally low level of flood risk and the low residual flood risk. However, the SoS may want to confirm with the EA that the certified FRA documents listed in amended Schedule 10 of the dDCO are those agreed with the Applicant.
- 21.2.88. The ExA is also satisfied that appropriate pollution control measures, including attenuation ponds, planting and proprietary measures to protect the water environment of the area during the construction and operational phases were proposed by the Applicant, and notes that neither the Environment Agency (EA) nor NE had any concerns in this regard.
- 21.2.89. The ExA finds that the Proposed Development, with the proposed mitigation and if well maintained, would not adversely affect water quality or resources. This is secured through the Environmental Masterplan, the First Iteration EMP and in the dDCO.
- 21.2.90. Taking all the matters reported above into account, the ExA ascribes Flood Risk, Water Quality and Resources neutral weight in making the Order.

Landscape and Visual Effects

- 21.2.91. The ExA considered the effects of the Proposed Development on Landscape and Visual Effects with regard to the assessment methodology used by the Applicant and the proposed approach to mitigation, including landscaping.
- 21.2.92. The ExA notes the general agreement on matters of Landscape and Visual Effects between the Applicant and Interested Parties (IPs). The ExA is satisfied that the Applicant's approach to assessing landscape and visual impacts of the Proposed Development has been thorough, with representative viewpoints identified and local landscape character considered.

- 21.2.93. The proposed mitigation, including landscaping is also considered to be reasonable and proportionate by the ExA and is secured in the First Iteration EMP [REP10-018] and in the dDCO [AS-026].
- 21.2.94. Nevertheless, the ExA agrees with the Applicant that the Proposed Development would result in significant adverse effects on Landscape and Visual Effects even after mitigation. Taking all the matters reported above into account, the ExA considers Landscape and Visual Effects provides moderate weight against making the Order.

Land Use

- 21.2.95. The ExA considered the effects of the Proposed Development on Land Use, including with regard to agricultural land and minerals.
- 21.2.96. The ExA notes the general agreement on matters of Land Use between the Applicant and IPs and notes the outstanding concerns of the National Farmer's Union (NFU) with regard to soil restoration.
- 21.2.97. The ExA is satisfied that the Applicant has sought to minimise the loss of Best and Most Versatile (BMV) agricultural land and that it would not be appropriate for the sand and gravel resources to be extracted prior to the commencement of the development. The ExA is also satisfied that the geographical parameters of the Proposed Development between the Black Cat roundabout and Caxton Gibbet roundabout mean it would not be possible for the route to avoid BMV agricultural land or Minerals Safeguarding Areas (MSAs).
- 21.2.98. Nevertheless, the Proposed Development would result in significant and permanent adverse effects on BMV agricultural land and the permanent loss of sand and gravel minerals. Taking all the matters reported above into account, including the geographical constraints of the route of the Proposed Development, the ExA concludes that Land Use provides moderate weight against making the Order.

Socio Economic Effects

- 21.2.99. The wider beneficial economic effects of the Proposed Development have been considered and concluded on under the assessment of Need. Here the ExA examined, considered, and concluded specifically on the effects of the Proposed Development on a community asset Eltisley Manor mental health facility; the tenant at Brook Cottages, Mr Baron; the owners and occupiers of the property near Black Cat Roundabout, Mr and Mrs Chamberlain (the Chamberlains); and the second tenant at the Chamberlains' property, Mr Goodwin.
- 21.2.100. The ExA is satisfied that effects of the Proposed Development on Eltisley Manor and corresponding delays for its staff, residents and visitors would be adequately managed through the measures described in the OCTMP and secured through R11 of the dDCO.
- 21.2.101. Based on the evidence in the Examination, the ExA is content that parties made reasonable adjustments to ensure that Mr Baron was not

disadvantaged through the process of negotiation, that he has had a fair chance to participate in the Examination, and that parties have complied with s20 of the Equality Act 2010.

- 21.2.102. The ExA acknowledges the delay in the Chamberlains starting their participating in the examination, but on account of the procedural decisions set out in the letter under Rule 8 and 17 of The Infrastructure Planning (Examination Procedure) Rules (EPR) 2010, the ExA is content that the Chamberlains had a fair opportunity to participate in the Examination as an Affected Persons (AP) and Interested Party (IP) would. The ExA sympathises with the Chamberlains and acknowledges the adverse effects of the Proposed Development on their longstanding home and sources of income. However, based on the evidence in the Examination the ExA is content that the Applicant has behaved reasonably with the Chamberlains and offered them reasonable advice and support to navigate the process.
- 21.2.103. The ExA acknowledges the lateness of the formal notification sent to the second tenant at the Chamberlains Property, Mr Goodwin. However, upon inspection of the evidence (much of which is confidential and so not in the public domain) the ExA finds that the omissions of Mr Goodwin from the BoR could have been due to a number of reasons and the responsibility of that omission cannot be placed on any one party alone. The ExA therefore does not doubt the Applicant's due diligence in this regard. Mr Goodwin was notified by the Applicant, of the Examination four weeks before the close. The ExA finds that this would be adequate time for Mr Goodwin to notify the Examination of his interest to be given IP status and to make a representation. The ExA acknowledges the lateness of the formal notification sent to Mr Goodwin, but feels that he has had a fair opportunity to participate in the Examination, had he chosen to.
- 21.2.104. The ExA acknowledges the adverse effects of the Proposed Development on both Mr Baron and the Chamberlains who would have to relocate from their long-standing homes, and the Chamberlains would lose their source of income. In that regard the ExA disagrees with the Applicant's approach that the loss of these properties is not considered to be critical in the decision-making process, and to not identify appropriate mitigation in the ES. Because of the permanent and irreversible adverse effects of the Proposed Development on the lives of both Mr Baron and the Chamberlains, the ExA ascribes substantial weight against the order being made.
- 21.2.105. The ExA must clarify that the attribution of weight here is with respect to the effects of the Proposed Development on the specific parties considered here, and does not take into account the wider economic benefits of the Proposed Development which the ExA has already concluded weighs substantially in favour of making the Order.

Diversion of High-Pressure Pipeline

- 21.2.106. Here the ExA has examined, considered, and concluded on the need for the pipeline diversion; the update on the archaeological excavation pursuant of the Planning Permission from CBC; and the process of determining if the pipeline diversion would be an NSIP in its own right.
- 21.2.107. Based on the evidence before the ExA, notably the Applicant's screening assessment, consultation with Health and Safety Executive (HSE), confirmation of health and safety discipline from Cadent, the archaeological excavation updates from the Applicant, and related endorsement from the planning authority, CBC, the ExA is content that the adverse effects of the pipeline diversion have been assessed and would be adequately mitigated accordance with NPS EN-1 and NPS EN-4. In particular the ExA is convinced that the archaeological work in Field 44 completed so far and ongoing, would be in line with the AMS, and would adequately mitigate the adverse effects on the archaeology.
- 21.2.108. At the close of the Examination, the Applicant confirmed that Cadent would agree the final design for the pipeline diversion works and then apply for a screening opinion from the SoS for Business, Energy and Industrial Strategy (BEIS) in accordance with the screening criteria. The screening opinion from SoS BEIS would determine if the pipeline diversion would be treated as an energy NSIP, reliant on whether the SoS confirms likely significant effects or not. The ExA is satisfied that the Applicant's process to determine whether or not the pipeline diversion is an NSIP, is consistent with the with the test set out in s20 of the PA2008. However, given the screening opinion and determination from SoS for BEIS is not before the ExA, the ExA must consider the pipeline diversion to be an NSIP in the context of the recommendation for the Proposed Development.
- 21.2.109. The ExA notes that upon satisfactory completion of the archaeological excavation work, the screening opinion from SoS BEIS would likely to determine that the pipeline diversion is not an NSIP. In that circumstance the pipeline diversion would most likely be delivered under the planning permission granted by CBC.
- 21.2.110. However, since the final completion of the archaeological excavation work and the screening opinion from SoS BEIS is not before the ExA, the ExA has determined that the pipeline diversion should be considered an NSIP in the context of the recommendation for the Proposed Development.
- 21.2.111. The ExA considers that the pipeline diversion is essential to the delivery of the Proposed Development because:
- 1) the consultation response from HSE stating states that the gas pipes would need to move to ensure that the Proposed Development would not be within the inner zones of the pipelines; and
 - 2) the great extent of the archaeological remains in the area, means there was no alternative to deliver the pipeline diversion in a way that did not affect the archaeology.

- 21.2.112. As such, the benefit of the pipeline diversion is intrinsically linked to enabling the delivery of the benefits relating to traffic improvements, road safety and economic growth from the Proposed Development. Accordingly, the ExA concludes that the benefits of the pipeline diversion in enabling the delivery of the wider A428 Black Cat to Caxton Gibbet Road Improvement Scheme, would outweigh the harm to the identified archaeology. The ExA advises that S104(7) of PA2008 is engaged and the ExA concludes that on the planning balance the case is made for the proposed pipeline diversion.
- 21.2.113. If the pipeline diversion needs to be delivered as part of this Order, that provision is adequately secured in Article 59 and the relevant Requirements in Schedule 2 of the dDCO would apply.
- 21.2.114. The ExA highlights the letter issued jointly by the Department for Transport (DfT) and BEIS on 30 July 2021, confirming that it has been agreed that the SoS for Transport would be the sole decision maker for the Proposed Development and that the SoS for BEIS would be consulted on the recommendations made by the ExA in relation to the energy NSIP. The comments made by SoS for BEIS would be taken into account when the SoS for Transport is making the decision.
- 21.2.115. The ExA confirms that the adverse effects of the Proposed Development on the archaeology in Filed 44 has been considered and taken into account in the effects on the Historic Environment as a whole. As such the pipeline diversion work itself does not carry weight in the planning balance for the Proposed Development.

Significant Cumulative Effects

- 21.2.116. Here the ExA has examined, considered, and concluded on the scope of the CEA and adequacy of proposed mitigation; whether or not, EWR project should be included in the CEA; and the consideration of the likely interactions between the Proposed Development and EWR. Matters relating to the Applicant's regard to the EWR project on the assessment of need for the Proposed Development and the findings of that assessment have been taken account in the assessment of need.
- 21.2.117. The ExA is satisfied with the Applicant's proposed methodology for assessing Combined Effects and Cumulative Effects and the adequacy of the proposed mitigation. The ExA also accepts that it would not be appropriate to include EWR in the CEA for the Proposed Development in line with the guidance contained in Advice Note 17. The ExA is satisfied with the Applicant's proposed methodology for assessing Combined Effects and Cumulative Effects, and the adequacy of the proposed mitigation. In particular, the ExA is satisfied that in line with Planning Inspectorate Advice Note 17 it would not be appropriate to include EWR project in the CEA for the Proposed Development.
- 21.2.118. The ExA acknowledges representations from several IPs as well as LAs about the lack of coordination between the Proposed Development and the EWR project, given the potential geographical proximity and

engineering interfaces between the two. However, the Proposed Development and the EWR project are two separate projects, brought forward by two different promoters. Given the difference between the timescales and stages of development, the coordination between the two projects or lack thereof is beyond the scope of this Examination.

- 21.2.119. The ExA is satisfied that the Proposed Development would be in line with the policy requirements of NPSNN Paragraphs 4.16, 4.17 and 4.82. Taking all the matters reported here, ExA and gives Significant Cumulative Effects, limited weight against making of the Order.

21.3. PLANNING BALANCE AND THE CASE FOR DEVELOPMENT CONSENT

- 21.3.1. S104(3) of the PA2008 provides that: *"The Secretary of State must decide the application in accordance with any relevant National Policy Statement, except to the extent that one or more of subsections (4) to (8) applies."* Such matters include if the Proposed Development would lead to the United Kingdom (UK) being in breach of its international obligations; be unlawful; lead to the SoS being in breach of any duty imposed by or under any legislation; result in adverse impacts of the development outweighing its benefits; or be contrary to legislation about how the decisions are to be taken.
- 21.3.2. While the ExA acknowledges the effects of the Proposed Development on matters relating to the HRA, and Flood Risk, Water Quality and Resources, the ExA ascribes neutral weight for or against making the Order. The Applicant's approach to design of the structural elements of the Proposed Development and the design development process also carries neutral weight in making the Order. Despite some adverse effects on NMUs and some missed opportunities to deliver greater benefit for NMUs, the ExA finds that the Proposed Development would deliver a net positive, and apports neutral weight to making the Order.
- 21.3.3. Of greatest concern to the ExA is the adverse effects of the Proposed Development on the Historic Environment, in particular the removal of Brook Cottages. The ExA finds that the Applicant did not give "*great weight*" to the conservation of Brook Cottages in developing the proposed Black Cat junction and has not provided a "*clear and convincing justification*" for the substantial harm and total loss of significance that would be caused by its removal, or that this harm is, therefore, "*exceptional*". Consequently, the Proposed Development would conflict with Paragraph 5.131 of the NPSNN. However, the ExA finds that the substantial public benefits of the Proposed Development over its 60-year lifetime, in terms of meeting transport need, improving road safety and reducing injuries and fatalities, and supporting economic and housing growth, would outweigh the substantial harm and total loss of significance. The Proposed Development would therefore accord with Paragraph 5.133 of the NPSNN.
- 21.3.4. Nevertheless, the substantial harm and total loss of significance that would be caused by the removal of the Grade II listed building Brook

Cottages, means the ExA ascribes the adverse effects of the Proposed Development on the Historic Environment substantial weight against making the Order.

- 21.3.5. In terms of socio-economic effects, with respect to the effects of the Proposed Development on the specific parties, Mr Baron, and the Chamberlains, the ExA attributes substantial weight against making the Order. The ExA conclusion on wider economic benefits of the Proposed Development is recognised separately in the context of the Need for the Proposed Development.
- 21.3.6. The Proposed Development would result in significant adverse effects on the landscape and visual receptors, and the ExA therefore considers Landscape and Visual Effects provides moderate weight against making the Order. The Proposed Development would also result in significant and permanent adverse effects for BMV agricultural land and sand and gravel minerals. Notwithstanding the locational constraints of the route of the Proposed Development between the Black Cat roundabout and Caxton Gibbet roundabout the ExA considers Land Use provides moderate weight against making the Order.
- 21.3.7. Taking into account the totality of adverse effects of construction activities on: traffic, air quality, noise and vibration, Landscape and Visual Effects, Land Use, and socio-economic aspects, the ExA attributes moderate weight against making the Order.
- 21.3.8. Notwithstanding the accordance with the NPSNN, the ExA considers there would be a residual adverse effect from the Proposed Development in terms of Climate Change and Carbon Emissions, which is significant and which, the ExA concludes carries limited weight against making the Order.
- 21.3.9. The ExA attributes limited weight against making the Order to potential adverse effects of the Proposed Development on construction traffic effects, air quality effects, noise effects, Biodiversity, and significant cumulative effects.
- 21.3.10. The NPSNN recognises that NSIPs will inevitably have adverse effects including on noise, Climate Change and Carbon Emissions, Landscape and Visual Effects, Biodiversity and the Historic Environment. It states that whilst applicants should deliver developments in accordance with Government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain (Paragraph 3.4). The ExA acknowledges the adverse effects of the Proposed Development, and finds that those effects are generally in conformity with the NPSNN, albeit with the exception of Paragraph 5.131.
- 21.3.11. The ExA consider that case for the Need for the Proposed Development has been made, in that the Proposed Development would make an important contribution to the improvement and enhancement of the existing SRN, meeting key strategic objectives of the NPSNN. The ExA

also finds that the Proposed Development would assist the Applicant and LHAs in discharging their Network Management Duty (NMD) under the Traffic Management Act 2004. LAs have also stated their strong support for the strategic need for the Proposed Development, and that their respective Local Plans would support the granting of the Order. The benefits are summarised previously in this Chapter but include relieving traffic congestion on the A428, providing more reliable journey times, encouraging traffic from local roads and the communities they serve to the SRN, improving road safety and facilitating local economic and housing growth. Therefore, the ExA attaches each of the aforementioned benefits, substantial weight in favour of making the Order.

- 21.3.12. The ExA is of the view that on balance, the likely benefits of the Proposed Development outweigh those matters that weigh against the making of the Order, in isolation or in combination with another. In addition to the planning balance outcome, the ExA also takes into account the policy direction in the NPSNN Paragraph 4.2, which states that subject to the detailed policies and protections within it, and the legal constraints set out in the PA2008, there is a presumption in favour of granting development consent for national networks NSIPs. The ExA concludes that there is a convincing case for development consent to be granted.

22. COMPULSORY ACQUISITION AND RELATED MATTERS

22.1. INTRODUCTION

- 22.1.1. As stated in Chapter 21 of this Recommendation Report, the ExA concludes that in line with Section (s) 104(7) of the Planning Act 2008 (PA2008), the benefits of the Proposed Development would outweigh its adverse impacts. It follows that the reporting on the case for Compulsory Acquisition (CA) and Temporary Possession (TP) is presented on the basis that the Applicant's case for development consent is made.
- 22.1.2. The case for CA and TP must always be examined in accordance with the tests in PA2008; furthermore, CA and TP were also identified as principal issues in the Rule 6 letter [PD-005]. Central to the Examination were matters relating to whether the Applicant's case for the Proposed Development in the public interest justified interference with Human Rights, and whether it would accord with the Equality Act 2010. The ExA also examined matters relating to the need for the amount of land proposed to be subject to CA and TP, alternatives in relation to individual plots, and effects on Statutory Undertaker (SU) land and apparatus.

22.2. APPROACH TO EXAMINATION OF THE CA AND TP CASE

- 22.2.1. To set the scene for the Examination of the CA and TP case, the ExA has considered the legislative framework, and the Applicant's case for CA and TP, in the following order:
- 1) the legislative framework in PA2008, including the legislative requirements from the Applicant and the Secretary of State (SoS)'s consideration in reaching a decision;
 - 2) the request for CA and TP powers in the application and the key documents where these are set out;
 - 3) the purposes for which land is required, identifying the main articles where the powers are sought in the dDCO; and
 - 4) Applicant's strategic case for CA and TP.
- 22.2.2. Subsequently, the ExA tested the Applicant's case for CA and TP with regard to the following matters:
- 5) individual objections and the ExA's reasoning on the individual objections;
 - 6) other matters, including Crown Land, Special category Land, SU's land, Human Rights, the Equality Act and the adequacy of funding, and the ExA's reasoning on those cases; and
 - 7) discussion on and changes to Article 11, Article 28 and Article 40, including comparison between dDCO and recommended DCO (rDCO).
- 22.2.3. The Applicant's case for CA and TP has been tested in light of the individual objections and related evidence. The ExA has subsequently

presented a conclusion as to whether the Applicant's case for CA and TP is made against the legislative framework in PA2008.

22.3. LEGISLATIVE REQUIREMENTS

22.3.1. Sections (s) 122 to 135 of PA2008 and the amendments made by the Growth and Infrastructure Act 2013, set out the main provisions relating to the authorisation of the CA of land, specifying the conditions which must be satisfied if a development consent order is to authorise CA, restrict the provisions which may be made about compensation in an order, and set out additional requirements which apply in relation to certain special types of land and Crown land and to the circumstances where special parliamentary procedure can be triggered.

22.3.2. Guidance is also available in Guidance Related to Procedures for the Compulsory Acquisition of Land, September 2013 (former) Department for Communities and Local Government (DCLG) (CA guidance).

Tests in s122 and s123 of PA2008

22.3.3. The PA2008, provides in s122 that the purpose for which CA may be authorised is if the land is required for the development to which the development consent relates, or to facilitate or is incidental to that development, or is replacement land which is to be given in exchange for the order land under s131 or s132.

22.3.4. In accordance with s122(3) there must be a compelling case in the public interest to acquire the land, which means that the public benefit derived from the CA must outweigh the private loss that would be suffered by those whose land is affected. In balancing public interest against private loss, CA must be justified in its own right.

22.3.5. In accordance with s123 of PA2008 one of three procedural conditions in subsections (2) to (4) must be met by the application proposal, namely:

- 2) that the application for the order must include a request for CA of the land to be authorised;
- 3) that all persons with an interest in the land consent to the inclusion of the provision; and
- 4) that the prescribed procedure has been followed in relation to the land.

22.3.6. It should be stated from the outset that the condition in sub-section (2) is met.

22.3.7. The Applicant is required to meet a number of general considerations, either in line with the CA Guidance or to satisfy the conditions in s122 and s123. To meet these conditions, the Applicant must demonstrate to the satisfaction of the SoS:

- 1) that there is appropriate provision for CA in the draft Development Consent Order (dDCO);

- 2) that the land in question is needed for the development to which the consent relates, or is required to facilitate, or is incidental to, the development, or is replacement land given in exchange;
- 3) that all reasonable alternatives to CA, including modifications to the scheme have been explored;
- 4) the proposed interference with the rights of those with an interest in the land is for a legitimate purpose, necessary and proportionate;
- 5) that there is clarity of how the land which it is proposed to acquired is intended to be used;
- 6) that the application is accompanied by a statement explaining how it will be funded, with information about the resource implications of both acquiring the land and implementing the project, and the availability of the funding is within the statutory period following the order being made; and
- 7) in accordance with s42 and s44 of PA2008, Applicants has consulted those with interests in relevant land before an application is made and sought to acquire land by negotiation wherever practicable.

22.3.8. The SoS must ultimately be persuaded that there is a compelling case in the public interest for the land to be acquired compulsorily, the SoS should be satisfied that there is compelling evidence that the public benefits that would be derived from the CA will outweigh the private loss that would be suffered by those whose land is to be acquired. In particular, regard must be given to the provisions of Article 1 of the First Protocol of the European Convention on Human Rights (ECHR) and, in the case of acquisition of a dwelling, Article 8 of the Convention.

Tests for Statutory Undertakers' land in s127 of PA2008

22.3.9. The legislative framework places restrictions on the CA of land held by SU in s127 of PA2008. If a SU has made a representation that has not been withdrawn before the end of the Examination, then the SoS will need to be satisfied that the land can be purchased or replaced or new rights over that land can be created without serious detriment to the carrying on of the undertaking. Under the provisions of s138 of PA2008, the removal of SUs' apparatus can be authorised if the SoS is satisfied that it is necessary for the Proposed Development.

Tests for Crown Land in s135 of PA2008

22.3.10. Interests in Crown land, unlike other land, cannot generally be compulsorily acquired. Therefore, where such land is required for a major infrastructure project, the land, or an interest in it held by or on behalf of the Crown, would need to be acquired through negotiation and bilateral agreement. S135 is of relevance, which provides that an order granting development consent may include provision authorising the CA of an interest in Crown land only if it is an interest which is for the time being held otherwise than by or on behalf of the Crown, and the appropriate Crown Authority consents to the acquisition.

Changes to TP in The Neighbourhood Planning Act 2017 (NPA2017)

- 22.3.11. Reference must be made to prospective legislated changes to the TP system applicable within England and Wales. The Neighbourhood Planning Act 2017 (NPA2017) has been enacted and contains provisions which amount to a codification of new TP practice. However, as of the closure of this Examination, the relevant provisions had not commenced. Paragraph (1) of Article 3 of the dDCO, the Applicant seeks to disapply provisions of NPA2017, noting that the provisions relating to TP in the NPA2017 had not yet come into force and the Applicant proposed to proceed under the existing PA2008 procedure.
- 22.3.12. The ExA accepts that the Applicant's TP provisions under the process available under the PA2008, recognising that the provisions of NPA2017 relating to TP require more detail on the operation of the regime, which have not yet been made.

22.4. THE REQUEST FOR CA AND TP POWERS IN THE APPLICATION

- 22.4.1. The application requests powers of CA and TP for the Proposed Development as described in the final submitted version of the following documents:
- 1) Schedule 1 of the dDCO [AS-026];
 - 2) Statement of Reasons (SoR) [REP10-013, Chapter 2];
 - 3) Land Plans [REP4-002];
 - 4) Book of Reference (BoR) [REP10-014]; and
 - 5) Crown Land Plans [REP4-004].
- 22.4.2. To a lesser extent, other relevant documents are the dDCO [AS-026], Explanatory Memorandum (EM) [REP10-008], Works Plans [APP-009] [APP-010], Streets, Rights of Way and Access Plans [REP10-002], Consents and Agreements Position Statement [REP9-008] and the Environmental Statement (ES) [APP-071].
- 22.4.3. The Applicant seeks powers to CA land permanently, for TP, and for TP with acquisition of permanent rights; while no land is sought for permanent acquisition of airspace and/or subsoil rights over land. The Applicant has sought powers of CA in respect of all plots of land even where the Applicant already holds an interest or presumes it holds an interest in the land. This approach has been taken to ensure that the Applicant has the right to acquire the interest it needs in all of the Land, even where an unknown or unregistered interest later asserts an interest in land which the Applicant believe it owns and clearing the title would be necessary.
- 22.4.4. There were no material or non-material changes sought to the application during the Examination.

22.5. THE PURPOSES FOR WHICH LAND IS REQUIRED

Powers sought in the dDCO

- 22.5.1. The main powers sought by the Applicant, authorising CA of land or interests in or rights over land, that are contained in the dDCO [AS-026] are described here [REP10-013, Chapter 3].
- 22.5.2. Article 25 Compulsory acquisition of land – would allow outright CA of land within the Order limits to enable the Applicant to construct the permanent works. The specific purposes for each plot of the land which is subject to powers of outright acquisition is set out in the Statement of Reasons (SoR) [REP10-013, Annex A].
- 22.5.3. Article 28 Compulsory acquisition of rights and imposition of restrictive covenants – would allow rights over land to be acquired instead of outright acquisition. This would enable flexibility in the Applicant’s approach and a reduction in the outright acquisition of land. The Applicant would need these rights for the purposes of constructing the works and the maintenance of the works thereafter. The SoR provides a description of the land which is subject to the acquisition of rights or the imposition of restrictive covenants [REP10-013, Annex A].
- 22.5.4. Article 30 Private Rights Over Land– would provide the Applicant the right to extinguish all existing private rights over land, in order to ensure that such rights do not interfere with the construction and operation of the Proposed Development.
- 22.5.5. Article 38 Acquisition of subsoil or airspace only – would provide that where the Applicant has powers of CA under Article 25 then it may choose instead to acquire only the subsoil underneath, or airspace over the land. This would have less impacts on affected landowners and allow the Applicant to minimise its costs.
- 22.5.6. Article 39 Rights under or over streets – would authorise the Applicant to enter on and appropriate the subsoil underneath or the airspace over any street required to deliver the Proposed Development without having to acquire any part of the street or any easement or right in the street.
- 22.5.7. Article 40 Temporary use of land for carrying out the authorised development – would authorise the Applicant to take TP of land specified in Schedule 7, remove buildings and vegetation from the land and construct temporary and permanent works. TP would be subject to time limits, and the Applicant would be required to remove all temporary works and restore the land to the reasonable satisfaction of the owners with some exceptions as listed in the dDCO. The SoR provides the specific purpose and description of the land which may be occupied temporarily [REP10-013, Annex A].
- 22.5.8. Article 41 Temporary use of land for maintaining the authorised development – would authorise the Applicant to take TP of any land within the Order limits for the purpose of maintaining the Proposed Development, during the period of five years from the date on which that part of the Proposed Development is first open for use. The Applicant may only remain in possession of land under this Article for so long as may be reasonably necessary to carry out the maintenance. The

Applicant would not be able to take TP of a house or any other occupied building under this Article. Before giving up possession of land, the Applicant would be required to restore the land to the owner's reasonable satisfaction.

- 22.5.9. Article 57 Crown Rights – includes provision for the acquisition of Crown Land, under s135 of PA2008 which provides that a DCO may authorise, with the consent of the Crown, the CA of an interest held in Crown land which, for the time being, is held otherwise than by or on behalf of the Crown. The relevant plots are listed in the BoR [REP10-014] and SoR [REP10-013, Chapter 7].
- 22.5.10. The Applicant confirms that none of the land to be acquired for the Proposed Development is special category land, that is land forming part of a common, open space, or fuel or field garden allotment, for the purposes of s131 and s132 of PA2008 [REP10-013, Chapter 7].
- 22.5.11. SU would be affected by the Proposed Development and provisions in the dDCO would authorise the permanent CA and acquisition of rights over SU's land. Protective Provisions (PP) in Schedule 9 of the dDCO contains provisions protecting the interests of SUs.

22.6. THE APPLICANT'S STRATEGIC CASE FOR CA AND TP

- 22.6.1. The Applicant summarised its strategic case for CA and TP at Compulsory Acquisition Hearing (CAH) 1 [EV-024] [EV-028] [REP3-021], making reference to the SoR [REP10-013] and the ES [APP-071] [APP-240]. The Applicant set out the need for the Proposed Development, in terms of traffic benefits, safety benefits, economic benefits and environmental benefits, which underpinned the Applicant's case that there is a compelling case in the public interest for the CA and TP powers sought in the application. Matters relating to the need for the Proposed Development have been reported in Chapter 5 of this Recommendation Report.
- 22.6.2. The Applicant explained that through the design process, the Proposed Development has been subject to a staged development [APP-072]. In relation to the land required for the Proposed Development, the Applicant stated that it had taken into account all requests for changes and where possible made changes in response to comments received from landowners. Changes made to the alignment resulted in overall reduction in the length of the mainline carriageway [REP10-013, Section 2.5]. Matters relating to the assessment of alternatives has been reported in Chapter 4 of this Recommendation Report, as well as in other Chapters on Planning matters.
- 22.6.3. The Applicant has explained how it intends to use the land in the SoR [REP10-013, Annex A]. The Applicant has taken into account the flexibility required to construct the Proposed Development within defined limits of deviation which are provided for in the dDCO and shown on the Works Plans. However, should it transpire that any part of the Land within the Order limits is not required, for instance, as a result of the

detailed design process, the Applicant would only seek to acquire that part of the Land required to minimise the effects on land interests.

22.6.4. The Applicant has also confirmed that any person affected by CA and TP would be entitled to compensation. under Article 28 and Schedule 6 to the dDCO. The Applicant has demonstrated that it has resources to pay the compensation in the Funding Statement. Taking special account of the resident at Brook Cottages and the business owners and residents at the Keenscreen property, the Applicant considers that any infringement of the ECHR rights of those whose interests in the land would be affected would be proportionate and legitimate, would be in the public interest and would be in accordance with national and European law.

22.6.5. The Applicant's case for CA and TP has been tested in light of the individual objections and related evidence. The ExA has subsequently presented a conclusion if the Applicant's case for CA and TP is made against the legislative framework in PA2008.

22.7. INDIVIDUAL OBJECTIONS

22.7.1. The Applicant's CA Schedule [REP10-033] details discussions that are ongoing with all freeholders who have an interest in land within the Order limits [REP10-033]. In line with the format suggested by the ExA, the Applicant has categorised these Affected Persons (AP) depending on the current status of negotiations:

- Agreement signed – 0
- All matters agreed, signing pending – 2
- No objection, and negotiations ongoing – 27
- No objection, negotiation not commenced – 0
- Objection, but ongoing negotiation – 0
- Objection, agreement unlikely before close of Examination – 18
- Objection, but ongoing negotiations, not interested in Acquisition by agreement – 17
- No objection, and not interested in Acquisition by Agreement – 31

22.7.2. The ExA has reported on the individual objections and provided the reasoning on those objections individually, before considering and concluding on the wider strategic matters relating to interference with Human Rights, alignment with the Equality Act, and if the Applicant has considered alternatives to CA, including modifications to the Proposed Development.

22.7.3. The ExA agrees with the Applicant's presentation of information regarding plot numbers and the types of rights sought relevant to each case, as summarised in the CA Schedule [REP10-033] and the BoR [REP10-014]. The location of plots for CA and TP can be found in the Land Plans [REP4-002]. Also of relevance is the SoR [REP10-013, Annex A]. These documents should be referred to while reading the following individual cases.

Emma Louise Banks

- 22.7.4. Emma Louise Banks (Bates Bros (Farms)), represented by Brown & Co [RR-035] [PDB-003] [REP6-055], is CA Schedule reference 1. The agent on behalf of the Affected Person (AP), sought confirmation that Proposed Development would not impact drainage flows in their retained land, and suggested removing plot 1/45a from the Order limits. The Applicant stated that it was not anticipated that any works would impact on drainage flows or existing ground/ field drainage in the area. The Applicant also confirmed that plot 1/45a could not be removed from the Order limits because it was flood compensation area for Rockham ditch [REP1-021].
- 22.7.5. The Applicant's final update [REP10-033] states that negotiations are ongoing, but matters had not been agreed between the AP and the Applicant.

ExA's reasoning

- 22.7.6. Matters relating to drainage and flooding are reported in Chapter 14 of this Recommendation Report and the ExA is satisfied that the effects of the Proposed Development on drainage and flood risk with regard to this location have been considered. Consistent with the FRA, the ExA is satisfied that the Applicant has a convincing case for the CA of plot 1/45a and that it is needed for the Proposed Development.

Diane Angela Sharman and the partners of the farming partnership H G Sharman & Son

- 22.7.7. Mrs Diane Sharman and the Partners of the farming partnership, H G Sharman and Son, represented by Bletsoes [RR-028] [RR-043] [REP1-083] [REP7-007], are CA Schedule references 2 and 3.
- 22.7.8. Mrs Diane Sharman owns land directly affected by the Proposed Development, which is farmed by the partnership. In addition, the partnership are tenants of several parcels of land directly affected by the Proposed Development. The agent on behalf of the APs, expressed the following concerns:
- 1) the Applicant's plans do not provide sufficient detail to ascertain the full effect on the AP's land and business;
 - 2) it was not clear if the existing access to the land East of Roxton Road and north of A421 would be affected;
 - 3) if the proposed new ditch was needed for drainage, and if it could be aligned closer to the Proposed Development to reduce the amount of land that was needed;
 - 4) due to the short-term development potential, and a possible Planning Application for the land southeast of Roxton Garden Centre (identified for flood storage in the Proposed Development), they believed had increased the value of this land over its agricultural value, and consequently would increase the compensation; the APs felt this represented greater cost to the public purse and requested that the flood storage area to be relocated to land where development would be unlikely;

- 5) the request for design changes to the new access to Kelpie Marina and a flood storage area have not been accepted;
- 6) a preference to retain freehold ownership of the flood storage area near the new access to Kelpie Marina;
- 7) the proposed layout of the new junctions onto Chawston Lane may present a problem for vehicles with restricted manoeuvrability, such as heavy goods vehicles and agricultural traffic;
- 8) further details on the proposed accommodation works have not been made available; and
- 9) further detail on how the Proposed Development will relate to the proposed East West Rail project has not been made available.

22.7.9. The Applicant responded that the existing access off Roxton Road, north of the A421 and the proposed Roxton Road roundabout, for access to land to the east, would be retained as part of the Proposed Development. The Applicant confirmed that the location and alignment of the cut-off ditch, the access to Kelpie Marina, and the flood storage area were dictated by the presence of the underground high-pressure gas main. Additionally, the location and size for flood storage area for the crossing of Rockham ditch had been determined by modelling set out in the ES [APP-082] [APP-219 to APP-223]. The Applicant was unable to locate a Planning Application for the land southeast of Roxton Garden Centre and did not accept the APs argument regarding the implication for the value of the relevant land. The Applicant confirmed that the new junction, designed in consultation with Bedford Borough Council (BBC), was sound for use by heavy goods vehicles, verified by a swept-path analysis. Finally, the Applicant confirmed that details relating to accommodation works including drainage and boundary treatment were in the Environmental Masterplan [REP9-037] and would be finalised at detailed design stage by the Principal Contractor [REP9-028].

22.7.10. In response to the request to retain the freehold ownership of the flood storage area, the Applicant reiterated the point it made at a wider discussion at CAH1 [EV-025] [EV-029] [REP3-018, 10] [REP9-027] that any disposal of essential mitigation land back to original landowners, would expose the Applicant to potential criminal sanction for breach of the terms of the DCO if the landowner failed to maintain the mitigation area. The Applicant could face greater jeopardy than the landowner; as such considered this an unreasonable risk and did not take forward the request from landowners.

22.7.11. The APs reiterated their concerns relating to lack of detail for accommodation work, access to their land, their analysis regarding elevated value of the land southeast of Roxton Garden Centre, and their preference to retain freehold ownership of the flood storage area, and these matters remained unresolved at the close of the Examination [REP7-007]. The Applicant, likewise has reiterated its responses and maintains its positions on all matters [REP9-027] [REP9-028].

ExA's reasoning

- 22.7.12. The ExA appreciates the detailed and considered concerns raised by the Sharmans and the partnership. In these matters that remained unresolved at the close of the Examination, the ExA makes the following findings. The ExA is persuaded by the Applicant's wider argument on the question of disposal of essential mitigation land back to original landowners and agrees that this would mean that the Applicant is reliant on the landowners on delivering the terms of the DCO, if the DCO were made, or face the penalty for non-compliance. The ExA notes that for such a provision, the dDCO would need to recognise and include all such landowners for purposes of transfer of powers and conduct the associated due diligence. The proportionality of the benefit of such a move versus the resource implication and risk exposure for the Applicant remains untested. As such, the ExA agrees with the Applicant not pursuing this process.
- 22.7.13. For the design issues raised by the APs regarding access to their land and the accommodation works, the ExA is satisfied that the detail in the Environmental Masterplan is adequate, and is satisfied with the Applicant's confirmation that the access to the AP's land would be retained. Wider matters relating to the design and design development process are reported in Chapter 10 of this Recommendation Report. On other matters, such as the requirement, location and details of the drainage ditch, flood storage and new access to Kelpie Marina, and the design of the new junctions onto Chawston Lane, the ExA is persuaded by the Applicant that these matters are underpinned by the technical analysis in the ES; in the absence of evidence to challenge the Applicant's proposed design outcomes the ExA has no reason to dispute the Applicant's case on these matters. Wider matters relating to Flood Risk, Highway – Network and Structures are discussed in Chapters 14 and 6 of this Recommendation Report.

The Executors of N A Alington

- 22.7.14. Executors N A Alington Little Barford Estate, represented by Bidwells [RR-109] [REP1-096] are CA Schedule reference 4. The Little Barford Estate, after the death of family owners, remains within the hands of its Executors, and operates as a rural estate divided into farmland, woodland, and residential properties. The farmland on the Estate centres around Top Farm and grazing land in the River Ouse floodplain. The Executors submitted an outline objection because the Proposed Development severs the Estate disrupting the main estate business, and highlighted the following concerns in written submissions [RR-109] [REP1-096] and orally at CAH1 [EV-025] [EV-029]:
- 1) Alongside the need for new north-south pedestrian and cycle routes, the AP emphasised the need that the Proposed Development does not prejudice housing and employment growth options and confirmation that the status of the new A428 does not prohibit new junctions in the future.
 - 2) The AP noted that permanent and temporary land take includes land for environmental mitigation, and asked that woodland and environmental mitigation areas be taken on a temporary basis and

returned when woodland works are completed. The AP also expressed concern about the inadequacy of the Applicant's process to sell back land that is surplus to need to the original owners, as the AP experienced during previous Nationally Significant Infrastructure Projects (NSIP) in the area.

- 3) Access bridge proposed over the A428 at Top Farm would be a single carriageway bridge of 4.7m, which would be insufficient for the working width of modern farm equipment which can be from 3m to over 8m. The AP states that currently the Estate had access over a farm track of unrestricted width or weight and as such, would require 7.3m running surface plus hard verge replacement access bridge to be provided by the Applicant.
- 4) The AP asked for further details regarding the land drainage alongside the Proposed Development to ensure it is sufficient to drain the landscape, reinstated underdrainage schemes and capacity to take both land water and road water.

22.7.15. The Applicant responded that it is proposing to mitigate the effect the new road alignment has on the Little Barford Estate by replicating the existing farm access through the provision of the private accommodation bridge. For matters relating to the provision for Non-Motorised Users (NMU) on Barford Road and the proposed structure over the East Coast Main Line (ECML) the Applicant stated that it would be providing a replacement of the existing infrastructures. Given the existing infrastructures did not include separate provision for walkers, cyclists and/or horse-riders (WCH) or NMU and in light of the assessed effects of the Proposed Development, the Applicant did not see justification for an intervention including NMU provision. However, the Applicant said that subject to suitable details of any proposed junctions onto the new dual carriageway, the status of the new road would not preclude the provision of a junction in the future. For details regarding drainage, the Applicant confirmed that those details would be dealt with at detailed design stage, post consent when the individual needs of each land parcel would be considered [REP1-021] [REP3-008].

22.7.16. In response to the request to retain the freehold ownership of the land taken for environmental mitigation, the Applicant reiterated the point it made at a wider discussion at CAH1 [EV-025] [EV-029] [REP3-018, 10] that any disposal of essential mitigation land back to original landowners, would expose the Applicant to potential criminal sanction for breach of the terms of the DCO if the landowner failed to maintain the mitigation area. The Applicant could face greater jeopardy than the landowner; as such it considered this an unreasonable risk and did not take forward the request from landowners. In response to a CAH1 post hearing action, regarding the concerns about disposal of land that had been acquired and found surplus, the Applicant explained that land would be acquired using General Vesting Declarations (GVD) after detailed design process. If any land acquired were found to be surplus to need after construction, it would be disposed of under the Government policy set out in the Crichel Down rules. Crichel Down rules states that the land would be offered back to the former owner first, and if they are not interested in acquiring

the land back, it would be offered for sale on the open market [REP3-018, 4, Appendix A].

- 22.7.17. After visiting the farm at the Accompanied Site Inspection (ASI) [EV-022], the ExA asked the AP at CAH1 and in Written Questions 2 (WQ2), to provide justification with reference to other NSIP schemes and relevant policies, that the future proofing of the overbridge and other similar provisions is a reasonable request from the Applicant. The ExA also sought clarification that given the proposed access bridge was of equivalent width to the current track, how would it leave the AP worse off [EV-025] [EV-029] [REP3-025].
- 22.7.18. The AP responded that they currently have unrestricted access for machinery because the track adjoins grass margins or fields and therefore machinery can either run on grass or the track could be widened at modest expense if needed to carry wider equipment. Compared to that the Applicant's proposed 4.7m access bridge with parapets is a limiting for their activities. Giving examples of 4.7m wide access bridges to Cantelupe Farm Trumpington, and A14 Cambridge Park Farm Histon the AP asserted that the width of these access bridges is no longer adequate and requires other measures [REP4-072, Q2.5.3.3].
- 22.7.19. To this point National Farmers Union (NFU) also stated that it considered that all accommodation overbridges provided for farmers should be no less than 5m wide and capable of taking a loading of 60 tonnes. The NFU stated that they submitted this petition to High-Speed 2 (HS2) Phase 1 Select Committee in 2016. The NFU also asserted that overbridges should be future proofed due to the problems which are now occurring with bridges which give access over certain railway lines to severed blocks of land [REP4-071].
- 22.7.20. The Applicant stated that the topographical survey shows that the width of the existing stone track running to Top Farm is 3.2m wide. And would not accommodate some of the agricultural machinery that the AP were demonstrating they would need to transport across the bridge. As such, the Applicant considered the proposed 4.3m width to be adequate and did not think the AP's request for the 7.3m access bridge was justified. However, the Applicant stated that it would continue discussion with the AP on this matter [REP3-025]. The Applicant did not find any information to support whether the NFU were successful in their petition on HS2 Phase 1 and did not find any undertaking in the HS2 register of assurances to future proofing in the terms suggested by NFU [REP5-015, Q2.5.3.3].
- 22.7.21. At the close of the Examination, the AP confirmed that there was an agreement with the Applicant to provide an access bridge of 6m between the fence and parapets in order to give a safe working width. However, the AP remain dissatisfied with the level of detailed design provided by the Applicant during Examination and the inadequacy of the Applicant's resources to manage disposal of land using the Crichel Down procedure post consent [REP10-077].

ExA's reasoning

- 22.7.22. The ExA finds that the AP's concerns regarding the limited resources available to the Applicant and its partners is a point well made and a matter that the ExA feels the Applicant would need to take account of in the round. However, the ExA feels it can consider only matters before it that relate to the Proposed Development. In that regard, the ExA is satisfied with the Applicant's explanation of its approach to the method of acquiring land and that surplus land would be disposed of in line with Government policy. Likewise the ExA finds that the level of detail in the application regarding drainage is adequate for Examination. Wider matters relating to the design and design development process are reported in Chapter 10 of this Recommendation Report and matters relating to Flood Risk are reported in Chapters 14 of this Recommendation Report.
- 22.7.23. The ExA is persuaded by the Applicant's wider argument on the question of disposal of essential mitigation land back to original landowners and agrees that this would mean that the Applicant is reliant on the landowners to deliver the terms of the DCO, if the DCO were made, or face the penalty for non-compliance. The ExA notes that for such a provision, the dDCO would need to recognise and include all such landowners for the purposes of transfer of powers and conduct the associated due diligence. The proportionality of the benefit of such a move versus the resource implication and risk exposure for the Applicant remains untested. As such, the ExA agrees with the Applicant for not pursuing this process.
- 22.7.24. The ExA has concluded on matters relating to NMU provision in Chapter 6 of this Recommendation Report, and has accepted the Applicant's case underpinning the intended NMU infrastructure across the Proposed Development in terms of its strategic design approach and extent of NMU provision.
- 22.7.25. On matters relating to the width of the access bridge, the ExA considers there is merit in the AP's argument about the limitation of a 4.7m access bridge with parapets as opposed to the greater capacity of the existing track, albeit only 3.2m wide, but with soft verges that provide more flexibility to accommodate larger agricultural vehicles and equipment by overrunning. The ExA saw the access track and the adjoining soft verges at the ASI [EV-022]. However, the AP's argument seeking 7.4m or NFU's submission seeking a 5m wide access track were not supported by adequate justification or evidence to demonstrate what width would be a reasonable provision by the Applicant, and what adaptability or future-proofing should reasonably lie with the AP as business owners responding to changes in their commercial operation as a matter of course. The ExA notes that it may not be possible to mathematically determine the specifications of such provisions, but it does feel that the Applicant must engage with individual landowners to secure provisions that would enable the landowners to continue their business after the loss and disruption. In that regard, the ExA agrees with the AP and finds that the infrastructure provision of a bridge of the proposed width with parapets

would indeed limit the access of agricultural vehicles and equipment to Top Farm more than is available through the current provision. While the AP confirmed that the agreement had been reached for a 6m wide access bridge, which the ExA welcomes, the ExA has not received confirmation from the Applicant and indeed notes that this width of 6m is not secured in the dDCO through any certified documents. As such, the ExA cannot give any said agreement weight in its recommendation. The SoS may wish to seek confirmation from the Applicant in this regard.

D.H.T. Limited and Neal Gerard Doherty

- 22.7.26. D.H.T. Limited and Neal Gerard Doherty, represented by Brown & Co [RR-025] [RR-077] are CA Schedule references 5 and 6. Mr Neal Gerard Doherty is Director of D.H.T. Limited, owner of the plots proposed for temporary and permanent acquisition, owns and lives in a residential property to the north of the proposed A428 and owns commercial units which are currently accessed directly from the A1.
- 22.7.27. The APs were concerned that the Proposed Development would have a detrimental impact upon their enjoyment of the residential home where they currently live. The access to their commercial units, would be replaced by a new link road, and the APs are concerned that they could lose passing trade, and the link road could be unsuitable for Heavy Goods Vehicles (HGV). The AP's plots would be acquired for a borrow pit, and in this regard questioned if the material in their plot was in fact suitable for the purposes of construction, and sought further details of bund details, security fencing, measures to control noise and dust during construction and monitoring the vibration effects on their residential property.
- 22.7.28. The Applicant confirmed that it would maintain access to all properties throughout the construction or provide alternative access arrangements, or minimise the duration of any access restrictions. Additionally, the Applicant confirmed that A1 Services Link has been designed to accommodate HGVs into and out of the property, and to promote a low-traffic, low-speed environment to accommodate vehicles turning into and out of accesses serving private land as detailed in the Permanent Speed Limit Plans [APP-015]. In relation to vehicles trying to access the AP's commercial units, these vehicles would benefit from not having to turn directly on and off the A1 main carriageway.
- 22.7.29. Regarding the concerns raised regarding the location, justification and effects of the borrow pit, the Applicant signposted to the findings in the Borrow Pit Optioneering Report [APP-246] and summarised the commitments made in the First Iteration Environmental Management Plan (EMP), in particular Annex A – Air Quality Management Plan, Annex B – Noise and Vibration Management Plan and Annex R – Borrow Pits Management Plan [REP10-018]. For details regarding bunding and security fencing, the Applicant confirmed that those details would be dealt with as detailed design stage, post consent.

ExA's reasoning

- 22.7.30. The ExA is content that the Outline Construction Traffic Management Plan (OCTMP) [REP10-019] secures the Applicant's commitments regarding the access to the AP's commercial properties. Matters relating to effects of construction traffic are reported in Chapter 6 of this Recommendation Report. The ExA is also satisfied that the First Iteration EMP secures noise, vibration and dust control related matters. Matters relating to the effects of noise and dust control are reported in Chapters 13 and 12 of this Recommendation Report. For the design issues raised by the APs regarding bunding and security fencing, the ExA is satisfied that the detail in the application is adequate, and further details would be confirmed at detailed design stage. Wider matters relating to the design and design development process are reported in Chapter 10 of this Recommendation Report.

Davison & Company (Great Barford) Limited

- 22.7.31. Davison & Company (Great Barford) Limited, represented by Carter Jonas LLP, own property at Crow Green situated to the northeast of Caxton Gibbet junction, and are CA Schedule reference 7. The AP has advanced proposals for an employment development on the land, which is part of a sustainable strategic employment development for allocation in the emerging Greater Cambridge Local Plan. While the AP does not object in principle to the Proposed Development, it is seeking agreement with the Applicant to safeguard the proposed employment development of its land.
- 22.7.32. The AP states that the Applicant has not made a case for the CA of its land, in particular Plot 14/16a for Work No. 111 which is a proposed borrow pit and site compound area, and contends that powers of TP would suffice. The AP goes further to state that neither CA or TP would be necessary if the AP and Applicant could come to an agreement for the AP to grant the Applicant, subject to appropriate safeguards and PP, such temporary rights as are necessary for the purposes of Work No 111. In later submissions, the AP also stated that it would be agreeable in principle to the proposed material change of its land subject to suitable reinstatement provisions to be included in a separate voluntary agreement with the Applicant [RR-027] [REP1-060] [EV-025] [EV-029] [REP3-045] [REP4-065] [REP6-092] [EV-085] [EV-088] [REP6-093] [REP7-006] [REP8-042] [REP9-048] [REP10-069].
- 22.7.33. The Applicant responded that it is committed to continuing engagement with the AP, and safeguarding the development aspirations. The Applicant further explained that a part of the land included within Plot 14/16a would be required for permanent works comprising a section of proposed new carriageway and associated infrastructure [APP-008, Sheet 14]. As such, its position was that all land within Plot 14/16a, including the borrow pit land should remain for CA, due to the nature of the works proposed and the extent to which it would be materially altered. However, the Applicant confirmed that it was continuing negotiations to explore the possibility of reaching an agreement to use the land required for borrow pit, under a short term private lease arrangement, subject to it being a suitable alternative and provide the Applicant with the rights

necessary to carry out the works [REP1-021] [REP3-008] [EV-025] [EV-029] [REP3-021] [REP3-008] [REP3-018, 6] [REP4-037] [REP5-015] [EV-085] [EV-088] [REP8-010] [REP9-026] [REP10-044].

- 22.7.34. While both parties confirmed that negotiations were ongoing and at pace, the matter remained unresolved at the close of the Examination, with the AP dissatisfied with the pace at which the Applicant had conducted negotiations.

ExA's reasoning

- 22.7.35. The ExA acknowledges that the AP's development aspirations, which are in line with the emerging Greater Cambridge Local Plan, should not be compromised by the Proposed Development and in that regard is content that negotiations are ongoing and live between parties. The AP makes a valid argument for the borrow pit land, which is only required for construction stage, and could be acquired for TP only. But the ExA is persuaded by the Applicant that given the nature of the works proposed and the extent to which it would be materially altered it should be included in the Order for CA. Additionally the ExA finds that the function of the borrow pit and site compound area is integral to the delivery of the Proposed Development, and that function may need some elasticity in terms of timescales, which could be limiting with the provisions of TP. For these reasons, the ExA concludes that the plots in question should remain for CA in the Order. However, the ExA notes that negotiations are on-going regarding a private lease arrangement between parties and encourages that approach to alleviate the AP's concerns. Given this agreement was not reached during Examination, the ExA has not taken this into consideration in its final conclusion.

JAC Settlement Trust Corporation Limited and Judith Anne Clements

- 22.7.36. Judith Anne Clements and JAC Settlement Trust, represented by Brown & Co [RR-060] [RR-050] are CA Schedule references 8 and 9 [REP10-033]. The APs own land on Potton Road in Eynesbury and have concerns regarding access at various points to their properties, if entrances to certain properties would be suitable for farm machinery equipment, details of accommodation works, like road surfacing, and fencing, unrestricted access to watercourse near plot 5/2f for maintenance, soil storage area near the brook near plot 5/2h, land drainage schemes, effects on the dwellings associated Rectory Farm and the effects of the utility diversions on water supply and pressure.
- 22.7.37. The Applicant's response confirms that access would be either retained or replaced with new access as detailed in the Streets, Rights of Way and Access Plans (SRoWAP) [REP10-002], and where relevant these would be suitable for HGVs and farm equipment as indicated in preliminary designs in the Environmental Masterplan [REP9-037]. The Applicant also confirmed that it would maintain access to all properties throughout the construction or provide alternative access arrangements, or minimise the duration of any access restrictions. For details of accommodation works,

the Applicant confirmed that those details would be dealt with at detailed design stage, post consent. While specific watercourse maintenance access location points would be confirmed with the relevant responsible water authority, the Applicant did not agree to removing the proposed hedgerow near plot 5/2f because it was proposed as part of essential landscape mitigation. To manage other environmental effects highlighted by the APs, the Applicant referred to the First Iteration EMP, in particular Annex E Soil Handling and Management Plan and Annex F Water Management Plan [REP10-018]. In particular, with respect to the effects on the properties on Rectory Farm the Applicant highlighted the environmental assessment [APP-074 to APP-084] and the proposed necessary mitigation [REP10-018].

ExA's reasoning

- 22.7.38. The ExA is content that the OCTMP [REP10-019] and the SRowAP [REP10-002] secures the Applicant's commitments regarding the access to the AP's properties. Matters relating to traffic are reported in Chapter 6 of this Recommendation Report. The ExA is also satisfied that the First Iteration EMP secures water management and soil handling matters. Related matters relating to water management and soil handling are reported in Chapters 14 and 11 of this Recommendation Report. For the design issues raised by the APs regarding surfacing and fencing, the ExA is satisfied that the detail in the application is adequate, and further details would be confirmed at detailed design stage. Wider matters relating to the design and design development process are reported in Chapter 10 of this Recommendation Report.

Mr R Bates & Ms J Must

- 22.7.39. The Bates and Must family, represented by Henry H Bletsoe & Son LLP are CA Schedule references 10 to 13 [REP10-033]. The APs own land located to the west of Roxton Road on the north and south side of the A421, and land to the north of School Lane.
- 22.7.40. The APs believe there to be potential for residential development on the land and are in discussions with a major PLC housebuilder, seeking to promote the site for development. In addition, the APs consider that there are minerals present which they believe they should be compensated for value over and above agricultural value. The APs made the case that since much of their land was required for construction, it should be subject to TP and not CA, and for this purpose the APs were in discussion with the Applicant to enter into a private lease agreement. The APs wanted an additional standard access to a development site to the north of School Lane, and wanted to maintain the accesses to their agricultural land, which would need to be safe and efficient for agricultural operation. They wanted to secure mitigation measures such as land drainage, and fencing and hedge boundaries [RR-107] [REP1-091].
- 22.7.41. The Applicant stated [REP1-021] [REP3-008] that while negotiations were ongoing a short term private lease arrangement for the land needed for borrow pit for the construction period, that land should

remain in the Order for CA. The Applicant confirmed that the value of any mineral present within the land would be accounted for in any negotiations. For the additional development standard access, the Applicant did not consider that to be a reasonable request given there was not a planning permission for the development. For the existing access arrangement, the Applicant would seek to maintain access to all properties throughout the construction of the works or provide alternative access arrangements, or restrict access for limited periods, and after engagement with landowners. The Applicant stated that detailed requirements of accommodation works, land drainage, and mitigation measures would be finalised at detailed design stage in consultation with the landowners and in line with the Environmental Masterplan [REP9-037].

- 22.7.42. No further representations were received from the AP, but at the close of the Examination, the Applicant provided an update that agreement on matters relating to accommodation works, agricultural requirements, and access onto School Lane, were still outstanding.

ExA's reasoning

- 22.7.43. Matters of compensation are not for consideration by the ExA or the SoS, and as such a view on that matter is not offered here. Given that the development plans for the site to the north of School Lane do not have Planning Permission, the ExA finds in favour of the Applicant's position that there is not a convincing case for additional access arrangements for that land.
- 22.7.44. The ExA has reported on matters relating to borrow pits in Chapter 11 of this Recommendation Report. The ExA has concluded that the borrow pit land should be subject to CA, and makes the same conclusions for this case. The ExA notes that the AP is negotiating a private lease agreement, which is not before the ExA and so not taken into consideration here.
- 22.7.45. The ExA is content with the detail presented in the application on matters relating to land drainage, accommodation work and access arrangement, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. Wider matters relating to land drainage are reported in Chapter 14 of this Recommendation Report and matters relating to private accesses are reported in Chapter 6 of this Recommendation Report.

Patricia Martha Mary Eayrs and William Eayrs

- 22.7.46. Patricia Martha Mary Eayrs and William Eayrs, represented by Brown & Co are CA Schedule references 14 and 15 [REP10-033]. The APs own land which is near Roxton Road as an investment with the intention of commercial development. They were objecting to the land being acquired to provide a flood alleviation area, which they believe would be better suited closer to and alongside the existing river [RR-082] [RR-120].
- 22.7.47. The Applicant highlighted the findings in the ES [APP-082] [APP-220] [APP-091] and stated that as part of the environmental assessment for

the Proposed Development, flood compensation has been identified for South Brook in the form of two floodplain compensation areas to compensate for the floodplain storage volume lost as a result of the proposed embankment for the new Roxton Road Link and the A1. The flood compensation proposed on the AP's land is required to mitigate the effects of the Proposed Development on the existing floodplains associated with South Brook. Given the interdependencies of needing to mitigate in the vicinity of the impacted floodplain and the suitability of land to form flood compensation, the Applicant was unable to amend the flood compensation in this area, as requested [REP1-021]. The matter remained unresolved at the close of the Examination.

ExA's reasoning

- 22.7.48. The ExA is satisfied that the Applicant's justification for locating the flood plain compensation area on the AP's land is based on sound environmental assessment, and is justified. Wider matters relating to flood risk are reported in Chapter 14 of this Recommendation Report.

R. H. Topham & Sons Limited

- 22.7.49. R. H. Topham & Sons Limited, represented by Brown & Co are CA Schedule reference 16 [REP10-033]. The APs own land north of the existing A428 and hold an interest in other land affected by the Proposed Development. The AP objected to the CA and TP of their land on grounds of the alignment of the Proposed Development, effects the AP's farming operations, farming site being split into small fields and difficult field shapes, acquisition of land near the Toseland Road flyover, access to different parts of the site, adequate post scheme drainage, soil surveys to ensure the land is returned in the same condition, areas of soil storage, diversion of Footpath 278/7, boundary treatments along the route and access to all land during construction.
- 22.7.50. Matters relating to soil surveys and restoration are reporting in Chapter 16 of this Recommendation Report. Matters relating to footpaths are reported in Chapter 6 of this Recommendation Report.
- 22.7.51. The Applicant responded that objections relating to the alignment of the Proposed Development have not been raised before during the non-statutory and statutory consultation, and highlighted that the Applicant's case for the identification, assessment and selection of route options is set out in the ES [APP-072]. For the existing access arrangement, the Applicant would seek to maintain access to all properties throughout the construction of the works or provide alternative access arrangements, or restrict access for limited periods, and after engagement with landowners. The Applicant explained that the acquisition of land near Toseland Road flyover was needed for construction and soil storage areas. The Applicant stated that detailed requirements of accommodation works, land drainage, and mitigation measures would be finalised at detailed design stage in consultation with the landowners and in line with the Environmental Masterplan [REP1-021] and other management plans secured through the dDCO.

- 22.7.52. At the close of the Examination, the Applicant updated that negotiations were ongoing but agreement had not been reached [REP10-033].

ExA's reasoning

- 22.7.53. The ExA has examined the Applicant's case regarding the need for the Proposed Development, and the assessment of alternatives and this has been reported in Chapters 4, 5 and 8 of this Recommendation Report.
- 22.7.54. The ExA is content with the detail presented in the application on matters relating to land drainage, accommodation work and access arrangements, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. Matters relating to private accesses are also reported in Chapter 6 of this Recommendation Report.

Robert John Millard

- 22.7.55. Robert John Millard, represented by Brown & Co are CA Schedule reference 17 [REP10-033]. The AP is concerned about the plot 13/7a which would be subject to TP. The plot is part of the AP's residential garden and comprises a thin strip which the AP questions is necessary for the purpose identified, the construction of the Eltisley link road. The AP is also concerned regarding the provision of appropriate fencing alongside the boundaries both during construction and following completion to ensure the security of his residential property is not compromised [RR-090].
- 22.7.56. The Applicant confirmed that fencing to demarcate and separate the construction site from neighbouring land plots would be installed and maintained throughout the construction period in accordance with the proposed design [REP1-021].
- 22.7.57. At the close of the Examination the Applicant updated that negotiations were ongoing but agreement had not been reached between parties [REP10-033].

ExA's reasoning

- 22.7.58. The ExA is content with the Applicant's response which reflects the information relating to fencing presented in the Environmental Masterplan [REP9-037]. The ExA is satisfied that further details would be developed in consultation with landowners at detailed design stage.

Roger Graham

- 22.7.59. Mr Roger Graham, represented by Brown & Co is CA Schedule reference 18. The AP owns land and his residential dwelling to the East of the current A1.
- 22.7.60. The AP objected to the Proposed Development stating that widening the existing road network would achieve a similar result. The concerns raised by the AP included: maintaining access at all times during construction from his dwelling onto the main road network, timing when replacement

access to his property would become operational, continuity of services such as electricity and telephone, mitigation measures between his property and the neighbouring site compound area, confirmation of the working hours, lighting, noise and pollution impacts on his property, reinstatement program for his residential garden land which is being acquired temporarily, fencing alongside the boundaries both during construction and following completion to ensure the security of his residential property is not compromised, height of the flyovers and surrounding infrastructure and their visual impact on his property and impingement of privacy [RR-091].

- 22.7.61. The Applicant said that it had engaged with this landowner and reached agreement on many matters. The Applicant summarised that the non-statutory and statutory consultation process undertaken, and highlighted that the Applicant's case for the identification, assessment and selection of route options is set out in the ES [APP-072]. The Applicant confirmed that it would seek to maintain access and utilities supply to all properties throughout the construction of the works or provide alternative access arrangements, or restrict access or utility supply for limited periods after engagement with landowners. For all other matters that Applicant stated that the design details are as set out in the ES and relevant management plans, and would be developed during detailed design stage in consultation with landowners [REP1-021].
- 22.7.62. At the close of the Examination the Applicant updated that negotiations were ongoing but agreement had not been reached between parties [REP10-033].

ExA's reasoning

- 22.7.63. Matters relating to noise, working hours, lighting, and visual effects have been reported in Chapters 13 and 15 of this Recommendation Report. The ExA is content with the detail presented in the application on matters relating to access arrangements, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. The ExA finds the Applicant's response regarding continuity of services, to be reasonable.

Duncan and Maxine Buchanan

- 22.7.64. Mr Duncan Buchanan and Ms Maxine Buchanan (the Buchanans), represented by Savills (UK) Limited are CA Schedule reference 19 [REP10-033]. The APs own the property Dove House Farm at Wyboston, surrounded by gardens, paddocks, and farmland.
- 22.7.65. The Buchanans have expressed concern throughout the Examination regarding the lack of meaningful engagement from the Applicant, the lack of an offer to enable appropriate discussions, insufficient justification for including their property for CA and TP, and lack of information to justify why alternative sites have not been considered to reduce the impact on the Buchanans' land. The Buchanans commissioned an engineering firm (WSP) to produce an alternative sketch design which they submitted as their preferred alternative because it would require

less land to be acquired from their property. But, the Buchanans stated, that their alternative design would require more land and would be closer to residential properties, requiring more noise and landscape mitigation. The Buchanans highlighted that the private loss of their land would affect the development opportunity on their land [RR-030] [REP1-061] [REP1-062] [REP3-046] [REP3-047]. The Examination of the highway design aspects of the Buchanans' WSP alternative proposal has been reported in detail in Chapter 6 of this Recommendation Report.

- 22.7.66. The Applicant reiterated that the justification for needing the extent of Buchanan's land was to prevent the new highway drainage increasing the risk of flooding and to meet water quality discharge requirements, in the most efficient way. The Application also explained that the alternative sketch design, would require the acquisition of several more properties, lead to access issues for properties on Nags Head Lane, sever footpath and agricultural fields, and require a new route for access [REP1-021] [REP3-008].
- 22.7.67. The ExA met with the Buchanans at the start of the ASI, and saw the site on its driving route [EV-022]. The ExA sought further clarification from the Applicant if, in line with the CA Guidance, all reasonable alternatives to CA, including modifications to the Proposed Development had been explored. Additionally, the asked the Buchanans if besides the loss of development opportunity, the loss of their land would affect their business and home life in any other ways [PD-009, Q2.5.3.4].
- 22.7.68. The Applicant stated that all reasonable alternatives and modifications have been explored in the development of the design of the Roxton Road Link, and that the proposed design uses the least amount of land as is reasonably practicable, whilst addressing the need to provide new and safe access to those residents and businesses who are affected by the closure of access onto the A1 northbound carriageway between The Lane, Wyboston and Black Cat roundabout. The Applicant's design had been modified to reduce the landscaping in the southern part of the plot requiring less than the alternative proposed by the Buchanans' alternative proposal. Other factors considered by the Applicant included, maintaining space between the access road and the western property boundary, avoiding the need to create new access points from neighbouring land, minimising the number of landowners effected by CA and TP, and least amount of land needed for CA and TP in that part of the Proposed Development [REP1-063] [REP4-037, Q2.5.3.4].
- 22.7.69. The Buchanans said that they would be affected because they would lose their outdoor space, and have a road closer to their house, leaving them feeling pinned in their "*rural forever home*" [REP4-053, Q2.5.3.4]. They also said that the Applicant's approach to negotiations had not been helpful, caused them mental strain, and they remained unconvinced that so much of their land was justifiably needed. The Buchanans reiterated that the acquisition of their land would mean loss of a development opportunity, but their family life would not be substantially affected.

- 22.7.70. The ExA also asked BBC to comment on the merits of the highway design proposed by the Buchanans, and BBC stated a preference for the Applicant's proposal on grounds of highway safety and minimising environmental effects. This matter has been reported in greater detail in Chapter 6 of this Recommendation Report.
- 22.7.71. The matter remained unresolved at the close of the Examination and the Buchanans submitted a final position statement stating overall dissatisfaction with the Applicant's approach, engagement and progress with negotiations [REP10-072] [REP10-073] [REP10-074] [REP10-075]. The Applicant's final update states that it was reviewing aspects of the design to determine if it is possible to reallocate flood compensation areas and highway drainage balancing ponds to an alternative location within the current Order limits [REP10-033].

ExA's reasoning

- 22.7.72. The ExA has taken into account (the LHA) BBC's views regarding the merits of highway design proposed by the Buchanans' WSP alternative proposal, the Applicant's assessment of the alternative proposal's additional land take and environmental effects, and the Buchanans own assessment of additional land take. The ExA finds that the Buchanans' WSP alternative proposal is not suitable design on several grounds, most pertinently in terms of needing additional land for CA and affecting greater number of land owners. The ExA's reasoning on the highway design merits of the WSP alternative proposal are reported in Chapter 6 of this Recommendation Report.
- 22.7.73. The ExA finds the Applicant's reasons for needing this land are underpinned by the technical analysis in the ES, and in the absence of a viable alternative, the ExA finds the need for the land is justifiable for the Proposed Development and related mitigation.
- 22.7.74. The ExA notes the concerns raised by several APs regarding the Applicant's approach to negotiations and the lack of progress at pace and has highlighted that in Chapter 24 of this Recommendation Report.

Euro Garages Limited and Woolfson Trago

- 22.7.75. Euro Garages Limited and its group company Woolfson Trago, represented by Tim Hancock Associates is CA Schedule reference 20 [REP10-033]. The APs own the property Dove House Farm at Wyboston, surrounded by gardens, paddocks, and farmland.
- 22.7.76. The AP holds a controlling leasehold interest in the Black Cat Restaurant, located immediately to the north of and adjoining the Black Cat Roundabout on the A1 trunk road. The AP had plans to modernise and redevelop this facility and that the property has been blighted by the Proposed Development. The AP was concerned that the facilities would be totally extinguished by the Proposed Development after which the needs of the motorists in this vicinity would not be satisfied [AS-003].

- 22.7.77. The Applicant said that compensation would be based on the value of the interest acquired or reduction in its value. As such, the development/refurbishment potential of a property will be reflected where appropriate. The Applicant noted the points made concerning the loss of the facility and stated that the provision of services on the A1 at Sandy and Buckden are approximately 19 kilometres (km) apart, which meets Design Manual for Roads and Bridges (DMRB) standards and the removal of the Black Cat junction service area does not contravene this guidance. It is for the private sector to promote and operate service areas that meet the needs of the travelling public and are subject to the provisions of relevant planning legislation and regulation [REP1-021].
- 22.7.78. At the close of the Examination the Applicant updated that negotiations were ongoing but agreement had not been reached between parties [REP10-033].

ExA's reasoning

- 22.7.79. Matters relating to compensation are not before the ExA or the SoS, and as such the ExA has not commented on this issue. The ExA's views on the Applicant's approach to provision of services is reported in Chapter 6 of this Recommendation Report.

Shell Gibbet Service Station

- 22.7.80. Shell Gibbet Service Station, represented by Tim Hancock Associates, is CA Schedule reference 21 [REP10-033]. The AP owns freehold interest in the Shell Gibbet Service Station, located to the southwest of and adjoining Caxton Gibbet roundabout. The AP was concerned that the Proposed Development would involve CA and TP of parts of its property which could interfere with its access arrangements. The AP was looking for means to ensure effective operation of the Shell Gibbet Service Station, including the provision of advance warning signs and measures to manage the effects on the trading performance of the Service Station during the works themselves [AS-002].
- 22.7.81. The Applicant admitted that discussions had not taken place with the landowner regarding the potential for early acquisition of the plot and on matters relating to the impacts on the service area at Caxton Gibbet roundabout [REP1-021]. At the close of the Examination, the Applicant updated that negotiations were progressing to agree values, and effects of the Proposed Development on the Service Station [REP10-033].

ExA's reasoning

- 22.7.82. The ExA notes the AP's views regarding lack of engagement from the Applicant and has highlighted that in Chapter 24 of this Recommendation Report. Other effects of the Proposed Development on the AP's property are covered in several Chapters, notably Chapter 6 of this Recommendation Report.

Shell Fortune Service Station

- 22.7.83. Shell Fortune Service Station, represented by Tim Hancock Associates, is CA Schedule reference 22 [REP10-033]. The AP owns freehold interest in the Shell Fortune Service Station, located to the north of and adjoining the Black Cat Roundabout on the A1 trunk road, near Roxton. The AP's concern was that the Applicant had not given proper consideration to the loss of the facility and no alternative provision has been made [AS-001].
- 22.7.84. The Applicant noted the points made concerning the loss of the facility and stated that the provision of services on the A1 at Sandy and Buckden are approximately 19km apart, which meets DMRB standards and the removal of the Black Cat junction service area does not contravene this guidance. It is for the private sector to promote and operate service areas that meet the needs of the travelling public and are subject to the provisions of relevant planning legislation and regulation [REP1-021].

ExA's reasoning

- 22.7.85. The ExA's views on the Applicant's approach to provision of services is reported in Chapter 6 of this Recommendation Report.

SIR Trustee 17 & SIR Trustee 18 Limited and Travelodge Hotels Ltd

- 22.7.86. SIR Trustee 17 and SIR Trustee 18 Limited (SIR Trustees), represented by Carter Jonas, are CA Schedule reference 24. Travelodge Hotels Ltd are also represented by Carter Jonas and are CA Schedule reference 23 [REP10-033].
- 22.7.87. The SIR Trustees own freehold interest in Travelodge Hotel on the existing Black Cat roundabout. The Applicant proposes to CA the hotel and demolish it to accommodate the Proposed Development. Both APs, SIR Trustees and Travelodge Hotel, object to the CA of their property and extinguishment of the hotel. They state that the hotel provides a function in supporting the SRN, in line with the Department for Transport (DfT) policy on roadside services which is to support the safety and welfare of the road user. The APs also expressed concern that the Applicant had not provided support to relocate the business [RR-117] [RR-099] [REP1-098].
- 22.7.88. The Applicant noted the points made concerning the loss of the facility and stated that the provision of services on the A1 at Sandy and Buckden are approximately 19km apart, which meets DMRB standards and the removal of the Black Cat junction service area does not contravene this guidance. It is for the private sector to promote and operate service areas that meet the needs of the travelling public and are subject to the provisions of relevant planning legislation and regulation. Regarding relocation, the Applicant said that given the specialist nature of this property relocation was unlikely to be a viable solution [REP1-021].
- 22.7.89. Travelodge Hotels stated that it had so far not received a valuation for its property, and the Applicant had not made a reasonable attempt to acquire the interests by agreement [REP3-052]. The Applicant said that during negotiations in 2020, it had been agreed between the parties that

it would be nearly impossible to value a hotel in the then current market as the leisure sector had effectively been shut down by the Covid-19 pandemic. The negotiations had commenced, and the Applicant had requested supporting evidence from the AP to provide a valuation [REP4-035].

ExA's reasoning

- 22.7.90. Matters relating to compensation are not before the ExA or the SoS, and as such the ExA has not commented on this issue. The ExA's views on the Applicant's approach to provision of services is reported in Chapter 6 of this Recommendation Report.

Bedford Borough Council

- 22.7.91. BBC, represented by Savills (UK) Limited are CA Schedule reference 25 [REP10-033]. BBC owns the freehold interest in approximately 66 acres of land immediately east of Black Cat Roundabout, and has development aspirations for employment development with direct access onto the Black Cat Roundabout for the western part of the Land.
- 22.7.92. BBC was seeking commitment from the Applicant to safeguard delivery of the full potential of the Land. BBC's land would be required for the Proposed Development's carriageway, flood compensation utilities diversions and construction compound. BBC was objecting to the CA of its land because in its view the CA of the land for flood compensation was not reasonably necessary and that TP would be sufficient. BBC was seeking more information regarding: the other purposes for which land was required, commitment from the Applicant regarding securing access to its land from the Black Cat Roundabout, designing sufficient capacity into the new road layout to accommodate associated traffic, PP for satisfactory drainage, minimisation of the flood storage area, and consideration if TP for some plots would satisfactorily meet the needs for the Proposed Development, obviating the need for CA [RR-008b] [REP2-002]. In response to the ExA, BBC provided details of the access arrangements that would be required for the developability of its land, and its concerns regarding the landlocking effect to plots 3/3b and 3/3c, due to the Applicant's CA proposals relating to plot 1/8r [REP1-043, Q1.5.2.2].
- 22.7.93. The Applicant stated that the flood compensation area was needed for compensatory flood storage areas shown on the FRA [APP-220, Figures 8.1 and 8.2] and is the minimum land take necessary. To consider matters relating to the TP rather than CA of some plots of land, the Applicant confirmed that those matters were being discussed outside of the Examination process.
- 22.7.94. On matters relating to access to the land from Black Cat Roundabout, the Applicant stated that while the Proposed Development would not preclude development of the land in question, the Proposed Development would not be able to take into account BBC's aspirations until further definition is available and included within the approved Local Plan. The Applicant stated that to accommodate new development in proximity to

the SRN, the statutory process to enable development, in line with Department for Transport (DfT) Circular 02/20131, it is required that *"Where appropriate, proposals for the creation of new junctions or direct means of access may be identified and developed at the Plan-making stage in circumstances where it can be established that such new infrastructure is essential for the delivery of strategic planned growth"*. The Applicant confirmed that it was not aware of a strategic growth test being received by DfT, from BBC. Matters relating to future access provision at Black Cat Junction for the employment development have been reported in Chapter 6 of this Recommendation Report.

- 22.7.95. The Applicant and BBC stated that they would continue to work together to ensure that the issue of access to the landlocked areas is resolved. Options that were being discussed included granting rights of access over the permanent land-take [REP1-021] [REP4-050].
- 22.7.96. The ExA asked BBC to provide further details of the employment development and if this had been included within the approved Local Plan [EV-028] [EV-024] [EV-023, 3]. BBC responded that it was in the process of preparing the local plan. The land has been submitted to the Bedford Local Plan Review call for sites (Site 1005 College Farm Black Cat Roundabout), and BBC's planning authority has confirmed in writing that the land may fit with one of the emerging development strategy options [REP3-033]. The ExA sought updates from parties [PD-009, Q1.5.2.2] and was informed that negotiations were progressing, although slowly [REP4-050] [REP6-054] [REP8-026]. At the close of the Examination, matters relating to access from Black Cat Junction and the landlocked plots were not agreed between the parties [REP10-025].

ExA's reasoning

- 22.7.97. The ExA finds the Applicant's reasons for needing BBC's land for compensatory flood storage areas is underpinned by the technical analysis in the ES and is justifiable. The ExA has no reason to believe that the land take is excessive either. Ongoing negotiations regarding lease agreements for buy back of land that is subject to CA, is not in the scope of the Examination and not a consideration for the ExA.
- 22.7.98. The ExA is required to give weight to local development plans and policies. But in this case BBC's employment development aspirations are at an early stage and not yet identified in the local planning authority's site allocation document. The ExA also takes into account DfT's statutory process to enable development near the SRN. As such, the ExA must agree with the Applicant that committing to access arrangements to BBC's development site would be premature. The ExA is mindful of the Applicant's confirmation that access to the site is not sterilised by the current layout of Black Cat roundabout.
- 22.7.99. The ExA notes the concerns raised by several APs regarding the Applicant's approach to negotiations and the lack of progress at pace and has highlighted that in Chapter 24 of this Recommendation Report.

The Official Custodian for Charities on behalf of The Huntingdon Freeman's Trust

- 22.7.100. Huntingdon Freeman's Trust is a registered charity with land holdings around the existing Black Cat roundabout. The AP is represented by Brown & Co and is CA Schedule reference 26 [REP10-033]. The AP's main concern related to several points of access to its land, and to ensure that the accesses would be suitable for farm machinery and equipment with adequate visibility splays and turning circles. The AP highlighted the need for fencing alongside the highway boundary, effective maintenance of all existing drainage schemes and to ensure all existing water flows are not interrupted [RR-110].
- 22.7.101. The Applicant confirmed that it would seek to maintain access and utilities supply to all properties throughout the construction of the works or provide alternative access arrangements, or restrict access or utility supply for limited periods after engagement with landowners. The Applicant confirmed that details relating to accommodation works, drainage and boundary treatment were in the Environmental Masterplan [REP9-037] and would be finalised at detailed design stage by the Principal Contractor [REP1-021].
- 22.7.102. At the close of the Examination, the Applicant provided an update that negotiations were ongoing, but parties had not reached agreement [REP10-033].

ExA's reasoning

- 22.7.103. The ExA is content with the detail presented in the application on matters relating to access arrangements, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. Other matters relating to highway design and layout are reported in Chapter 6 of this Recommendation Report. The ExA finds the Applicant's response regarding continuity of services, to be reasonable.

Gemma Jane Gape Tucker and Judith Penelope Glossop Bennett Gape Pearson

- 22.7.104. Mrs JPGBG Tucker and Pearson Gape Farming Partnership, represented by Brown & Co, are CA Schedule reference 29 [REP10-033]. The APs own property near Caxton Gibbet roundabout which would be subject to CA and TP. The APs were concerned regarding the electrical diversion on their land and wanted to ensure that adequate supply is put in place for the dwellings and buildings following the diversion. They also sought further details on the width of the new roundabout access that is proposed to be included at the Caxton Gibbet West roundabout. They asked for more inter-connected cycle provision. Additionally the AP had concerns regarding land drainage, soil surveys to ensure the land would be returned to them in the same condition, boundary treatments to ensure the security of their property, and access to all land at all times during construction [RR-061] [RR-083] [REP1-080].

- 22.7.105. The Applicant confirmed that it would divert the existing overhead power line to the farm but that would not change the existing power supply. The Applicant also confirmed that it would seek to maintain access to all properties throughout the construction of the works or provide alternative access arrangements, or restrict access for limited periods after engagement with landowners. The Applicant confirmed that details relating to drainage and boundary treatment were in the Environmental Masterplan [REP9-037] and would be finalised at detailed design stage by the Principal Contractor [REP1-021].
- 22.7.106. At the close of the Examination, the Applicant provided an update that negotiations were ongoing, but parties had not reached agreement [REP10-033].

ExA's reasoning

- 22.7.107. The Applicant's response regarding continuity of the power supply to the property is reasonable. The ExA is content with the detail presented in the application on matters relating to access arrangements, boundary treatment, and drainage, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. Matters relating to cycle paths are reported in Chapter 6 of this Recommendation Report. Matters relating to soil surveys and restoration are reported in Chapter 16 of this Recommendation Report.

Woodthorpe Hall Garden Centre Limited,

- 22.7.108. Woodthorpe Hall Garden Centres Limited, who own and operate Roxton Garden Centre, represented by Savills (UK) Ltd (Savills), are CA Schedule reference 30 [REP10-033]. The Garden Centre is affected by CA and TP on the north-eastern side, and its main concern is regarding the TP of a grass field which is regularly used as overflow car parking at peak times when the main car park is inadequate. The garden centre has further concerns regarding the construction traffic using the garden centre entrance, maintaining access to Gap Home Improvements concession on the site, keeping Bedford Road operational at all time so access to the garden centre is not interrupted, boundary details to ensure security, effects on water supply, and overall adverse impact on the profitability of the garden centre. The garden centre had concerns about the general lack of communication from the Applicant and wanted to be consulted early to ensure the effects could be mitigated or managed [RR-121] [REP1-102].
- 22.7.109. The Applicant confirmed that it would provide overflow car parking adjacent to the access track and does not intend to possess the entrance to the garden centre and is committed to maintaining access for the garden centre and its visitors. While the Applicant has no intention to use the access to the garden centre for the construction traffic, the Applicant intends to use the access track for the diversion of the overhead power cable to the south-east only. The Applicant stated that detailed requirements of accommodation works, including fencing, will be finalised in line with the First Iteration EMP at detailed design by the Principal Contractor and in consultation with the landowner. The Applicant

considers that the borehole source at the garden centre would not be adversely impacted by the Proposed Development [REP1-021] [REP3-008].

- 22.7.110. At the close of the Examination, the Applicant provided an update that negotiations were ongoing, but parties had not reached agreement [REP10-033].

ExA's reasoning

- 22.7.111. The ExA finds that the Applicant's reason for the TP of the overflow car park is for legitimate purposes to facilitate the construction of the combined Kelpie Marina access track and realigned Bedford Road [REP10-013]. The ExA is content with the detail presented in the application on matters relating to access arrangement and boundary treatment, and is satisfied that further details would be developed in consultation with landowners at detailed design stage. The Applicant's response regarding the borehole source is reasonable.
- 22.7.112. The ExA notes the concerns raised by several APs regarding the Applicant's level of engagement and has highlighted that in Chapter 24 of this Recommendation Report.

Maureen Elizabeth Wright and Terence John Wright

- 22.7.113. Maureen Elizabeth Wright and Terence John Wright, represented by Brown & Co, are CA Schedule reference 32, and would be affected by CA and TP. The APs are concerned regarding the provision of appropriate fencing alongside the boundaries during construction and following completion to ensure the security of the field, and details of the replacement access on Chawston Lane.
- 22.7.114. The Applicant responded that the detailed requirements of accommodation works will be finalised at detailed design by the Principal Contractor and in consultation with the landowner. Detailed requirements of accommodation works will be finalised at detailed design by the Principal Contractor and in consultation with the landowner.

ExA's reasoning

- 22.7.115. The ExA is content with the detail presented in the application on matters relating to access arrangement and fencing, and is satisfied that further details would be developed in consultation with landowners at detailed design stage.

Church Commissioners for England

- 22.7.116. Church Commissioners for England (CCE), represented by Deloitte LLP (Deloitte) are CA Schedule reference 34 [REP10-033]. CCE purchased land near the existing Caxton Gibbet roundabout in January 2021, which would be subject to CA and TP for the Proposed Development. The land is currently let to George and William Topham and is in agricultural use (CA

Schedule reference 16). The land is likely to be promoted for future development [REP1-094].

- 22.7.117. Key issues raised by CCE about the effect of the Proposed Development on its landholdings include justification for the large extent of permanent land acquisition, in particular with regard to plot 14/6e, justification for the large extent of land proposed for TP, inadequate notice period of 14 days for TP, and private accesses [REP1-094]. Matters relating to the notice period for TP has been reported later in this Chapter. Matters relating to private means of access have been reported in Chapter 6 of this Recommendation Report.
- 22.7.118. The Applicant responded that the extent of land required for CA in plot 14/6e was for a borrow pit. The Applicant explained that its intention would be to return all of the borrow pits to agricultural use and this would be more effective with shallow excavations rather than a smaller but deeper borrow pit. The extents of the plots required for TP have been determined with an understanding of the minimum land required to construct the works safely and efficiently [REP3-008].
- 22.7.119. CCE remained unconvinced that the Applicant had demonstrated that the land identified for CA and TP was necessary for the Proposed Development, and not just desirable or convenient. Moreover, it was felt that there was not enough clarity about engagement on detailed design on private accesses and the exact extent of the land [REP4-064].
- 22.7.120. Both parties were in negotiation through the Examination regarding a private agreement for land required for CA and TP. While CCE was dissatisfied with the progress and pace of negotiations, it did not feel there were any show-stoppers to reaching agreement between parties. The Applicant's final update in the CA Schedule states that the while matters were close to a final private agreement, this had not been signed before the close of the Examination [REP3-044] [REP6-104] [REP8-043] [REP5-015] [REP8-010] [REP9-026].

ExA's reasoning

- 22.7.121. While CCE has challenged the Applicant's approach regarding the extent of land needed for CA for borrow pits and the land needed for TP, the ExA has not seen any evidence to substantiate that challenge, or an alternative proposal, or arguments specifically highlighting the flaws with the Applicant's approach, assessment and measures set out in the ES and the First Iteration EMP. As such, the ExA accepts the Applicant's justification for the extent of land needed for borrow pits to facilitate its restoration to agricultural land is justifiable, and also accepts the justification for the extent of land needed for TP for safe construction of works. The ExA is also satisfied that the detail in the application relating to private accesses is adequate, and that further details would be confirmed at detailed design stage.
- 22.7.122. Matters relating to design and design development process have been reported in Chapter 10 of this Recommendation Report. The examination of the wider case relating to borrow pits has been reported in Chapter 11

of this Recommendation Report. Matters relating to private accesses are reported in Chapter 6 of this Recommendation Report. The ExA notes the concerns raised by several APs regarding the Applicant's approach to negotiations and the lack of progress at pace and has highlighted that in Chapter 24 of this Recommendation Report.

Kenneth Chamberlain and Patricia Chamberlain

- 22.7.123. Mr and Mrs Chamberlain (the Chamberlains) own a residential property and commercial premises at A1 Keen Screens, located along the eastern side of the A1 to the north of the existing Black Cat Junction. The Chamberlains are CA Schedule reference 52 [REP10-033]. The Chamberlains' property is subject to CA and would be demolished as a result of the Proposed Development.
- 22.7.124. The effect of the Proposed Development on the Chamberlains' home, life and income has been reported in detail in Chapter 17 of this Recommendation Report. The ExA tested if the Chamberlains had fair opportunity to participate in the Examination in compliance with the Applicant's, other parties' and the ExA's duties under the Equality Act 2010, and this is also reported in detail in Chapter 17 of this Recommendation Report. While testing the purposes for which CA would be authorised are legitimate and sufficient to justify interfering with the human rights of those with an interest in the land, the ExA has had special regard to the Chamberlains case, and the ExA has concluded on this later in this Chapter.
- 22.7.125. In this section, the ExA is reporting and concluding on whether the Applicant's justification for the CA of the Chamberlains; property is sound, in light of the Chamberlains' objection. The Chamberlains were objecting to the Proposed Development primarily on account that it would lead to the loss of their home and their business, and they did not feel they were receiving fair compensation for their property. The Chamberlains had rejected the Applicant's compensation offer for the purchase of the property and stated that the process so far had left them stressed [AS-018] [AS-019].
- 22.7.126. The Applicant provided a technical note setting out the alternatives that were considered to the CA of this specific site, and that all options would require CA of the property and demolition because of its proximity to the existing A1 and Black Cat junction. The alternatives considered after preferred route selection would have required greater land acquisition, unsafe access arrangement for the property, and greater environmental effects such as additional flood compensation, diversion of a high-pressure gas main of national importance and potentially further impact on archaeology in the area [REP7-002, Appendix B].
- 22.7.127. Responding to the Chamberlains concerns regarding the Applicant's offer of compensation not being commensurate with a fair price for the property, the Applicant explained their approach to valuation which was based on best available transactional evidence in a reasonable proximity

to the subject property and analysed in line with the Royal Institute of Chartered Surveyors (RICS) Guidance [REP9-027].

- 22.7.128. The Applicant offered the Chamberlains reasonable fees to encourage them to instruct an agent to act on their behalf. The Applicant received a counter offer from the Chamberlains shortly before the close of the Examination. However, the matter remained unresolved at the close of the Examination [REP10-033].

ExA's reasoning

- 22.7.129. The ExA finds that the Chamberlains predominant concern was regarding the fairness of the compensation they were due to receive; they did not find the Applicant's offer acceptable and had rejected it once. In accordance with S106(1)(c) of the PA2008 matters of compensation are not for consideration by the ExA, as such a view on that matter is not offered here. However, the Applicant's approach to valuation of the property based on evidence and industry guidance from RICS seems reasonable to the ExA.
- 22.7.130. The Chamberlains did not offer reasons to challenge the Proposed Development, or the highway design that would result in the CA of their property. The ExA takes into account, the Applicant's case for the minimum land-take necessary, minimising environmental effects, and safe highway layouts, and finds in favour of the Applicant that the CA of the Chamberlains' land is justified.

22.8. OTHER MATTERS

Crown Land

- 22.8.1. Article 57 of the dDCO, includes provision for the acquisition of Crown land which is land being held by or on behalf of the Crown. The BoR [REP10-014] and the Crown Land Plans [REP4-004] show that Crown land comprises of plots 1/1m, 1/1n, 1/3a, 1/3b, 1/3c, 1/4a, 1/4b, 1/5a, 1/6a, 1/6b, 1/6c, 1/6d, 1/8e, 1/8g, 1/8o, 1/8r, 1/9b, 1/10a, 1/10b, 1/10c, 1/10e, 1/10f, 1/10g, 1/10h, 1/10k, 1/19a, 1/24a, 1/32a, 1/32b, 1/32c, 1/43c, 1/43d, 1/43f, 1/54a, 2/1a, 2/1i, 2/5a, 2/6a, 2/8a, 2/8b, 2/8c, 2/8d, 2/8e, 2/12d, 2/17a, 2/20a, 2/20b, 2/20c, 2/20d, 2/27a, 2/28a, 2/29a, 2/30a, 2/31a, 2/33a, 2/34a, 2/35a, 2/36a, 2/37a and 2/37b. In line with s135 of PA2008 the consent of the Crown Estate and other Crown authorities to the CA of these land interests is required.
- 22.8.2. The ExA asked for an update on progress in securing written consent under s135 from the Crown Estate for inclusion of the Crown plots and if there were any known impediments to securing the consent. The Applicant stated that there had been no indication that there would be any issues in securing consent for the Crown plots and that the Government Legal Department had instructed their legal advisors to progress the necessary agreements. Accordingly, subject to receipt of the necessary consents, the Applicant confirmed that the provisions of s135(1) would be met [EV-019] [EV-026] [EV-030]. The Applicant provided similar updates during the Examination indicating that Crown

consent was expected to be received prior to the close of the Examination and it was not anticipated that the acquisition of Crown land would pose an impediment to the Proposed Development [REP4-027] [REP6-024] [REP8-005] [REP10-033]. However, at the close of the Examination Crown Consent had not been received.

ExA's reasoning

- 22.8.3. Given that the Applicant has not provided documents confirming that Crown consent has been given for the CA of Crown land, the ExA has considered if the Order may be operative without the plots of land which are Crown owned, and if a recommendation could be made for consent subject to withholding consent for certain plots. However, the Crown plots are located near the existing Black Cat junction and would be required for the proposed Black Cat Junction, the link road between Roxton Road and The Lane and other purposes [REP4-004, Sheets 1 and 2] [REP9-037, Sheets 1 and 2]. As such, the ExA finds that the Proposed Development would not be deliverable to the extent assessed in the ES, without the Crown plots.
- 22.8.4. In the absence of requisite consents from relevant Crown Authorities, the ExA concludes that the Order cannot authorise the CA of those plots of land and/ or interests which are Crown land because s135(2) has not been met.
- 22.8.5. If the SoS is minded to agree with the ExA's recommendation to grant consent as set out in Chapter 21 of this Recommendation Report, the ExA recommends that prior to the issuing their decision, the SoS would need to obtain consents from the relevant Crown Authorities for the Crown land consistent with the BoR [REP10-014] and in accordance with s135(1) of the PA2008.

Special Category Land

- 22.8.6. The Applicant has confirmed that none of the land to be acquired for the Proposed Development comprises land forming part of a common, open space, or fuel or field garden allotment for the purposes of s131 and s132 of the PA2008 [APP-030] [EV-026] [EV-030].

ExA's reasoning

- 22.8.7. No evidence or representations were received to the contrary, and the ExA is content that that s131 and s132 of the PA2008 are not engaged.

Statutory Undertakers

- 22.8.8. The dDCO makes provision for PP in Parts 1 to 9 for the protections of various SUs. The SU progress schedule [REP10-035] lists the following SUs have an interest in plots for which powers are requested:
- 1) Anglian Water Services Limited (Anglian water), undertaking water and waste water services;
 - 2) BBC, as Highway Authority (HA);

- 3) The Bedfordshire and River Ivel Internal Drainage Board (BRI IDB), as Drainage Authority;
- 4) Cadent Gas Limited (Cadent), undertaking gas distribution;
- 5) Cambridgeshire County Council (CCC), as HA;
- 6) Cambridge Water/ South Staffordshire Water plc (CWSSW), undertaking water and waste water services;
- 7) CBC, as HA;
- 8) Eastern Power Networks plc (EPN), undertaking electricity transmission;
- 9) Environment Agency (EA), environmental operator, regulator and advisor;
- 10) Exolum Pipeline System Ltd (Exolum), operator of fuel pipeline;
- 11) National Grid Electricity (NGET), undertaking electricity transmission;
- 12) National Grid Gas plc (NGG), undertaking gas distribution;
- 13) Network Rail Infrastructure Ltd (NRIL), undertaker for rail transport infrastructure and services;
- 14) Openreach, undertaking telecommunications;
- 15) UK Power Networks (Operations) Limited (UKPN), electricity network;
- 16) Virgin Media, undertaking telecommunications; and
- 17) Vodafone, undertaking electronic communications.

The case in relation to NRIL, BRI IDB and Cadent

- 22.8.9. NRIL [AS-014], BRI IDB [AS-031] and Cadent [RR-012] [REP10-030] [REP10-068] withdrew objections before the close of the Examination.

ExA's reasoning with respect to NRIL, BRI IDB and Cadent

- 22.8.10. In light of the withdrawal of the objection by NRIL, BRI IDB and Cadent, the ExA concludes that s127 of the PA2008 is not engaged.
- 22.8.11. The ExA also concludes that the rights sought by the Applicant from NRIL, BRI IDB and Cadent would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

The case in relation to the Highways Authorities – BBC, CBC, CCC

- 22.8.12. The Applicant reported that it had not been asked to negotiate PP for inclusion in the dDCO in respect of land owned by BBC and CBC. A side agreement is being negotiated between the Applicant and CCC, and between the Applicant and CBC. These side agreements were not before the ExA. No representation has been received in this matter from BBC, CCC and CBC.
- 22.8.13. BBC's representation on land owned near the existing Black Cat roundabout is reported earlier in this Chapter.

ExA's reasoning with respect to BBC, CBC and CCC

- 22.8.14. Given no representations were received from the three HAs in relation to the acquisition of their interests, the ExA does not believe that s127 of the PA2008 is engaged.
- 22.8.15. The ExA also concludes that the rights sought by the Applicant in these cases would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of the PA2008.

The case in relation to EPN

- 22.8.16. No representations were received from EPN. Generic PP for the protection of Electricity, Gas, Water and Sewage Undertakers have been agreed between the parties in Part 1, Schedule 9 in the dDCO [AS-026]. This is now agreed with CWSSW as confirmed in the SoCG [RR-101] [REP10-029]. The Applicant reported that the PP were also agreed with EPN.

ExA's reasoning with respect to EPN

- 22.8.17. Given no representations were received from EPN in relation to the acquisition of its interests, the ExA does not believe that s127 of the PA2008 is engaged.
- 22.8.18. The ExA also concludes that the rights sought by the Applicant in this case would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of the PA2008.

The case in relation to EA

- 22.8.19. Representations were received from the EA seeking PP to maintain access to the River Great Ouse in order to undertake its permissive powers for maintenance or evidence gathering [RR-036] [REP1-076]. The Applicant stated that in order to retain access to the watercourse south of the proposed new dual carriageway, it had proposed a maintenance access track along the north side of the River Great Ouse viaduct, a vehicular access route under the viaduct with a minimum headroom of 2.4m, and river piers set back a minimum of 2.0m from the river. Alongside the Applicant continued to work with the EA on the PP [REP1-021] [REP3-007].
- 22.8.20. Bespoke PP for the protection of the EA and Drainage Authorities have been included in Part 3, Schedule 9 in the dDCO [AS-026], and as per the final SoCG these provisions are agreed with EA [REP10-021].

ExA's reasoning with respect to EA

- 22.8.21. In light of the representations received from EA, the ExA considers that s127 is engaged. Taking note of the Applicant's response, and given agreement was reached between parties, the ExA is satisfied that the rights sought by the Applicant can be acquired without serious detriment to the carrying on of the undertaking.
- 22.8.22. The ExA also concludes that the rights sought by the Applicant in this case would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of the PA2008.

The case in relation to Exolum

- 22.8.23. Bespoke PP for the benefit of Exolum Pipeline System Ltd (formerly CLH Pipeline System Ltd) have been included in Part 6, Schedule 9 in the dDCO [AS-026]. This was confirmed by Exolum before the close of the Examination [REP6-096] [AS-030].

ExA's reasoning with respect to Exolum

- 22.8.24. Given the representation received from Exolum did not contain an objection to the acquisition of its interests, and that the PP in the dDCO are agreed, the ExA does not believe that s127 of the PA2008 is engaged.
- 22.8.25. The ExA also concludes that the rights sought by the Applicant in this case would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of the PA2008.

The case in relation to NGET and NGG

- 22.8.26. The representations from NGET and NGG stated that they owned and operated a high-pressure gas transmission pipeline and above ground installation, and a high voltage electricity overhead transmission line, located within or in close proximity to the proposed Order limits. NGET and NGG stated their rights to retain its apparatus in situ and wanted to ensure that its rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the Order limits would be maintained at all times. For this, NGET and NGG would require PP to be included in the dDCO [RR-075] [REP1-086]. They identified specific interactions between their apparatus and the Proposed Development where they required more detailed package of PP [REP8-040]. They highlighted limited progress with negotiations and were unable to withdraw their objection before the close of the Examination [REP9-054].
- 22.8.27. The Applicant responded that negotiations on the PP and a side agreement were ongoing [REP1-021] [REP3-008]. The Applicant believed that the PP included in the dDCO would appropriately safeguard NGET and NGG assets, but the Applicant was continuing to engage on matters of detail. The Applicant did not see any fundamental areas of disagreement between parties [REP9-023] [REP10-044].
- 22.8.28. Bespoke PP for the protection of NGET and NGG have been included in Part 4, Schedule 9 in the dDCO [AS-026]. The signed SoCG identifies that matters relating to the detailed PP are not yet agreed [REP10-076].

ExA's reasoning with respect to NGET and NGG

- 22.8.29. In light of the representations received from NGET and NGG, the ExA considers that s127 is engaged. The ExA takes account of statements from both parties that there were no matters of fundamental disagreement and that they were confident that agreement would be reached soon. As such, the ExA is satisfied that the rights sought by the

Applicant can be acquired without serious detriment to the carrying on of the undertaking.

- 22.8.30. The ExA also concludes that the rights sought by the Applicant in this case would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

The case in relation to Openreach and Virgin Media

- 22.8.31. No representations were received from Openreach and Virgin Media. The Applicant stated that bespoke provisions had not been requested by either party [REP10-035]. The dDCO contains standard PP which apply to telecommunication code operators, in Part 2 of Schedule 9 [AS-026].

ExA's reasoning with respect to Openreach and Virgin Media

- 22.8.32. Given no representations were received from Openreach and Virgin Media in relation to the acquisition of its interests, the ExA does not believe that s127 of PA2008 is engaged for either party.
- 22.8.33. The ExA also concludes that the rights sought by the Applicant in both cases would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

The case in relation to UKPN

- 22.8.34. The dDCO contains generic PP for the protection of the electricity, gas, water and sewage undertakers, in Part 2 of Schedule 9 [AS-026]. No representations were received from UKPN, and the Applicant stated that the PP had been agreed [REP10-035].

ExA's reasoning with respect to UKPN

- 22.8.35. Given no representations were received from UKPN in relation to the acquisition of its interests, the ExA does not believe that s127 of PA2008 is engaged.
- 22.8.36. The ExA also concludes that the rights sought by the Applicant in this case would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

The case in relation to Vodafone

- 22.8.37. No representations were received from Vodafone. The Applicant stated that Vodafone requested bespoke provisions, and these had been agreed between parties [REP10-035]. The dDCO contains PP which apply to telecommunication code operators, in Part 2 of Schedule 9 [AS-026].

ExA's reasoning with respect to Vodafone

- 22.8.38. Given no representations were received from Vodafone in relation to the acquisition of its interests, the ExA does not believe that s127 of PA2008 is engaged for either party.

- 22.8.39. The ExA also concludes that the rights sought by the Applicant in both cases would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

The case in relation to Anglian Water

- 22.8.40. Representations were received from Anglian Water to state that it did not have an in principle objection to the Proposed Development. Anglian Water was in negotiations with the Applicant on several matters including, provisions that would enable it to continue to provide customers with uninterrupted services, clarity regarding the Applicant's works near Anglian Water apparatus to minimise the risk of damage, safeguards to ensure emergency works on its apparatus are done with a view to minimise impact on its service, drafting of the PP, and other matters relating to costs, compensation and payments [RR-004]. Anglian water made several representations regarding the lack of engagement from the Applicant and slow pace of negotiations [EV-030] [EV-026] [REP3-031] [REP8-039].
- 22.8.41. The Applicant responded to reassure that Anglian Water's access arrangement would not be disrupted or minimised as far as possible. The Applicant also confirmed that negotiations were ongoing on the PP, several points of disagreement were related to compensation and costs [REP1-021]. The Applicant added the Anglian Water's property consultants and solicitor had indicated that parties would be able to reach a satisfactory agreement on the outstanding issues [REP3-021].
- 22.8.42. In the final SoCG at the close of the Examination, matters relating to the precise wording of the PP were still outstanding [AS-020]. Bespoke PP for the benefit of the drainage authorities have been included in Part 3 of Schedule 9 of the dDCO [AS-026].

ExA's reasoning with respect to Anglian Water

- 22.8.43. In light of the representations received from Anglian Water, the ExA considers that s127 is engaged. Anglian Water's sustained disagreement could be considered to be at variance with the tests in s127 of the PA2008. However, the ExA takes into consideration the following and concludes that none of the matters that remain unresolved would lead to serious detriment to Anglian Water undertaking its functions:
- 1) Anglian Water has stated that it does not in principle object to the Proposed Development;
 - 2) The matters that remain under negotiations relating to compensation amount and payment schedule are outside the scope of the Examination; and
 - 3) On other matters relating to technical design, further details would be confirmed at detailed design stage.
- 22.8.44. The ExA highlights however that the wording of the PP is not yet agreed and the SoS would need to get confirmation from parties on agreed wording.

- 22.8.45. The ExA also concludes that the rights sought by the Applicant for Anglian Water would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.

ExA's overall reasoning on rights sought by the Applicant from SUs

- 22.8.46. Overall the ExA is content that for SUs where s127 is engaged, the Proposed Development would not lead to any serious detriment to those SUs undertaking its functions.
- 22.8.47. The ExA is also content that rights sought by the Applicant from SUs would be necessary for the purposes of the Proposed Development, and therefore the dDCO accords with s138 of PA2008.
- 22.8.48. On that basis, the ExA recommend that the PP in Schedule 9 of the dDCO are adopted, with the exception of Anglian Water, NGET and NGG, where the SoS would need to seek confirmation from parties on the agreement on the wording.

Human Rights

- 22.8.49. The Human Rights Act 1998 (HRA1998) includes provisions in the form of Articles, which aim to protect the rights of the individual. The relevant articles are:
- 1) Article 1 of The First Protocol – protects the rights to peaceful enjoyment of possessions.
 - 2) Article 6 – entitles those affected by compulsory powers to a fair and public hearing.
 - 3) Article 8 – protects the right of the individual to respect for their private and family life, their home and their correspondence.
- 22.8.50. Paragraph 10 of the CA Guidance states that the SoS must ultimately be persuaded that the purposes for which an order authorises the CA of land are legitimate and are sufficient to justify interfering with the human rights of those with an interest in the land affected. In particular, regard must be given to the provisions of Article 1 of the First Protocol to the ECHR and, in the case of acquisition of a dwelling, Article 8 of the Convention.
- 22.8.51. The Applicant's case to justify interference with Human Rights is set out in the SoR [REP10-013, Chapter 6]. The Applicant states there are four residential properties affected by the CA of land in the Proposed Development. The Applicant's case relating to the effects on these properties is explained here.
- 22.8.52. The Applicant's case relating to Brook Cottages, a pair of Grade II listed cottages, which are proposed for demolition, is to ensure the preferred route alignment of the main carriageway is in compliance with design safety standards [REP10-013, Chapter 6]. The Applicant's full justification of the preferred route in this location is set out in the Black Cat Junction Design Options report [APP-247]. The Examination of the effects of the

Proposed Development on Brook Cottages and its resident, Mr Baron, has been reported in Chapters 8 and 17 of this Recommendation Report, and matters relating to CA have been reported in this Chapter.

- 22.8.53. The Applicant's case relating to the residential property and businesses associated with A1 Keenscreen, which are proposed for demolition, is to construct the realigned A1 carriageway approaching the existing Black Cat roundabout. The owners of the property, Mr and Mrs Chamberlain (the Chamberlains) live in the residential dwelling and they let the other premises on the property for rental income. The demolition of this property would lead to loss of home and income for the owners and occupiers. The Applicant states that it has not been possible to minimise harm to the residential property and associated businesses due to its proximity to the existing A1 [REP10-013, Chapter 6]. The Examination of the effects of the Proposed Development on the residential property and businesses associated with Keenscreen and its residents has been reported in Chapters 17 of this Recommendation Report, and matters relating to CA have been reported in this Chapter.
- 22.8.54. Chapter 17 of this Recommendation Report also reports on events surrounding the Chamberlains not being able to register as an AP and IP. The ExA notified them on 9 December 2021 of its decision to treat them as if they were AP and IP and offered them an opportunity to request a CAH and an Open Floor Hearing (OFH). Neither CAH, nor OFH were requested, but the Chamberlains made written representations to the Examination.
- 22.8.55. Chapter 17 of this Recommendation Report also reports on the effects of this Proposed Development on one of the Chamberlains commercial tenants on the property, Mr Goodwin, who was identified during the Examination (on 6 January 2021). Mr Goodwin was formally notified of his right to register as an IP and participate in the Examination, by the Applicant on 20 January 2022, which is four weeks before the close of the Examination on 18 February 2022. No correspondence was received from Mr Goodwin until the close of the Examination.
- 22.8.56. None of the residential properties within Kelpie Marina would be acquired, but the current access to the A1 would be removed because it is currently unsafe and this would worsen with the grade separation of Black Cat junction. To mitigate this impact, it has been agreed that a new access would be provided to the property via the provision of a new access track and bridge forming part of Work No. 7, secured through Schedule 1 in the dDCO [AS-026]. The ExA did not receive any representations from the residents of Kelpie Marina.

ExA's reasoning

- 22.8.57. On account of the new access track and bridge that would be provided to the residents of Kelpie Marina, the ExA does not consider that the Human Rights are affected in a significant way, and is satisfied that the any interference is justified and proportionate, and any adverse effects would be sufficiently mitigated.

- 22.8.58. In Chapter 17 of this Recommendation Report, the ExA concludes that the Proposed Development would have permanent and irreversible significant adverse effects on both Mr Baron and the Chamberlains because they would have to relocate from their long-standing homes, and the Chamberlains would lose their source of income. Notwithstanding, that conclusion, the ExA finds that the purpose for which the CA of the land at the location of Brook Cottages and the properties associated with Keenscreen is legitimate and sufficient to justify interfering with the human rights of those with an interest in the land affected, Mr Baron and the Chamberlains.
- 22.8.59. On account of the ExA's procedural decisions on 9 December 2021, the ExA is content that the Chamberlains have had a fair opportunity to participate in the Examination as an AP and IP would, and in that regards the requirement of Article 6 of the HRA1998 is met. The ExA acknowledges that while the lateness of the formal notification sent to Mr Goodwin is regrettable, the ExA has concluded that he has had a fair opportunity to participate in the Examination and the requirement of Article 6 of the HRA1998 is met. Since no correspondence has been received by Mr Goodwin, the ExA is satisfied that no further action is required.

The Equality Act 2010

- 22.8.60. The Equality Act 2010 under s149 requires a public authority, in the exercise of its functions, to:
- 1) have due regard to the need to eliminate discrimination harassment and victimisation and any other conduct prohibited by or under the Act;
 - 2) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and
 - 3) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 22.8.61. The protected characteristics are age, gender, gender reassignment, disability, pregnancy and maternity, religion and belief, and race, also referred to as statutory equality groups.
- 22.8.62. The Applicant states that it has had due regard to and complied with its duties under s149 of the Equality Act 2010 [REP10-013, Chapter 6]. The Applicant has carried out an Equality Impact Assessment (EqIA) [APP-245] and identified a number of impacts where groups with protected characteristics may experience disproportionate or differential adverse effects. The assessment concludes that developed embedded mitigation measures in combination with the ongoing actions outlined in the EqIA should provide benefits for those from equality groups and help to minimise any adverse impacts of the Proposed Development. The EqIA will be reviewed and updated throughout the development and construction stages of the Proposed Development.
- 22.8.63. In Chapter 17 of this Recommendation Report the ExA has reported on the effects of the Proposed Development on the patients of Eltisley Manor

care home, Mr Baron the resident of Brook Cottages, and the Chamberlains the residents of the properties associated with Keenscreen, who all have protected characteristics. The ExA sought further information through CAH2, WQ2, and letters issued under Rule 17 of the Infrastructure Planning (Examination Procedure) Rules (EPR) 2010, and received responses from the Applicant, BBC and Mr Baron, the Chamberlains, and Public Health England (PHE) in relation to Eltiseley Manor. Due to the personal information contained in some of the evidence referred to above some of it has been redacted or not published in the Examination Library (EL). However, all of the information was before the ExA and the ExA is satisfied that there is adequate evidence to support and confirm the representations by all parties. In compliance with its duties under the Equality Act 2010 and to discharge its Public Sector Equality Duty (PSED), the ExA via the Case Team at the Planning Inspectorate (the Inspectorate), made adjustments to the way it communicated with Mr Baron and the Chamberlains.

ExA's reasoning

- 22.8.64. The Applicant has not included the effects of the Proposed Development on the patients of Eltisley Manor care home, covered by the protected characteristic of disability, in the EqIA, which the ExA considers to be an omission. However, in light of the evidence presented in Chapter 17 of this Recommendation Report, the ExA is persuaded that the Applicant has taken special account of the effects of the Proposed Development to the vulnerable residents of the care home, and accordingly proposed measures that would adequately mitigate the severance of access as described in the OCTMP [REP10-019, Section 3.16] and secured through Requirement 11 (R11) of the dDCO [AS-026].
- 22.8.65. Also in light of the evidence presented in Chapter 17 of this Recommendation Report, the ExA is satisfied that the Applicant and BBC made adequate effort and reasonable adjustments to ensure that Mr Baron was not disadvantaged through the process of negotiation to relocate from his property, and in that regard discharged their PSED. The ExA is also content that the Applicant has behaved reasonably with the Chamberlains, and concludes that they have been offered reasonable level of advice and support to navigate the process.

Adequacy of funding

- 22.8.66. The Applicant, National Highways (NH), states that it is a government owned company and responsible for delivering the major projects in the Road Investment Strategy (RIS). The funding commitment for delivering the Proposed Development was made when the Government published the RIS1, which is underpinned by legislation following the Infrastructure Bill receiving Royal Assent on 12 February 2015. RIS2, published on 11 March 2020 renewed the commitment to fund and deliver the Proposed Development during Road Period 2 (this road period runs from 2020 to 2025). The Applicant highlighted that the Chancellor of the Exchequer made a commitment to fund various road schemes in his budget speech of 11 March 2020 including the "*A428 in the East*". The Government commitments set out above demonstrate that the Proposed Development

would be fully funded by the Department for Transport (DfT) and consequently the Proposed Development would not be dependent on funding contributions from other parties [APP-031].

- 22.8.67. The Applicant states the Proposed Development would have an estimated cost of £812.5 million including allowances for risk and inflation, which includes compensation payments relating to the CA of land interests and TP. The Applicant confirmed that the estimates for compensation payments have been informed by land referencing activities, engagement of professional surveyors, and information received from consultation and engagement with parties having an interest in the land. The Applicant has been and will continue to be, responsible for all preparation costs associated, such as design costs, legal costs, land acquisition costs, advance payments to SUs and surveying costs. The overall cost estimate has been prepared in accordance with NH procedures and provides sufficient cost certainty to enable the Applicant to confirm the viability of the Proposed Development [APP-031].
- 22.8.68. The ExA asked for confirmation if there had been any changes to Government's commitment to funding the Proposed Development [EV-019, 12]. The Applicant confirmed that there are no specific updates to the funding statement and the full business case was in the final investment approval. The Applicant added that it was not aware of any changes which could risk this as there is a clear allocation of funding for the Proposed Development. The Applicant added that the Benefit Cost Ratio (BCR) on the majority of projects has reduced as a result of updates to the transport appraisal guidance, but this Proposed Development is in the medium value for money category which is the general range for most schemes in RIS2, and the Applicant did not consider it to be a risk [REP3-021].

ExA's reasoning

- 22.8.69. In light of the Government's commitment to the RIS2 programme, which the Applicant confirmed had not changed, the ExA can be content that the funding would be available to cover the capital expenditure and the cost of CA and TP for the Proposed Development.
- 22.8.70. The lowering of the BCR on the Proposed Development has been reported in Chapter 5 of this Recommendation Report. In light of the comparison provided by the Applicant between the Proposed Development and other medium value of money schemes in the RIS2 programme, the ExA has no reason to believe that there would be a risk to the delivery of the Proposed Development.

22.9. PROPOSED CHANGES TO THE PROVISIONS IN THE dDCO

Article 11 – Consent to transfer benefit of Order

- 22.9.1. Article 11 Paragraph (4) would permit the transfer of benefit of the Order to nine bodies listed in Paragraph (5) without the consent of the SoS. The transfer of benefit to the bodies in Paragraph (5) would be limited in

each case to certain works. The ExA sought assurance from the bodies to demonstrate that they have the ability to deliver the works that could be transferred to them, and asked the Applicant to provide detailed justification to explain why the transfer of the benefit of the Order is acceptable without SoS consent [PD-015, Q4.3.6.1].

- 22.9.2. The Applicant responded that each of the bodies identified in Article 11(5) is a SU and licence holder with associated duties to install or maintain a safe supply in relation to their relevant licence and apparatus/equipment. Accordingly, each of the bodies has been judged as fit and proper to undertake the corresponding works identified in Article 11(5), and would normally undertake their own diversions, installations, inspection and ongoing maintenance in the course of their usual operations. The Applicant also submitted a schedule listing the SUs, the relevant work number and corresponding work, and the statutory basis under the relevant legislative regime that entitled the SU to carry out those works [REP9-024, Q4.3.6.1] [REP9-024, Appendix A]. In addition, the ExA received responses from five bodies listed in Article 11(5) concurring with the Applicant's response and to confirm their ability to deliver the works that could be transferred to them (Anglian Water [REP9-045], Cadent [REP9-046], Exolum Pipeline [REP9-051], National Grid [REP9-053] and Vodafone Limited [REP10-071]).
- 22.9.3. Paragraph (3) stated that persons to whom the benefits of the order would be transferred would be bound by the same restrictions and liabilities as the undertaker, except when the transfer of benefits is to SUs, and in those cases the liability for the payment of compensation would remain with the undertaker. The ExA was unclear with the drafting which did not explicitly state that for the purposes of the exclusion to CA compensation in Paragraph (3), the SUs are the bodies listed in Paragraph (5).
- 22.9.4. The Applicant responded to explain that the reason there was a separate list of bodies in Article 11(5) is because the article would allow the undertaker to transfer powers to these named bodies without the consent of the SoS. Accordingly given that the SoS consent is not required in these cases, there was an exclusion in Paragraph (3) which would not allow the transfer of liability for the payment of compensation, which would remain with the undertaker. However, to add clarity the Applicant proposed the following amendment to make explicit that for the purpose of the exclusions in Paragraph (3), the SUs are the bodies listed in Paragraph (5):
- 22.9.5. *"(3) The exercise by a person of any benefits or rights conferred in accordance with any transfer or grant under paragraph (1) is subject to the same restrictions, liabilities and obligations as would apply under this Order if those benefits or rights were exercised by the **undertaker, save where those benefits or rights are exercised by a statutory undertaker (which for the purposes of this article includes any entity listed in paragraph (5)),** ~~save where those benefits or rights are exercised by a statutory undertaker or by an owner or occupier of land~~*

pursuant to paragraph (2) of article 28 (compulsory acquisition of rights and imposition.”

ExA’s reasoning

- 22.9.6. On account of the Applicant’s explanation and supporting information, and the corroboration from five (of the total nine) bodies listed in Article 11(5), the ExA satisfied that the bodies would have the ability to deliver the works that could be transferred to them.
- 22.9.7. On the basis of the information provided by the Applicant setting out the statutory basis under the relevant legislative regime that entitled the nine SUs in Article 11(5) to carry out the works that could be transferred to them, the ExA is satisfied that it would be justified for the transfer of benefit of the Order to those nine bodies for the specified works.
- 22.9.8. The ExA is content with the Applicant’s proposed amendments to the drafting in Article 11(3), and has included these changes in the rDCO.

Article 28 – Compulsory acquisition of rights and imposition of restrictive covenants

- 22.9.9. The ExA expressed concern with the broad scope of Article 28 (1) coupled with the lack of any statement in the EM, to the effect that Article 28 only applies to the Order land listed in Schedule 5, could mean that the undertaker would have an unrestricted right to impose undefined new rights over any of the Order land, not just the plots listed in Schedule 5, and including over land for TP only. Accordingly, the ExA asked if Article 28 required clarity that it only applies to the plots listed in Schedule 5, or if undefined rights are sought on land not listed in Schedule 5, then should this intent be clearly identified and the need for it justified in the EM and SoR [PD-006 , Q1.7.3.20 and Q1.7.3.28].
- 22.9.10. The Applicant explained that the provisions of Article 28 do not just apply to the land identified in Schedule 5. The public benefit of this broad scope would be to allow the undertaker to reduce the extent of permanent acquisition and rely only on rights instead, wherever possible. The Applicant added that it would not be possible to acquire new rights over land authorised for TP only because of the drafting in Article 40 – Temporary use of land for carrying out the authorised development, and the colour coding on the land plans [REP1-022, Q1.7.3.20 and Q1.7.3.28].
- 22.9.11. Notwithstanding the Applicant’s response, the ExA proposed including the following wording in Article 28 [PD-015, Q4.6.2.1]:
- “The power to impose restrictive covenants under paragraph (1) is exercisable only in respect of plots specified in column (1) of Schedule 5”*
- 22.9.12. The Applicant reiterated that since the detailed design for the Proposed Development had not been completed, the Applicant was seeking the worst-case option from a CA perspective to ensure deliverability of the Proposed Development. However, should it be possible on completion of

the detailed design work, to allow construction, operation and maintenance of the Proposed Development without acquiring the freehold interest, and instead acquiring a lesser interest of only rights over a particular plot of land, this would be desirable to minimise the impact of the Proposed Development on landowners and at less cost to the public purse [REP9-024, Q4.6.2.1].

ExA's reasoning

- 22.9.13. The ExA does find merit in the Applicant's argument and can see that the benefit of the proposed broad scope of Article 28 could minimise the impact of the Proposed Development on landowners and at less cost to the public purse. However, the ExA remains dissatisfied with a provision that would allow the undertaker to impose undefined new rights on any plot, which has not been the subject of consultation on that basis. This could also lead to uncertainty for landowners, which the ExA finds unjustified. Additionally, the ExA is not convinced that the drafting of Article 40(9)(a) does limit the imposition of undefined new rights over land for TP only. As such, in the rDCO, the ExA has proposed a new Paragraph (2) to restrict the widely drawn powers in the Applicant's dDCO, with drafting as proposed [PD-015, Q4.6.2.1].

Article 40 – Temporary use of land for carrying out the authorised development

- 22.9.14. The ExA asked the Applicant to provide justification and explanation if Article 40(9)(a) would allow the creation of permanent rights under Article 28(1) over land which is intended for TP only. The ExA also asked if persons with an interest in that land would be aware and have been consulted on the basis that their land is sought for TP but the Applicant would have the ability to create undefined new rights over their land [PD-006, Q1.7.3.29] [EV-019].
- 22.9.15. The Applicant stated that Article 40(9) has an express restriction on the permanent CA of land if it is authorised for TP only, but it would permit acquiring new rights over that land if those new rights are authorised under Article 28. The Applicant explained that because of Article 40(1)(a)(i) and Article 40(9)(a) it is not possible to acquire new rights over TP land unless that land is also listed in Schedule 5. The Applicant also confirmed that all persons in the BoR have been consulted, and notified of any minor changes. While there is the ability in the dDCO to reduce the permanent CA of land and replace this instead with the acquisition of rights, none were anticipated [REP1-022, Q1.7.3.29] [EV-026] [EV-030].
- 22.9.16. Despite the Applicant's confirmation the ExA did not consider that the Applicant's drafting achieved this intention. The ExA remained concerned that the interaction between Articles 28 and 40 could permit the creation of undefined new rights and the imposition of undefined restrictive covenants in the land listed in Schedule 7 which is described as being land for TP. The ExA found there was no clarity on the new rights that could be sought, and was not convinced that appropriate consultation has

taken place on the creation of new undefined rights. Consequently, the ExA felt that it would not be possible to determine whether or not there is a justified case for the acquisition of such rights [PD-015, Q4.6.3.1].

- 22.9.17. As such, the ExA proposed the deletion of Paragraph 40(9)(a) [PD-015, Q4.6.3.1]:

"The undertaker may not compulsorily acquire under this Order the land referred to in paragraph (1)(a)(i) except that the undertaker is not to be precluded from—

(a) acquiring new rights over any part of that land under article 28 (compulsory acquisition of rights and imposition of restrictive covenants); or

(b) acquiring any part of the subsoil of or airspace over (or rights in the subsoil of or airspace over) that land under article 38 (acquisition of subsoil or airspace only)."

- 22.9.18. The Applicant accepted these changes and has included it in the dDCO [AS-026].

ExA's reasoning

- 22.9.19. The ExA remains content with the Applicant's proposed amendments to the drafting in Article 40(9), and has included these changes in the rDCO.

Notice period in Article 40

- 22.9.20. NFU has consistently made the case on behalf of its members that before entering on and taking TP of land under Article 40, the undertaker must serve notice of a minimum of 28 days, as opposed to 14 days provided for. NFU stated that 14 days' notice is inadequate notice for a landowner/ farmer to be able to vacate that area of land and minimise the impact on the farm business NFU stated that the Applicant had increased the notice period to 28 days on the A30 Chiverton to Carland Cross made DCO [RR-074] [REP1-084] [REP3-050] [REP4-071] [REP6-098]. This concern was shared by CCE who would also be affected by TP and stated that 14 days' notice would not be adequate [REP1-094] [REP4-064] [REP8-043].
- 22.9.21. The Applicant's position has been that there would be ongoing engagement with landowners and in practice the informal notice given to landowners would be greater than that, and that 14 days would only be the formal notice period. The Applicant also stated that it did not see any landowners or farming businesses affected by the Proposed Development that would be affected by the 14 days notice period [REP1-021] [REP3-008] [REP5-015] [REP6-039].
- 22.9.22. The ExA asked the Applicant if increasing the notice period would likely have an impact on the viability of the Proposed Development or the construction programme. The ExA also asked the NFU to provide specific cases where landowners and farming businesses adversely affected by TP, would benefit from an additional 14 days' notice and why [EV-093,

5]. Ultimately, the ExA, in the proposed changes to the rDCO, stated that it was minded to increase the notice period to 28 days and asked parties for comments [PD-015, Q4.6.3.2].

- 22.9.23. NFU did not provide any specific cases. The Applicant responded that there would be risks to delays, have potential impacts to the construction programme and would reduce the Applicant's ability to accommodate any changes requested by stakeholders. However, the Applicant also stated that increasing the notice period would not impact on the viability of the Proposed Development as a whole [REP6-039] [REP9-024]

ExA's reasoning

- 22.9.24. NFU has consistently made the case on behalf of its members that before entering on and taking TP of land under this article the undertaker must serve notice of a minimum of 28 days, as opposed to 14 days provided for [RR-074] [REP1-084] [REP3- 050] [REP4-071] [REP6-098]. While the NFU has not provided specific cases of individual members who might benefit from the 28 days' notice period for specific reasons,
- 22.9.25. Despite the lack of specifics from the NFU about how specific members would be affected, the ExA takes account of NFU's representation on this particular matter only because of their understanding and generic expertise of how their members businesses operate. The ExA also takes account of the representation from CCE, a landowner, who has also repeatedly stated that 14 days would be inadequate notice period to prepare for TP.
- 22.9.26. The ExA takes account of the Applicant's representation that it would engage with landowners over a period longer than the formal 14 days notice. While this commitment is not secured anywhere, it gives the ExA insight on the Applicant's process of engaging with APs as it prepares to take TP. This demonstrates, because the Applicant would be engaging with landowners over an extended period anyway, not only can the Applicant quite easily give formal notice longer than 14 days, but it can do so without any meaningful risk of delay. Ultimately, the ExA relies on the Applicant's representations that increasing the notice period would not impact on the viability of the Proposed Development as a whole.
- 22.9.27. On this basis, the ExA finds that 14 days to prepare for TP of land that would most inevitably affect day-to-day life, and businesses, specifically farming operations and would not be adequate preparatory period for landowners. The ExA also finds that the Applicant can accommodate a longer notice period without risking the delivery of the Proposed Development. As such the ExA proposes increasing the notice period in Article 40(2) to 28 days, and has included this change in the rDCO.

22.10. CONCLUSIONS

Purpose for which CA may be authorised under s122 of PA2008

- 22.10.1. The ExA's has considered the Applicant's case for CA and TP as set out in the SoR, BoR, Land Plans, Crown Land Plans, Funding Statement and the

ES and other relevant documents, and the relevant provisions in the dDCO. The ExA has also taken account of the representations and objection made by landowners, business owners, home owners, SUs, and other parties, and the Applicant's responses on the matters raised.

22.10.2. On that basis the ExA can conclude that in accordance with s122(2)(a) and s122(2)(b):

- 1) the Applicant is seeking CA for land that is required for the development to which the development consent relates, or to facilitate or is incidental to that development
- 2) the Applicant has a clear idea of how it intends to use the land which it proposes to acquire; and
- 3) all reasonable alternatives to CA have been explored and that there are no alternatives which ought to be preferred.

22.10.3. The ExA can also conclude that there is a compelling case in the public interest to acquire the land, which means that the public benefit derived from the CA outweighs the private loss that would be suffered by those whose land is affected. In drawing this conclusion, the ExA has special regard to the residents of Eltisley Manor nursing home, Kelpie Marina, Brook Cottages and the residential dwelling associated with Keenservices.

Land to which authorisation of CA can relate s123 of PA2008

22.10.4. The ExA concludes that in accordance with s123, there is appropriate provision for CA in the Applicant's dDCO. The ExA highlights that related to CA and TP provision, the ExA has proposed changes to Articles 28 and 40 in the rDCO. The ExA has proposed the changes for the reasons set out, but in general terms to further tighten the compliance of the provisions of the Order with s122 of PA2008.

22.10.5. In accordance with the requirement in the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009, the Applicant has included and updated through the Examination as required, a SoR, a funding statement, Land Plans and a BoR.

S135 Crown Land

22.10.6. In the absence of requisite consents from relevant Crown Authorities, the ExA concludes that the Order cannot authorise the CA of those plots of land and/ or interests which are Crown land because s135(2) has not been met. If the SoS is minded to agree with the ExA's recommendation to grant consent as set out in Chapter 21 of this Recommendation Report, the ExA recommends that prior to the issuing their decision, the SoS would need to obtain consents from the relevant Crown Authorities for the Crown Land consistent with the BoR [REP10-014] and in accordance with s135(1) of the PA2008.

Special Category Land

22.10.7. On the basis that CA is not sought for any special category land, s122(2)(c), s131 and s132 are not engaged.

Statutory Undertakers

- 22.10.8. Overall the ExA is content that the Proposed Development accords with s127 and s138, in that the Proposed Development would not lead to any serious detriment to the SUs undertaking their functions, and the rights sought by the Applicant would be necessary for the purposes of the Proposed Development.
- 22.10.9. On that basis, the ExA recommend that the PP in Schedule 9 of the dDCO are adopted, with the exception of Anglian Water, NGET and NGG, where SoS would need to seek confirmation from parties on the agreement on the wording.

Consultation with parties in accordance with s42 and s44

- 22.10.10. In accordance with s42 and s44 of PA2008, the Applicant has consulted those with interests in relevant land before an application is made. For parties that were identified during the Examination, the Applicant has notified them of their rights as soon as practicable. In drawing this conclusion, the ExA has had special regard to the cases of the Chamberlains and Mr Goodwin, where the ExA has already concluded that the delay in the formal engagement with both parties, while regrettable, was not lack of due diligence on the Applicant's part.
- 22.10.11. The Applicant has sought to acquire land by negotiation wherever practicable. In this regard the ExA acknowledges and sympathises with the concerns raised by several APs and regarding limited engagement from the Applicant and the slow pace of negotiations. However, the ExA is mindful that the COVID-19 pandemic would have affected progress in a significant way and in many ways. As such, the ExA remains convinced that the Applicant has made best endeavours to engage with AP, and progressed negotiation as far as practicable before and during the Examination.

Human Rights

- 22.10.12. The ExA's overall conclusion relating to Articles 1 and 8 of the Human Rights Act are that the purpose for which the CA of the land within the Order limits are being sought, is legitimate and are sufficient to justify interfering with the human rights of those with an interest in the land affected. In respect of Article 6, the ExA concludes that the process of examining this application, including the opportunities to submit representations, a series of Written Questions and the opportunities to be heard at Hearings, all mean that those whose rights may be affected have been given access to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law. In drawing this conclusion the ExA has taken account of all individual representations and objections made relating to CA of land, and in particular the specific considerations relating to the interference with the Human Rights of the residents of Kelpie Marina, Mr Baron, the Chamberlains and Mr Goodwin.

Equality Act

- 22.10.13. The ExA's overall conclusion relating to Equality Act is that the Applicant has had due regard to and complied with its duties under S149 of the Equality Act 2010, throughout the process, including pre-application and Examination. The ExA is also content that through the embedded mitigation measures secured in the ES, in combination with the ongoing actions outlined in the EqIA, the Applicant would continue to comply with its duties through the construction of the Proposed Development. In drawing this conclusion, the ExA has taken account of the specific cases relating to protected rights of the residents of Eltisley Manor Nursing Home, Mr Baron, and the Chamberlains.

Compensation and adequate and secure funding

- 22.10.14. In light of the Government's commitment to the RIS2 programme, which the Applicant confirmed had not changed, the ExA can be content that the funding would be available to cover the capital expenditure and the cost of CA and TP for the Proposed Development.

Overall conclusion

- 22.10.15. On the basis of the conclusions drawn above, the ExA concludes that subject to receiving consent from Crown Authorities, the Applicant's case for CA and TP has been made in its own right. The ExA also concludes that there is compelling evidence that the public benefits that would be derived from the CA will outweigh the private loss that would be suffered by those whose land is to be acquired.

23. DRAFT DEVELOPMENT CONSENT ORDER AND RELATED MATTERS

23.1. INTRODUCTION

- 23.1.1. This Chapter of this Recommendation Report describes the draft Development Consent Order (dDCO) [APP-025] as applied for and the changes made to it during the Examination. It also describes matters that were not resolved at the close of the Examination, the ExA's recommendations on those matters and the corresponding changes to the dDCO that would result.
- 23.1.2. The dDCO was identified as a principal issue in the ExA's Initial Assessment of Principal Issues [PD-005, Annex C] for matters relating to definition and scope of the Proposed Development and construction programme, consistency, reasonableness and alignment with the Environmental Statement (ES) and adequacy to cover the effects of the diversion of the High-Pressure Gas Pipeline if it meets the thresholds for a Nationally Significant Infrastructure Project (NSIP). Matters relating to the diversion of the High-Pressure Pipeline (pipeline diversion) are reported in Chapter 18 of this Recommendation Report.

23.2. THE dDCO AS APPLIED FOR

- 23.2.1. The dDCO as applied for [APP-025] included a number of provisions to enable the construction, operation and maintenance of the Proposed Development.
- 23.2.2. In Part 1 Preliminary, Articles 1 and 2 set out how the dDCO may be cited, when it would come into force and the meaning of various terms used in the Order; Article 3 provides (in reliance on section 120(5)(a) of the Planning Act 2008 (PA2008)) for the disapplication of certain requirements which would otherwise apply under general legislation.
- 23.2.3. In Part 2 Principal Powers, Articles 4 to 8 provide development consent for the Proposed Development and allow it to be carried out and maintained. Article 9 provides for limits of deviation, and Articles 10 and 11 set out who has the benefits of the powers of the DCO and how those powers can be transferred;
- 23.2.4. In Part 3 Streets, Articles 12 to 20 provide powers in relation to street works, including the ability for the undertaker to be able to carry out works to and within streets, and powers for temporary and permanent stopping up, or to create or improve access.
- 23.2.5. In Part 4 Supplementary Powers, Articles 21 to 24 relate to discharge of water, protective work to buildings, authority to survey and investigate land and maintenance of drainage works.
- 23.2.6. In Part 5 Powers of Acquisition and Possession, Articles 25 to 36 provide powers in relation to the Compulsory Acquisition (CA) and Temporary

Possession (TP) of land, along with powers in relation to Statutory Undertakers (SU).

- 23.2.7. In Part 6 Operations, Articles 45 and 46 contain powers in relation to trees and hedgerows.
- 23.2.8. In Part 7 Miscellaneous, Articles 47 to 60 relate to the application of landlord and tenant law, operational land under the Town and Country Planning Act 1990, defence to proceedings in respect of statutory nuisance, appeals relating to the Control of Pollution Act 1974, document certification, the serving of notices, arbitration, traffic regulation, removal of human remains, crown rights and use of private roads for construction. In particular Article 51, Protective Provisions (PP) gives effect to Schedule 9, which contains provisions protecting the interests of third parties. Article 58 Works in the River Great Ouse provides for suspension of the public right of navigation over the River Great Ouse within the Order limits where necessary to construct the Scheme. And Article 59 The Cadent Diversion Works makes provision for the Pipeline diversion works to be carried out pursuant to planning permission granted under Part 3 of the 1990 Act.
- 23.2.9. There are ten Schedules to the dDCO, providing for:
- 1) Schedule 1, the description of the authorised development and ancillary works;
 - 2) Schedule 2, the requirements applying to the authorised development and the procedure for discharging the requirements;
 - 3) Schedule 3, classifications of roads, trunk roads, classified and unclassified roads, speed limits, traffic regulation measures (clearways and prohibitions), revocations and variations of existing traffic regulation orders, footpaths, cycle tracks, footways and bridleways and roads to be de-trunked;
 - 4) Schedule 4, permanent stopping up of highways and private means of access and provision of new highways and private means of access;
 - 5) Schedule 5, land in which only new rights and restrictive covenants etc. may be acquired;
 - 6) Schedule 6, modification of compensation and compulsory purchase enactments for creation of new rights;
 - 7) Schedule 7, land of which temporary possession may be taken;
 - 8) Schedule 8, removal of hedgerows and trees subject to tree preservation orders;
 - 9) Schedule 9, PP for the protection of electricity, gas, water and sewage, undertakers, of operators of electronic communications code networks, of the Environment Agency and drainage authorities, of National Grid as electricity and gas undertaker, of network Rail Infrastructure Limited, of CLH pipeline system, of Anglian Water Services Limited; and
 - 10) Schedule 10, documents to be certified.

23.3. THE EXAMINATION OF THE dDCO AND ITS REVISIONS

- 23.3.1. The Applicant submitted with the application a dDCO [APP-025] and an Explanatory Memorandum (EM) [APP-028]. The ExA examined the provisions of the dDCO At Hearings and through Written Questions (WQ):
- 1) Issue Specific Hearing (ISH) 1 on 18 August 2021 [EV-012] [EV-015];
 - 2) Compulsory Acquisition Hearing (CAH) 1 on 22 September 2021 [EV-027] [EV-031];
 - 3) ISH2 on 23 September 2021 [EV-036] [EV-041];
 - 4) ISH3 on 24 September 2021 [EV-047] [EV-052];
 - 5) ISH6 on 2 December 2021 [EV-079 to EV-084];
 - 6) WQ1 [PD-008];
 - 7) WQ2 [PD-009]; and
 - 8) WQ3 [PD-014].
- 23.3.2. The ExA issued its commentaries and proposed changes to the dDCO [REP6-002] and the corresponding EM [REP6-004], which were the most recent versions of the two documents in that stage of the Examination. Comments and responses were received from the Applicant and other Interested Parties (IP) on Deadline (D) 9 on 25 January 2022.
- 23.3.3. The dDCO and EM as submitted with the Application, and all subsequent versions where the Applicant sought to respond to matters raised in written and oral questions from the ExA and in written and oral submissions from other parties, are:
- 1) As submitted with the application: dDCO Revision 1 [APP-025], with corresponding EM Revision 1 [APP-028];
 - 2) dDCO Revision 2 [REP1-003] at D1, with corresponding EM Revision 2 [REP1-005];
 - 3) dDCO Revision 3 [REP4-006] at D4, with corresponding EM Revision 3 [REP4-008];
 - 4) dDCO Revision 4 [REP6-003] at D6, with corresponding EM Revision 4 [REP6-005];
 - 5) dDCO Revision 5 [REP9-004] at D9, with corresponding EM Revision 5 [REP9-006];
 - 6) dDCO Revision 6 [REP10-006] at D10, with corresponding EM 6 Revision 6 [REP10-008]; and
 - 7) Final versions submitted before the close of the Examination: dDCO Revision 7 [AS-026].

CHANGES TO THE dDCO DURING EXAMINATION AND COMPARISON OF DIFFERENCES BETWEEN dDCO AND rDCO

- 23.3.4. The changes and differences between the Applicant's dDCO as submitted, the Applicant's final dDCO and the ExA's rDCO are highlighted in Table 3, in the following way:
- 1) The provisions where no changes have been proposed have been identified.
 - 2) The provisions where only minor changes are proposed, do not have any accompanying explanation.

- 3) The provisions where there was substantive discussion between the Applicant, IPs and the ExA, have accompanying brief explanations, and cross reference to Chapter in the Recommendation Report, where those matters are reported fully.
- 4) Comparison is provided between the dDCO and the recommended DCO (rDCO). These have been highlighted and accompanied with explanation and cross-references.

23.3.5. It would be helpful to refer to the Applicant's final DDCO with all track changes [AS-028], the EM [REP10-009], schedule of changes to the dDCO [REP10-032], and the ExA's rDCO, while reading this Chapter.

Table Error! No text of specified style in document.6: Changes made to Applicant's dDCO and Comparison between Applicant's dDCO and ExA's rDCO

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
Top Page		
1)	<p>Changes have been made to the Project Team against author, from Highways England to National Highways. The Applicant was incorporated as Company of the name Highways England Company Limited. While the company number and registered office for the Applicant remains the same, on 8 September 2021, it changed its name to National Highways Limited. For clarity, all references to the company name have been changed to reflect the new name National Highways Limited, in the Applicant's dDCO, the EM, and the Book of Reference (BoR) [REP10-014]. The Applicant did not update any other submitted documents [REP6-030, 1].</p> <p>Corresponding change were made to the definition of 'undertaker' [REP10-032, Table 1-3, 4], and in the Explanatory Note [REP10-032, Table 1-3, 47].</p> <p>The ExA has included this change in the rDCO.</p>	Chapter 2 of this Report
Contents and throughout		
2)	<p>Minor changes made to reflect corresponding changes to page numbers, titles, references to footnotes, removing square brackets in preamble REP10-032, Table 1-5, 3], change of name from CLH Pipeline (CLH PS) LTD to</p>	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>Exolum Pipeline System Limited [REP10-032, Table 1-3, 2], and addition of Part 8 to Schedule 9 PP [REP10-032, Table 1-3, 1].</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 1 PRELIMINARY		
Article 1 Citation and commencement		
3)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 2 – Interpretation		
4)	<p>Minor change to insert the date for the advanced works permission which has been granted by Central Bedfordshire Council (CBC) since the application was submitted [REP10-032, Table 1-1, 2]. Other related matters reported in Chapter 18 of this Report.</p> <p>The ExA has included these changes in the rDCO.</p>	
5)	<p>New definition of 'bridlepath' has been added to correspond to the updated streets, rights of way and access plans (SRoWAP) [REP10-002] [REP10-032, Table 1-5, 4].</p> <p>The ExA has included this change in the rDCO.</p>	
6)	<p>Changes made to the definition of 'commence' and all activities that would be excluded from commencement have been deleted from the definition of 'commence' [REP10-032, Table 1-2, 0 and Table 1-3, 3].</p> <p>Correspondingly a definition of 'pre-commencement work' has been included to identify what works will be classed as pre-commencement works and therefore what will fall under the pre-commencement plan [REP10-032, Table 1-2, 14].</p>	<p>Chapter 11 of this Report</p> <p>Reference 87 and 109 of this table</p>

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>Corresponding change has been made, adding the pre-commencement plan to Schedule 10 Documents to be Certified [REP10-032, Table 1-2, 23].</p> <p>The ExA has included this change in the rDCO.</p>	
7)	<p>Minor change has been made to delete 'the' to correct the defined term 'general arrangement plan' [REP10-032, Table 1-5, 5].</p> <p>The ExA has included this change in the rDCO.</p>	
8)	<p>New definition of 'land adjacent to the Order limits' has been proposed by the Applicant to address concerns regarding the reasonableness of widely drawn powers in Articles 4 and 23, for the purposes described by the Applicant [REP10-032, Table 40-4, 1 and 4, 14].</p> <p>Corresponding changes have been made to Articles 4 and 23 [REP10-032, Table 40-4, 4 and 14].</p> <p>In the rDCO, the ExA has proposed edits to the Applicant's definition, mainly by removing the words 'or maintain' to restrict the provision to construction period only, rather than for the life span of the Proposed Development.</p>	<p>Chapter 11 of this Report</p> <p>Reference 11 and 38 of this table</p>
9)	<p>New definition of 'tree constraints plan' has been added to correspond to the updated Appendix 7.5 Arboriculture Impact Assessment Report Part 2 and Part 3 Revision 2 [REP3-002] [REP3-003] [REP10-032, Table 1-2, 1].</p> <p>Corresponding change was made, adding Appendix 7.5 Part 2 and Part 3 Revision 2 to Schedule 10 Documents to be Certified [REP10-032, Table 1-2, 46].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 3 – Disapplication of legislative provisions		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
10)	<p>Water discharge activity has been deleted upon request from both the EA and Cambridgeshire County Council (CCC). As such, the Applicant would not disapply Section (s) 24 (restrictions on abstraction) and s25 (restrictions on impounding) of the Water Resources Act 1991 through the dDCO. Typographical and other corresponding edits have been made [REP10-032, Table 1-2, 2].</p> <p>The ExA has included these changes in the rDCO.</p>	Chapter 14 of this Report
PART 2 PRINCIPAL POWERS		
Article 4 – Development consent etc. granted by the Order		
11)	<p>Changes were made to correspond with the inclusions of a definition for 'land adjacent to the Order limits' [REP10-032, Table 40-4, 4].</p> <p>The ExA has included these changes in the rDCO.</p>	<p>Chapter 11 of this Report</p> <p>Reference 8 and 38 of this table</p>
Article 5 – Maintenance of authorised development		
12)	No changes proposed in either the Applicant's final dDCO or the ExA' rDCO.	
Article 6 – Application of the 1990 Act		
13)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 7 – Planning permission		
14)	<p>Minor typographical correction to add (1) at the start of the first paragraph [REP10-032, Table 1-1, 3].</p> <p>The ExA asked the Applicant and LAs if there were any extant Planning Permissions pursuant to the 1990 Act within the Order Limits that would be relevant under Article 7(2) [PD-008, Q1.7.3.6]. The Applicant explained that there</p>	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>were three planning permissions that were in consideration when including this provision. These were to do with the Black Cat Quarry granted by BBC, relating to operation, updated restoration scheme, and variation to the approved operating hours and vehicle numbers. As set out in the EM [REP10-008], the Applicant explained that this power was necessary because the Order limits fall within the land subject to that planning permission, and the provision would ensure that the Applicant would not be in breach of that planning permission [REP1-022]. The ExA is satisfied with that explanation and has not proposed any amendments in the rDCO.</p>	
Article 8 – Existing powers and duties of the undertaker		
15)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 9 – Limits of deviation		
16)	<p>For limits of deviation as they relate to non-motorised user routes, reference is now included to the SRowAP [REP10-002].</p> <p>In addition, an approval role is included for the relevant Local Highway Authority (LHA) in relation to any works that may occur outside of the limits of deviation, to reflect that such deviation may have an impact on local highway assets [REP10-032, Table 1-2, 3].</p> <p>The ExA has included these changes in the rDCO.</p>	Chapter 6 of this Report
Article 10 – Benefit of Order		
17)	No changes proposed in either the Applicant's final dDCO or the ExA' rDCO.	
Article 11 – Consent to transfer benefit of Order		
18)	Amendments to Paragraph (3) have been made to clarify that where the benefits transferred are exercised by a SU or an owner/occupier pursuant to Article 28(2), SUs for the	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>purposes of this Article are the entities listed in Paragraph (5), and the liability for compensation in all cases would remain with the undertaker [REP10-032, Table 40-4, 5] [REP9-024, Q4.3.6.1].</p> <p>The ExA has included these changes in the rDCO.</p>	
19)	<p>Minor change has been made to Paragraph (5)(c) to reflect that CLH Pipeline Systems has changed its name to EXOLUM Pipeline System Ltd [REP10-032, Table 1-3, 5].</p> <p>The ExA has included these changes in the rDCO.</p>	
20)	<p>Minor change has been made to Paragraph (5)(e) to reflect that Cambridge Water has been incorporated by South Staffordshire Water PLC [REP10-032, Table 40-4, 6].</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 3 STREETS		
Article 12 – Application of the 1991 Act		
21)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 13 – Construction and maintenance of new, altered or diverted streets and other structures		
22)	Changes made to Article 13 to address concerns raised during Examination to include a process for certification in relation to the adoption of new roads by LHAs, and for the certification to include the completion to LHA's reasonable satisfaction, the timing for adoption, the boundary of the assets to be adopted by the LHA and transfer of responsibility to the LHA for its maintenance	<p>Chapter 6 of this Report</p> <p>Reference 28 of this table</p>

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>from the issue of the LHA's certificate [REP10-032, Table 40-4, 6].</p> <p>The original Paragraph (3) has been deleted to recognise that the Public Rights of Way (PRoW) will be highways for the purpose of Article 13, and therefore follow the same certification process [REP10-032, Table 40-4, 7].</p> <p>The ExA has included these changes in the rDCO.</p>	
23)	<p>Minor changes have been made to Paragraph (4) to include culverts and other structures laid under bridges [REP10-032, Table 1-3, 7].</p> <p>The ExA has included these changes in the rDCO.</p>	
24)	<p>Minor changes have been made in Paragraphs (6) and (8) to reflect that the undertaker would be responsible for the maintenance of bridges that carry a private right of way over a special road or trunk road [REP10-032, Table 1-3, 8 and 9].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 14 – Classification of roads, etc.		
25)	<p>Minor changes have been made to Article 14 Paragraphs (1) to (5) which deals with the de-trunking of existing roads currently within the Strategic Road Network (SRN), to make clear that each road or restriction can be treated individually [REP10-032, Table 1-2, 4].</p> <p>Other minor errors regarding reference made to the LHA have been corrected [REP10-032, Table 1-2, 5] [REP10-032, Table 40-4, 11].</p> <p>The ExA has included these changes in the rDCO.</p>	Chapter 6 of this Report

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
26)	<p>Minor changes have been made, with the addition of Paragraphs (16) (17) requiring the undertaker to provide information to the relevant LHA regarding PRow that may be subject to some change due to the application of the limits of deviation, within three months of the PRow being handed over to the LHA [REP10-032, Table 1-2, 6 and Table 1-3, 12].</p> <p>The ExA has included these changes in the rDCO.</p>	
27)	<p>Minor changes have been made to Paragraph (8) to allow for sections of the de-trunked highway to be handed over to the LHA, on different dates [REP10-032, Table 1-3, 10].</p> <p>The ExA has included these changes in the rDCO.</p>	
28)	<p>New Paragraph (9) has been added to ensure that the undertaker would only be able to determine if a highway can be de-trunked once the undertaker has agreed this with the SoS, who must consult the relevant LHA on the date of de-trunking and whether the highway to be de-trunked is of a reasonably satisfactory standard for use as a local highway before deciding whether to give that consent [REP10-032, Table 1-3, 11].</p> <p>A minor edit has been made to remove the duplicate word 'and' [REP10-032, Table 1-5, 12].</p> <p>The ExA has included these changes in the rDCO.</p>	<p>Chapter 6 of this Report</p> <p>Reference 22 of this table</p>
29)	<p>Minor change made to Paragraph (7) (also relating to the addition of new Paragraph (9)) relating to the date on which PRow would be open for use [REP10-032, Table 40-4, 10].</p> <p>Other minor edits have been made to include 'bridlepaths' to correspond with the updated</p>	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>SRoWAP [REP10-002] [REP10-032, Table 1-5, 11 and 13].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 15 – Power to alter layout etc. of streets		
30)	<p>Minor changes have been made to Paragraph (4) to allow the street authority to request further information and extend the deemed consent deadline as a result of that request [REP10-032, Table 1-5, 15].</p> <p>Other minor edits have been made to include 'bridlepaths' to correspond with the updated SRoWAP [REP10-002] [REP10-032, Table 1-5, 14].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 16 – Street Works		
31)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 17 – Temporary alteration, diversion, prohibition and restriction of the use of streets		
32)	<p>Minor changes have been made to Paragraph (6)(b) to allow the street authority to request further information and extend the deemed consent deadline as a result of that request [REP10-032, Table 1-5, 16].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 18 – Permanent stopping up and restriction of use of streets and private means of access		
33)	Minor changes have been made to make it clear that these PRow are subject to the same limits of deviation as shown on the SRoWAP	Reference 46 of this table

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>[REP10-002] [REP10-032, Table 1-3, 13, Table 40-4, 12 and 13].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 19 – Access to works		
34)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 20 – Clearways, prohibitions and restrictions		
35)	<p>Minor punctuation change has been made to replace colon with semi-colon [REP10-032, Table 1-5, 17].</p> <p>The ExA has included this change in the rDCO.</p>	
PART 4 SUPPLEMENTAL POWERS		
Article 21 – Discharge of water		
36)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 22 – Protective work to buildings		
37)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 23 – Authority to survey and investigate the land		
38)	<p>Changes were made to correspond with the inclusions of a definition for 'land adjacent to the Order limits' [REP10-032, Table 40-4, 14].</p> <p>The ExA has included these changes in the rDCO.</p>	Reference 8 and 11 of this table
39)	Other matters relating to notice period were discussed during Examination, but no related changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
Article 24 – Maintenance of drainage works		
40)	Minor change has been made to include a footnote [REP10-032, Table 1-5, 19]. The ExA has included this change in the rDCO.	
PART 5 POWER OF ACQUISITION		
Article 25 – Compulsory acquisition of land		
41)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 26 – Compulsory acquisition of land – incorporation of the mineral code		
42)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 27 – Time limit for exercise of authority to acquire land compulsorily		
43)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 28 – Compulsory acquisition of rights and imposition of restrictive covenants		
44)	In the rDCO, the ExA has proposed a new Paragraph (2) to restrict the widely drawn powers in the Applicant's dDCO which could allow the general power to impose undefined restrictive covenants over all of the order land [REP1-022, Q1.7.3.20, Q1.7.3.28] [REP3-021, 9b, 9c] [REP9-024, Q4.6.2.1]. The Article would also require renumbering of subsequent paragraphs.	Chapter 22 of this Report
45)	Minor change was made to correct a cross referencing error [REP10-032, Table 1-1, 5]. The ExA has included this change in the rDCO.	
Article 29 – Public rights of way		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
46)	<p>Minor changes have been made to ensure there is clarity about the interaction between Article 18 and 29 and that there is no gap in the provision of the PRow network. Minor changes have been made to make it clear that these PRow are subject to the same limits of deviation as shown on the SRowAP [REP10-002] [REP10-032, Table 1-2, 7].</p> <p>The ExA has included these changes in the rDCO.</p>	Reference 33 of this table
Article 30 – Private rights over land		
47)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 31 – Power to override easements and other rights		
48)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 32 – Disregard of certain interests and improvements		
49)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 33 – Set-off for enhancement in value of retained land		
50)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 34 – No double recovery		
51)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 35 – Modification of Part 1 of the 1965 Act		
52)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 36 – Application of the 1981 Act		
53)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
Article 37 – Modification of the 2017 Regulations		
54)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 38 – Acquisition of subsoil or airspace only		
55)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 39 – Rights under or over streets		
56)	<p>Minor change has been made that would require the undertaker to give 28 days' notice before acquiring the subsoil of, or airspace over, any street within the Order limits [REP10-032, Table 40-4, 16].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 40 – Temporary use of land for carrying out the authorised development		
57)	<p>Paragraph (9)(b) has been deleted from Article 40, in order to clarify and make certain that the undertaker would not be able to create undefined new rights in the land listed in Schedule 7 and that the only CA that would be permitted in this land is the CA of new rights listed in Schedule 5 [REP10-032, Table 40-4, 17].</p> <p>The ExA has included these changes in the rDCO.</p>	Chapter 22 of this Report
58)	In the rDCO, the ExA has proposed changing the notice period to take TP be changed increased from 14 days to 28 days in Article 40(2).	Chapter 22 of this Report
Article 41 – Temporary use of land for maintaining the authorised development		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
59)	<p>Minor change has been made to correct paragraph reference [REP10-032, Table 40-4, 18].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 42 – Statutory undertakers		
60)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 43 – Apparatus and rights of statutory undertakers in stopped up streets		
61)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 44 – Recovery of costs of new connections		
62)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 6 OPERATIONS		
Article 45 – Felling or lopping of trees and removal of hedgerows		
63)	<p>Minor wording changes have been made to make it clear that this Article does not apply to trees subject to a Tree Preservation Order (TPO) as Article 46 specifically addresses TPO trees [REP10-032, Table 1-2, 8].</p> <p>The ExA has included these changes in the rDCO.</p>	
64)	Minor wording change to secure an approval role for local planning authority before hedgerows not previously identified are removed within the Order limits [REP10-032, Table 1-2, 8].	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	The ExA has included these changes in the rDCO.	
Article 46 – Trees subject to tree preservation orders		
65)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 6 MISCELLANEOUS AND GENERAL		
Article 47 – Application of landlord and tenant law		
66)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 48 – Operational land for purposes of the 1990 Act		
67)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 49 – Defence to proceedings in respect of statutory nuisance		
68)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 50 – Appeals relating to the Control of Pollution Act 1974		
69)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 51 – Protective provisions		
70)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 52 – Certification of documents, etc.		
71)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 53 – Service of notices		
72)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 54 – Arbitration		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
73)	<p>In the rDCO, the ExA has added a new Paragraph (2) which prevents the SoS being subject to the decisions of the arbitrator in the exercise of statutory functions. The SoS may wish to consult with the Applicant because the ExA did not seek the Applicant's views on this proposed change during Examination.</p> <p>The ExA's proposed wording is based on the Article 17(2) of the recently made Little Crow Solar DCO:</p> <p><i>"(2) Any matter for which the consent or approval of the Secretary of State is required under any provision of this Order shall not be subject to arbitration."</i></p>	
Article 55 – Traffic regulation		
74)	<p>Minor edits to wording in Paragraphs (3) and (7) to make it clear that the Applicant would have powers to make traffic regulation orders in relation to roads for which it is not the highway authority at any time up to 12 months from the opening of the last part of the authorised development for public use [REP10-032, Table 1-2, 10 and 11].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 56 – Removal of human remains		
75)	<p>Minor changes have been made to correct paragraph references in Paragraphs (4) and (6) [REP10-032, Table 40-4, 19].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 57 – Crown Rights		
76)	<p>No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.</p>	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
Article 58 – Works in the River Great Ouse		
77)	<p>Minor drafting changes have been made to remove brackets from Paragraphs (1) and (2). Additional Paragraph (3) has been added to make it is clear what is meant as an 'emergency' for the purpose of this Article. Related changes to paragraph numbering and cross references have also been made REP10-032, Table 1-2, 6, Table 1-2, 12, Table 40-4, 20]. These changes have been agreed with the EA [REP1- 022, Q1.7.3.24] [REP1- 076, Q1.7.3.24] [REP10-021, Table 3-2].</p> <p>The ExA has included these changes in the rDCO.</p>	
Article 59 – The Cadent Diversion Works		
78)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
Article 60 – Use of private roads for construction		
79)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
SCHEDULE 1		
PART 1 – AUTHORISED DEVELOPMENT		
80)	<p>Minor changes have been to correct an error referring to an underground electricity cable instead of an overhead electricity cable in Work No 99 [REP10-032, Table 1-2, 13].</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 2 – ANCILLARY WORKS		
81)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
SCHEDULE 2 – REQUIREMENTS		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
PART 1 – REQUIREMENTS		
Interpretation		
82)	<p>Definition has been added for 'Brook Cottages heritage strategy' which would be a document listed in Schedule 10 Documents to be Certified, and for 'Brook Cottages soft strip' in line with updated Brook Cottages Requirement (R) 16 [REP10-032, Table 40-4, 21].</p> <p>The ExA has included these changes in the rDCO.</p>	<p>Chapter 8 of this Report</p> <p>Reference 105 of this table</p>
83)	<p>Minor edits have been made to clarify the definition for 'contaminated land' [REP10-032, Table 40-4, 22].</p>	
84)	<p>The definition of 'Ecological Clerk of Works' has been changed to include reference to the First Iteration Environmental Management Plan (EMP) which defines the role [REP10-032, Table 1-3, 15].</p> <p>The ExA has included these changes in the rDCO.</p>	
85)	<p>The definition of 'First Iteration EMP' has been changed to include reference to the Travel Plan and the Borrow Pits Management Plan [REP10-032, Table 1-3, 16].</p> <p>The ExA has included this change in the rDCO.</p>	<p>Chapter 11 of this Report</p>
86)	<p>The definition of 'Flood Risk Assessment' (FRA) has been added as a result of new R21, and refers to the document of that description including the FRA technical note as listed in Schedule 10 Documents to be Certified [REP10-032, Table 1-3, Page 43]</p>	<p>Chapter 14 of this Report</p> <p>Reference 110 of this table</p>
87)	<p>Definition of 'pre-commencement plan' has been included to refer to the document of that</p>	<p>Chapter 11 of this Report</p>

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>description as listed in Schedule 10 Documents to be Certified [REP10-032, Table 1-2, 14].</p> <p>Definition of 'pre-commencement works plan' had been included in error and this has been deleted [REP10-032, Table 1-1, 7].</p> <p>The ExA has included these changes in the rDCO.</p>	Reference 6, 109 of this table
88)	<p>Definition of 'scheme design approach and design principles' has been added to refer to the document of that description as listed in Schedule 10 Documents to be Certified [REP10-032, Table 1-3, 17].</p> <p>The ExA has included this change in the rDCO.</p>	<p>Chapter 10 of this Report</p> <p>Reference 100 of this table</p>
89)	<p>In the rDCO, the ExA has added a new definition for 'relevant stakeholders' related to new Paragraph (3) under R12 [REP9-024, Q4.8.1.4] [REP9-043, Q4.8.1.4] [REP10-045, Q4.8.1.4].</p>	<p>Chapter 10 of this Report</p> <p>Reference 101 of this table</p>
R2 Time limits		
90)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R3 Second Iteration EMP		
91)	<p>Minor changes were made to include EA and Natural England (NE) who requested to be consulted on the Second Iteration EMP. Clarification was added that all consultees would be consulted so far as is relevant to their respective functions [REP10-032, Table 1-3, 18 and Table 1-5, 28].</p> <p>The ExA has included this change in the rDCO.</p>	
R4 Third Iteration EMP		
92)	Minor changes were made to include NE who requested to be consulted on the Third	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	<p>Iteration EMP. Clarification was added that all consultees would be consulted so far as is relevant to their respective functions [REP10-032, Table 1-5, 29].</p> <p>The ExA has included this change in the rDCO.</p>	
R5 Details of consultation		
93)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R6 Landscaping		
94)	<p>Changes were made to Paragraphs (1) and (2) to reflect how the landscaping scheme would be brought forward post development consent [REP10-032, Table 1-1, 8]</p> <p>Other changes made to include LHA and NE and clarification was added that all consultees would be consulted so far as is relevant to their respective functions [REP10-032, Table 1-2, 15] [REP10-032, Table 1-5, 30]</p> <p>Change made to introduce the words 'substantially in accordance with', instead of 'reflect' [REP10-032, Table 40-4, 23] [REP9-024, Q4.8.1.2] [REP9-043, Q4.8.1.2] [REP10-045, Q4.8.1.2].</p> <p>The ExA has included this change in the rDCO.</p>	
R7 Fencing		
95)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R8 Contaminated land and groundwater		
96)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R9 Archaeology		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
97)	Change has been made to reflect the process as set out within the Archaeological Mitigation Strategy (AMS) [REP10-032, Table 1-2, 16]. The ExA has included this change in the rDCO.	
R10 Protected species		
98)	Change has been made to remove a defined term not used elsewhere in the Order [REP10-032, Table 1-5, 31]. The ExA has included this change in the rDCO.	
R11 Traffic management		
99)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R12 Detailed design		
100)	Paragraph (1)(c) has been added to ensure that the detailed design must accord with the scheme design approach and design principles document [REP10-032, Table 1-3, 19]. The ExA has included this change in the rDCO.	Chapter 10 of this Report Reference 88 of this Chapter
101)	In the rDCO, the ExA has proposed the addition of a new Paragraph (3) to secure the process of engagement with relevant stakeholders on detailed design process. Related to this change a new definition is added to Paragraph (1) Interpretation for 'relevant stakeholders'. The ExA's proposed wording includes amendments to the wording provided by the Applicant, without prejudice [REP9-024, Q4.8.1.4] [REP9-043, Q4.8.1.4] [REP10-045, Q4.8.1.4].	Chapter 10 of this Report Reference 89 of this Chapter
R13 Surface and foul water drainage		
102)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
R14 Flood compensatory storage		
103)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R15 Safeguarding of milestones		
104)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R16 Brook Cottages		
105)	<p>Changes have been made to include further provisions relating to the demolition and potential reconstruction of Grade II listed Brook Cottages, including details regarding reconstruction, timescale and mechanism for demolition and reconstruction and greater clarity in terms of specific and detailed reasons that would prevent the relocation, if relevant [REP10-032, Table 40-4, 24]. The wording has been agreed with Bedford Borough Council (BBC) and Historic England (HistE).</p> <p>The ExA has included this change in the rDCO.</p>	<p>Chapter 8 of this Report</p> <p>Reference 82 in this table</p>
R17 Highway lighting		
106)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
R18 Noise Mitigation		
107)	<p>Minor change has been made to correct an error [REP10-032, Table 1-1, 10].</p> <p>The ExA has included this change in the rDCO.</p>	
R19 Construction hours		
108)	Changes have been made to the list of activities included and excluded from being done during construction hours [REP10-032, Table 40-4, 25].	Chapter 13 of this Report

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	The ExA has included this change in the rDCO.	
R20 Pre-Commencement Plan		
109)	<p>Change has been made to reflect that there is a pre-Commencement Plan as well as a biodiversity pre-commencement plan listed in Schedule 10 Documents to be Certified [REP10-032, Table 1-2, 17].</p> <p>The ExA has included this change in the rDCO.</p>	<p>Chapter 11 of this Report</p> <p>Reference 6, 87 of this table</p>
R21 Flood risk assessment		
110)	<p>New requirement has been added as requested by the EA ensuring that the undertaker would be required to comply with the FRA [REP10-032, Table 1-3, 20].</p> <p>The ExA has included this change in the rDCO.</p>	Reference 86 of this table
R22 Construction phase local traffic monitoring		
111)	In the rDCO, the ExA has added a new R22 to monitor construction phase traffic for the locations identified in the Outline Construction Traffic Management Plan (OCTMP), to ensure that the Applicant can identify any adverse effects on the traffic on the Local Road Network (LRN).	Chapter 6 of this Report
R23 Operation phase local traffic monitoring		
112)	<p>New requirement has been added to monitor traffic effects at five specific locations on the local road network during operational phases of the Proposed Development [REP10-032, Table 40-4, 26].</p> <p>The ExA has included this change in the rDCO. In the Applicant's dDCO this new requirement is R22; it is R23 in the ExA's rDCO due to the addition of a new R22 in the rDCO.</p>	Chapter 6 of this Report

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
R24 Biodiversity net gain assessment and offsetting scheme		
113)	In the rDCO, the ExA has added a new R24 requiring the Applicant to provide an updated Biodiversity Net Gain (BNG) assessment. Additionally, should this BNG assessment show an uncompensated loss of priority habitats, including hedgerows, then the Applicant would be required to deliver a Biodiversity Offsetting Scheme for priority habitats.	Chapter 7 of this Report
R25 Approvals and amendments to approved details		
114)	Minor change made to requirement numbering due to the addition of R21, R22 and R24. The ExA has included this change in the rDCO.	
PART 2 – PROCEDURE FOR DISCHARGE OF REQUIREMENTS		
R26 Applications made under requirements		
115)	Minor change made to requirement numbering due to the addition of R21, R22 and R24 [REP10-032, Table 1-3, 22]. The ExA has included this change in the rDCO.	
R27 Further information		
116)	Minor change made to requirement numbering due to the addition of R21, R22 and R24 [REP10-032, Table 1-3, 23]. The ExA has included this change in the rDCO.	
R28 Register of requirements		
117)	Minor change made to requirement numbering due to the addition of R21, R22 and R24. The ExA has included this change in the rDCO.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
R29 Anticipatory steps towards compliance with any requirement		
118)	Minor change made to requirement numbering due to the addition of R21 and R22. The ExA has included this change in the rDCO.	
SCHEDULE 3 – CLASSIFICATIONS OF ROADS ETC.		
PART 1 – TRUNK ROADS		
119)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 2 – CLASSIFIED ROADS		
120)	Changes have been made to extend the extent of the A1428 forming part of the de-trunked A428 [REP10-032, Table 1-2 18]. The ExA has included this change in the rDCO.	
PART 3 – UNCLASSIFIED ROADS		
121)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 4 – SPEED LIMITS		
122)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 5 – TRAFFIC REGULATION MEASURES (CLEARWAYS AND PROHIBITIONS)		
123)	Minor edits have been made to correct sub-paragraph reference and grammar and spelling [REP10-032, Table 40-4, 30] [REP10-032, Table 1-5, 36]. The ExA has included this change in the rDCO.	
PART 6 – REVOCATIONS & VARIATIONS OF EXISTING TRAFFIC REGULATION ORDERS)		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
124)	<p>Minor edits have been made to correct sheet number reference [REP10-032, Table 1-5, 37].</p> <p>The ExA has included this change in the rDCO.</p>	
PART 7 – FOOTPATHS, CYCLE TRACKS, FOOTWAYS AND BRIDLEWAYS		
125)	<p>Heading was updated to reflect Schedule heading [REP10-032, Table 1-5, 1]. Edits have been made to include 'bridlepaths' to correspond with the updated SRoWAP [REP10-032, Table 1-5, 38]. Other amendments have been made to correct errors in that the name of LAs and in the measurements [REP10-032, Table 1-2, 19] [REP10-032, Table 1-3, 24] [REP10-032, Table 1-5, 39, 41, 43]. Rows have been added in order to correspond with the updated SRoWAP [REP10-032, Table 1-5, 40, 42].</p> <p>The ExA has included this change in the rDCO.</p>	
PART 8 – ROADS TO BE DETRUNKED		
126)	<p>CCC has been included to reflect the area falls under its area [REP10-032, Table 40-4, 31].</p> <p>The ExA has included this change in the rDCO.</p>	
SCHEDULE 4 – PERMANENT STOPPING UP OF HIGHWAYS AND PRIVATE MEANS OF ACCESS AND PROVISION OF NEW HIGHWAYS AND PRIVATE MEANS OF ACCESS		
127)	<p>Edits have been made to include 'bridlepaths' to correspond with the updated SRoWAP [REP10-032, Table 1-5, 44].</p> <p>The ExA has included this change in the rDCO.</p>	
PART 1 – HIGHWAYS TO BE STOPPED UP FOR WHICH NO SUBSTITUTE IS TO BE PROVIDED		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
128)	Changes have been made to align with SRowAP [REP10-032, Table 40-4 32] [REP10-032, Table 1-5, 46, 48]. The ExA has included this change in the rDCO.	
PART 2 – HIGHWAYS TO BE STOPPED UP FOR WHICH A SUBSTITUTE IS TO BE PROVIDED AND NEW HIGHWAYS WHICH ARE OTHERWISE TO BE PROVIDED		
129)	Changes made to align with SRowAP [REP10-032, Table 1-3, 25, 26] [REP10-032, Table 1-5, 45, 46, 49, 50]. The ExA has included this change in the rDCO.	
PART 3 – PRIVATE MEANS OF ACCESS TO BE STOPPED UP FOR WHICH A SUBSTITUTE IS TO BE PROVIDED AND NEW PRIVATE MEANS OF ACCESS WHICH ARE OTHERWISE TO BE PROVIDED		
130)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
PART 4 – PRIVATE MEANS OF ACCESS TO BE STOPPED UP FOR WHICH NO SUBSTITUTE IS TO BE PROVIDED		
131)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
SCHEDULE 5 – LAND IN WHICH ONLY NEW RIGHTS AND RESTRICTIVE COVENANTS ETC. MAY BE ACQUIRED		
SCHEDULE 5 – LAND IN WHICH ONLY NEW RIGHTS AND RESTRICTIVE COVENANTS ETC. MAY BE ACQUIRED		
132)	Edits made to clarify the titles of the table [REP10-032, Table 1-1, 10] and correct plot numbering REP10-032, Table 1-2, 20] [REP10-032, Table 40-4, 33]. The ExA has included this change in the rDCO.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	SCHEDULE 6 – MODIFICATION OF COMPENSATION AND COMPULSORY PURCHASE ENACTMENTS FOR CREATION OF NEW RIGHTS	
	SCHEDULE 6 – MODIFICATION OF COMPENSATION AND COMPULSORY PURCHASE ENACTMENTS FOR CREATION OF NEW RIGHTS	
133)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
	SCHEDULE 7 – LAND OF WHICH TEMPORARY POSSESSION MAY BE TAKEN	
	SCHEDULE 7 – LAND OF WHICH TEMPORARY POSSESSION MAY BE TAKEN	
134)	Edits made to correct plot numbering and grammar [REP10-032, Table 1-2, 21] [REP10- 032, Table 40-4, 34]. The ExA has included this change in the rDCO.	
	SCHEDULE 8 – HEDGEROWS AND TREES	
	PART 1 – REMOVAL OF HEDGEROWS	
135)	No changes proposed in either the Applicant's final dDCO or the ExA's rDCO.	
	PART 2 – TREES SUBJECT TO TREE PRESERVATION ORDERS	
136)	Edits have been made to correct drawing references and grammar [REP10-032, Table 1- 2, 22] [REP10-032, Table 1-5, 52]. The ExA has included this change in the rDCO.	
	SCHEDULE 9 – PROTECTIVE PROVISIONS	
	PART 1 – FOR THE PROTECTION OF ELECTRICITY, GAS, WATER AND SEWAGE UNDERTAKERS	
137)	Changes have been made as agreed between the Applicant and the SUs.	

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
	The ExA has included these changes in the rDCO.	
PART 2 – FOR THE PROTECTION OF OPERATORS OF ELECTRONIC COMMUNICATIONS CODE NETWORKS		
138)	<p>Changes have been made as agreed between the Applicant and the SUs.</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 3 – FOR THE PROTECTION OF THE ENVIRONMENT AGENCY AND DRAINAGE AUTHORITIES		
139)	<p>Changes have been made as agreed between the Applicant and the SUs.</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 4 – FOR THE PROTECTION OF NATIONAL GRID AS ELECTRICITY AND GAS UNDERTAKER		
140)	<p>Changes have been made as agreed between the Applicant and the SUs.</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 5 – PROTECTION FOR NETWORK RAIL INFRASTRUCTURE LIMITED		
141)	<p>Changes have been made as agreed between the Applicant and the SUs.</p> <p>The ExA has included these changes in the rDCO.</p>	
PART 6 – FOR THE PROTECTION OF EXOLUM PIPELINE SYSTEM LIMITED		

Ref	Changes made to Applicant's dDCO Comparison between Applicant's dDCO and ExA's rDCO	Location for further explanation
142)	Changes have been made as agreed between the Applicant and the SUs. The ExA has included these changes in the rDCO.	
PART 7 – FOR THE PROTECTION OF ANGLIAN WATER SERVICES LIMITED		
143)	Changes have been made as agreed between the Applicant and the SUs. The ExA has included these changes in the rDCO.	
PART 8 – FOR THE PROTECTION OF CADENT GAS LIMITED		
144)	Changes have been made as agreed between the Applicant and the SUs. The ExA has included these changes in the rDCO.	
SCHEDULE 10 – DOCUMENTS TO BE CERTIFIED		
SCHEDULE 10 – DOCUMENTS TO BE CERTIFIED		
145)	Changes made to reflect the latest version of relevant documents and additional documents as highlighted elsewhere in this table. The ExA has included these changes in the rDCO.	

23.4. CONCLUSIONS

23.4.1.

The ExA has considered all iterations of the dDCO submitted by the Applicant, and is in agreement with the Applicant on a majority of the changes proposed in the final dDCO [AS-026]. The provisions in the rDCO where the ExA has recommended changes are listed here:

- 1) Change to definition of 'land adjacent to Order limits' by removing the words "to maintain" (table references 8, 11 and 38);

- 2) Article 28 new Paragraph (2) added, and subsequent Paragraph numbering changed (table reference 44);
- 3) Article 40, notice period changed to 28 days in Paragraph (2) (table reference 58);
- 4) Article 54, new paragraph (2) added excluding SoS from any arbitration (table reference 73);
- 5) Schedule 2, Article 1, definition of "relevant stakeholders" added to support new Paragraph (3) in R12 (table reference 89);
- 6) R12, new Paragraph (3) added (table reference 101);
- 7) New R22 regarding construction phase local traffic monitoring added (table reference 111);
- 8) R22 in Applicant's dDCO ad become R23 in the rDCO and includes minor edits to align with new R22 (table reference 112); and
- 9) New R24 regarding Biodiversity Net Gain assessment and offsetting scheme added (table reference 113).

23.4.2. The ExA considers that the rDCO includes requirements that are necessary, relevant to planning, relevant to the development to be consented, enforceable, precise, and reasonable in line with the National Policy Statement for National Networks (Paragraph 4.9).

23.4.3. Taking all matters raised in this Chapter and all matters relevant to the DCO raised in the remainder of this Recommendation Report fully into account, if the SoS is minded to make the DCO, it is recommended to be made in the form set out in Appendix D.

24. SUMMARY OF FINDINGS AND CONCLUSIONS

24.1. INTRODUCTION

- 24.1.1. The ExA confirms that this application has been examined with reference to Section (s) 104(2) of the Planning Act 2008 (PA2008), as amended. The ExA has had regard to the NPSNN, to the NPS EN-1 and NPS EN-4 for the diversion of the high-pressure gas pipeline (pipeline diversion), to the three Local Impact Reports (LIRs) submitted by five Local Authorities (LA), to matters prescribed in relation to the Proposed Development, and to other matters that are both important and relevant to the Secretary of State's (SoS's) decision.

24.2. CONSIDERATION OF FINDINGS AND CONCLUSIONS

- 24.2.1. The ExA concludes that whilst the Proposed Development would be in general accordance with the NPSNN, it would conflict with Paragraph 5.131. This is because the Applicant has not given "*great weight*" to the conservation of Brook Cottages, a designated heritage asset, has not provided a "*clear and convincing*" justification for the substantial harm and total loss of significance that would be caused by the removal of Brook Cottages, or that this harm is, therefore, "*exceptional*". Conversely, the ExA finds that the substantial public benefits of the Proposed Development over its 60-year lifetime, in terms of meeting transport need, improving road safety and reducing injuries and fatalities, and supporting economic and housing growth, would outweigh the substantial harm and total loss of significance. The Proposed Development would therefore accord with Paragraph 5.133 of the NPSNN.
- 24.2.2. The ExA has concluded that if the pipeline diversion is deemed to be an NSIP in its own right, and is delivered under the provisions in this Order, there would be no conflict with NPS EN-1 or NPS EN-4. Chapter 18 of this Recommendation Report addresses the diversion of a gas pipeline and sets out the ExA's approach to this matter. The ExA has determined that the diversion should be considered an NSIP in the context of the recommendation for the Proposed Development and has examined it accordingly. The ExA has concluded that the diversion is inextricably linked to the delivery of the overall benefits of the Proposed Development and these benefits would outweigh the residual harm of the diversion and consequently the case is made for the Proposed Development under s104(7) of PA2008.
- 24.2.3. The ExA draws the SoS's attention to the intention of the pipeline operator, Cadent Gas, to obtain a screening opinion from the SoS for BEIS, as to whether the diversion would be an NSIP in its own right. Should the screening opinion conclude that the diversion would be an NSIP, the ExA draws the SoS's attention to the agreement to consult with the SoS for BEIS on this matter only.

- 24.2.4. Having regard to relevant local development plan policies, the submitted LIRs, and to all other representations received, the ExA is satisfied that there are no important and relevant matters that would individually or collectively lead to a different recommendation from that set out below.
- 24.2.5. Whilst the SoS is the competent authority under the Habitats Regulations, and will make the definitive assessment under those Regulations, the ExA is satisfied that the Proposed Development would have no likely significant effects on European sites and this finding has been taken into account in reaching its recommendation.
- 24.2.6. As required by Regulation 3(1) of the Infrastructure Planning (Decisions) Regulations 2010, the ExA has had regard to the desirability of preserving listed buildings or their settings or any features of special architectural or historic interest which they possess. As required by Regulation 7 of the Infrastructure Planning (Decisions) Regulations 2010, the ExA has had regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.
- 24.2.7. The ExA concludes that the Applicant's case for Compulsory Acquisition (CA) and Temporary Possession (TP) has been made in its own right. The ExA also concludes that there is compelling evidence that the public benefits that would be derived from the CA would outweigh the private loss that would be suffered by those whose land is to be acquired.
- 24.2.8. However, the requisite consents from relevant Crown Authorities have not been obtained and so the ExA concludes that the Order cannot authorise the CA of those plots of land and/ or interests which are Crown Land because s135(2) has not been met. If the SoS were to agree with the ExA's recommendation to grant consent as set out in Chapter 21 of this Recommendation Report, the SoS would need to obtain consents from the relevant Crown Authorities for the Crown Land consistent with the BoR [REP10-014] and in accordance with s135(1) of the PA2008. The Order cannot be made unless Crown consent is obtained.
- 24.2.9. The ExA has had regard to the provisions of the Human Rights Act 1998. In some cases, there would be interference with private and family life and home in contravention of Article 8, and interference in the peaceful enjoyment of possessions in contravention of Article 1 of the First Protocol, of the European Convention on Human Rights (ECHR). However, these are qualified rights and the weight of national policy in favour of the Proposed Development and the public benefits arising from the Proposed Development means that the interference in the human rights of affected owners and occupiers would be proportionate and justified in the public interest.
- 24.2.10. The ExA has had due regard to the Public Sector Equality Duty (PSED) under the Equality Act 2010. The Proposed Development would cause residual harm to the interests of persons who share a protected characteristic. However, the ExA considers that considerations made by the Applicant and BBC have been reasonable and is satisfied that neither

Mr Baron, nor Mr and Mrs Chamberlain have been disadvantaged by the process as a result of their protected characteristics.

- 24.2.11. In accordance with s104(4) of the PA2008, the ExA has concluded that the determination of this application in accordance with the relevant NPSs would not lead the UK to be in breach of any of its international obligations; or lead the SoS to be in breach of any duty imposed on the SoS by, or under, any enactment, or be otherwise unlawful by virtue of any enactment.
- 24.2.12. With the mitigation proposed and secured in the recommended Development Consent Order (rDCO) in Appendix D of this Report, there are no adverse impacts arising from the Proposed Development that would outweigh its benefits. Notwithstanding the aforementioned conflict with Paragraph 5.131 of the NPSNN, there is nothing to indicate that the application should be decided, otherwise than in accordance with the relevant NPSs, the NPSNN and NPS EN-1 and NPS EN-4.
- 24.2.13. The case for and against the Proposed Development is set out in Chapter 21 of this Recommendation Report. Having had regard to all the matters referred to in Chapter 21, the ExA concludes that the overall benefits of the Proposed Development would outweigh the adverse effects and so would accord with s104 of the PA2008.
- 24.2.14. ExA notes the several representations from IPs and some statutory bodies and statutory undertakers regarding the limited engagement from the Applicant and the slow pace of negotiations. The ExA also highlighted this concern with the Applicant several times during Examination, notable at CAH1 [EV-019, 7] and the Rule 17 letter dated 17 January 2022 [PD-016, 4]. The ExA finds that there would have been great benefits to negotiations progressing at pace before submitting the application, particularly on matters relating to traffic modelling, CA and TP, and engagement with East West Rail Company Limited. Benefits could have included that the Examination time could have been better utilised to either bring more matters to a conclusion or resolution, and focus on issues where agreement was proving difficult. The ExA is mindful that the COVID-19 pandemic would have affected progress, particularly by limiting face to face contact, reliance on technology which for some parties meant progress with negotiations was not possible, inadequacy of resources due to illness, and in several other ways unknown to the ExA. The ExA still would make this general observations to the Applicant in light of the dissatisfaction from parties.

24.3. RECOMMENDATION

- 24.3.1. For all of the above reasons, and in the light of its findings and conclusions on important and relevant matters set out in this Recommendation Report, the ExA recommends that the SoS grants consent for the Order, subject to:
- obtaining the consent of the relevant Crown Authorities in accordance with s135(1) of the PA2008;

- obtaining confirmation from the Environment Agency that the Flood Risk Assessment (FRA) documents secured in Schedule 10 of the ExA's recommended DCO are the ones they agreed with the Applicant; and
- satisfying themselves that at the time of making the decision the adverse effects of the GHG emissions from the Proposed Development alone or cumulative would not be significant, in light of the emerging policy context and any new published data.